IPAF POWERED ACCESS RENTAL MARKET REPORT 2016 - EUROPE

April 2016

This Report Has Been Prepared Solely For:





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FOREWORD

IPAF Powered Access Rental Market Report 2016 - Europe







IPAF

- The International Powered Access Federation (IPAF) promotes the safe and effective use of powered access equipment worldwide. IPAF is a non-profit member organisation that represents the interests of rental companies, manufacturers, distributors, users and training companies. It was set up in 1983 and celebrated its 30th anniversary in 2013.
- The IPAF training programme for platform operators is certified by TÜV as conforming to ISO 18878. More than 100,000 people are trained each year through a worldwide network of over 600 IPAF-approved training centres. Successful trainees are awarded the PAL Card (Powered Access Licence), the most widely held and recognised proof of training for platform operators.
- Membership of IPAF is open to users of platforms, manufacturers, distributors, rental and training companies. Members
 enjoy access to practical information and a growing portfolio of member services. They also have the chance to influence
 the legislation and regulations that govern platform use. More information can be found at www.ipaf.org.
- IPAF has more than 1000 members.



Additional copies of this report can be ordered at www.ipaf.org/reports or from your nearest IPAF office. IPAF has also published the IPAF US Powered Access Rental Market Report 2016 – details available at www.ipaf.org/reports or from your nearest IPAF office.

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Ducker

- Ducker Worldwide, a premier consulting and research firm, is driven to help its clients achieve their most ambitious
 growth goals. Custom market intelligence, strategic consulting and transaction advisory services are delivered by fullyengaged Ducker Principals and a diverse team of global talent.
- Ducker benefits from solid industry experience and a highly international team with the ability to approach and study global markets at a local level:
 - Product and industry expertise: experience in the AWP and equipment rental markets through several projects covering access equipment and other types of construction machinery at all levels of the value chain including rental as well as distribution and contracting.
 - <u>International approach applied locally</u>: with a team of permanent native consultants working out of offices that reach across the US, Europe and Asia, Ducker prides itself on the fact that all fieldwork is completed in the respondent's native language by in-house consultants and by Ducker's internal multi-lingual call-centers.
 - Methodological expertise: on-going involvement in strategic consulting within areas such as market sizing and segmentation, distribution structure, competitive positioning, customer satisfaction or market opportunity and new product entry assessments for a variety of products within the global construction and transportation industries amongst others.
 - Quality charter: Ducker Worldwide works to the guidelines of the ESOMAR ethics standards.
- More information on Ducker can be found at www.ducker.com.



This report was produced by the European headquarters of Ducker Worldwide in cooperation with its US headquarters.

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This study assesses the MEWP (Mobile Elevating Work Platform) rental market value for Europe over an eight-year period. A separate report is available covering the US market.

- The study covers the time period 2008-2017, with particular focus on 2015.
- Main objectives:
 - 2015 MEWP rental market value and fleet size.
 - Trends and dynamics (2008–2017).
 - Operational indicators (investment, age of fleet, application).
 - In addition to the primary market value and fleet size objective, fleet mix is included to ensure that the value is anchored in reality. Moreover, fleet information is typically more available than rental revenue. This has allowed for cross-checks, revenue-per-unit ratios and the optimisation of secondary sources.
 - Estimated size of the 2015 MEWP rental fleet worldwide, with a breakdown by region and by machine type (including the estimated share of vehicle mounted platforms held by rental companies owning self-propelled fleets).
 - Update of the Chinese MEWP rental market.
- New in this report:
 - o Ranking of construction and non-construction sub-sectors in the MEWP rental revenue.
 - Return on investment / Average payback period by power source (in addition to by equipment type).
 - Utilisation rates by equipment type (booms vs. scissors).
 - Preliminary estimate of the number of operators trained annually.
- The current study does not examine rental company profitability.
- All interviews were conducted in the first two months of 2015 which has allowed for primary data collection on the full
 previous year, thus providing for more specifically targeted and up-to-date information than would have been available
 from any statistical sources.



Products and Countries

- The present study focuses on powered access equipment, i.e. mobile elevating work platforms (MEWPs), also called aerial
 work platforms (AWPs). It includes the full range (all sizes and types) of powered access equipment except mast climbing
 work platforms and hoists.
- Included are powered access equipment: all booms, scissor lifts and vertical masts
 - Both articulated and straight telescopic booms.
 - Self-propelled as well as push-around, towable and vehicle-mounted.
- Excluded are: low-level equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbing work platforms, hoists and equipment owned by non-rental companies.
- The European part of the study comprises the following ten countries:
 - Denmark (DK)
 - Finland (FI)
 - o France (FR)
 - Germany (DE)
 - Italy (IT)
 - Netherlands (NL)
 - Norway (NO)
 - Spain (ES)
 - Sweden (SE)
 - United Kingdom (UK)

These represent 85% of the European* market in value.



* Defined as 27 EU countries + Norway + Switzerland + Croatia + Macedonia



Target Companies and Respondents

- The main source of information for this study is primary research through telephone interviews. Organisations interviewed for this study include rental companies and other industry experts:
 - Rental companies:
 - Specialist MEWP rental companies (62% of the market): MEWPs account for more than 50% of total rental revenue.
 - Generalist rental companies (38% of the market): MEWP rental revenue accounts for 50% or less of total rental revenue.
 - From rental companies interviewed, on average, MEWP rental revenue represents 69% of their overall rental revenue.
 - National rental associations
 - Industry experts
- Secondary data was also gathered to validate major market trends identified.
- Only persons with input in machine selection or management were qualified as respondents. Recurrent respondent job
 functions were Managing Director, Sales Director, Technical Director, Purchasing Manager, Fleet Manager and Operations
 Manager.
- Ducker and IPAF would like to thank all industry representatives interviewed, without whose kind assistance it would not have been possible to conduct this research.
- IPAF and Ducker would also like to thank Murray Pollok, Managing Editor of International Rental News for his
 contributions and commentary on the current rental market.



Definitions

MEWP rental revenue:

- o Includes for example: machine rental rates, machine repair, support (e.g. fuel services), transportation/delivery, training, insurance, operator charges.
- Used equipment sales are excluded from the MEWP rental revenues reported.

Specialists vs. Generalists:

- o For specialists: MEWPs account for more than 50% of total rental revenue.
- Generalists: MEWPs account for 50% or less of total rental revenue.

Cross-Hire:

- Rental by one rental company from another rental company (excluded from final results).
- Utilisation rate:
 - Physical number of machines out on hire as percentage of total number in fleet at any given time.
- Retention period:
 - Average time during which rental companies typically keep their powered access equipment.
- Rental rate:
 - o Corresponds more to net prices than list prices. Directly linked to the rental revenue.
 - The euro amount that the customer agrees to pay for possession and use of a machine.



Definitions

Exchange rates:

 The currency exchange rates used for countries outside the Euro Zone are as below (average annual 2015 exchange rates). The same rate has been used throughout the time period in order to eliminate variation in growth rates due to exchange rates rather than to the actual MEWP rental market.

	Currency Unit	Converter to Euro
Denmark	DKK	0,134
Norway	NOK	0,134
Sweden	SEK	0,107

	Currency Unit	Converter to Euro
UK	£	1,377

	Currency Unit	Converter to Euro
US	USD	0,900

EXECUTIVE SUMMARY

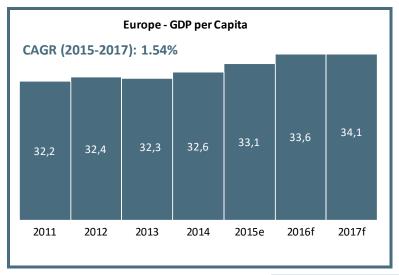
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Macro-economic indicators are showing positive growth for the forthcoming years with increasing GDP per capita and lowering unemployment rate. Construction outlooks are also relatively optimistic in all construction subsegments.



9,5% 9,3% 8,4% 8,6% 8,3% 2011 2012f 2013 2014 2015e 2016f 2017f

Thousand Euro at 2015 prices. 10 countries under study. Source: Ducker Worldwide for IPAF based on Euroconstruct 2015

Europe - Construction Data						
910	890	872	881	888	917	<u>9</u> 37
534	527	519	526	535	553	566
37 <u>6</u>	363	352	355	354	364	371
263	250	241	242	250	256	266
2011	2012	2013	2014	2015e	2016f e : Ducker Worl	2017f

Construction put in place in billion Euros based on Euroconstruct 2015 Source: International Monetary Fund, World Economic Outlook Database, October 2015

CAGR (2015-2017)

- Residential construction: 2.88%

- Non-res. constr. : 2.45%

- Total construction: 3.13%

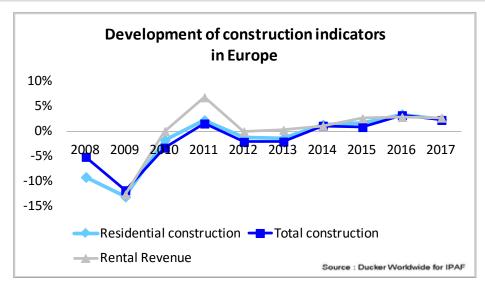
Residential constructionNon-residential construction

— Total construction

Civil engineering

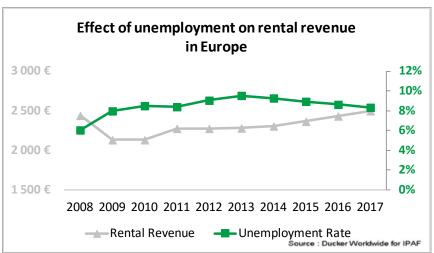


The MEWP rental revenue development in Europe has been proven to be highly positively correlated to the construction sector activity. On the contrary, unemployment is negatively correlated.



- The difference among European MEWP markets was also seen in the correlation results as the relationship of the indicators was quite heterogeneous among the European countries.
- However, <u>residential construction</u> and <u>unemployment</u> development showed the highest overall correlation across the ten European markets under study.

- For evaluating the relationship between rental revenue and several economic and industry indicators, a correlation analysis (PEARSON correlation) was conducted, which compares variances and standard deviations among variables.
- To show the relationship in a more accessible way, the growth rates were plotted next to each other for the construction sector.
- The connection between revenue and unemployment is shown in real values and per year level.



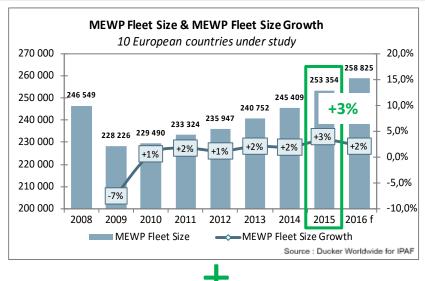


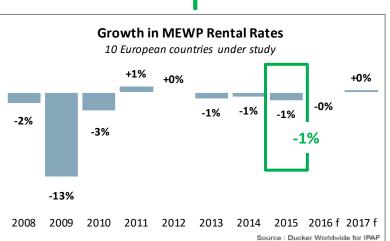
MEWP Rental Market Situation at End 2015

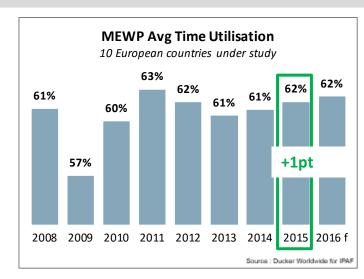
- The European mobile elevating work platform (MEWP) rental market is improving gradually, driven by a stronger construction market and stronger overall economy. It registered modest growth of +3% in 2015 to reach €2.4B.
- The MEWP fleet accelerated its expansion in 2015 with +3%, while utilisation rates slightly improved (+1%). However, intense competition in several countries continued to drive rates down.
- Four groups of countries can be identified, with significantly different market situations at end 2015:
- Spain and Italy are chalking up the highest growth and are well beyond the recession with growth at or above 5% in 2015. Both countries are seeing all indicators as positive: fleet expanded in 2015, which did not prevent utilisation from improving and rental companies were able to increase rates.
- Sweden and Germany remain highly dynamic markets with continuous positive growth at +5%. Revenue growth is driven primarily by fleet expansion in Germany, while in Sweden, rental revenue and utilisation improvement also drove revenue growth.
- On the other end, the UK and Norway, which were historically dynamic countries, are showing signs of growth slow down. Both markets experienced downward pressure on rental rates in 2015, which could continue in 2016.
- Finland, France, Netherlands and Denmark are showing stabilisation to only slight growth but are all confirming their exit from recession.

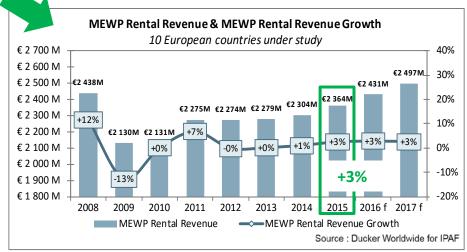


MEWP European rental revenue accelerated its growth in 2015, confirming a positive trend identified in 2014. Despite intense competition pressuring rates, improved demand in most countries drove fleet expansion and utilisation up in 2015.



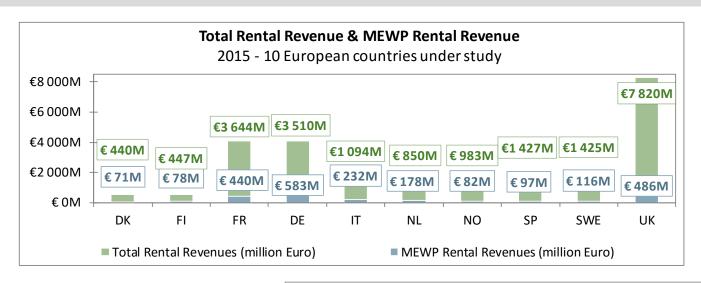


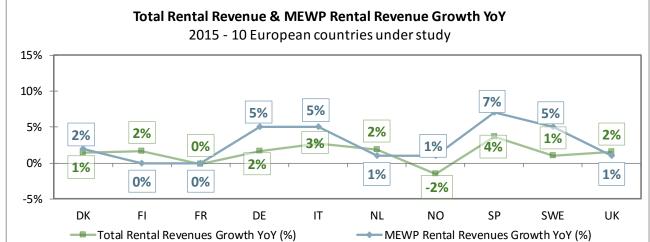






Italy and the Netherlands are countries where MEWP rental revenue holds the highest share over the overall equipment rental revenue (21%). In 2015, in most countries, the MEWP rental revenue growth was higher than that of the overall rental revenue (source ERA).





ERA overall equipment rental revenue includes:

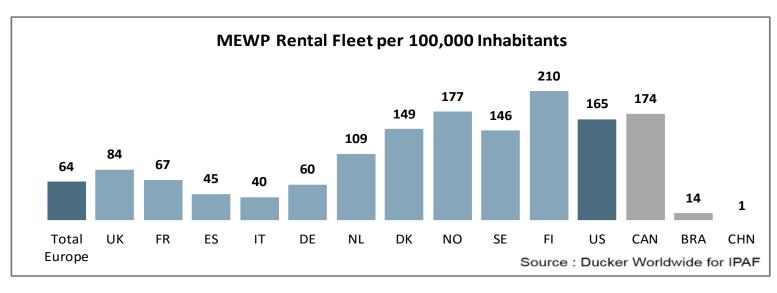
- General Plant
- Tools & General Equipment
- 3. Access
- Power generation & Temperature Control
- Accommodation & Fencing
- Industrial Machinery
- 7. Crane

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Strong differences exist in terms of maturity of the MEWP rental market across Europe. The Nordic countries are by far showing highest maturity levels, while there is still high growth potential in Italy and Spain.

• A measure of market maturity is to assess the ratio: MEWP rental fleet vs. country population.





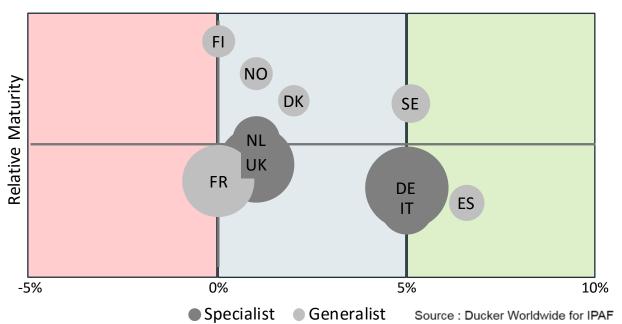
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While the European MEWP rental market (10 countries under study) experienced moderate revenue growth in 2015, different country-specific situations exist.

- Spain, Italy, Germany and Sweden are showing significant growth, with substantial growth potential still lying ahead especially for Germany, Italy and Spain, which are much less mature markets than the Swedish market.
- Denmark, Norway, the Netherlands and the UK experienced moderate growth in 2015.
- France, while beginning market stabilisation in 2015, still holds high growth potential, and Finland, which also stayed stable in 2015, presents lower overall growth potential as it is already the most mature of the 10 European markets under study.

2015 MEWP Rental Revenue Growth



Note: market maturity index based on the ratio: country fleet size country population Note: bubble size reflects market size (value).





Region	Market Situation 2015	GDP	Overall construction	MEWP Rental Market	Key Indicator
	2013		_	Warket	
Finland	Market stabilisation Exit from recession is	= +0.6%	-1%	= 0%	Slight fleet expansion
France	confirmed	= +0.2%	-1%	= 0%	Rental rates continuously down
NL	Fleet diversification and slight economic upturn	+1.5%	+7%	+ 1%	Slight fleet expansion
UK	Market slow down due to intense competition and limited construction	+1.8%	+1%	+ 1%	Slight fleet expansion Rental rates down
Norway	Growth slow down after 4 years of strong dynamism	= +0.1%	+2%	+ 1%	Fleet expansion Strong rate pressure
Denmark	Market driven by demand in construction end-applications	= +0.6%	+2%	+ 2%	Fleet expansion
Germany	Market driven by demand in non-construction endapplications (industry)	+1.2%	+1%	+ 5%	Fleet expansion First year with rate pressure
Sweden	Market driven by strong demand in construction	+2%	+8%	+ + 5%	Fleet expansion, utilisation and rental rates improving
Italy	Recovery is confirmed	= +0,7%	= +0%	+ + 5%	Fleet expansion, utilisation and rental rates improving
Spain	Recovery is confirmed, driven primarily by non-construction end-applications	+3.4%	+1%	1 + 7%	Fleet expansion, utilisation and rental rates improving
Europe (10 countries)	Growing demand	+1,4%	+1%	+3%	Fleet expansion Continuous rental rate pressure

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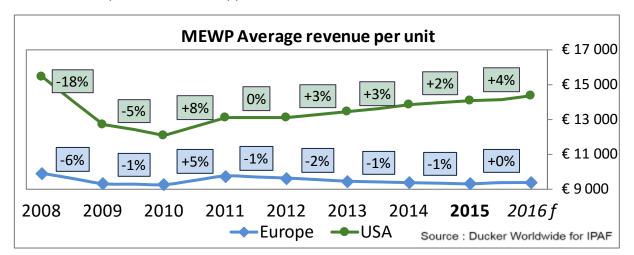


Although the European MEWP market is improving, the US is still showing stronger dynamism.

Region	2015 revenue growth	2015 revenue	2015 fleet size growth	2015 Fleet size	Utilization rate growth	Rental rate growth
Europe*	+ 3%	€ 2.4Bn	+ 3%	253 354	+ 1 pt	- 1%
USA	+ 5%	€ 7.5 Bn	+ 3%	530 525	- 1 pt	+ 2%

Exchange rate \$1 = €0.900

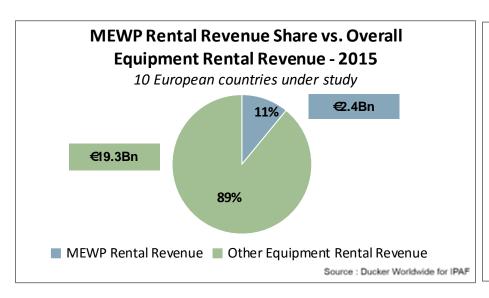
- The US market remains significantly ahead of the European one, driven by a positive economy with steadily increasing GDP per capita and strong construction sector activity.
- The US revenue per unit continued its steady improvement in 2015, and should even accelerate this positive trend in 2016. On the other end, the European revenue per unit was affected by a continuous rate deterioration in 2015. Stabilisation of the revenue per unit should happen in 2016.

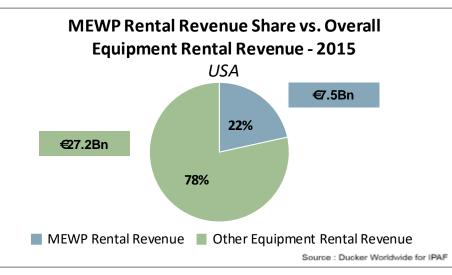


*10 countries under study – representing approx. 85% of the entire European market revenue.



The European MEWP rental revenue continued to account for slightly more than 10% of the overall construction equipment rental revenue in 2015. It is still approximately half of what the US MEWP rental market represents vs. overall US equipment rental revenue. (source ERA).





ERA overall equipment rental revenue includes:

- General Plant
- Tools & General Equipment
- 3. Access
- Power generation & Temperature Control
- Accommodation & Fencina
- **Industrial Machinery**
- 7. Crane

ARA: American Rental Association ERA: European Rental Association

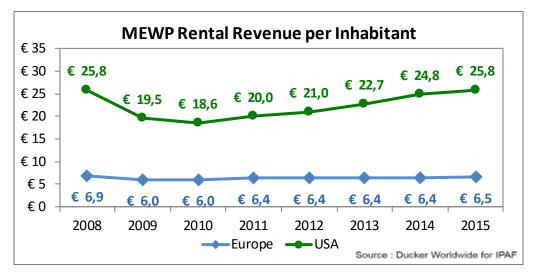
ARA overall equipment rental revenue includes:

- Party & Event
- General tool
- Construction & Industrial Equipment

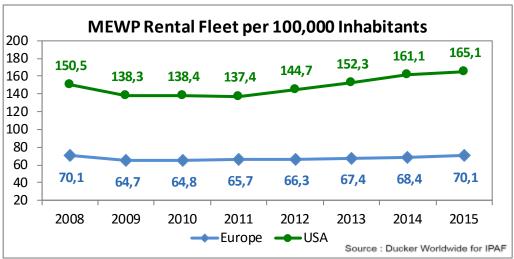
Exchange rate: \$1 = €0.900



European rental revenue and fleet per capita remain drastically below US levels. While the European market is less mature than the US, it has been showing significantly slower growth since 2011.



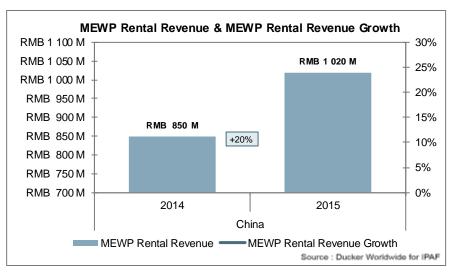
- The European rental revenue per inhabitant started to increase again in 2015 after four years of stagnation.
- While rental revenue in the US grew by almost 40% since 2010, it only increased by 8% since then in Europe.



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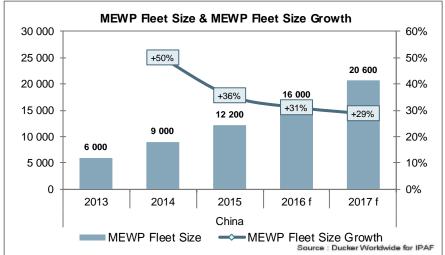
The Chinese MEWP rental market continued to experience steep revenue growth in 2015, driven by strong fleet expansion. It is now above RMB1000M (€148M). The Chinese MEWP rental fleet should exceed 20,000 units by 2017.



- That being said, the market is also experiencing intense increasing competition, leading to significant rental rate pressure.
- Utilisation rates remained high in 2015 at above 80%.

1 RMB = 0,145 € (average 2015 conversion rate)

 While JLG and Genie are still leading the market, domestic brands i.e. Dingli, Jingcheng, Runshare and Mantall are gaining more and more focus recently, especially among small rental companies.



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Worldwide MEWP Rental Fleet Size is estimated at approximately 1,170,000 units. This represents a 4% increase compared to 2014. Latin America, and especially Brazil, experienced significant decrease in fleet size.

North America				
Articulated Booms	106 450			
Straight Booms	126 550			
Scissors	329 450			
Others	30 950			
Total	593 400			

Latin America*				
Articulated Booms	6 750			
Straight Booms	15 800			
Scissors	20 700			
Others	4 100			
Total	30 250			

^{*}Includes Mexico

EAME	
Articulated Booms	80 750
Straight Booms	39 800
Scissors	167 450
Others	40 150
Total	328 150

Overall Europe (27 countries) accoun	ts for 95%
of total EAME fleet	

ASIA - PAC			
Articulated Booms	20 800		
Straight Booms	38 650		
Scissors	99 150		
Others	39 650		
Total	198 250		

Note: included are powered access: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<10ft/3m high), telescopic material handlers, forklifts, cranes, mast climbers

Others include: vertical lifts, vertical masts, vehicle-mounted booms owned by rental companies owning self-propelled fleets

MARKET SIZE 2008 - 2016

IPAF Powered Access Rental Market Report 2016 - Europe

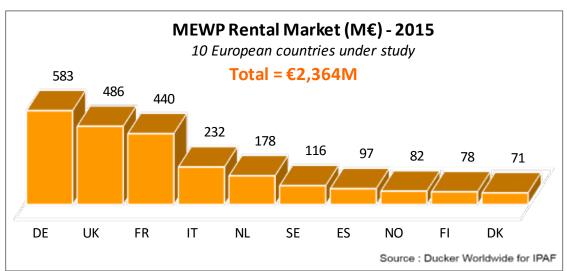






The MEWP Rental Market (10 European countries under study) is estimated at approximately €2.4B in 2015. Total European* market value is estimated at €2.7B.

- Similarly to previous years, Germany, the UK and France are the 3 largest MEWP rental markets among the countries under study, accounting for approximately 65% of the revenue in the 10 countries under study.
- The ranking of countries remains unchanged.



- Although the German fleet size is smaller than the UK one, the German market is the largest one as far as value is concerned.
- The share of MEWP revenue as % of total rental revenue experienced an increase in 2015, compared to 2014. It is now at 69% (vs. 64% in 2014).
- MEWP rental revenue is increasing the total revenue of companies, gaining share against other types of equipment rental, or other activities.
- No market saw their value decrease in 2015. Some countries continued their recovery (Spain, Italy) or pursued growth (Germany, UK), while MEWP rental revenue remained rather stable in others markets (France, Finland).

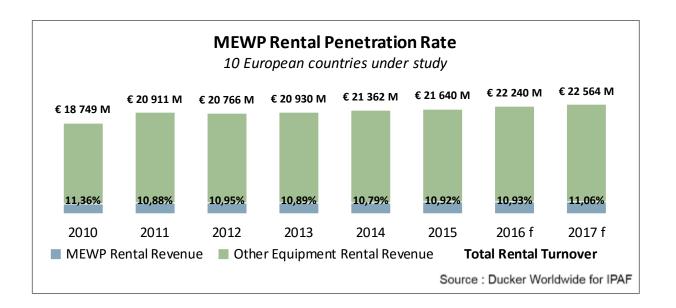
2015	Total	UK	FR	ES	IT	DE	NL	DK	NO	SE	FI
Rental Revenue as % of Total Company Revenue	56%	55%	60%	37%	58%	46%	54%	73%	71%	79%	66%
MEWP Revenue as % of Total Rental Revenue	69%	88%	64%	54%	58%	75%	75%	46%	39%	44%	58%
MEWP Rental Revenue as % of Total Company Revenue	36%	49%	39%	20%	34%	35%	41%	34%	28%	35%	38%

^{*} Defined as 27 EU countries + Norway + Switzerland + Slovenia + Croatia + Macedonia



After losing ground against other equipment rental since 2012, the MEWP rental market is now gaining share again.

• Total European MEWP penetration is expected to grow slowly and go beyond 11% in 2017.

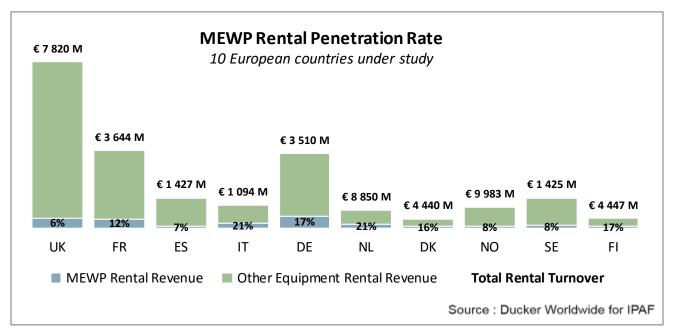


Source for Total Rental Turnover: ERA 2015 Report.



Similarly to last year's results, the share of MEWP rental revenue as part of the total equipment rental revenue ranges from 6% to 21% in the 10 European countries under study.

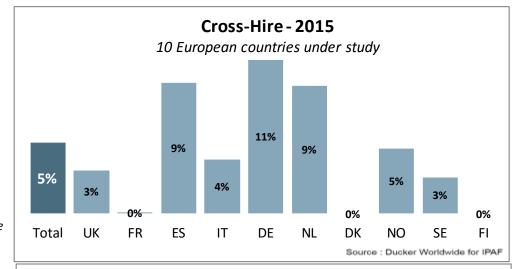
- Highest shares are encountered in Italy, the Netherlands, Germany, Finland and Denmark, above 15% each.
- Lowest MEWP rental penetration rates are found in the UK, Spain, Sweden and Norway, below 10%.



Source for Total Rental Turnover: ERA 2015 Report.

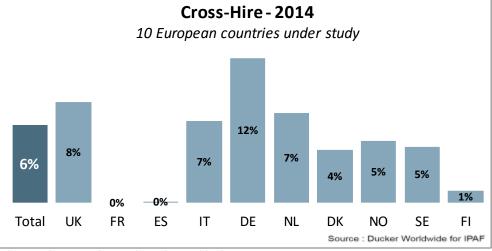


The average level of cross-hire was at 5% in the European countries under study in 2015.



All re-rental amounts have been eliminated from totals expressed in this report

Cross-hire = Rental by one company from another

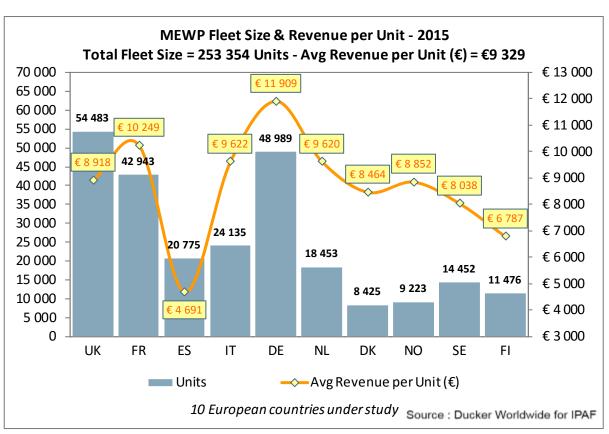


- Although slightly decreasing, the level of cross-hire in Germany is still the highest in Europe; the gap is narrowing with countries like the Netherlands, where cross-hire increased.
- Cross-hire was almost not used in France, Denmark and Finland in 2015, where demand was low, and rental companies were able to provide requested equipment.
- A strong increase of cross-hire is reported in Spain, where the demand for MEWP rental increased after several years of de-fleeting, creating thus timely needs for more equipment.
- On the contrary, cross-hire decreased in the UK, Sweden and Italy, where rental companies tried to limit cross-hiring as much as possible.

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MEWP fleet size is estimated at approximately 253,000 units (in the 10 European countries under study). The overall European* fleet size is estimated at approximately 313,000 units.



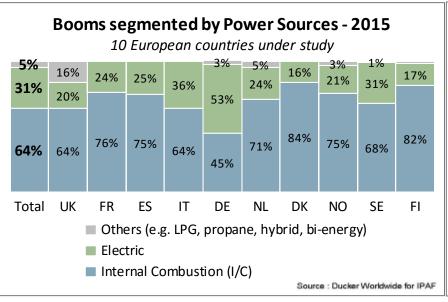
End of the year data

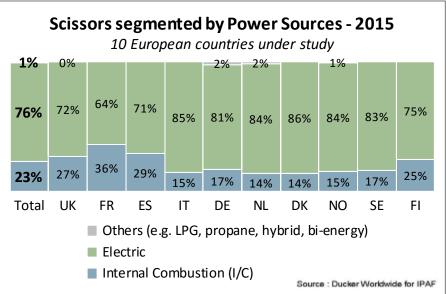
- Similarly to previous years' results, the main three biggest fleets are in the UK, Germany and France.
- The average revenue per unit is slightly higher than 9,000€ among the 10 European countries under study.
- Average revenues per units remained close to the ones presented in last year's report and no significant change is highlighted.
- Average revenue per unit kept increasing in Spain, but remained significantly lower than in other countries.



In 2015, the share of booms powered with internal combustion engines increased overall. I/C engines remained stable in the scissors category, while electric increased, at the expense of hybrid equipment.

• The strong decrease of the proportion hybrid scissors is explained by their lack of attractiveness: hybrid scissors are considered as not convenient, as they are too big for going inside buildings and thus, not used for indoors applications.





<u>% of fleet</u> powered by electric vs. internal combustion.

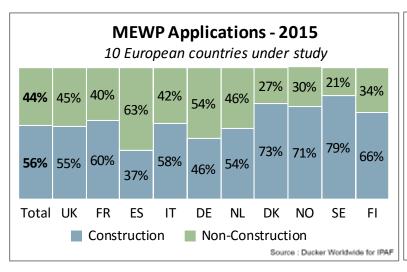


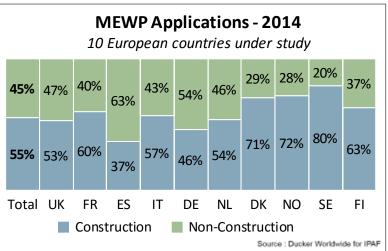
The share of construction increased very slightly in 2015, and now accounts for 56% of MEWP rental applications.

- The positive construction outlook in most markets under study led to a slight increase of this sector, while non-construction applications remained stable, with fewer cycles identified.
- The share of construction applications remains the highest among Nordic countries, while it is at its lowest level in Spain.
- Several rental companies across Europe report a clear aim at diversifying their activities by working more in non-construction.

Non-construction includes e.g. property care, maintenance, cleaning, utilities, events.

Construction includes new build and renovation; including all types of buildings, also industrial.





MARKET DYNAMICS 2008 - 2016

IPAF Powered Access Rental Market Report 2016 - Europe

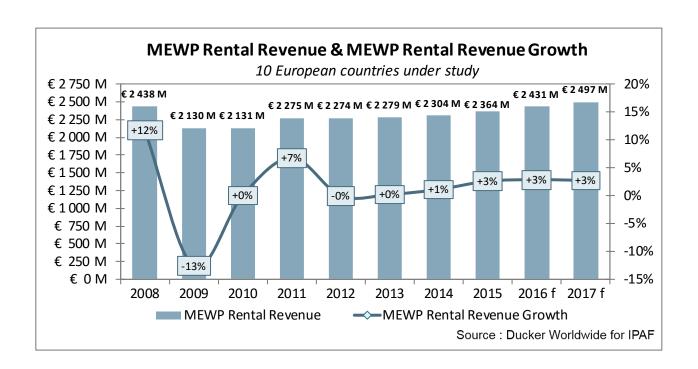






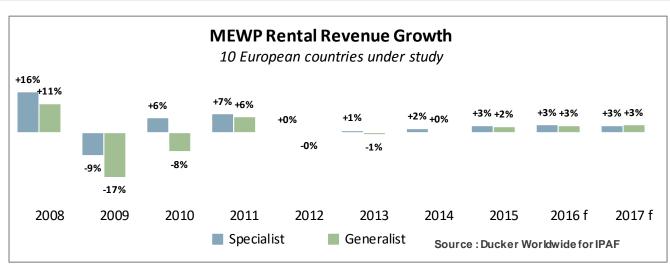
As forecasted last year, the growth initiated in 2014 in the MEWP European rental market is now confirmed. Total market value is estimated at €2.4Bn in 2015.

- Several macro-economic factors drive this positive growth, in particular, an increase of the overall construction sector, as well as economic improvements in most of the countries under study.
- Growth is expected to be maintained at a similar level (+3%) over the next two years.



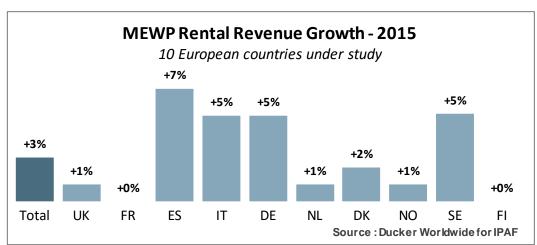


In 2015, market revenue grew or remained stable in all 10 European countries under study. Although the situation remains fragile in some markets, no further decrease was reported.



- Both general and specialist companies experienced similar growth in 2015.
- The same growth rate will be maintained for these two categories in 2016 and 2017.

- Spain and Italy confirmed and accelerated revenue growth, as forecasted last year.
- Sweden, Denmark and the Netherlands continued to grow at a rate between 1% and 5%.
- Growth slowed down in both the UK and Norway.
- The situation stabilised in France and Finland: after several years of strong recession, revenue stopped deteriorating in 2015.

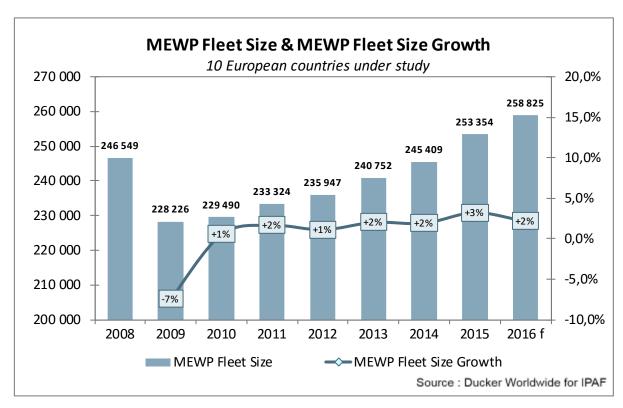


^{*} Defined as 27 EU countries + Norway + Switzerland + Slovenia + Croatia + Macedonia



Total fleet continued to grow for the 6th year in a row and now exceeds its 2008 level. Total number of units is now above 253,000 units.

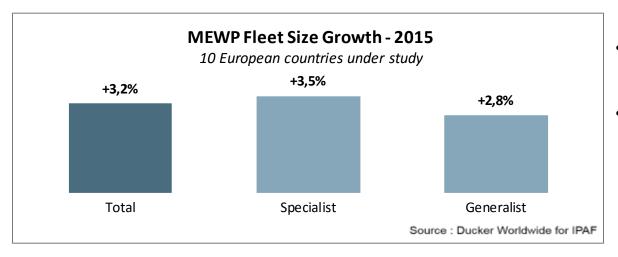
- Driven by the increasing demand for MEWPs from a variety of sectors, the German fleet grew at the faster pace (+8%).
- No de-fleeting trend was identified in any market in 2015.
- Continuous, although slightly slower, fleet increase is expected in 2016.



Note: included are powered access equipment: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers

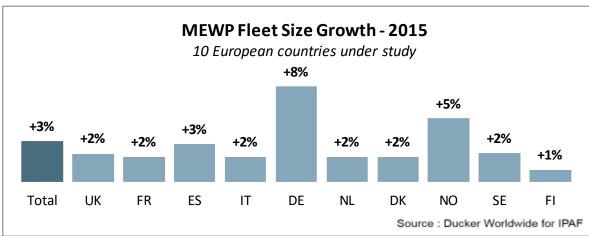


Fleet grew in all countries under study and for both specialists and generalists.



- Fleet growth is reported for both specialist and generalist companies.
- Nevertheless, the increase in MEWP fleet size was stronger among specialist companies.

 Except Germany and Norway, where fleet expanded rapidly following a trend initiated in 2010, the other markets were cautious in fleet additions: fleet growth rates range from 1% to 3% in most markets.

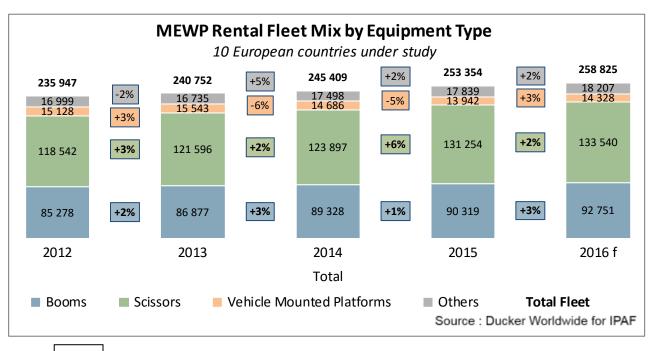


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Scissors are the main MEWP category in the European fleet and they now account for 52% of total fleet size.

- Scissors are the equipment most in demand already the mainstay in the European fleet, their share continued to increase strongly in 2015.
- The growth of booms slowed down a bit in 2015, but it is expected to increase in 2016.



Note: included are powered access equipment: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers

% unit growth, e.g. Booms fleet increased by 1% from 2014 to 2015.

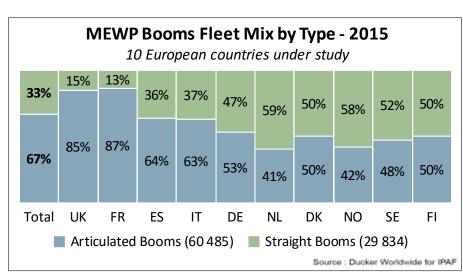
Others include: vertical lifts, vertical masts, push-around, trailer mounted/towable.

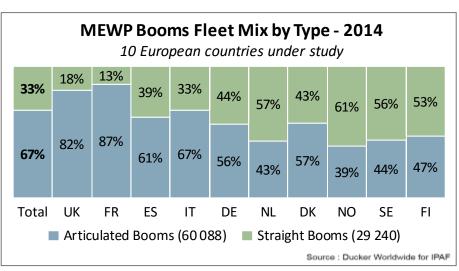
+X%



Boom fleet segmentation between straight and articulated remained unchanged, with variations depending on countries. Articulated booms still account for 67% of the total boom fleet.

- In France and the UK, the share of articulated booms remains traditionally high, due to the diversified range of applications articulated booms allow for.
- In the Netherlands and most of the Nordic countries, straight booms dominate: these machines are very popular in these regions, on large construction sites, and for the Nordics, where space is less of issue.



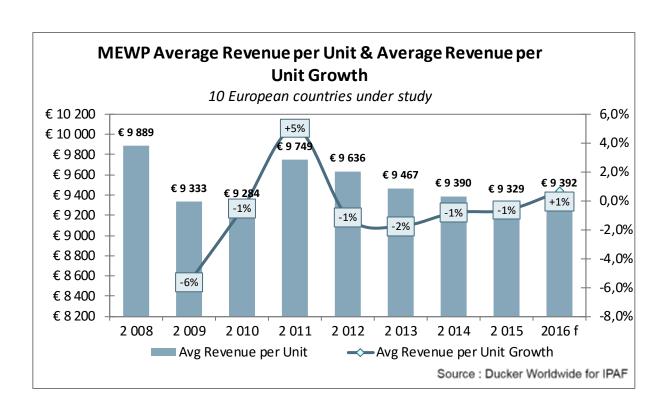


End of the year data



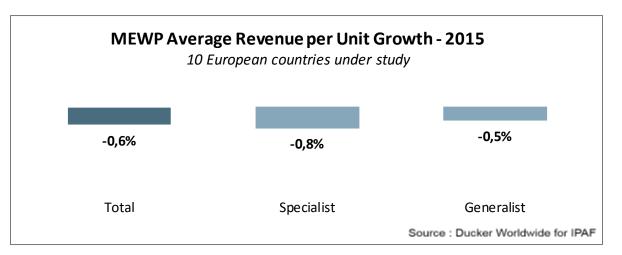
Although market revenue grew, the continued expansion of fleet size, coupled with overall stagnating or decreasing rental rates, led to a further slight decrease of the average revenue per unit.

A slight increase in average revenue per unit is expected for 2016.

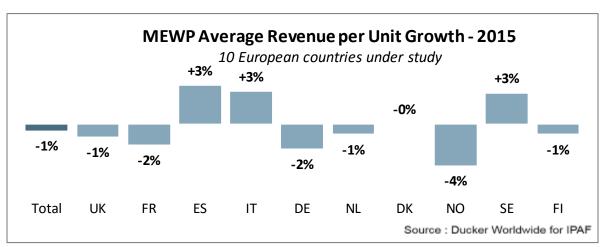




Revenue per unit decreased for both specialist an generalist companies. The overall slight decrease hides a variety of situations across the 10 European countries under study.



- Some dynamic markets (Germany, the UK) experienced an increased pressure on price, which led to a decrease in the average revenue per unit, despite the overall positive revenue growth.
- In Spain and Italy, improving demand, allowed rental companies to increase rental rates after several years of deterioration.



INVESTMENT 2008 - 2016

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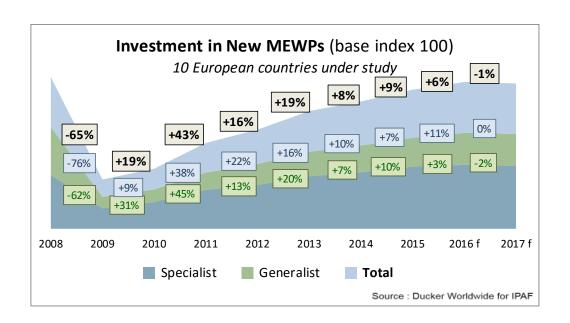






In line with last year's market report, the total amount of investments made in 2015 grew significantly.

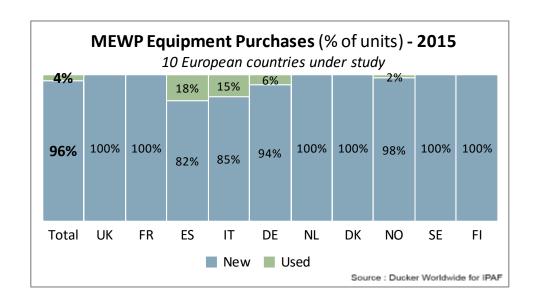
- Both generalist and specialist companies increased investment; the increase was slightly more significant for specialist companies in 2015.
- Equipment spending was dedicated to both fleet renewal and fleet expansion, with companies pursuing the aim of having the most attractive fleet to face tougher competition.
- The level of investment is expected to increase less in 2016, and reach a plateau in 2017.





Most equipment was purchased new by MEWP rental companies across the 10 European countries under study.

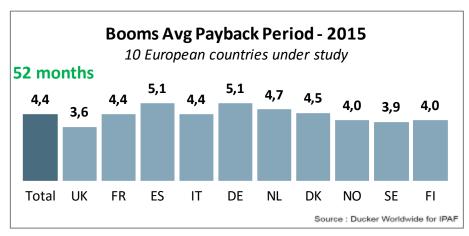
- MEWP rental companies believe that new equipment delivers stable performance and is more attractive to customers.
- On the other hand, some smaller rental companies tend to prefer investing in used equipment. This is especially the case in Spain and Italy.

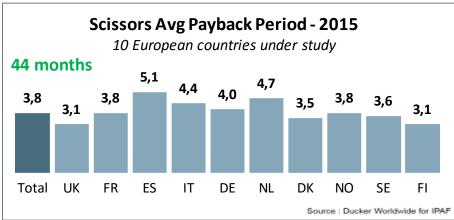




Average payback period increased for both booms and scissors. It remains at a higher level for booms (52 months) than for scissors (44 months).

• The main reason for the increase in payback period is deterioration in rental rates.





4.4 = 4 years and 4 months

3.8 = 3 years and 8 months

OPERATIONAL ASPECTS 2008 - 2016

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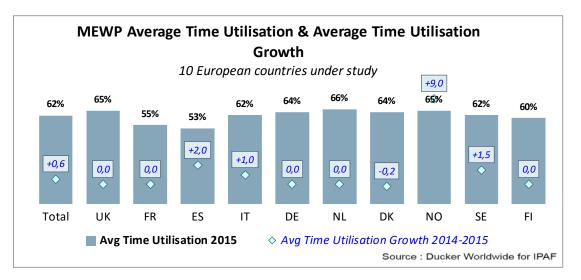
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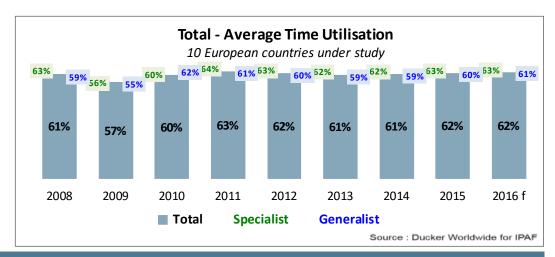


The overall European utilisation rate remained stable in 2015 compared to 2014. However, discrepancies exist between countries.



- Norway, Spain, Italy and Sweden saw an increase in utilisation rates, driven by dynamic demand.
- On the other end, in the UK, France, Germany, Netherlands, Denmark and Finland, utilisation rates remained stable as rental companies chose to expand fleet as a driver of revenue.
- On average in Europe, scissors show slightly higher utilisation rates than booms (+1,5pts). Similar differences should continue in 2016.

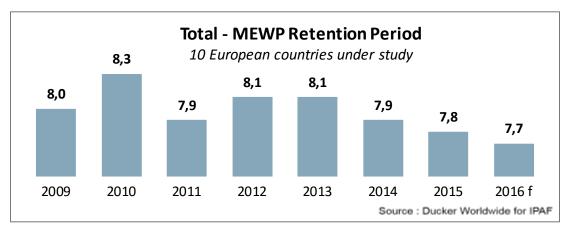
 Specialists continued to record slightly higher utilization rates than generalist rental companies



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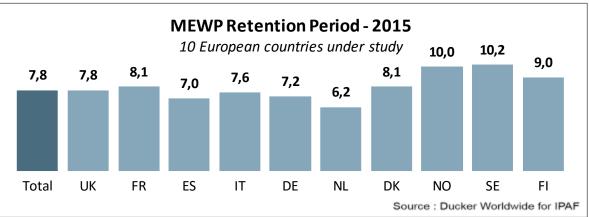
The average European utilisation rate (10 countries under study) continued to slightly shorten due to on-going investment in fleet renewal.



 Rental companies expect retention period to continue to slightly decrease in 2016, due to equipment spending they are planning. However, retention period should stabilise in 2017.

7.8 = 7 years and 8 months

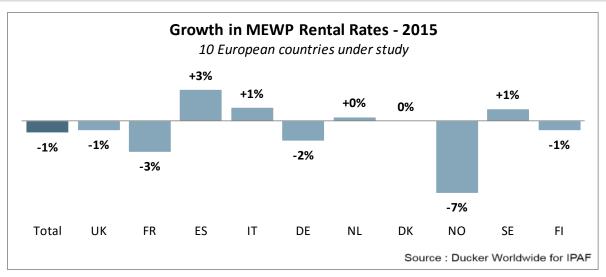
 Most countries are relatively aligned concerning retention period, except for the Nordics, which typically keep machines longer. Dutch rental companies report keeping equipment for a shorter period than the European average.



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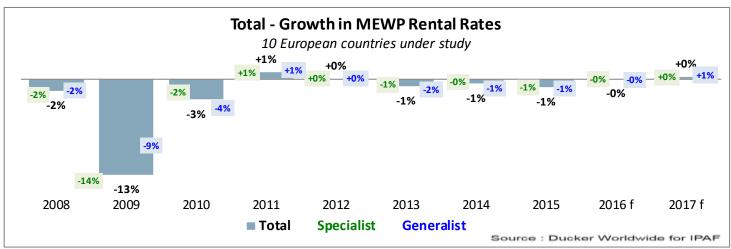


Despite general market improvement, rental companies in most European countries under study continued to experience intense competition leading to rental rate deterioration.



- Countries most affected in 2015 by rental rate deterioration were Norway, France, Germany, Finland and the UK.
- On the other end, a few countries were able to improve rental rates. This is the case for Spain and Italy, who have been experiencing several years of deterioration, as well as Sweden.
- Several companies in France are questioning the viability of their business should rates continue to deteriorate.

 Specialist and generalist rental companies decreased rates in similar proportion.



MARKET TRENDS AND DRIVERS

IPAF Powered Access Rental Market Report 2016 - Europe

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Although most rental companies agree that increasing safety concerns and environmental regulations are positive for the industry, they still fear that more constraints could impact their profitability.

Increasing safety concerns in MEWP usage

- Safety concerns are definitely growing amongst rental companies, manufacturers and authorities. These concerns impact many aspects of the MEWP market:
 - Growth of the number of trained operators, and increased safety regulations reinforcement by authorities, is expected in the next few years in several European countries e.g. in Spain.
 - Mandatory safety coordinator for companies with more than 100 employees e.g. in Sweden, more frequent safety checks to be performed on machines, etc.
 - Machines will have to be safer i.e. equipped with safety devices (secondary guarding devices), which means that machine retrofit/upgrading will happen more and more
 - Younger equipment, increasing machine replacement leads to increased safety

Environmental regulations

- Several new regulations and/or trend towards greener equipment is reported in countries like the UK (with the NRMM in London), the Netherlands, and Italy.
- Green machine usage is expected to increase in the near future with greater use of electrical and hybrid engines, along with lithium batteries to allow for longer and stronger autonomy.
- IPAF is expected to continue lobbying authorities in order to give time to rental companies to adapt fleet to legal requirements.

Differentiators

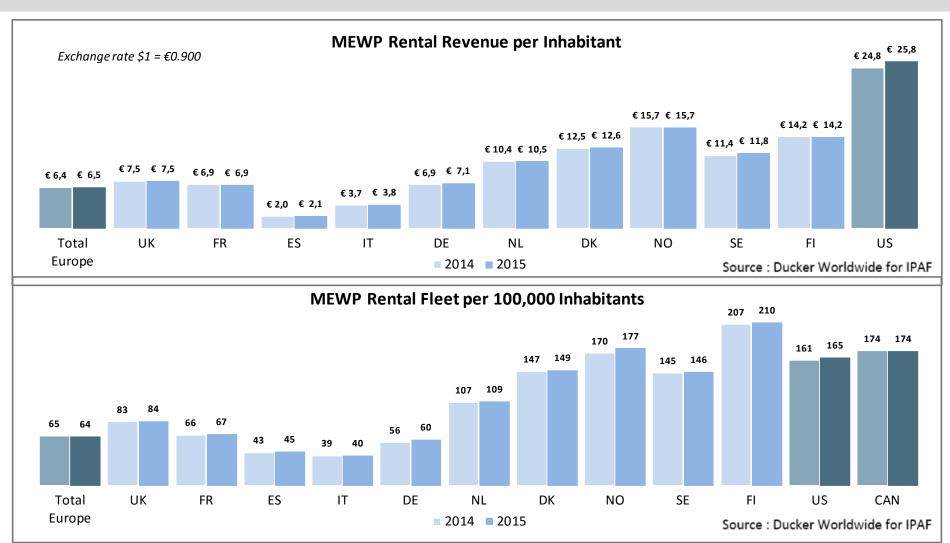
- In a situation of intense European competition, rental companies report relying on few strategic pillars:
 - Balancing the repartition of end-markets they are renting to by putting emphasis on non-construction activities.
 - Increase business agility in order to adapt better to customer needs in terms of fleet mix and differentiating services.
 - Offering complete services including insurance for possible damages.

Market concentration

• Rental companies report a continuous trend towards market concentration, with smaller rental companies, and/or large groups being acquired by others, in both dynamic markets (Germany), and in struggling markets like France (Hertz Equipment Rental France and Spain acquired by Loxam).

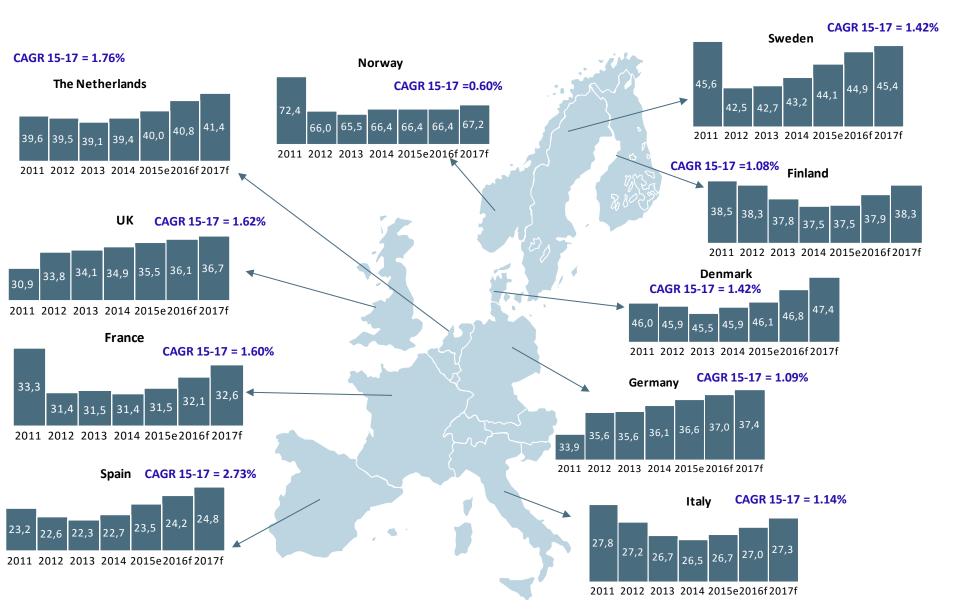


MEWP rental revenue per inhabitant and MEWP rental fleet per 100,000 inhabitants



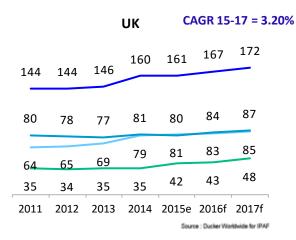
Prepared for The International Powered Access Federation by Ducker Worldwide

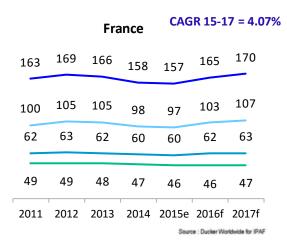


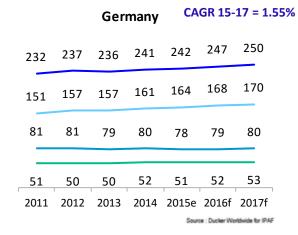




The French construction market continued to deteriorate slightly in 2015, while the UK and Germany showed slight growth. Forecasts show a clear improvement in all countries, and primarily in France.





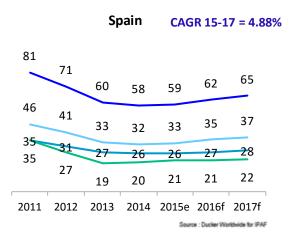


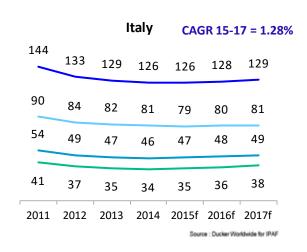
Construction put in place in billion Euros based on Euroconstruct 2015.

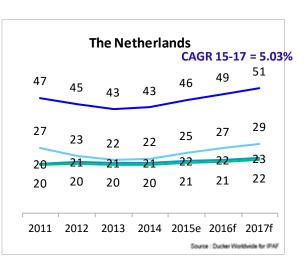
Residential construction
Non-residential construction
Total construction
Civil engineering



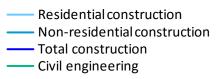
The highest construction growth was achieved in the Netherlands in 2015. Italy showed a stable situation while Spain improved slightly. The Netherlands and Spain should experience significant improvements in 2016 and 2017.





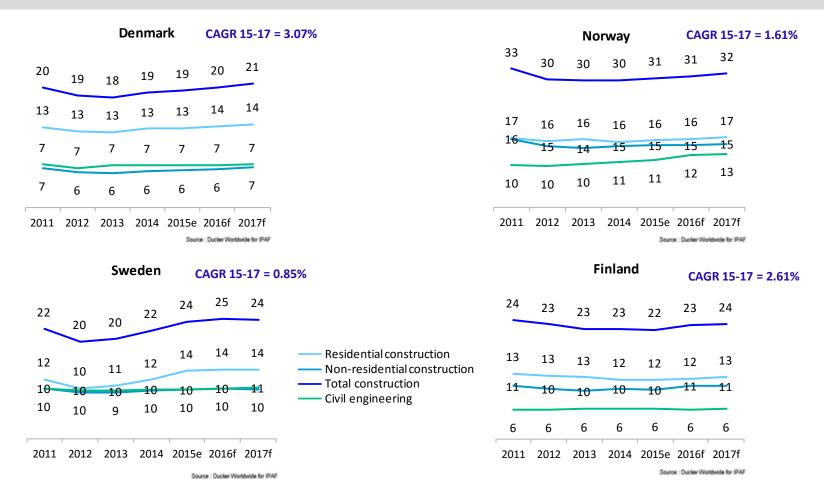


Construction put in place in billion Euros based on Euroconstruct 2015.





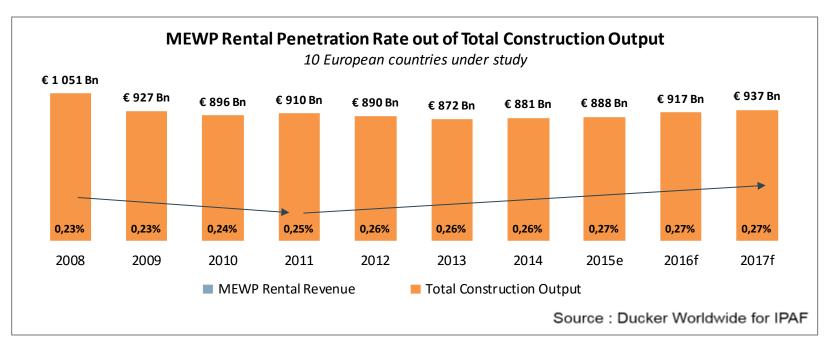
The construction sectors in Sweden and Norway constructions sector increased in 2015, while Denmark remained stable and Finland decreased. Recovery should start in 2016 for Finland and Denmark.



Construction put in place in billion Euros based on Euroconstruct 2015.



The European MEWP rental revenue represents a very small share of the European construction output. However, while this share tended to decrease until 2011, it is since then on a more positive trend, slowly gaining slight importance.



Construction put in place in billion Euros based on Euroconstruct 2015.



Comparative analysis - Total Equipment Rental (ERA) versus Powered Access Rental (IPAF)

	Total Equipment Rental – ERA – 2015				Powered Access Rental – IPAF – 2015			
	Total rental revenues (million Euro)	Growth revenues year on year (on%)	Revenues from construction versus non-construction (on %)	Fleet investment variation year on year (on %)	MEWP rental revenues (million Euro)	Growth revenues year on year (on %)	Revenues from construction versus non-construction (on %)	Fleet investment variation yea on year (on %)
Denmark	440	1.4%	70% - 30%	2.0%	71	2%	73% - 27%	5%
Finland	447	1.7%	70% - 30%	-6.7%	78	0%	66% - 34%	0%
France	3644	-0.1%	70% - 30%	0.8%	440	0%	60% - 40%	-14%
Germany	3510	1.7%	70% - 30%	5.8%	583	5%	46% - 54%	6%
Italy	1094	2.7%	70% - 30%	3.8%	232	5%	58% - 42%	50%
Netherlands	850	1.9%	70% - 30%	3.4%	178	1%	54% - 46%	20%
Norway	983	-1.5%	60% - 40%	-0.8%	82	1%	71% - 29%	9%
Spain	1427	3.7%	75% - 25%	9.7%	97	7%	37% - 63%	55%
Sweden	1425	1.0%	70% - 30%	3.4%	116	5%	79% - 21%	1%
UK	7820	1.5%	60% - 40%	3.9%	486	1%	55% - 45%	5%
Total 10 Countries	21640	1.3%	65% - 35%	1.8%	2364	3%	56% - 44%	9%

CHINESE MEWP MARKET

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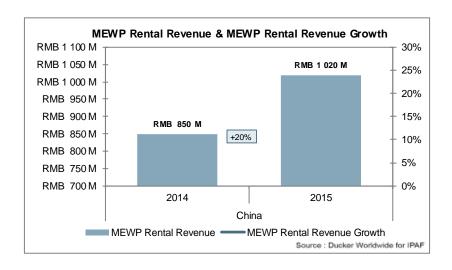
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The Chinese MEWP rental market continued to experience steep revenue growth in 2015, driven by strong fleet expansion. It is now above RMB 1000 M (€148 M).

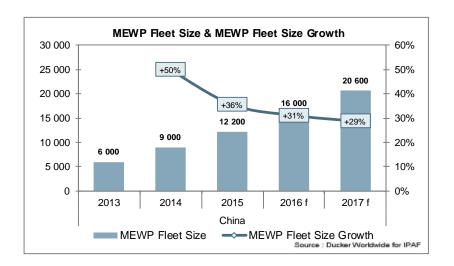


- Positive development of the MEWP rental market in China encouraged small and medium-sized companies to invest into MEWP machines.
- Rental companies of other equipment types show interest in adding MEWPs to their fleet.
- Several large rental companies are preparing for M&A activity in order to increase market shares.
- MEWP manufacturers show interest in rental activities and are starting to offer MEWPs in their rental subsidiaries.
- These new players entering the MEWP market are offering very aggressive rental rates which led to significant rental rate pressure in 2015 (-5%).
- Typical rental contracts are from 3 to 12 months long. Long rent (> 6 months) is getting more popular.



The MEWP rental fleet grew in 2015 by approximately 35%. It is expected to go beyond 20,000 units by 2017.

- Scissors represent the majority of the rental MEWP fleet in China, accounting for 55 to 60% of total fleet size. Booms account for about 30-35%, while vehicle mounted platforms and other smaller equipment represent approx. 10%.
- Scissors are valued for their flexibility in a wider range of uses a further advantage is their rental price, which is more attractive than booms and vehicle mounted platforms.
- Booms are heavily used in public and industrial building maintenance i.e. airports, high-rise office building and shopping malls, followed by outdoor construction work.
- Vehicle mounted machines are used mostly in municipal and utility maintenance projects.
- Although the majority of MEWP brands available in China are European and North American, domestic machines are gaining importance and acceptance.
- While JLG and Genie are still leading the market, domestic brands i.e. Dingli, Jingcheng, Runshare and Mantall are gaining more and more focus recently, especially among small rental companies.
- Average fleet retention period in China is between 7 and 8 years.
- Average utilisation rates are estimated at 82%.





The Chinese MEWP rental market is experiencing strong development, which will continue in the coming years.

Increasing MEWP awareness

- The geographical reach of MEWPs is expected to broaden. It is currently somewhat limited to the major Chinese cities, however other cities/regions will see increasing awareness of MEWPs.
- New end-applications will grow in importance in the future. Strong potential exists for higher MEWP usage in events/exhibitions, hospitality, hospitals, and industrial parks.
- Scaffolding and ladders are perceived by the Chinese government in the 12th five-year plan as not being sufficiently safe when working at height. This equipment type will be progressively replaced by MEWPs in the future.

Increased focus on work safety

- Rental players expect the introduction of official safety standards within the next 3 to 5 years.
- Since the end of 2015, the Association of Equipment Manufacturers (AEM) has been working with manufacturers of MEWPs with the aim to develop new safety standards for work at height in China.

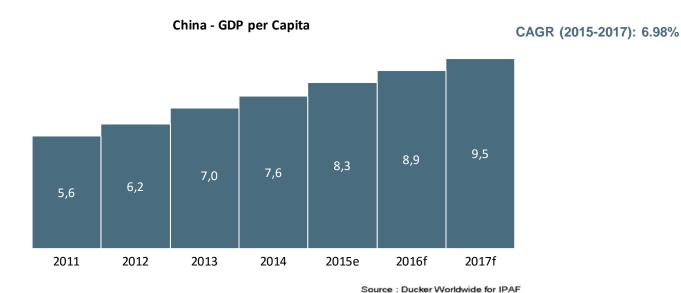
Fleet Management

- Services like training, maintenance, spare parts supply, etc. are expected to gain more focus within the overall rental business in the forthcoming years.
- A better geographical spreading of rental companies will facilitate and simplify rental, thus driving rental activity up.
- Increased demand for various MEWP heights will lead to a more diversified MEWP fleet in the future.



Macro-economic indicators show stable growth of the Chinese economy in the next years.

- After experiencing rapid growth for more than a decade, China's economy experienced a slowdown in recent years.
- The Chinese Central Government emphasised the concept of NEW NORMAL for economical development, forecasting the GDP growth rate to remain below 7% in the 13th five year plan 2016 – 2020.
- Multiple national and international construction projects are planned in the forthcoming years: 'One-belt, 'One road' scheme and 'Maritime Silk Road'.



Data Source: International Monetary Fund, World Economic Outlook Database, October 2015

APPENDIX

IPAF Powered Access Rental Market Report 2016 - Europe

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67



Ten countries under study

- France
- Germany
- Italy
- Netherlands
- Nordic Region (DK, NO,SE, FI)
- Spain
- UK

- Austria
- Belgium
- Bosnia
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Estonia
- Greece
- Hungary
- Ireland

- Latvia
- Lithuania
- Luxembourg
- Macedonia
- Malta
- Poland
- Portugal
- Romania
- Slovak Republic
- Slovenia
- Switzerland

THANK YOU.

The International Powered Access Federation (IPAF) is a not-for-profit members' organisation that promotes the safe and effective use of powered access equipment worldwide. Members include manufacturers, rental companies, contractors and users.

Offices in: UK, Brazil, China, Finland, France, Germany, Italy, the Netherlands, Singapore, Spain, Switzerland, Turkey, UAE, USA.

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COUNTRY REPORT – FRANCE

IPAF Powered Access Rental Market Report 2016 - Europe

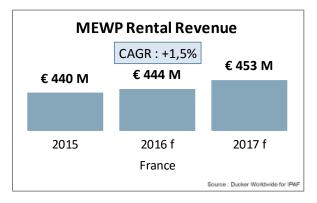
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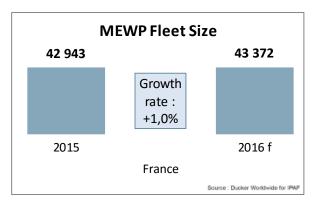




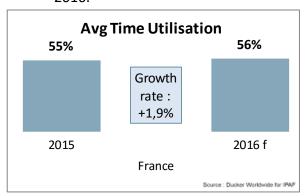


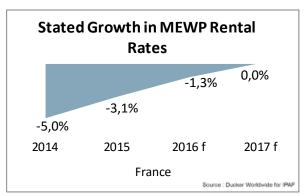
The French market achieved only a slight stabilisation in 2015, driven by an improved last quarter. However, uncertainties and strong concern remain amongst rental companies who are struggling to be profitable.





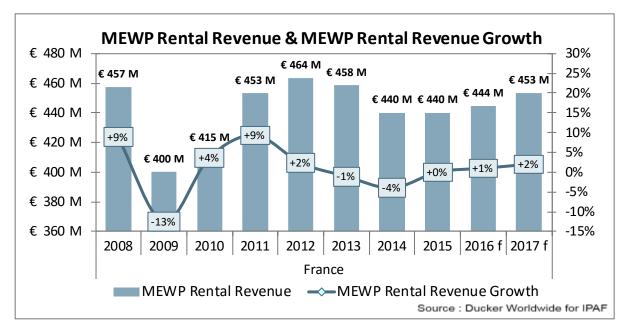
- Market recovery is yet to come in France. Demand was still low, which continued to drastically put
 pressure rental rates. Fleet expansion allowed revenue to stabilise in 2015, but 2016 remains highly
 uncertain.
- Rental companies hope for a construction rebound, which is indeed forecast by Euroconstruct in 2016.

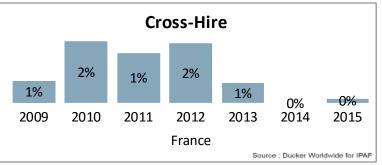






After several years of struggling, the French market slowly stabilised in 2015, primarily driven up by an improved last quarter.



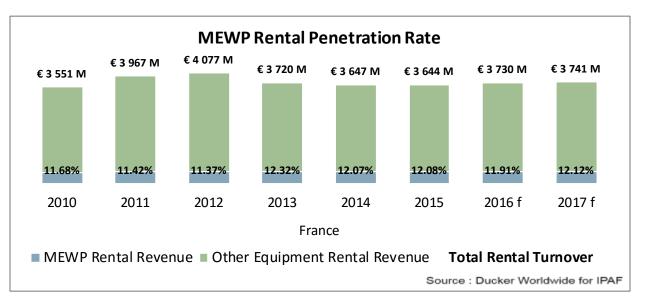


- The beginning of 2016 shows a relatively positive market trend, which rental companies hope to see continue in the rest of the year.
- In any case, if growth is confirmed in 2016, it should remain limited, as it is slowed down by poor rental rates.
- Many French rental companies explain that they have reached their limits in terms of profitability (or lack of). Many are in a critical situation; some significant M&A activity has been going on lately.
- Due to limited demand, cross-hire is very low.
- Rental companies report that services represent from 15% and sometimes up to 35% of their revenue, primarily coming from transport.



The MEWP rental revenue still represents approximately 12% of the overall equipment rental revenue. (source ERA)

• The stable share of MEWP rental revenue over the overall rental equipment revenue lies in the fact that the MEWP rental market value is evolving similarly to the overall equipment rental market.

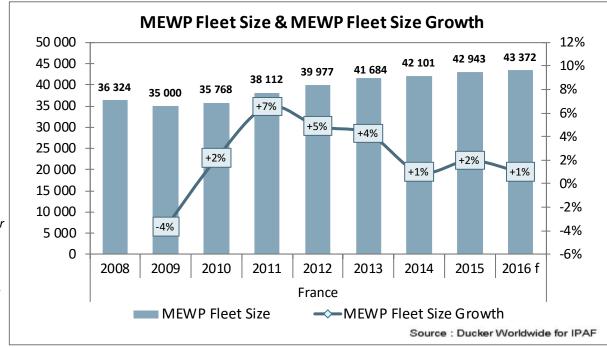


Source for Total Rental Turnover: ERA 2015 Report.



Slight fleet expansion continued in 2015, as a way to stabilise revenue. Fleet size should continue to slightly increase in 2016, but no major investment is planned by rental companies.

• In particular, the major rental companies report having continued to add machines to their fleet, while smaller rental companies stopped expanding fleet.

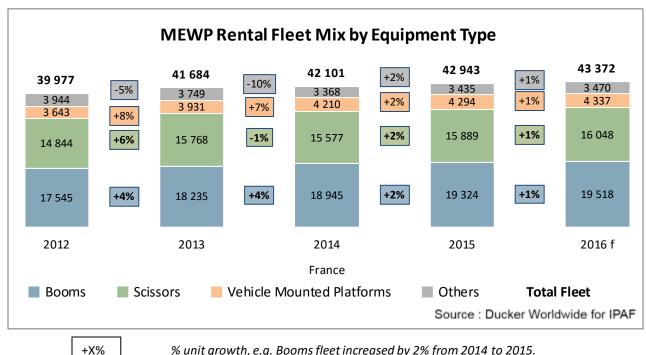


Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers



The different MEWP machine types evolved similarly in 2015 compared with 2014, and no differences are expected in 2016.

Booms still account for 45% of the French fleet, while scissors represent 37%.



Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers

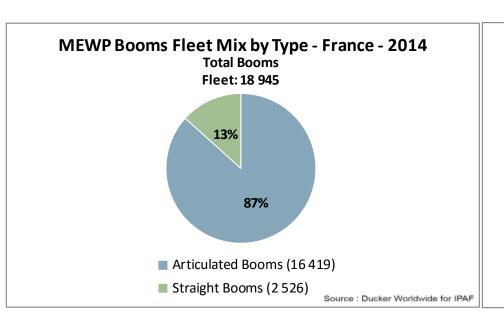
% unit growth, e.g. Booms fleet increased by 2% from 2014 to 2015.

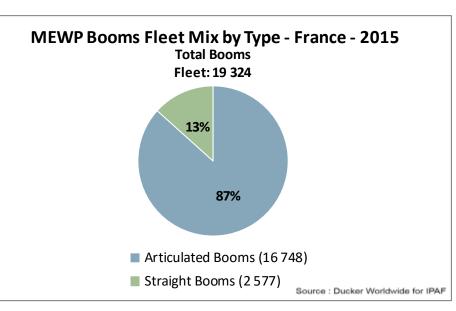
Others include: vertical lifts, vertical masts, push-around, trailer mounted/towable.



France remains the country where the share of articulated booms is the highest, before the UK.

• The proportion of articulated booms should remain relatively stable in 2016.

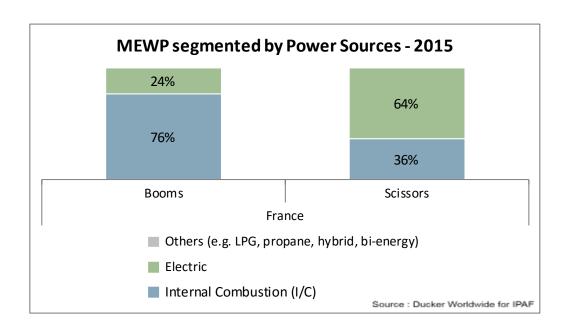






The trend towards electric machines slowed down in 2015 in France. However, it is expected to continue on the long-term.

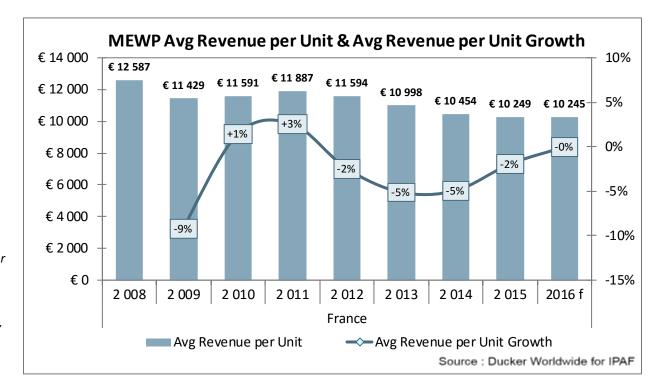
• As in most countries, more than two thirds of the boom fleet is diesel while more than 60% of scissors are electric.





In 2015, the average revenue per unit continued to deteriorate for the fourth year in a row due to strong continuous rental rate deterioration.

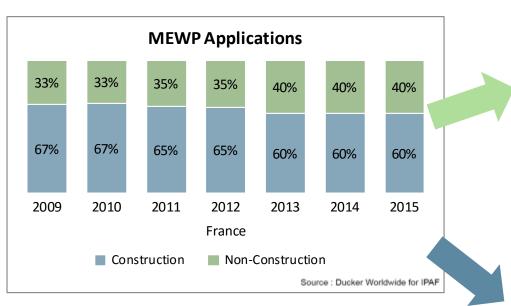
- The average revenue per unit has reached its lowest point since 2008.
- Rental companies hope that 2016 will at least see the stabilisation of the revenue per unit. Several companies' survival is at stake.



Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers



The share of construction in the MEWP rental revenue remained at 60% in 2015. However, several rental companies expressed a clear strategic goal to diversify more towards non-construction applications in the forthcoming years.



Share of rental revenues

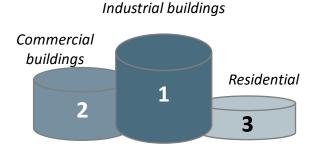
Non-construction includes industry, maintenance, cleaning, utilities, events.

Construction includes new build and renovation; including all types of buildings, also industrial.

Main non-construction sub-sectors



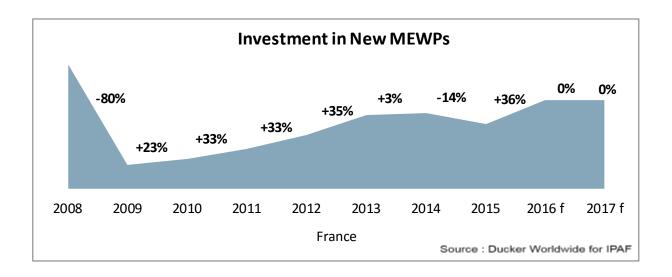
Main construction sub-sectors





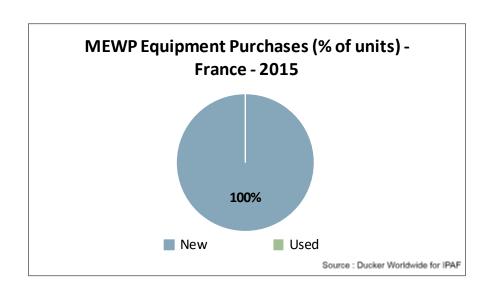
Overall investment decreased in 2015, but spending is expected to grow again in 2016, and remain stable in the following year.

- Some rental companies report having put in place a specific annual replacement rate, varying from 10 to 20% of the fleet per year.
- These companies have been maintaining the same replacement pace despite difficult years.





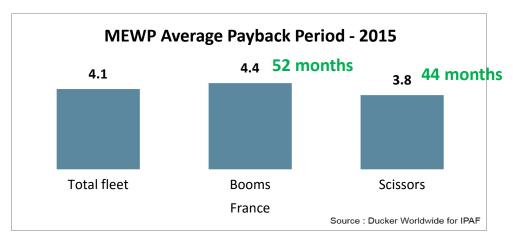
MEWPs purchased by rental companies in France are purchased new.





The 2015 average payback period is estimated at approximately 50 months. It is close to the 2014 levels.

• Diesel scissors are said to offer a significantly longer payback period compared to electric scissors, typically 10 additional months.

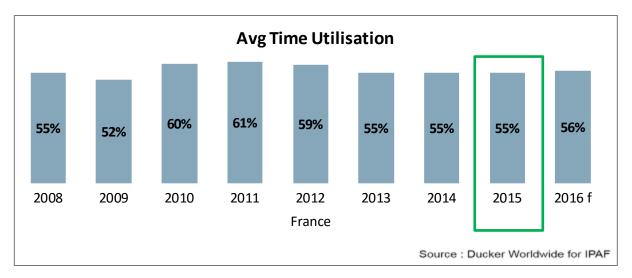


4.1 = **4** years and **1** month



Most companies interviewed report utilisation rates ranging from 50% to 60%. They hope for a slight improvement in 2016, while many uncertainties remain.

- Rental companies were not able to identify differences in the utilisation levels for booms versus scissors.
- France is the country showing the lowest utilisation levels among the 10 European countries under study.

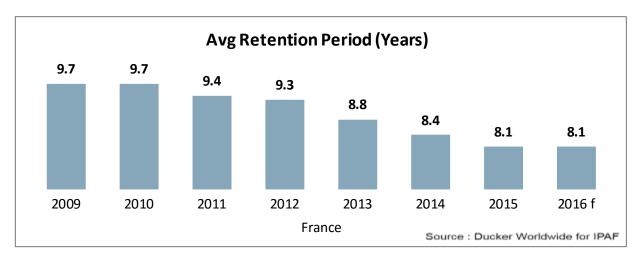


Definition: Physical number of machines out on hire as % of total number in fleet at any given time.



In France, the average MEWP retention period is around 8 years.

• The average French retention period hides some discrepancies between companies, as some report deflecting equipment after 6 years, and others extending the retention period until 10 years.



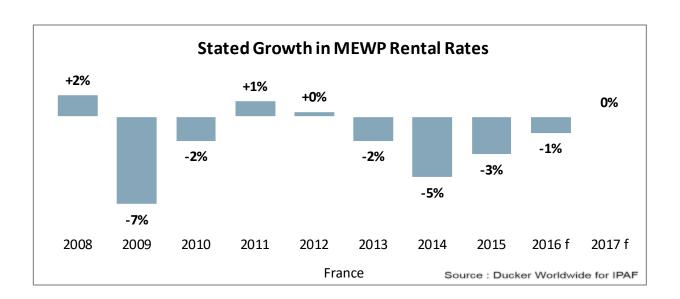
8.1 = 8 years and 1 month

Definition: Period of time that a machine is kept in fleet = selling age if acquired new



Pressure on rental rates continued to be strong in 2015, creating a highly difficult situation for many rental companies in France.

- Many report that long-term rental rates were particularly affected by the downward pressure.
- Many rental companies struggle to be optimistic for the 2016 rate evolution, even though several are questioning the viability of their business should rental rates continue to deteriorate.



A PERSPECTIVE FROM THE MANAGING EDITOR OF *INTERNATIONAL RENTAL NEWS*

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- Proof, if needed, that the French economy was flat came in the form of modest revenue performances from the country's big two rental companies Kiloutou and Loxam. Both reported slightly down or near identical revenues for their French operations in 2015.
- But if that suggests a market becalmed, then the true picture was slightly different. Underlying demand in construction may well have been flat, but there were signs in the latter half of the year that things were improving, and in any case, the countries two major rental companies were taking things into their own hands by making headline acquisitions.
- Loxam, for example, sealed the acquisition of Hertz's French and Spanish businesses; a deal that had long been anticipated. Hertz was the third largest rental company in France, so its acquisition by the market leader was a major event, adding 60 locations to the Loxam network and tens of millions of Euros in revenues (the Spanish operation comprised just two branches.)
- Loxam understood that, with organic growth difficult to achieve in France, growth opportunities were elsewhere. So it is that it acquired a 25% stake in Brazilian rental company Degraus, which it sees as a long term opportunity. (The currently depressed Brazilian market would suggest that it will indeed be a long term move.)
- Kiloutou wasn't going to be left behind, and it chose a similar international strategy, acquiring a major German access rental company, Starlift, in early 2016, adding to the earlier, domestic acquisition of Aquiloc.
- Xavier du Boÿs, Kiloutou's CEO, said the business environment in France remained challenging. "We saw renovation pick up towards the end of 2015, which is a sign that people are starting to move house more. So this trickled through to an increase in rentals from small clients, but our larger clients who depend on bigger projects are still struggling."





- Still, there was room for growth. Acces Industrie managed a small increase in its revenues impressive given the backdrop and also saw a significant change to its own management structure, with founder and CEO Daniel Duclos stepping down to be replaced by joint CEOs Pascal Meynard and Eric Lacombe. Mr Duclos remains on the board.
- Lavendon Group's French operation posted even higher growth rates for 2015, with sales up 11%. The company is starting from a smaller scale than its bigger competitors, and is in a position to grow its market share, but it was still a strong performance in a slow economy.
- What 2016 will bring is uncertain, with the rental sector not overly optimistic about growth prospects. Still, as home to two of the most aggressive rental companies in Europe, France will continue to be one of the most interesting markets for neutral observers.

APPENDIX

IPAF Powered Access Rental Market Report 2016 - FRANCE

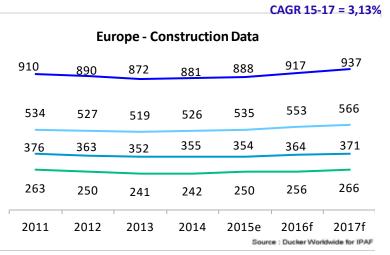
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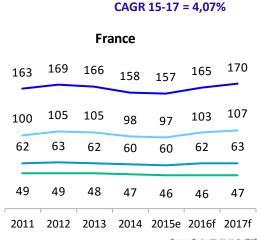






The French construction market continued to deteriorate in 2015. However, increasing housing sales and building permits in the residential sector bring hope for significant improvement in 2016 and 2017.







Construction put in place in billion Euros based on Euroconstruct 2015. FRANCE GDP per Capita in thousand euros - estimates based on Euroconstruct 2015.

Residential construction
Non-residential construction
Total construction
Civil engineering

THANK YOU.

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COUNTRY REPORT – GERMANY

IPAF Powered Access Rental Market Report 2016 - Europe

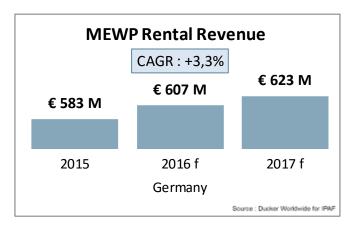
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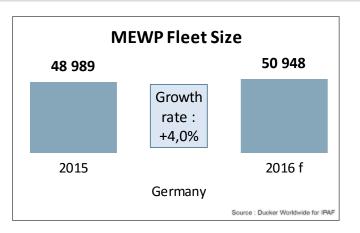




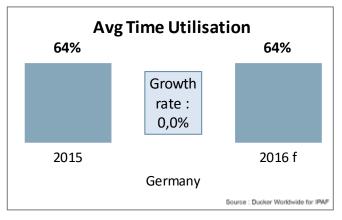


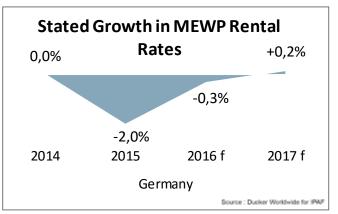
In 2015, the German MEWP rental market experienced revenue increase driven by fleet size growth, despite significant pressure on rental rates compared to previous years.





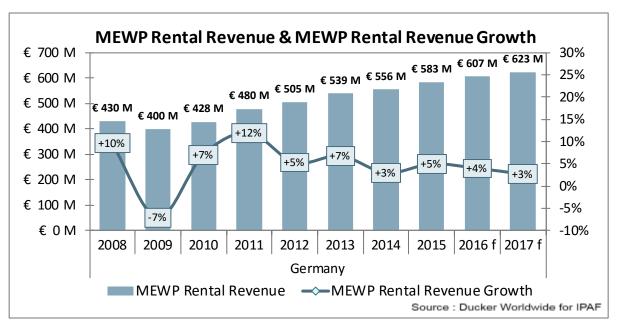
- The German MEWP rental market is well established, and under a continuous development phase, with smoother indicators marking evolution than the last few years.
- After remaining stable in 2014, rental rates declined in 2015 due to the higher number of machines on the market and foreign companies with increased presence, offering lower prices.

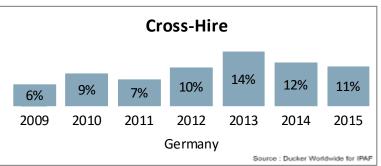






The German MEWP rental market experienced significant 5% growth in 2015, continuing its promising development from year to year.



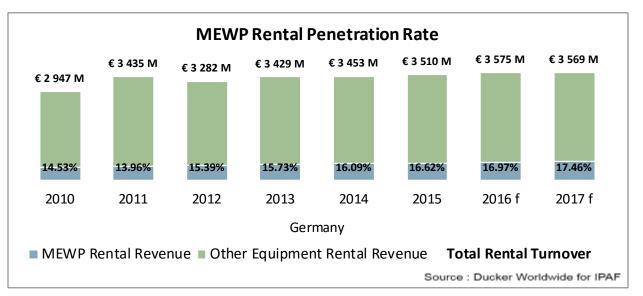


- The MEWP rental market in Germany has been growing steadily over the last 6 years and showing signs of good performance overall.
- Revenue growth is expected to slightly slow down over the next few years, although remaining largely positive. Main explanation is due to a slow down in fleet growth, while rental rates are expected to stabilise.
- Approximately 50 000 operators were trained in Germany in 2015.
 Training validity lasts 5 years.
- The level of cross-hire decreased slightly in 2015 by 1%.



The MEWP rental penetration accounts for approximately 16% of the total rental market in Germany. (source ERA) It is one of the highest among the 10 European countries under study.

- The MEWP rental penetration is expected to grow over the next few years, and go beyond 17% in 2017.
- MEWPs show potential as a substitute to scaffolding, which leads to increasing share of MEWPs within the rental market.

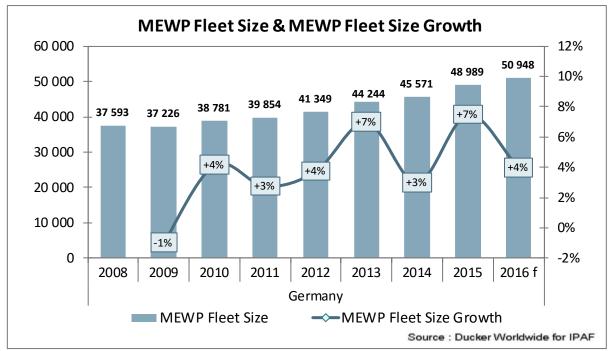


Source for Total Rental Turnover: ERA 2015 Report.



The German fleet size increased significantly in 2015, acting as the main driver for the overall MEWP market growth. It is expected to reach almost 51,000 units in 2016.

- A positive economic situation in Germany, in addition to new companies entering the German market, led to an increased number of units.
- The German MEWP rental market remains highly fragmented, and numerous players contributed to fleet size growth in 2015.
- Companies are maintaining a good level of investments, dedicated mostly to fleet expansion; all of them reported strong fleet increase in 2015.
- The demand for MEWPs is not fully covered in Germany yet; rental companies are extending fleets to ensure full coverage of upcoming demand in the next years.

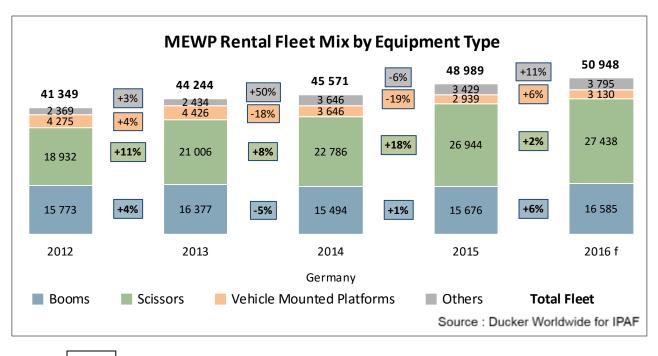


Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers



Scissors experienced the strongest growth among other equipment types. Within this category, the number of small scissors between 3-6 m platform height increased significantly thanks to their suitability for indoor industrial works.

• Vehicle mounted platforms decreased by 19% in 2015 due to their higher price and lower demand: it is commonly considered that the purchasing price of one vehicle mounted platform stands for that of 20 scissor lifts.



Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers

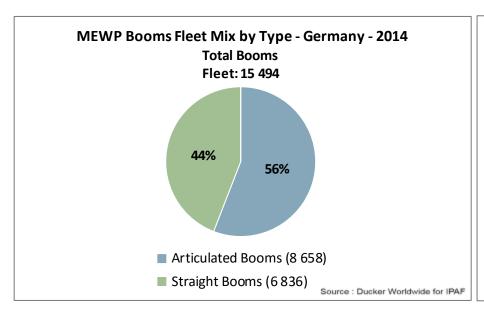
% unit growth, e.g. Booms fleet increased by 1% from 2014 to 2015.

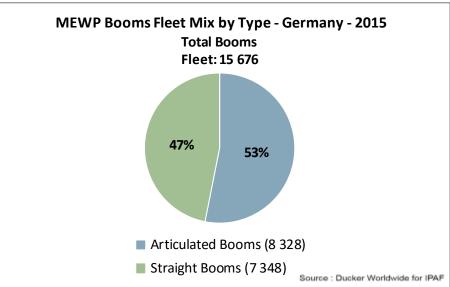
Others include: vertical lifts, vertical masts, push-around, trailer mounted/towable.

+X%



Although articulated booms represent the majority of the German boom fleet, their share slightly declined in 2015. It remains close to 55%.

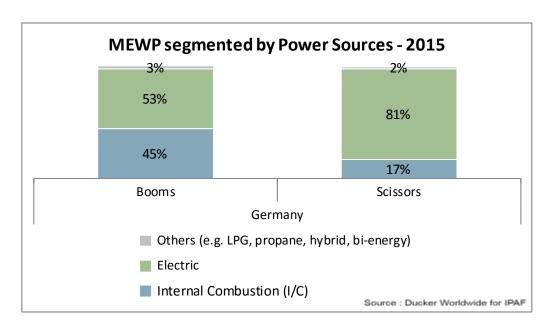






Both booms and scissors are mostly battery driven.

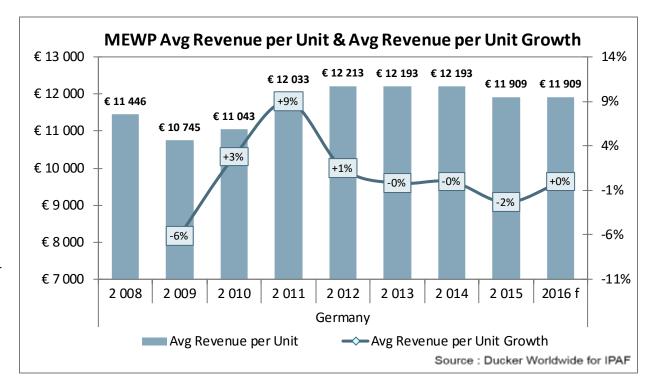
- Contrary to other European countries, the share of electric booms still dominates against internal combustion powered booms.
- Electric scissors represent the majority of this equipment type: they are used for both indoor and outdoor applications on flat grounds.
- It is expected that with new legislation about Tier V starting in 2019, diesel equipment prices will increase, due to new filters needed on the machines to reduce emissions.





The average revenue per unit decreased in Germany for the first time after several years of increasing or flat development.

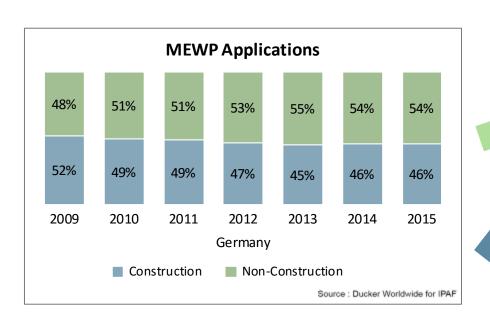
- Lower rental rates contributed to the decrease of the average revenue per fleet.
- As rates are expected to stabilise, while total fleet size increases along with revenue, the level of MEWP average revenue is expected to stay on the same level in 2016.



Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers



The split between construction and non-construction customers remained stable in 2015, with a majority of rental revenues coming from the non-construction sector.

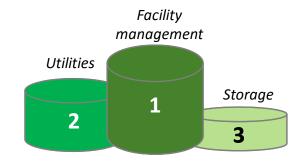


Share of rental revenues

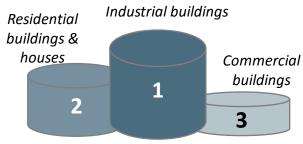
Non-construction includes industry, maintenance, cleaning, utilities, events.

Construction includes new build and renovation; including all types of buildings, also industrial.

Main non-construction sub-sectors



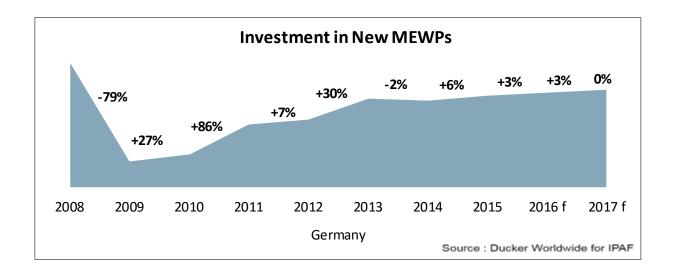






The level of investment increased in 2015, and is expected to continue growing as MEWP rental companies expand fleets in 2016.

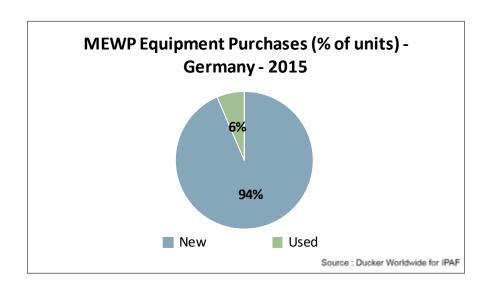
- In 2016 the investment is expected to keep growing, although at a slower pace compared to 2015.
- Attractive equipment prices also played a role in rental companies' decisions to purchase new machines, when they were hesitating. High discounts were given for large volume purchases.





The large majority of MEWPs are purchased new. Only 6% are purchased as used equipment.

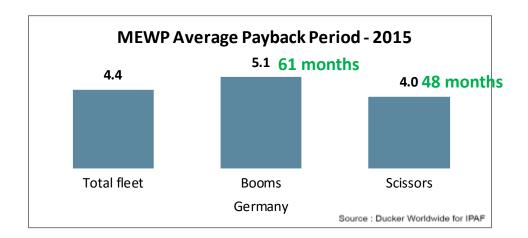
- Main reason for purchasing used equipment is their lower price.
- Purchasing of low number of units at one time does not allow rental companies to benefit from discounts offered by manufacturers when buying new equipment.





In 2015, the payback period decreased by 2 months for both types of equipment.

- The payback period of booms is longer than for scissors.
- Diesel driven machines have longer return on investment than electric ones due to their higher purchasing price.



4.4 = 4 years and 4 months

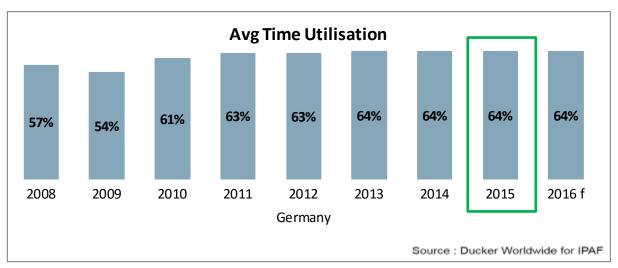


Scissors: 65%

Booms: 61%

The German MEWP utilisation rate remained stable at 64% for the third year in a row.

- The German fleet is increasing from year to year, keeping a stable level of utilisation, while demand increases.
- Booms have a lower utilisation rate than scissors, which are the most popular equipment on the market.
- German rental companies consider the current utilisation rate as satisfactory and do not expect to increase it further.



Definition: Physical number of machines out on hire as % of total number in fleet at any given time.

Prepared for The International Powered Access Federation by Ducker Worldwide



The retention period in Germany increased slightly in 2015, but is expected to remain at a stable level, at approximately 7 years.

- Long-term rental contracts led to a situation in which rental companies must wait until the equipment is back at the company's site to sell it.
- Long-term rental contracts extended the retention period in 2015.



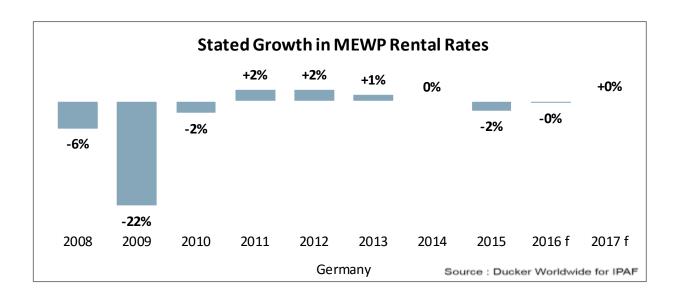
7.2 = 7 years and 2 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new



Rental rates declined by 2% in 2015 in Germany, for the first time over the last four years, confirming the growing competitive pressure on the MEWP rental market.

- As foreign companies reinforce their presence on the market and the number of available MEWPs increases, pressure on price gets stronger.
- Rates are expected to stabilise over the next few years. An increase in rates is hardly expected, and pressure will remain strong.



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- Germany remains one of the region's strongest economies and its access market reflects that, with reasonable but not dramatic levels of fleet and revenue growth over the past few years.
- It says something about the subdued European business environment that growth levels of 2 or 3% are viewed positively.
- As well as being one of the largest and best performing access markets in Europe, it is also a singular one in respect of its ownership structure, with dozens of family-owned companies with AWP fleets in the 500 to 2000 unit range. Gerken, with a fleet of more than 4200 units, exemplifies this trend.
- Equivalent companies like these operating in the UK or France would likely have been acquired long ago, or grown through acquisitions, but they remain a key feature of the German access sector. Many are also members of the two big rental franchise organisations in Germany, System Lift and PartnerLift the former with 70 rental companies and a total AWP fleet of 8,000 units, and the latter with more than 100 members and a 15,000 unit fleet.
- If family ownership is taken for granted in Germany, there are signs that the market may be changing. There was TVH's acquisition of Mateco a few years ago and of course Gardemann by Lavendon before that but the news in March this year that Kiloutou was acquiring Starlift, a classic German family-owned concern with a fleet of 750 machines, still felt significant. It might be that in years to come we look back on the Kiloutou acquisition as a key moment in the evolution of the German market.
- Or it may be that they will look back on another recent announcement as being a key moment; that being the news that HKL, the country's largest renter of earthmoving equipment, was opening a dedicated aerial platform rental centre in Dortmund. The company has had aerials and telehandlers in its fleet for many years, but this dedicated centre is a first and could indicate a shift to decisively broaden its product range beyond its core earthmoving business.



- There were other significant happening in Germany over the past 18 months. The rental market the world over is wondering what to do about the internet, both how to exploit it as a sales channel, and how to defend itself from being on the receiving end of the Airbnb or Uber 'treatment'.
- Caterpillar dealer Zeppelin, which owns the Zeppelin Rental business, has decided to address this head-on by creating its own online rental channel, Klickrent. Klickrent will offer Zeppelin Rentals fleet for rental online, but will also seek partnerships with other rental companies to add to the selection of equipment available.
- It remains to be seen how significant this business will be, but it at least offers the possibility of offering a kind of online equivalent of a System Lift or PartnerLift.
- That kind of proactive initiative is to be welcomed in a market where high growth is difficult to find, and where, like the UK, prices
 are under constant pressure. Lavendon, for example, was moved to take a £15 million hit on the value of its goodwill in Germany
 in its 2015 accounts, and says it will restructure to focus on the larger industrial conurbations in the country.
- The country's family-owned rental companies, however, continue to operate sustainable businesses, with examples of big investors in the past 12 months including both Gerken (€3 million on 20 Ruthmann platforms) and Beyer Mietservice, spending heavily on both Ruthmann and PB Lifttechnik machines.
- It seems there is a lot of life left in the German Mittelstand business model.

APPENDIX

IPAF Powered Access Rental Market Report 2016 - GERMANY







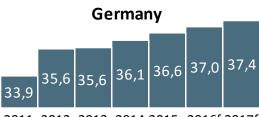
Both total construction and GDP in Germany experienced slight growth in 2015. The growth trend is continuing for the third year in a row.

CAGR 15-17 = 3,13%

CAGR 15-17 = 1,55%

Europe - Construction Data								Germany							
	910	890	872	881	888	917	937	2	32	237	236	241	242	247	250
	534	527	519	526	535	553	566	1	51	157	157	161	164	168	170
	37 <u>6</u>	363	352	355	354	364	371	8	31	81	79	80	78	79	80
	263	250	241	242	250	256	266		51	50	50	52	51	52	53
	2011	2012	2013	2014	2015e	2016f e : Ducker Worl	2017f kdwide for IP/	20	2011	2012	2013	2014	2015e		2017f

CAGR 15-17 = 1,09%



2011 2012 2013 2014 2015e 2016f 2017f

Construction put in place in billion Euros based on Euroconstruct 2015.

GERMANY GDP per Capita in thousand euros - estimates based on Euroconstruct 2015.

Residential construction
Non-residential construction
Total construction
Civil engineering

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COUNTRY REPORT – ITALY

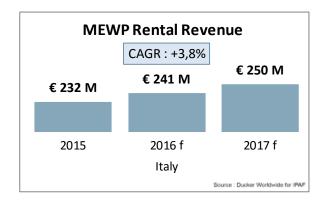
IPAF Powered Access Rental Market Report 2016 - Europe

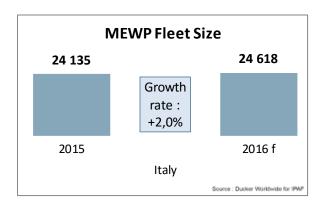




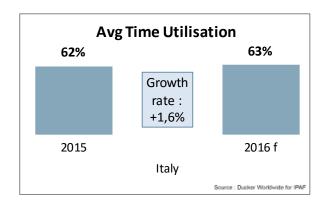


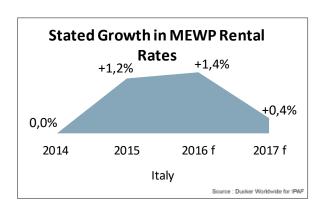
The Italian market experienced significant growth in 2015 after several years of recession. All indicators are positive, and drive revenue up: fleet size and utilisation rates increased, and rental rates started improving after several years of deterioration.





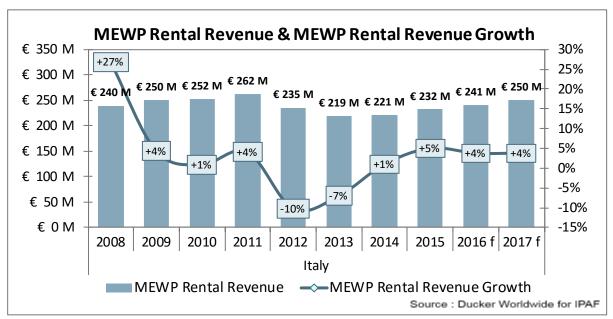
- As forecast in last year's report, market recovery is confirmed in Italy.
- This positive trend should continue in the years to come, driven by a continuously expanding fleet, improving utilisation and rental rates.

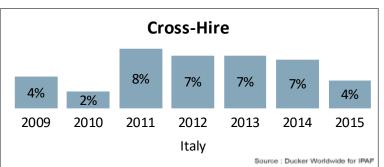






In 2015, the Italian MEWP rental market confirmed the recovery initiated in 2014, with a significant revenue growth of 5%. 2016 and 2017 show similar positive outlooks.



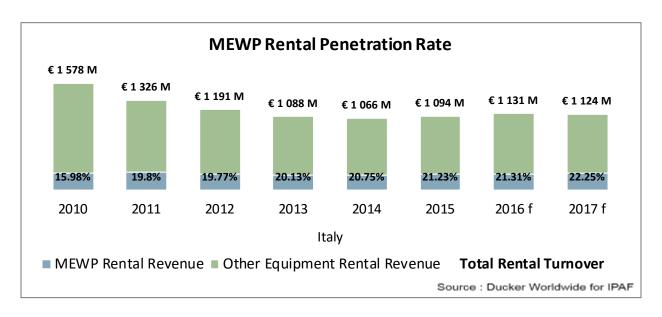


- Fully in line with our previous estimates, the pre-recession levels should be reached in 2017 with €250M rental revenue.
- In particular, bigger rental companies were able to increase their revenue; 2015 was more successful than previously expected.
- Fleet expansion allowed companies to reduce cross-hiring in 2015.
- Approx. 25 000 operators were trained in Italy in 2015. This number strongly increased in 2015, driven by regulations.



The MEWP rental revenue is continuing to grow within the overall construction equipment rental revenue as it is recovering faster than the overall rental market. (source ERA)

• MEWP rental penetration will continue to gain ground and will exceed 22% in 2017.

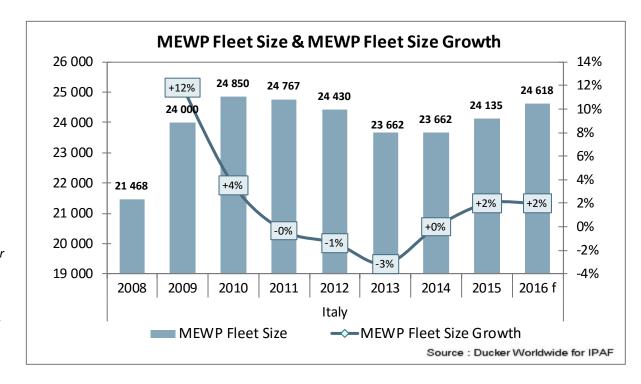


Source for Total Rental Turnover: ERA 2015 Report.



As anticipated, Italian rental companies expanded fleets in 2015, after several years of contraction.

- However, despite fleet expansion, pre-recession (2010) levels should not be reached yet in 2016.
- The Italian market is relatively concentrated with approximately 10 to 15 rental companies owning more than 1000 units per fleet, and representing 80% of the rental market.

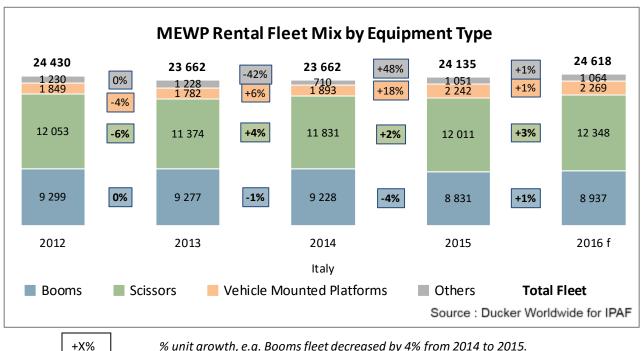


Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers



In 2015, fleet expansion was primarily driven by scissors and vehicle mounted platforms purchases.

- Scissors account for half of the Italian MEWP rental fleet, while booms only represent 30% (vs. 39% in 2014).
- The smaller rental companies specialised in vehicle-mounted equipment report a significant expansion of their fleet.



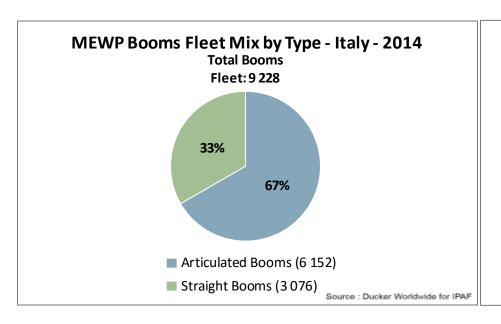
Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers

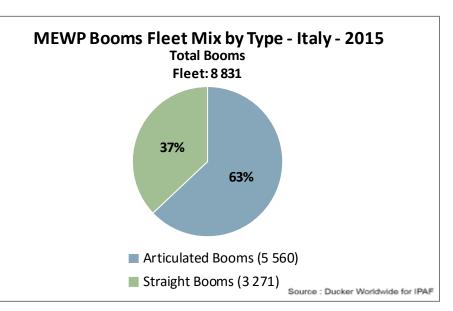
% unit growth, e.g. Booms fleet decreased by 4% from 2014 to 2015.

Others include: vertical lifts, vertical masts, push-around, trailer mounted/towable.



While the boom fleet continued to contract in 2015, the share of straight booms slightly increased, driven by construction end-applications.

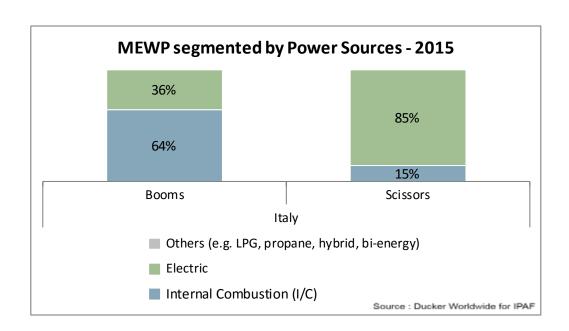






No changes occurred in the power source types of the MEWP rental fleet in 2015. More than a third of booms and 85% of scissors are electric.

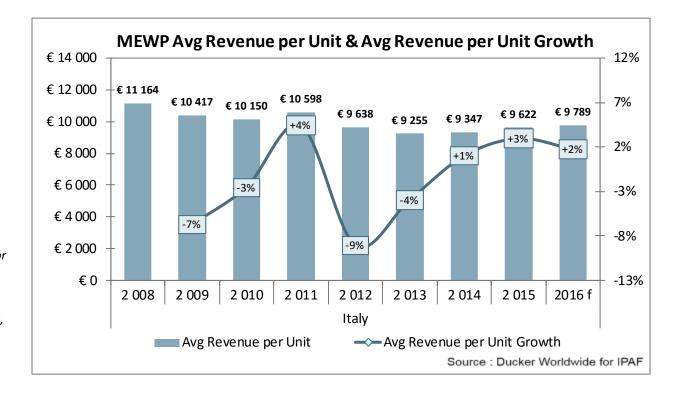
• Hybrid equipment are very slowly entering the Italian market, with only a few units of booms and spider lifts purchased in 2015.





The average revenue per unit continued to improve in 2015, driven by improving rental rates.

 However, and despite a continuous improvement forecast in 2016, the revenue per unit pre-recession levels are still far from being reached.

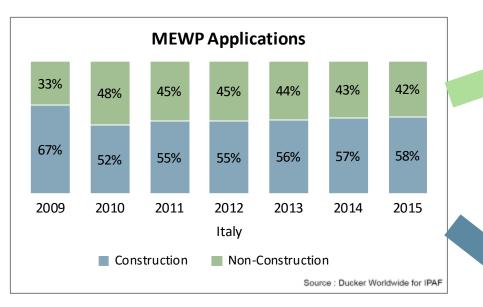


Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers



The share of the construction sector slightly increased in 2015. The Italian market traditionally shows a high share of construction applications and it is expected to remain stable over the next years.

• Residential construction is reported by rental companies to provide the largest share of construction-related revenue.

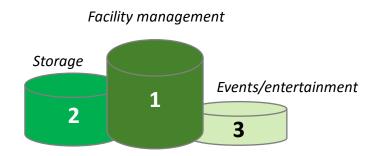


Share of rental revenues

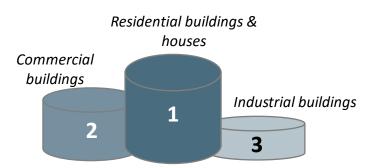
Non-construction includes industry, maintenance, cleaning, utilities, events.

Construction includes new build and renovation; including all types of buildings, also industrial.

Main <u>non-construction</u> sub-sectors



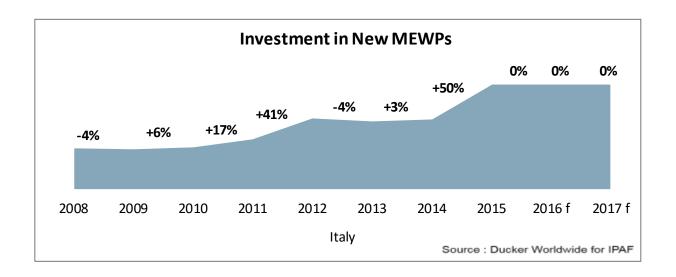
Main construction sub-sectors





Italian rental companies invested significantly more in 2015 than in 2014. While 2014 investments were dedicated almost exclusively to replacement, 2015 investments were also aimed at expanding fleet.

• Despite the significant increase in investments in 2015, rental companies expect to maintain this relatively high level of investment in the forthcoming years.

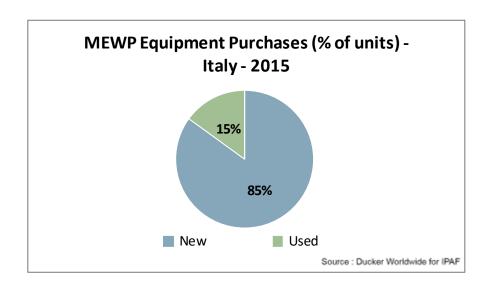


ITALY - EQUIPMENT PURCHASES



The share of used equipment purchased remained relatively stable in 2015, around 15%. Italy remains one of the European countries where the share of used equipment purchased is the highest.

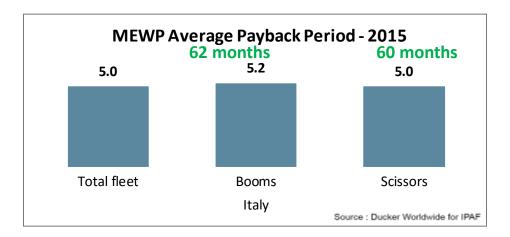
- Used equipment purchased is typically under 3 to 4 years old.
- Smaller rental companies, or companies starting a rental activity, are typical buyers of used equipment.





The average payback period is estimated at approximately 5 years, with a slightly higher payback period for booms than for scissors.

• Diesel equipment is reported to have a longer payback period at more than 65 months, while electric equipment typical payback period is around 53 to 55 months.



5.2 = 5 years and 2 months

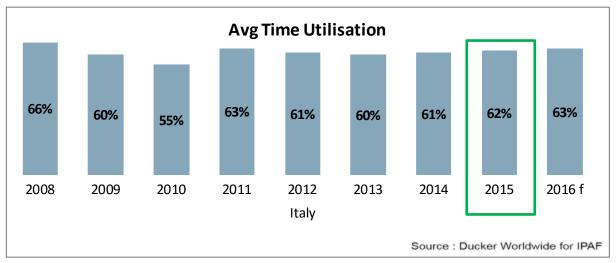


Scissors: 62%

Booms: 62%

Utilisation rates increased slightly in 2015. The growth should continue in 2016.

- 62% utilisation rate is perceived as a good level for the majority of rental companies in Italy.
- Both scissors and booms are said to achieve approximately the same utilisation levels.



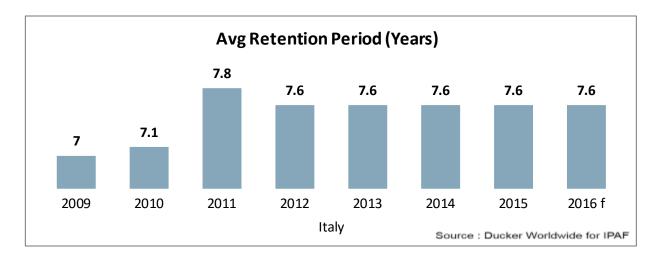
Definition: Physical number of machines out on hire as % of total number in fleet at any given time.

Prepared for The International Powered Access Federation by Ducker Worldwide



Retention period remained unchanged in 2015 at approximately 7.5 years.

• Regular renewal of the fleet has allowed a stable retention period to be maintained over the years.



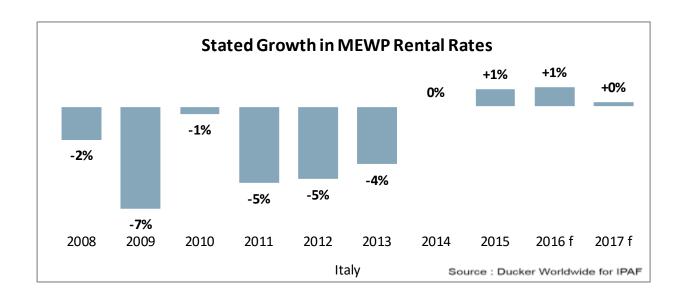
7.6 = 7 years and 7 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new



After many years of deterioration, 2015 finally saw a slight improvement in rental rates.

- More recent and specialised fleets, coupled with a better economic situation driving demand, allowed rental companies to increase rental rates slightly in 2015.
- Continuous but slight improvement is expected in 2016, while 2017 remains uncertain.



A PERSPECTIVE FROM THE MANAGING EDITOR OF *INTERNATIONAL RENTAL NEWS*

IPAF Powered Access Rental Market Report 2016 - ITALY









- Italy's access market is slowly climbing out of a lengthy slump, although one that has been neither as prolonged or deep as in Spain. Italy's access fleet reduced a bit, but started to recover last year and is likely to grow again in 2016.
- The European Rental Association's annual rental report a useful tool to compare with IPAF's own reports estimated Italian rental growth to be reasonable at 2.7%, and forecasts growth of 3.4% this year.
- Ramon Santamaria, Sales Director at Nacanco one of Italy's largest aerial platform renters described the ERA figures as
 "encouraging...It presents a positive outlook despite challenges facing the overall economy and the construction industry".
- The rental sector has been much more resilient that the construction equipment market, where sales of machines fell by 80% at the peak of the slowdown. In contrast, the Italian rental market fell by around 15%, according to the industry association Assodimi.
- Assodimi reports that the North of Italy has been the quickest to show improvement, with the Expo Milan providing a good source
 of work for Italy's access rental players.
- Of course, Italy is another 'singular' market in Europe, in that it has resisted foreign intervention from the biggest players. Only Boels has had the courage, so far, to dip its toe in the market, operating now from depots in Milan, Brescia and Verona.
- It will be a significant moment when a Loxam, Lavendon or Kiloutou finally takes the plunge. However, for the time-being, they judge that the Italian market is best left to the Italians.

APPENDIX

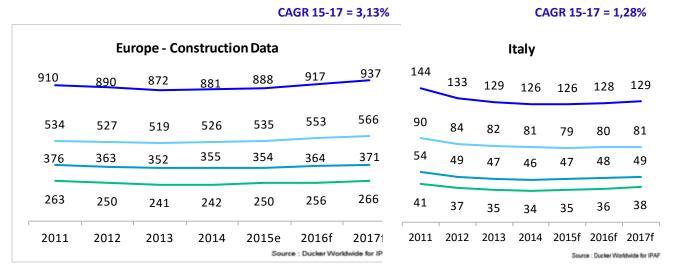
IPAF Powered Access Rental Market Report 2016 - ITALY







In 2015, the overall construction market remained relatively stable (but stopped deteriorating), and GDP started to recover. More significant growth is expected in 2016 and 2017.



CAGR 15-17 = 1,14%

Italy

27,8 27,2 26,7 26,5 26,7 27,0 27,3

2011 2012 2013 2014 2015e2016f 2017f

Construction put in place in billion Euros based on Euroconstruct 2015.

ITALY GDP per Capita in thousand euros - estimates based on Euroconstruct 2015.

Residential construction
Non-residential construction
Total construction
Civil engineering

THANK YOU.

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Offices in: UK, Brazil, China, Finland, France, Germany, Italy, the Netherlands, Singapore, Spain, Switzerland, Turkey, UAE, USA.

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COUNTRY REPORT – THE NETHERLANDS

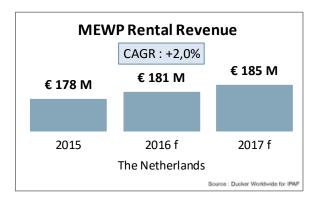
IPAF Powered Access Rental Market Report 2016 - Europe

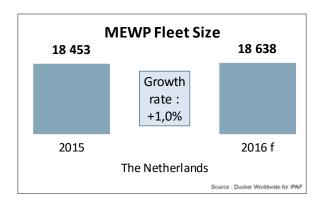




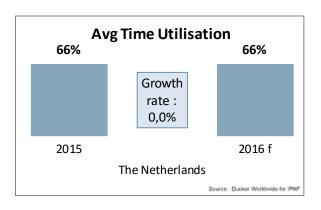


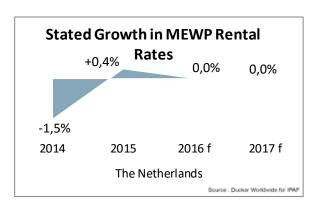
An improved economical outlook drove the Dutch MEWP rental market growth in 2015. As demand increased, especially from construction, rental companies expanded fleets gradually which drove revenue expansion (+2%). A similar trend should continue in the forthcoming years.





• Scissors still holds the lion share with 52% of the Dutch fleet, while booms only stand for 32%, with a majority of straight booms

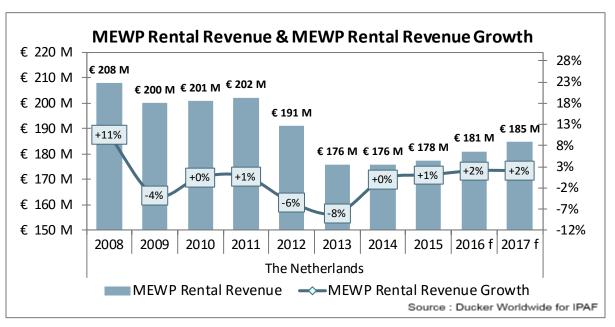


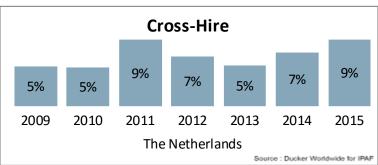


• For the first time after seven years of continuous decrease, rental rates started stabilising in 2015. However, market players do not expect rates to improve in the years to come.



After market stabilisation in 2014, MEWP rental revenue in the Netherlands recorded minor growth of 1% in 2015. Revenue increase should slightly accelerate in 2016 and 2017.

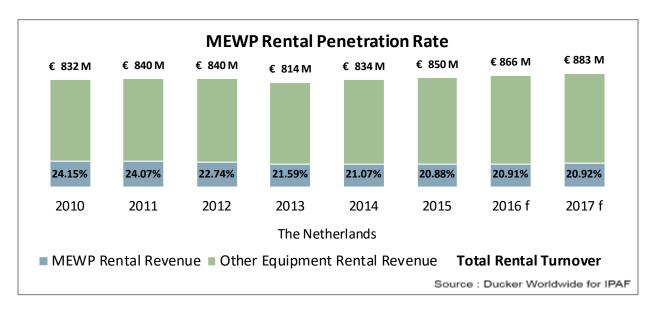




- Slight general economic growth and construction market improvement in the Netherlands in 2015 positively impacted the demand and the MEWP rental market which reached €178M in 2015.
- It is estimated that approximately 16 000 operators were trained in 2015 in the Netherlands.



The penetration of MEWPs in the overall Dutch rental revenue kept decreasing slightly in 2015, as it has done since 2010. However, as the MEWP market continues to improve, penetration should slightly increase in 2016/2017.

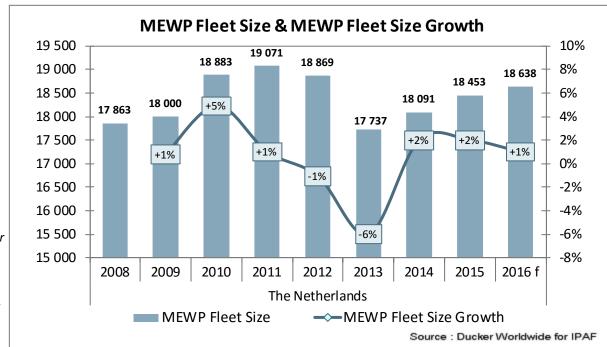


Source for Total Rental Turnover: ERA 2015 Report.



As forecast in the 2015 Rental Market Reports, the Dutch MEWP rental fleet continued to grow at a similar pace to 2014. It should slightly slow down in 2016, as rental companies plan on reducing investment.

The Dutch fleet size is estimated at 18 500 units in 2015. 2012 levels should not be reached in 2016.

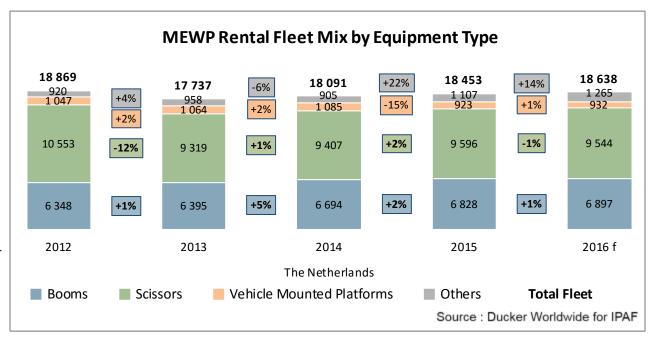


Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers



After several years during which the boom fleet grew faster than scissors, equipment types experienced similar growth in 2016.

- While booms are said to be more versatile, scissors still account for more than 50% of the Dutch MEWP rental fleet.
- Market players report an increasing usage of low-level access equipment (<3m high) used for non-construction activities (maintenance, storage, etc.) instead of ladders and scaffoldings.



Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers

% unit growth, e.g. Booms fleet increased by 2% from 2014 to 2015.

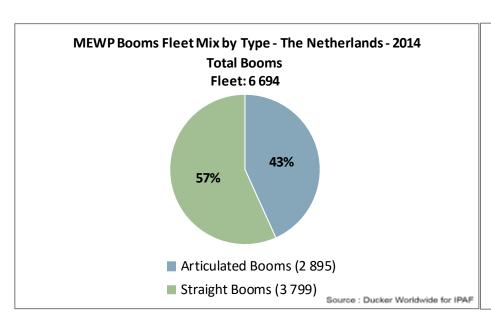
Others include: vertical lifts, vertical masts, push-around, trailer mounted/towable.

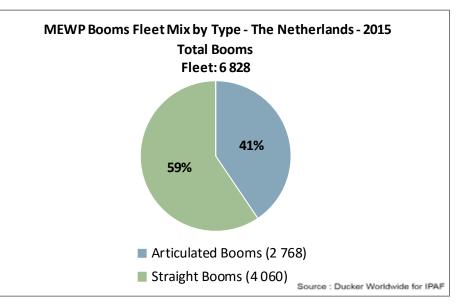
+X%



Contrary to previous forecast, straight booms reinforced their presence in the Dutch market with nearly 60% of the rental fleet.

• While articulated booms are said to be more versatile than straight, the latter are most seen in large construction projects, which still accounts for the majority of the MEWP end-market.

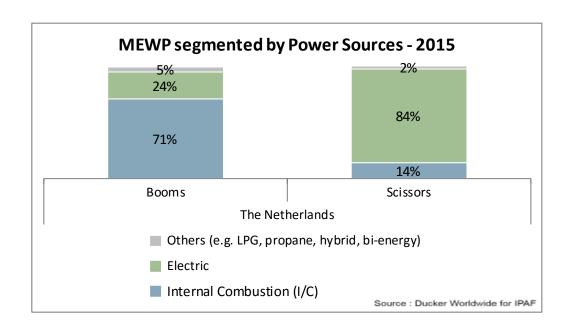






While I/C engines still dominate the boom fleet and electric dominates the scissor fleet, hybrid machines started to gain more importance in the Dutch market in 2015. Several market players see the Netherlands as a pioneer in Europe in terms of hybrid MEWP usage.

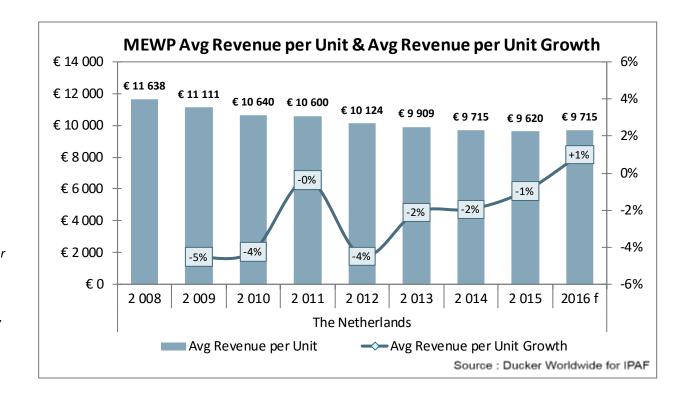
- The high share of internal combustion booms is linked with the large share of straight booms in the boom mix.
- Compared with 2014, the growth of electric scissors continued, though at a slow pace.





As predicted in last year's report, the average revenue per unit continued to deteriorate slightly in 2015, due to an expanding fleet and relatively stable rates. However, 2016 shows more positive outlooks.

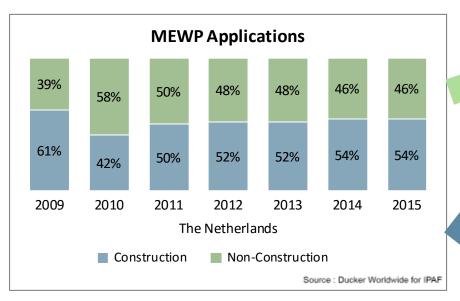
Rental companies are hoping for a slight improvement of the revenue per unit in 2016. However, strong uncertainties remain
concerning their ability to improve rental rates this year.



Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers



The share of construction activities in the MEWP rental revenue remained stable in 2015, driven by a relatively stable construction market. Industrial building construction is reported as being the first source of revenue from construction activities.

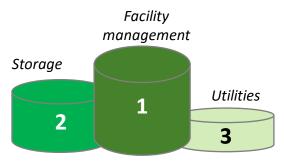


Share of rental revenues

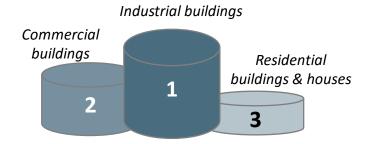
Non-construction includes industry, maintenance, cleaning, utilities, events.

Construction includes new build and renovation; including all types of buildings, also industrial.

Main <u>non-construction</u> sub-sectors



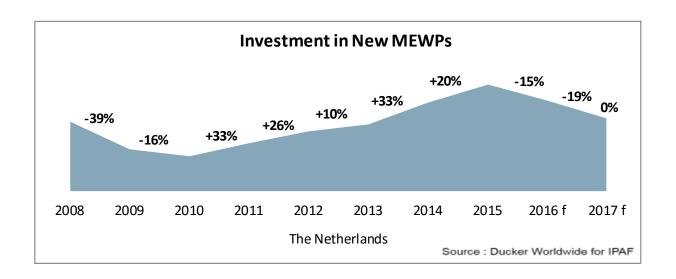
Main construction sub-sectors





Investment reached a peak in 2015, but rental companies expect to reduce equipment spending in the forthcoming years, due to remaining market uncertainties.

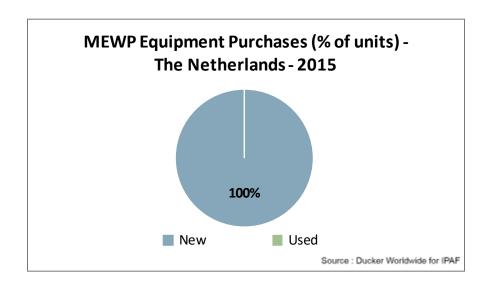
• In 2015, investments were directed at both renewal and fleet expansion. Rental companies remain cautious and plan to limit investment in the next two years.





The very vast majority of new equipment purchases in the Netherlands is dedicated to new machines.

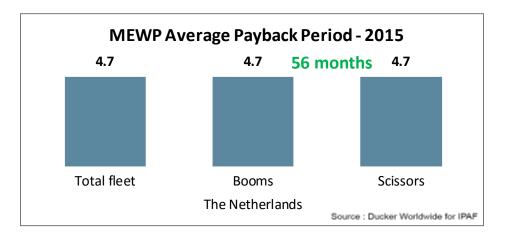
 Rental companies prefer investing in new equipment in order to optimise the Total Cost of Ownership (TCO) and return on investment.





The MEWP average payback period in the Netherlands in 2015 increased slightly, reaching 56 months. It is said to be at the same level for booms and scissors.

• No differences are reported by rental companies in the payback period depending on power sources.

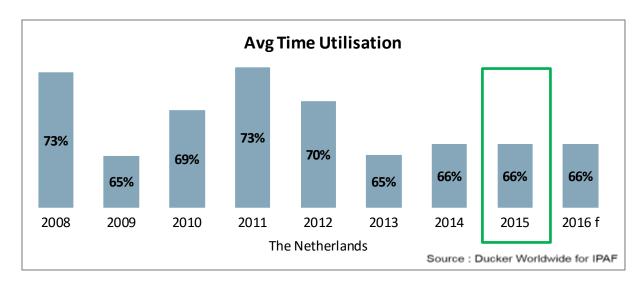


4.7 = 4 years and 7 months



Utilisation rates remained at stable levels compared with 2014 at 66% in 2015.

- Rental companies forecast the same levels of utilisation in 2016.
- Scissors allow for higher utilisation rates (70%) than booms (63%) because booms are more influenced by the seasonality or the rental activity.



Scissors: 70%

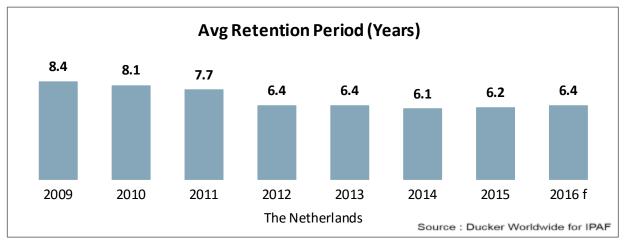
Booms: 63%

Definition: Physical number of machines out on hire as % of total number in fleet at any given time.



MEWP retention period remained stable in 2015, slightly above 6 years.

• While the replacement of booms is often done after 5 to 6 years, booms are typically kept longer (8 years).



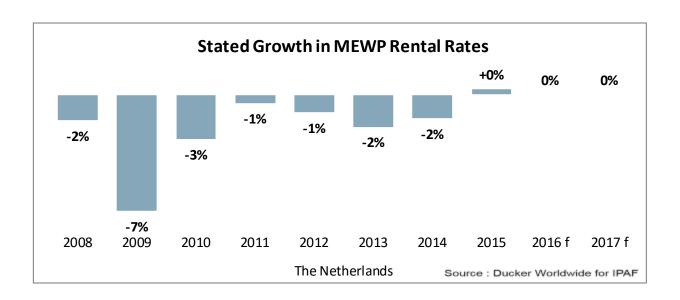
6.2 = 6 years and 2 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new



After 7 years of rental rate deterioration, rental companies managed to maintain stable rental rates, to slightly increase rates in 2015.

• The stronger demand for big booms, which provide better rental rates, drove rate stabilisation.



A PERSPECTIVE FROM THE MANAGING EDITOR OF *INTERNATIONAL RENTAL NEWS*

IPAF Powered Access Rental Market Report 2016 - THE NETHERLANDS









- Is there an access market in the world with a more international outlook than the Netherlands? It isn't just the access industry where Dutch companies face outwards, the same is true in the crane industry think Mammoet, for example and in many other businesses.
- That almost natural 'reflex' to look outwards has served Dutch companies well, particularly in the past three or four years when the Netherlands economy and the rental market has been sluggish at best.
- The recovery from the low point in 2013 has been slow, and looks like continuing to be so. The European Rental Association, for example, thinks overall rental market growth in 2015 was 1.9% and forecasts that 2016 will be slightly slower, at 1.8%. These are not numbers to get excited about.
- Even so, the Netherlands has a fantastic network of small and medium sized access rental companies who have continued to invest, companies like Colle, Kok Verhuur, Bac, HWS and Pienemann. There are dozens and dozens more.
- And one feature of the market has been the courage to invest in specialist or very large machines the 180 ft plus machines from Genie and JLG have found buyers in the Netherlands where others in Europe have been more cautious. Again, the international outlook of the Dutch is a help, with a willingness to re-rent all over Europe.





- And of course, the Netherlands is lucky to have some of Europe's biggest rental players in Riwal and Boels. Riwal, which made its first international move 15 years ago when it established a base in Denmark, continued its international strategy in 2015, opening new depots in Belgium, Denmark and Sweden.
- It also doubled its capital expenditure programme in 2015, investing €80 million, or which €30 million was to increase the size of the fleet. (One suspects, however, that the lion's share of the expansion part of this was spent outside the Netherlands.)
- Boels, meanwhile, was on the acquisition trail, adding businesses in Sweden, Belgium, and two in the Netherlands (Port-O-Let and Yellow Rental). The Dutch acquisitions were non-access related (toilets and accommodation), which plays into Boels strength in the events sector.
- It is perhaps no surprise that at this moment in the Netherlands, Boels most recent acquisitions have been outside the access and construction sector.

APPENDIX

IPAF Powered Access Rental Market Report 2016 - THE NETHERLANDS



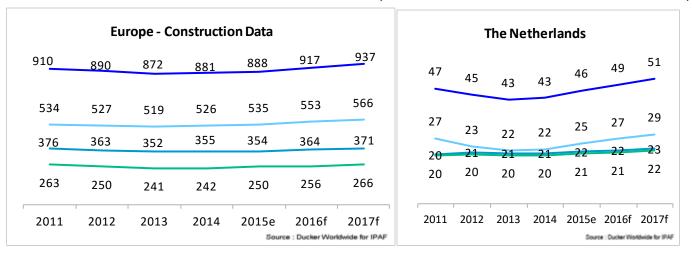




The construction market experienced significant growth in the Netherlands in 2015. The positive trend should be maintained in the next few years.

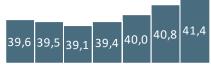
CAGR 15-17 = 3,13%

CAGR 15-17 = 5,03%



CAGR 15-17 = 1,76%

The Netherlands



2011 2012 2013 2014 2015e2016f 2017f

Construction put in place in billion Euros based on Euroconstruct 2015.

Residential construction

Non-residential construction

Total construction

Civil engineering

THE NETHERLANDS GDP per Capita in thousand euros - estimates based on Euroconstruct 2015.

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COUNTRY REPORT – NORDIC REGION

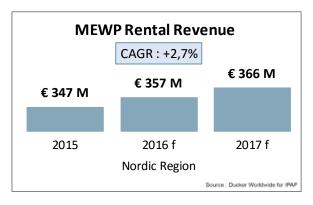
IPAF Powered Access Rental Market Report 2016 - Europe

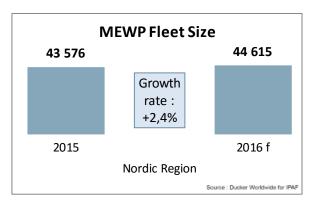




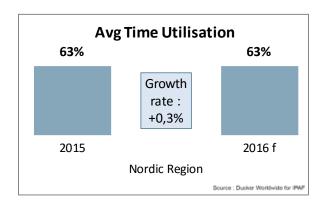


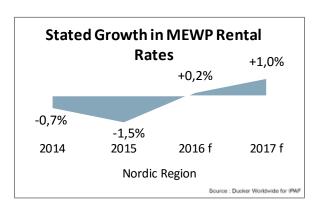
The Nordic region displays different market situations with Sweden maintaining a very dynamic MEWP rental market, Norway showing signs of slow-down, and Finland and Denmark stabilising after recession.





- Fleet expanded everywhere by 2% to 3% except in Norway were it remained stable
- Utilisation rates improved in Sweden and Norway, but remained stable in Finland and Denmark
- Rental rates improved slightly only in Sweden, remained stable in Denmark, but decreased in Finland and Norway

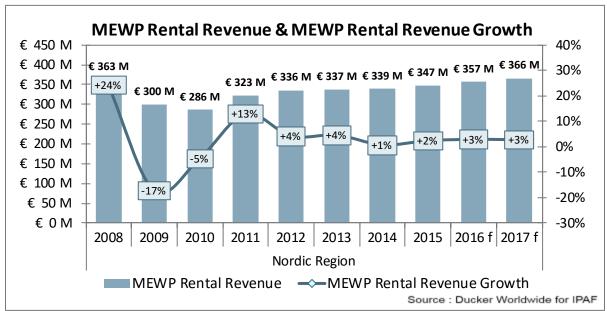


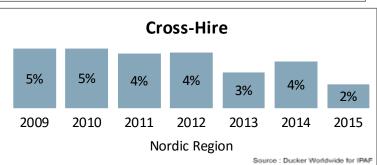


NORDIC REGION - RENTAL MARKET VALUE AND GROWTH



The overall rental market in the Nordic region grew by 2% in 2015, strongly driven by Sweden. All Nordic countries experienced a revenue increase, except for Finland which remained stable.



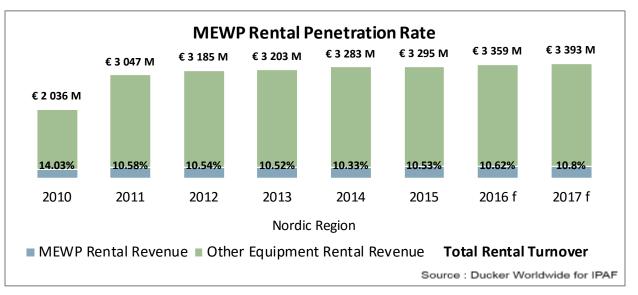


- The highest revenue growth occurred in Sweden with 5%. A good economy and construction boom raised positive rental revenue.
- Denmark with 2% growth and Norway with 1% managed to keep the revenue increasing. Denmark benefited from a good construction market around the Copenhagen region; Norway coped well with oil price fluctuations.
- It is estimated that approximately
 5 000 operators were trained in
 2015 in the Nordic countries.



MEWP average rental penetration remained relatively stable in 2015, at around 11%. (source ERA)

- However, after having experienced slight but constant decrease since 2010, the share of MEWP rental revenue over the overall construction equipment rental revenue improved in 2015 and is expected to continue increasing in the forthcoming years.
- MEWP rental revenue penetration over the overall equipment penetration varies across the Scandinavian countries. Denmark and Finland show the highest penetration with 16-17% while Sweden and Norway are closer to 8%.

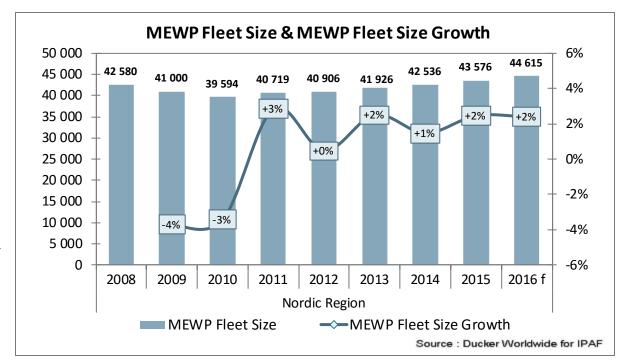


Source for Total Rental Turnover: ERA 2015 Report.



The total MEWP rental fleet of Denmark, Finland, Norway and Sweden increased in 2015 by 2%.

- The largest fleet expansion comes from Norway with +5%, while Denmark and Sweden experienced moderate growths of 2%, followed by Finland with 1%.
- All countries except Norway should continue fleet expansion in 2016.



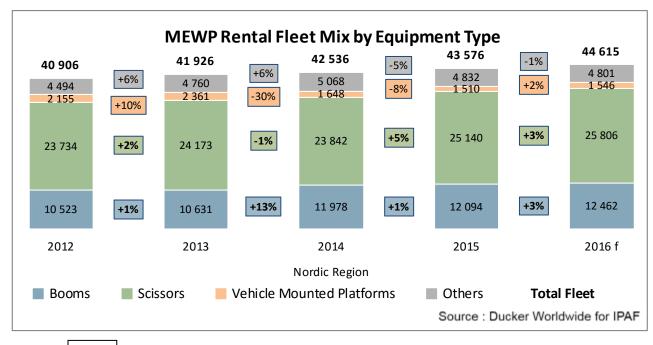
Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers



The Nordic scissor fleet experienced the strongest growth among MEWP types in 2015. Scissors continue to hold the lion's share in the Nordic fleet with 58% of the fleet size.

- In all four Nordic countries, scissors dominate the MEWP rental fleet. Sweden has the highest share with scissors accounting for 60% of the fleet.
- The overall proportion of scissors should remain stable in 2016.

+X%



Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers

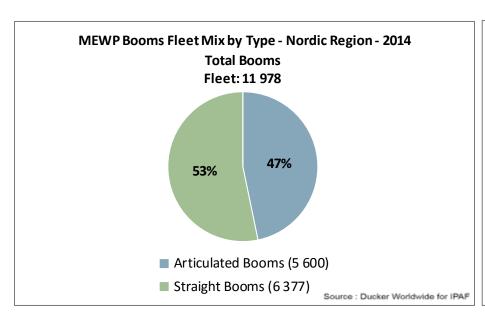
% unit growth, e.g. Booms fleet increased by 1% from 2014 to 2015.

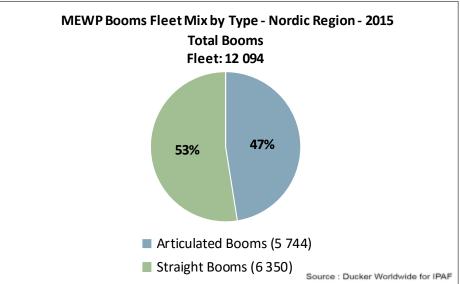
 $Others\ include: vertical\ lifts,\ vertical\ masts,\ push-around,\ trailer\ mounted/towable.$



Straight booms remain dominant in Northern Europe. Their share is expected to remain stable in the forthcoming years.

• The geography of the Nordic region, with large spaces and lower population density, allow, more than in other European countries, for a wider usage of straight booms than elsewhere in Europe.

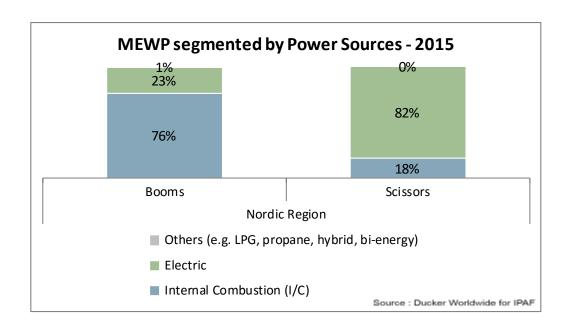






As in other European countries, the majority of booms used in Nordic countries are I/C while scissors are mostly electric. This split is similar to previous years.

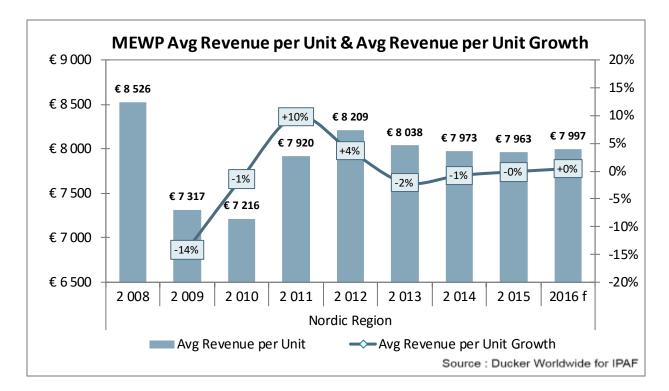
• Due to intense weather conditions, rental companies report that diesel booms are much more convenient as they function better than electric engines in cold climate, and can be stored outside.





The average revenue per unit remained stable in 2015, limited by the slight deterioration in rental rates. A similar trend is expected for 2016.

- While Finland and Norway experienced a significant deterioration of the average revenue per unit, due to decreasing rental rates, Denmark's revenue per unit remained stable and in Sweden, it improved by approximately 3%.
- The average revenue per unit is highest in Norway at almost 8900€, while it is the lowest in Finland at less than 7000€.

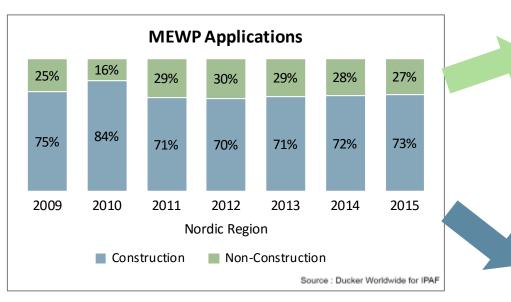


Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers



Construction continues to be very strong in Scandinavia. On average, 73% of the MEWP rental revenue came from construction in 2015.

• Facility management is the first non-construction end-market for MEWP rental companies, while industrial building is the main construction end-application.

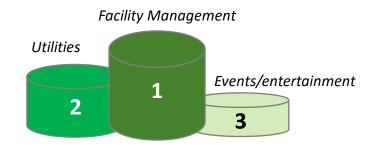


Share of rental revenues

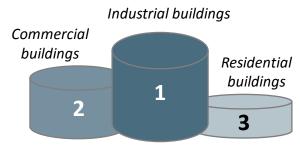
Non-construction includes industry, maintenance, cleaning, utilities, events.

Construction includes new build and renovation; including all types of buildings, also industrial.

Main non-construction sub-sectors



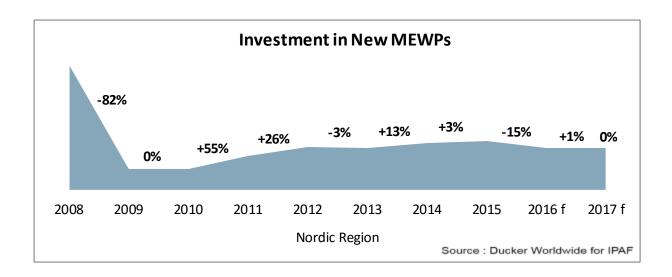
Main construction sub-sectors





Total amount of investment grew by 3% in the Nordic countries. After two years of increased investment, they are expected to slow down in the forthcoming years.

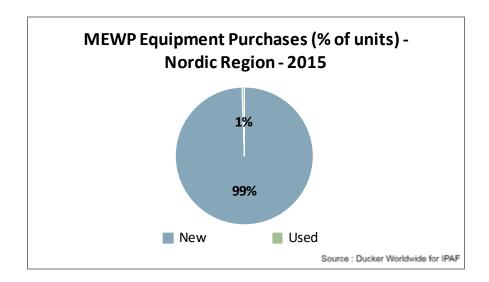
• Highest investment growth is reported in Norway with +8%, as the fleet expanded significantly in 2015.





The Nordics, like most other European countries, invest in new equipment rather than in used machines.

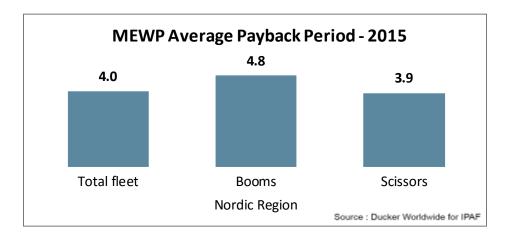
- Only in exceptional cases or in case of acquisition do used units enter the fleet.
- Used equipment purchased are typically under 5 years of age.





Booms show a longer payback period than scissors due to the higher price of diesel booms. The average payback period increased compared to 2014, primarily due to rental rate deterioration.

• In addition, the difference in payback period is getting wider between booms, which are primarily expensive diesel booms, and scissors, primarily small and electric.

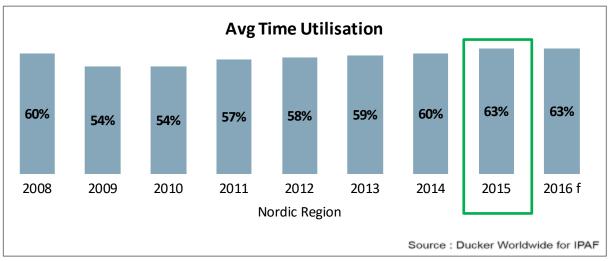


4.8 = 4 years and 8 months



Scandinavian fleets saw an increase in utilisation rates in 2015, driven by Norway and Sweden to a lesser extent. Utilisation rates are expected to remain stable in 2016.

- Booms as in many other European countries had a lower utilisation rate than scissors.
- Many rental companies report that the ideal utilisation rate is at 70%.

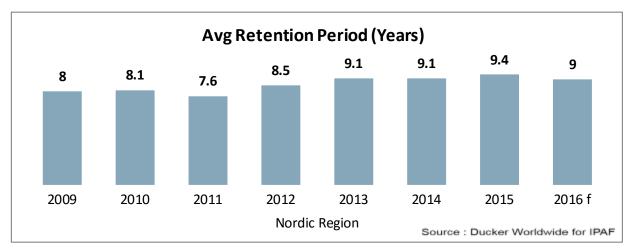


Definition: Physical number of machines out on hire as % of total number in fleet at any given time.



The average retention period remained relatively stable in 2015, and should stay stable in 2016. The Nordic countries show the highest retention period in Europe.

• Sweden and Norway report the highest retention period at around 10 years.



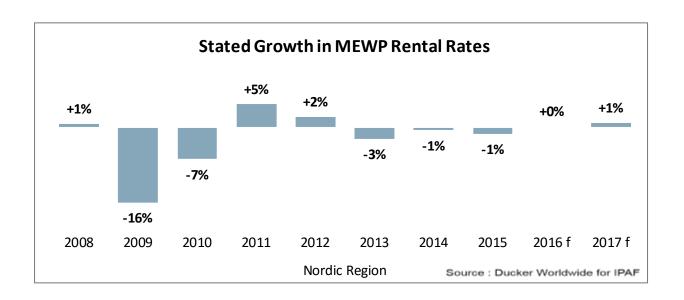
9.4 = 9 years and 5 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new



Rental rates continued to deteriorate in the Nordic region. 2016 should see rate stabilisation.

- Major discrepancies exist between countries. Sweden is the only country experiencing slight rental rate improvement. On the other end, Norway is experiencing drastic rate deterioration.
- Rental rates decreased slightly in Finland, while they remained stable in Denmark.
- Rental rates should improve only slightly everywhere but in Norway in 2016.



A PERSPECTIVE FROM THE MANAGING EDITOR OF *INTERNATIONAL RENTAL NEWS*

IPAF Powered Access Rental Market Report 2016 - NORDICS









- If it is annoying for those in Denmark, Sweden, Finland and Denmark to be viewed through the 'Nordic' prism a shorthand that overlooks the fact that they are four distinct countries then there is at least a logic in that the four share a mature rental culture and strong and well established access sectors.
- Yet, the four countries are currently enjoying if that's the right word quite mixed fortunes, both in terms of construction growth and in their rental performance. The broad brush view is that Norway and Finland have been the most challenging markets Norway not least because of the oil and gas slowdown while Sweden and Denmark are the better performers.
- In fact, the European Rental Association paints an overall positive picture in its forecasts for the Nordic markets, with Denmark, Finland and Sweden all forecast to exceed rental growth of 2% this year in fact reaching 3.5% in Finland. Sweden is expected to be the least buoyant, with rental growth of 0.9% forecast.
- Of course, these forecasts relate closely to what is expected in the construction sector, and here, Euroconstruct also paints a pretty positive picture, with Denmark expected to have the slowest growth of the four this year, at 2.3%, while the others see growth in the 3-4% range.

A PERSPECTIVE FROM THE MANAGING EDITOR OF INTERNATIONAL RENTAL NEWS



- Many observers also view the rental market through the actions of the region's biggest two rental companies, Cramo and Ramirent, both who which will be under new CEOs this year.
- What is instructive about these two is that the growth strategies point to certain areas that don't necessarily emphasise the importance of aerials. For both companies, for example, an expansion into modular space is seen as a key opportunity. Space has become what access was 10 years ago.
- Both, and Ramirent in particular, are also making big play of a move into 'site solutions', where the rental company takes on the
 entire logistics of a site for contractors. This is something that Zeppelin Rentals is pioneering in Germany both Cramo and
 Ramirent will have watched that with interest.
- Mergers and acquisitions activity in the Nordic market has not been dramatic over the past 18 months, although there have been some deals. In May last year Stavdal acquired Rent City in Karstadt, while Kranpunkten has also been on the acquisitions trail, buying Janneniska subsidiary Nofa Janneniska in May last year and Alvelins Uthyrnings in January this year.
- Meanwhile, in Denmark last year, the private equity fund CataCap, together with pension fund Danica and French Access Capital Partners, acquired and merged two of the country's largest rental companies, GSV Materieludlejning and Pitzner Materiel. GSV was already making moves to expand this year, acquiring in January the heavy equipment rental business Bramsnæs Entreprenørmaskiner ApS.
- In addition, there was Riwal's expansion in Denmark and Sweden (where it added two depots), and Boels' first foray into the Nordic market, buying Toolmatic, a Danish company that operates around 250 'in-store' rental desks at DIY and builders merchant in Denmark, Norway and Sweden.
- So plenty of activity and growth, just not all of it in aerial platforms.

APPENDIX

IPAF Powered Access Rental Market Report 2016 - NORDICS







• Exchange rate:

- The currency exchange rate used for the NORDIC REGION is shown below. The same rate has been used throughout the time period (2015) in order to eliminate variation in growth rates due to exchange rate fluctuations rather than to the actual MEWP rental market.

	Currency Unit	Converter to Euro
Denmark	DKK	0,134
Norway	NOK	0,134
Sweden	SEK	0,107

NORDIC REGION - CONSTRUCTION STATISTICS

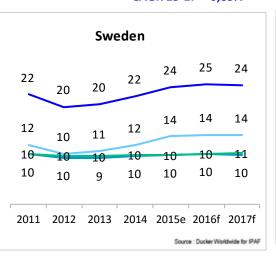


The total construction market grew in the Nordic countries in 2015. However, while Sweden, and Norway to a lesser extent were dynamic, Denmark and Finland saw only stagnation to deterioration of the market in 2015. Forecasts show improvement in all countries in the next two years.

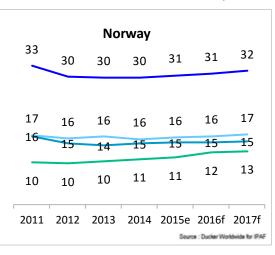
CAGR 15-17 = 3,13%

Europe - Construction Data 2015e 2016f 2017f : Ducker Worldwide for IPAF

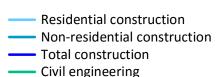
CAGR 15-17 = 0,85%



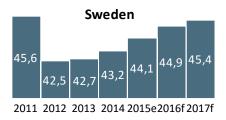
CAGR 15-17 = 1,61%



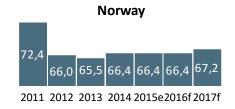
Construction put in place in billion Euros based on Euroconstruct 2015.



CAGR 15-17 = 1,42%



CAGR 15-17 =0,60%



NORDIC REGION GDP per Capita in thousand euros - estimates based on Euroconstruct 2015.

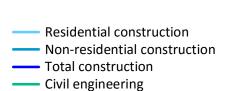


The total construction market grew in the Nordic countries in 2015. However, while Sweden, and Norway to a lesser extent were dynamic, Denmark and Finland saw only stagnation to deterioration of the market in 2015. Forecasts show improvement in all countries in the next two years.

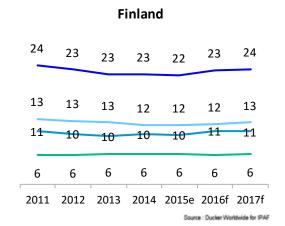
CAGR 15-17 = 3,07% Denmark 21 20 20 19 19 19 18 14 14 13 13 13 13 7

2011 2012 2013 2014 2015e 2016f 2017f

Source: Ducker Worldwide for IPAF



CAGR 15-17 = 2,61%



CAGR 15-17 = 1,42%



2011 2012 2013 2014 2015e2016f 2017f



CAGR 15-17 =1,08%

NORDIC REGION GDP per Capita in thousand euros - estimates based on Euroconstruct 2015.

THANK YOU.

The International Powered Access Federation (IPAF) is a not-for-profit members' organisation that promotes the safe and effective use of powered access equipment worldwide. Members include manufacturers, rental companies, contractors and users.

Offices in: UK, Brazil, China, Finland, France, Germany, Italy, the Netherlands, Singapore, Spain, Switzerland, Turkey, UAE, USA.

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info@ipaf.org





COUNTRY REPORT - SPAIN

IPAF Powered Access Rental Market Report 2016 - Europe

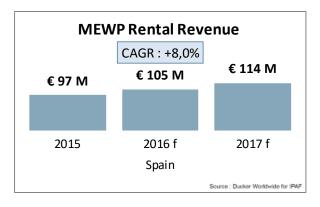
The International Powered Access Federation www.ipaf.org/reports

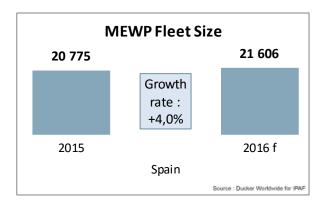




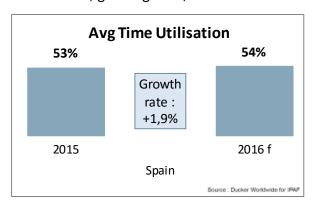


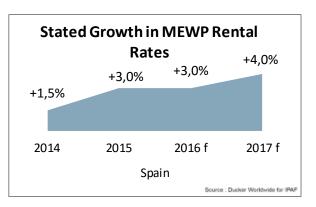
After several years of recession since 2008, the Spanish MEWP rental market started to show positive signs of recovery in 2014, which are clearly confirmed in 2015. This encouraging trend is expected to accelerate in the next years.





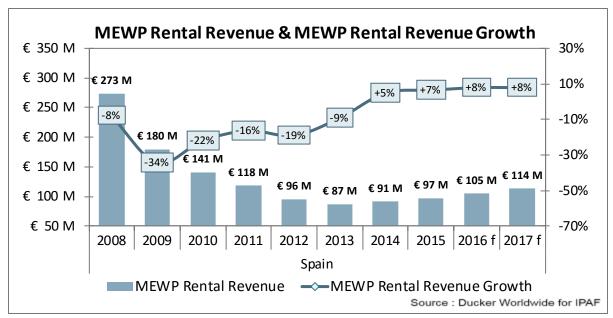
- All indicators were positive in 2015, driven by improving economy and construction industry
- Fleet expanded without affecting utilisation, which continued to improve, and rental rates accelerated their recovery
- 2016 and 2017 are expected to show an acceleration of market improvement, with better rental rates, growing fleet, and fleet utilisation improvement

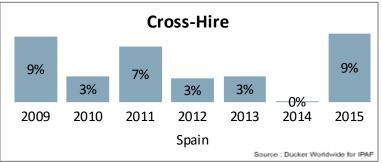






As forecast in last year's rental market reports, the Spanish MEWP sector experienced solid growth in 2015, driven by improving economy and construction industry.



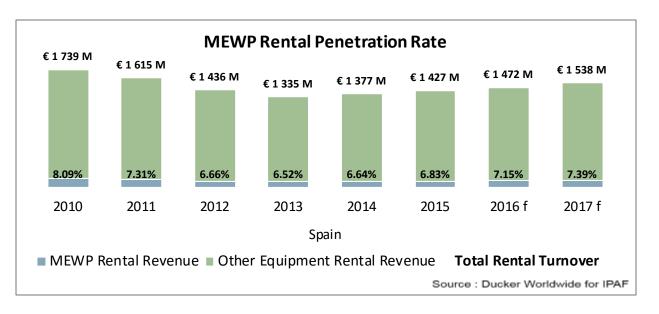


- This very positive trend is expected to continue, and even perhaps accelerate slightly in 2016 and 2017.
- Some rental companies reports profits in 2015, for the first time in many years.
- However, despite significant growth rates, the Spanish MEWP rental revenue is far from reaching pre-recession levels.
- In 2015, rental companies used more cross-hire as a way to meet growing demand.



After several years during which the MEWP rental revenue was even more affected than that for other construction equipment, the tide is finally turning and the share of MEWP rental revenue over the overall equipment rental revenue is increasing again. (source ERA)

• The MEWP rental revenue should account for more than 7% of the overall Spanish equipment rental revenue in 2016.

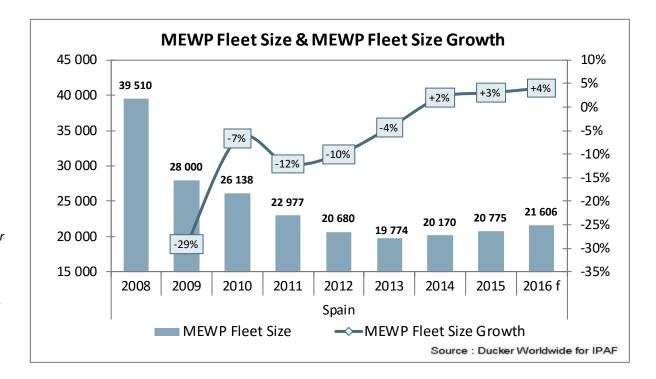


Source for Total Rental Turnover: ERA 2015 Report.



Exactly in line with last year's forecasts, the Spanish fleet continued to expand in 2015. It should exceed 21,000 units in 2016.

- Rental companies report that after years of highly limited investment, the Spanish fleet is old and needs more renewals in the next few years.
- In 2016, the Spanish fleet size is at 54% of its 2008 pre-recession levels.

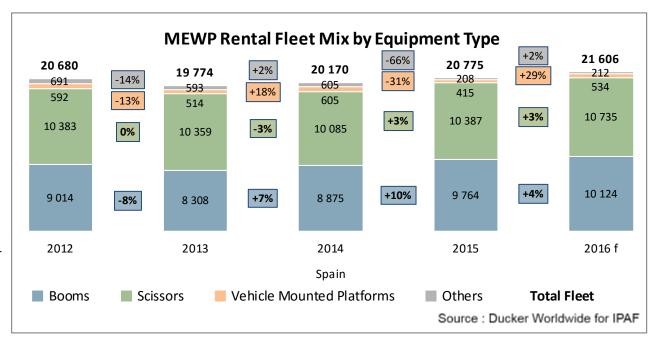


Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers



Rental companies report having invested primarily in booms in 2015, for their higher versatility and convenience. In addition, higher booms (>20m) were the most affected segment during recession when companies limited spending to smaller, lower-priced equipment.

- Booms now account for 47% of the Spanish fleet, while scissors still own the lion's share with 50%.
- In 2016, the fleet is expected to grow in more balanced proportions between booms and scissors.



Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers

% unit growth, e.g. Booms fleet increased by 10% from 2012 to 2013.

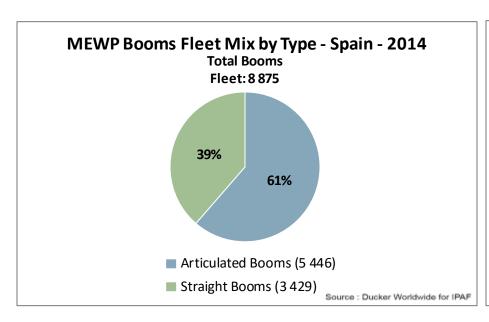
Others include: vertical lifts, vertical masts, push-around, trailer mounted/towable.

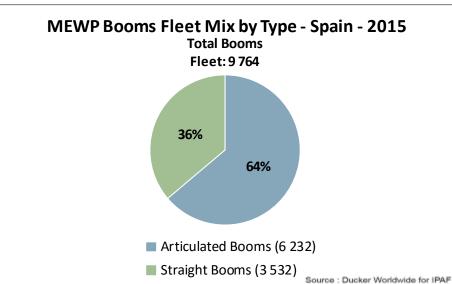
+X%



All rental companies interviewed report that articulated booms are gaining interest and share due to their versatility, and their heavy usage in industrial construction.

• The proportion of articulated booms has kept increasing in the past few years, from 57% in 2013 to 64% in 2015.

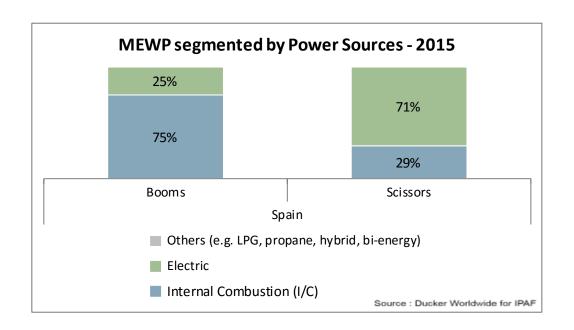






A strong trend towards electric equipment was mentioned by rental companies in Spain. These electric machines are versatile, and are used extensively in non-construction applications i.e. maintenance, storage, etc.

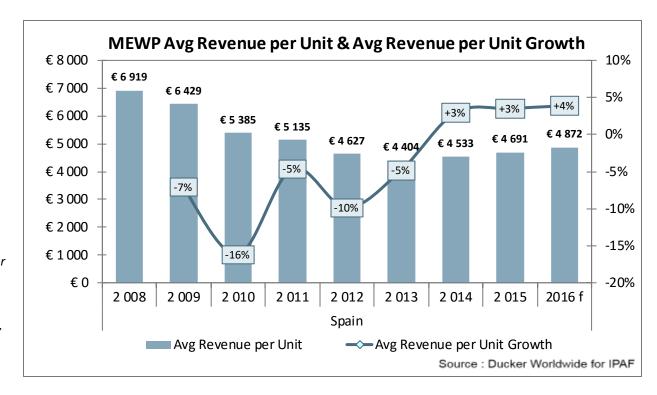
The share of electric equipment should continue to grow again in 2016 and could stabilise in the following years.





The average Spanish MEWP revenue per unit improved again in 2013, at a similar pace to 2012. The average revenue per unit is driven up by improving rental rates.

 Although rental rates should continue to improve in the forthcoming years, the average revenue per unit will remain significantly lower than pre-recession levels for several more years. In 2016 it will account for approximately 70% of the 2008 average revenue per unit.

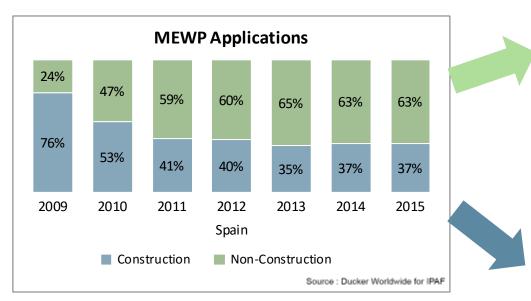


Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers



After several years of decrease in the share of construction related revenue, rental companies started seeing an increase in their revenue linked with construction in 2014. This share remained stable in 2015 but should continue to increase slightly in the forthcoming years, as the construction industry recovers.

• Facility management is reported to be the main non-construction sector for MEWP rental companies, while industrial building is the first construction end-application.

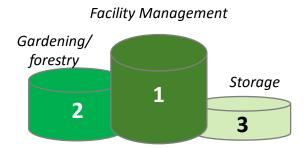


Share of rental revenues

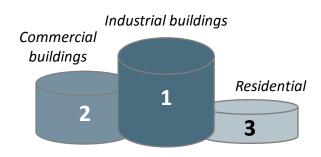
Non-construction includes industry, maintenance, cleaning, utilities, events.

Construction includes new build and renovation; including all types of buildings, also industrial.

Main non-construction sub-sectors



Main construction sub-sectors

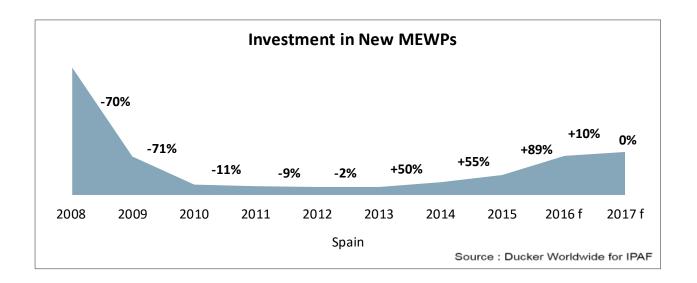


Prepared for The International Powered Access Federation by Ducker Worldwide



Rental companies report investing strongly in new equipment primarily in order to rejuvenate fleet (which has significantly aged during recession years), but also to expand fleet size.

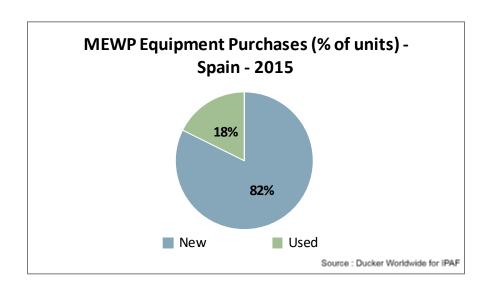
- Rental companies started increasing equipment investment again in 2014, and pursued strong investment in 2015.
- Strong increased spending in new equipment should continue in 2016, but should slow down to stabilise in the following years.



SPAIN - EQUIPMENT PURCHASES



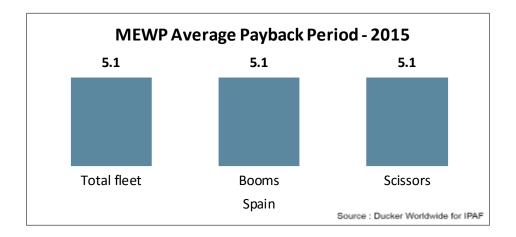
Spain is the country, along with Italy, where the highest share of used equipment purchases is encountered. Rental companies expect the share to decrease in the following years, linked with market and investment capabilities improvement.





The average payback period in Spain is 5 years. Rental companies were unable to differentiate booms from scissors.

 Smaller equipment, which was typically more purchased during recession or slow years, provide a shorter payback period at around 3 years, while bigger and higher equipment purchased more frequently in 2014 and 2015 have a 5 to 7 years payback period.

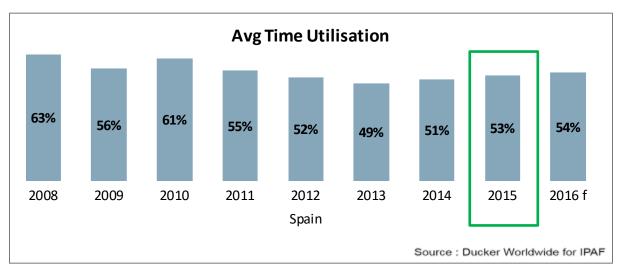


5.1 = 5 years and 1 months



Utilisation rates improved in 2015 to reach 53% on average. They are expected to progress again in the forthcoming years.

• Spanish rental companies had different business strategies in 2015: while some chose to strongly expand fleet at the expense of utilisation, others limited or did not increase fleet in order to reach much higher utilisation rates (up to 70% for a few).



Definition: Physical number of machines out on hire as % of total number in fleet at any given time.



Retention period remains around 7 years in Spain, with a slight decrease in 2015 compared to 2014, due to strong investment in fleet renewals and fleet expansion.

• Some rental companies report keeping equipment up to 12 years, which is made possible by a thorough and regular maintenance plan.

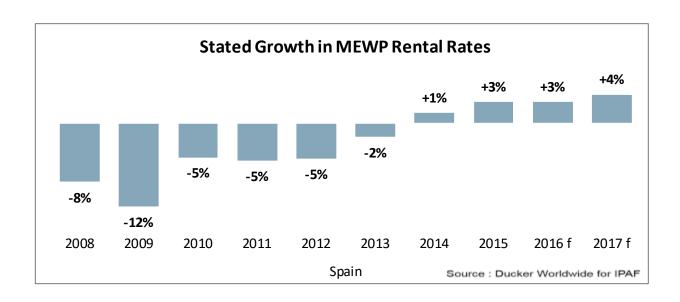


7.3 = 7 years and 3 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new



After slight rental rate improvement in 2014, the positive trend accelerated in 2015 and should continue in 2016 and 2017.



A PERSPECTIVE FROM THE MANAGING EDITOR OF *INTERNATIONAL RENTAL NEWS*

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- The key thing to remember about the Spanish AWP rental market is that the country's total access rental fleet of around 20,000 units is currently half the size it was at the peak of the market in 2008.
- The pain that the market has gone through to get to that new fleet size cannot be underestimated, but the fact is the smaller fleet size is a good thing because it balances supply with demand and offers the prospect of reasonable rental rates.
- Of course, the prospect of reasonable rental rates doesn't mean you get them, and conditions remain difficult for Spanish rental companies. Payment terms with the very largest contractors in Spain are very poor 160 days or more despite regulations designed to counter the problem. (It has even been claimed that some major contractors get round the regulations by requiring rental suppliers to sign letters stating that they are happy with long payment terms.)
- This has led some major rental companies in Spain to retreat completely from serving some of the country's largest contractors. You know a market is difficult when you have to write off some of the biggest potential customers.

A PERSPECTIVE FROM THE MANAGING EDITOR OF INTERNATIONAL RENTAL NEWS



- Even so, the fact is that Spain's rental market is growing again. Almost 70% of Spanish renters responding to a survey by rental association ASEAMAC reported higher revenues in 2015 and almost 80% were expecting to expand their CapEx investment this year.
- As the association's president, Juan Torres, said at the start of 2016, "The market is growing from a low point, but it is still growth."
- The other point is that aerials remain an extremely important product for the country's rental players. In fact, both GAM and Hune have if anything increased their focus on aerials while diminishing their involvement in earthmoving equipment: the market versatility of the aerial platform has once again shone through.
- The past six years has seen renters in the rest of Europe watch on with sympathy, but now there are signs that they are engaging with the market again.
- Loxam's existing Spanish operation was boosted by its acquisition of the Hertz business which brought two locations and a focus on power rentals and the company's CEO, Gerard Deprez, speaking at an ANAPAT meeting in 2015, commented that "there is big potential in Spain, so companies are looking to grow there, including Loxam."
- Meanwhile Riwal, which has continued to operate in the country, has recently opened a used platform centre in Valencia, reflecting the increased demand for equipment in the country.
- It has been a long time coming, but Spain is on the up.

APPENDIX

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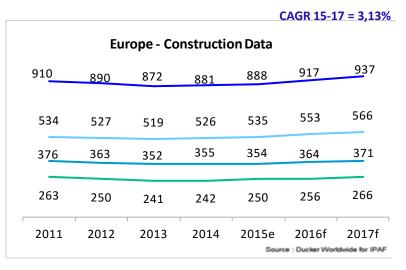
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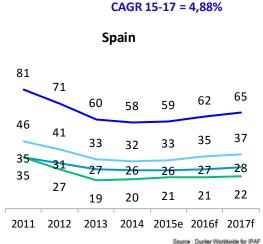






After several years of drastic recession, the Spanish construction industry is recovering. But while in 2015, all construction sectors except non-residential started to recover, 2016 and 2017 should see strong positive trends in all sub-segments.







Construction put in place in billion Euros based on Euroconstruct 2015.

SPAIN GDP per Capita in thousand eurosestimates based on Euroconstruct 2015.

Residential construction
 Non-residential construction
 Total construction
 Civil engineering

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COUNTRY REPORT – UNITED KINGDOM

IPAF Powered Access Rental Market Report 2016 - Europe

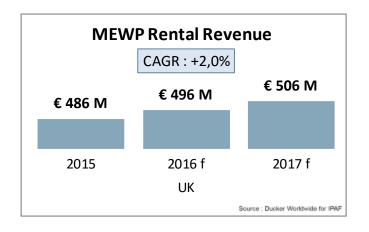
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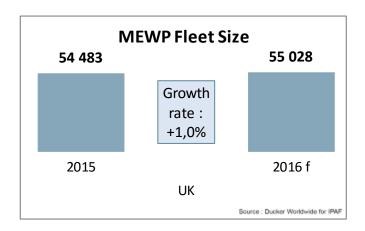




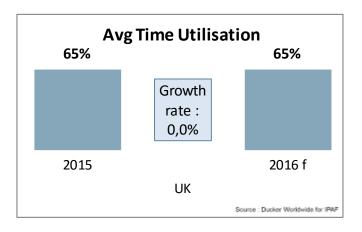


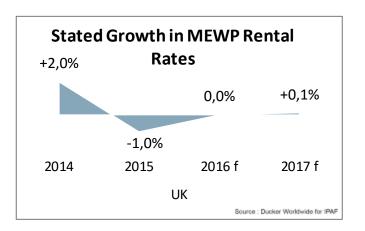
The UK MEWP rental market pursued its growth, though hindered by tougher competition and challenging pressure on rates.





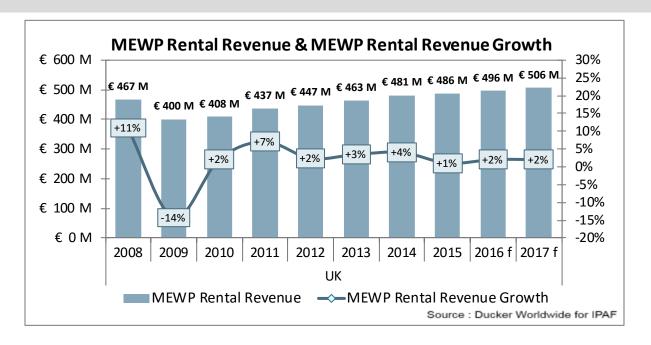
- Slower growth of market revenue, driven by slight fleet increase and stable utilisation.
- Increased feeling of price pressure, leading to a flat level in the next few years.



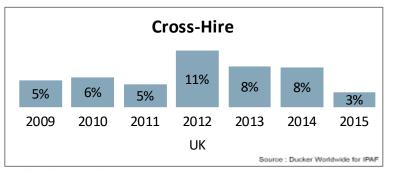




A moderate market growth characterised the UK MEWP rental revenue evolution in 2015. Slightly higher growth is expected over the next two years.



Exchange rate £1 = 1.377€

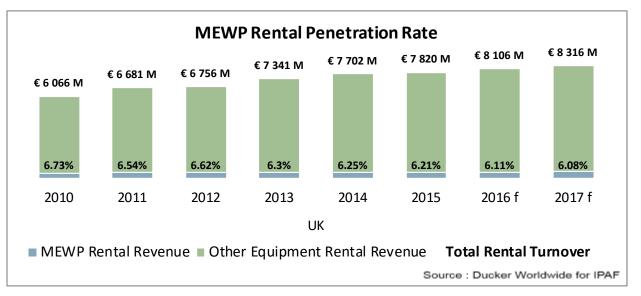


- Revenue hit its lowest growth rate in 2015 since 2009.
- Total MEWP rental revenue reached €486 M (£ 669 M) in 2015.
- Approximately 90,000 operators were trained in 2015 in the UK, which represents a rising tendency. Rental companies who offer their own training have observed higher demand over the last two years. This development is expected to continue in the next two years.
- Cross-hire rental activity decreased in 2015. Rental companies' margins on re-rent are said to be low.



The total MEWP rental market accounted for more than 6% of the total UK construction equipment rental market in 2015. (source ERA)

• The MEWP rental penetration rate is slightly decreasing over the years to a 6% rate, which underlines that the overall equipment rental market is currently growing at a faster pace than the MEWP rental market.

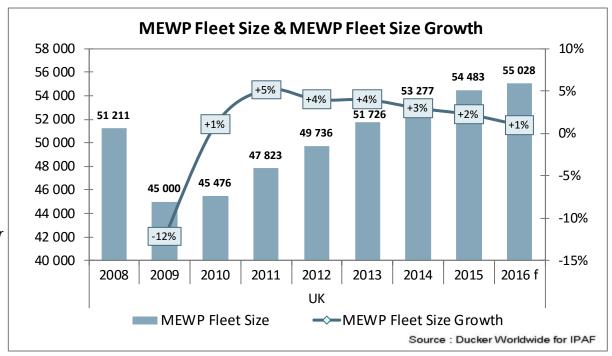


Source for Total Rental Turnover: ERA 2015 Report.



After several years of sustained increase, fleet size growth in the UK slowed down **slightly** in 2015. It is forecasted that total MEWP fleet size goes beyond 55,000 units in 2016.

• The UK fleet size is reaching its highest level, and expected to continue doing so over the next few years.

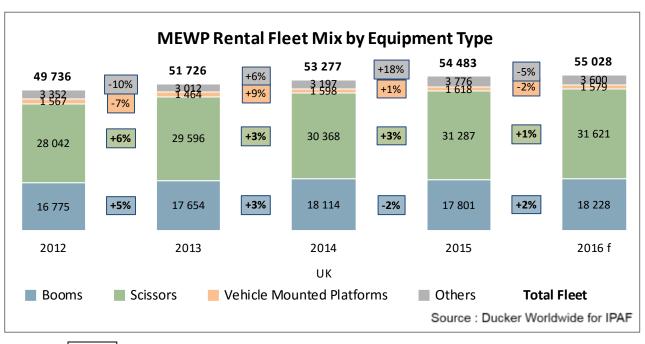


Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers



The scissors category grew slightly in 2015, while the share of booms decreased by 2% in 2015. Nevertheless, the midterm trend is a stable fleet mix.

• Scissors remain the largest MEWP category; they are appreciated for their versatility.



Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers

% unit growth, e.g. Booms fleet decreased by 2% from 2014 to 2015.

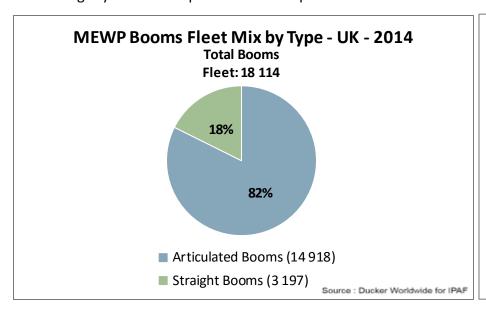
Others include: vertical lifts, vertical masts, push-around, trailer mounted/towable.

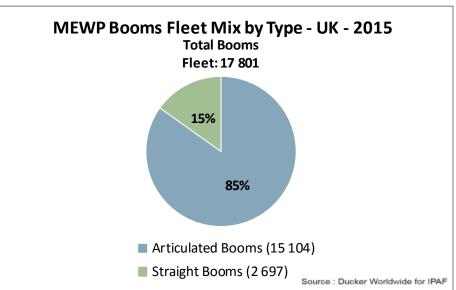
+X%



Articulated booms hold the lion's share within the total boom category. They account for 85% of the total boom fleet.

- Articulated booms offer more flexibility in usage than straight ones. As a result, these are widely available in rental companies' fleets.
- They are well-suited to construction customers, working sometimes in restricted areas.
- Although the total number of booms decreased in MEWP rental fleets in 2015, the number of articulated ones tended to increase slightly. Rental companies seem to optimise their fleet with the equipment most in demand.

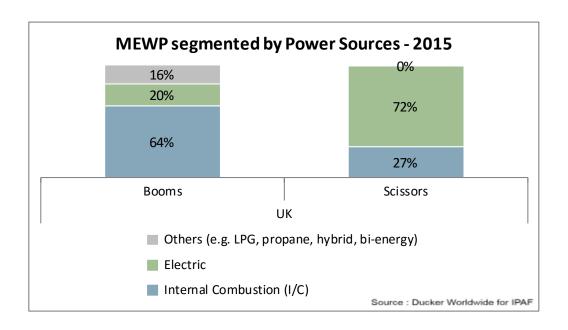






The UK market is decreasing its usage of hybrid and propane powered access equipment, due to application issues linked to these equipment.

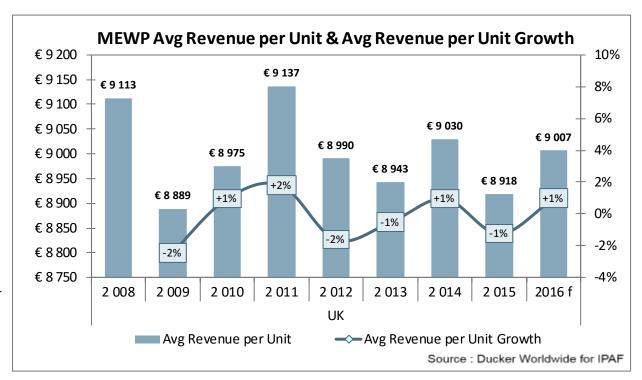
- Contrary to previous years, the share of hybrid scissors has drastically decreased. These machines have become less attractive due to their large size which makes it difficult to go into builings and thus, their limited potential for indoor applications.
- In relation to that, the share of electric scissors increased significantly, replacing the hybrid machines.
- In 2015, the share of internal combustion (IC) booms remained stable at 64%.
- Emission regulations valid in London since 2016 contributed to reducing the use of big diesel booms in this city area.





The average revenue per unit decreased slightly in 2015 and reached a value of approximately 8,900€.

Revenue per unit is expected to grow in 2016, and go beyond €9,000 again.



Note: included are powered access lifts: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers

Exchange rate £1 = 1.377€



The construction sector gained a 2% share in 2015 against the non-construction sector. Construction revenues now account for 55% of total MEWP rental revenues.

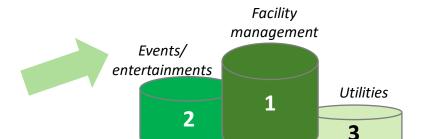
• The highest demand on MEWPs in the construction sector is driven by commercial and industrial buildings.

MEWP Applications 45% 46% 48% 47% 47% 48% 55% 54% 53% 53% 55% 52% 52% 45% 2009 2010 2011 2012 2013 2014 2015 UK Construction ■ Non-Construction Source: Ducker Worldwide for IPAF

Share of rental revenues

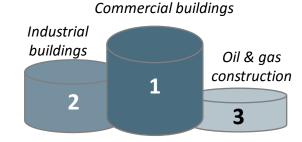
Non-construction includes industry, maintenance, cleaning, utilities, events.

Construction includes new build and renovation; including all types of buildings, also industrial.



Main <u>construction</u> sub-sectors

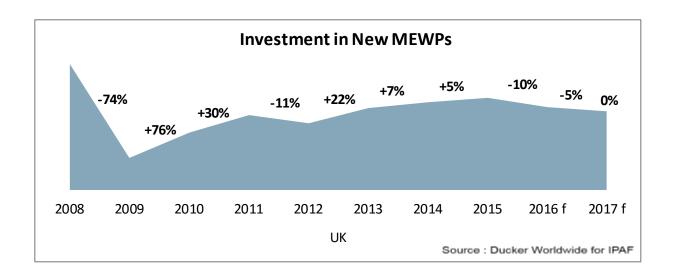
Main non-construction sub-sectors





In 2015, MEWP rental companies have reached a peak in the amount of investments dedicated to purchasing new equipment. They now intend to progressively decrease that amount.

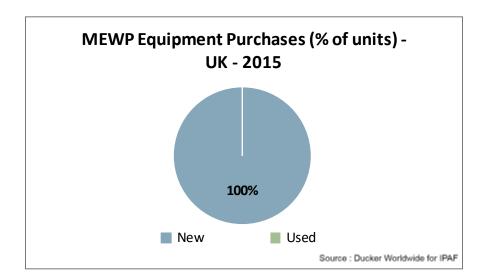
• Investments are expected to continue decreasing over the next two years, although at a slower pace.





UK MEWP rental companies reported relying on new equipment only.

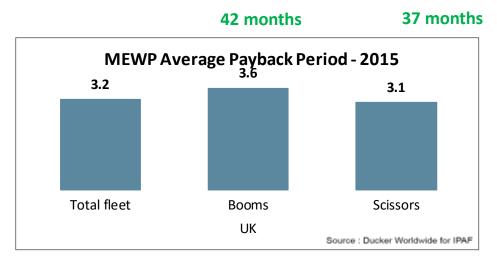
- MEWP manufacturers offer more attractive discounts when a large number of units is purchased at once.
- New equipment can be used longer. Proper maintenance helps to extend the equipment's lifetime.





The average payback period for MEWPs is 3 years and 2 months. It is slightly longer for booms than for scissors.

- The payback period for electric scissors is reported to be shorter than for diesel ones.
- For booms, payback period is similar between electric and diesel equipment.

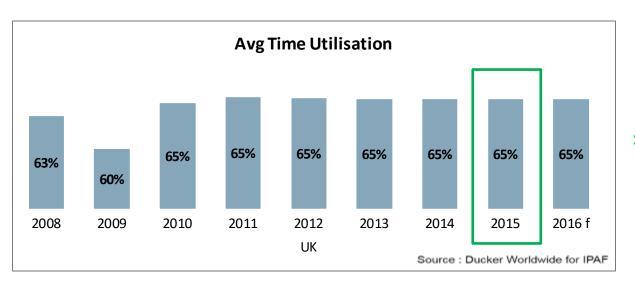


3.6 = 3 years and 6 months



Utilisation rates remained stable over the last 6 years at 65%. No change is expected in 2016.

- The utilisation rate for booms was reported to be higher because of long contracts with this machine type.
- Scissors are rented out with shorter term contracts than booms, which translates into lower utilisation rate.



Scissors: 64%

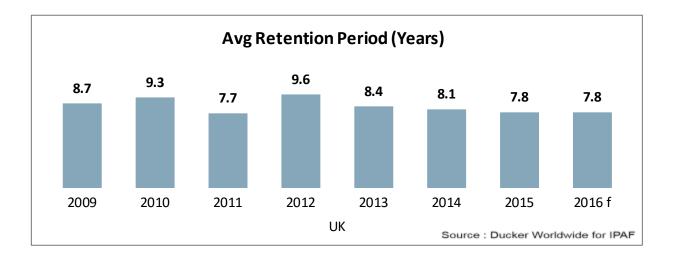
Booms: 70%

Definition: Physical number of machines out on hire as % of total number in fleet at any given time.



The average retention period in the UK continued decreasing in 2015.

- Electric equipment is kept longer in MEWP rental fleets than diesel equipment.
- Truck-mounted platforms are said to be the equipment with the longest retention period.



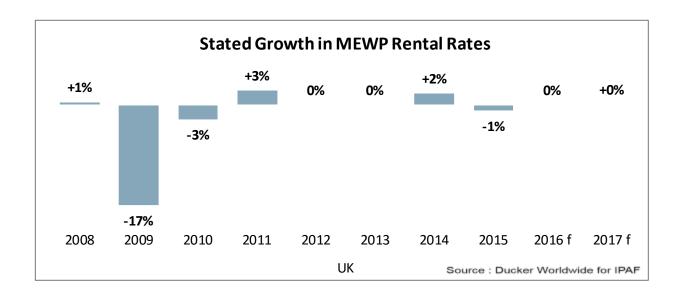
7.8 = 7 years and 10 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new



After 4 years of positive or stable evolution, rental rates decreased by 1% in 2015.

- Increased competition on the market led to price decrease in 2015.
- Rental companies expect their rates to reach a flat level in 2016 but do not foresee any increase of their rates in the mid-term.



A PERSPECTIVE FROM THE MANAGING EDITOR OF *INTERNATIONAL RENTAL NEWS*

IPAF Powered Access Rental Market Report 2016 - UK

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- The UK's extremely mature equipment rental market is a useful one to watch wherever you operate in the world, because trends evident here often find themselves adopted in other countries.
- Think low level access, diversification into non-construction sectors like facilities management, or operator training: all revenue earning strategies for UK rental companies that are being adopted around the world.
- UK companies may not be leaders in rental IT or the exploitation of 'big data' that accolade probably belongs to some of the major US players, or the Nordic countries but they understand how to maximise opportunities in a competitive market.
- Those skills are certainly needed now, with the UK in 2015 and 2016 a market adapting to slower growth rates reflecting concerns about the strength of the wider economy and intense competition on price, as the market absorbs the many new machines acquired in the years 2012 to 2014.
- Lavendon's performance and strategy in 2015 is instructive. The company's UK revenues, for its Nationwide Platforms business, were down 1% last year but its operating profits were up, and it was emphasising that its ability to "deliver more than a standard rental product" was important with its bigger customers. Its BlueSky safety or productivity-focused ancillary products were an example of this.
- UK companies have also been at the forefront of managing their in-depot operations to maximise the availability of their fleet. HSS was one of the first UK national's to pursue this policy aggressively, and Lavendon says its own initiatives in this regard had reduced the amount of fleet awaiting repair by almost a quarter.





- The UK is seeing wide regional variations ranging from bad news in the north east of Scotland where Aberdeen-based oil industry work has been drying up, to continued positive news in the south east of England, and in particular London, where there is continued investment in infrastructure and construction.
- The trends in the MEWP market that have been evident in the UK over recent years were again to the fore in 2015. The UK's big players continue to focus on training both AFI and Riwal acquired training businesses in 2015 and there has also been an interest in buying into niche markets, examples being VP plc's acquisition of tracked access company Higher Access in early 2016 and A-Plant's move into the construction hoist sector with the addition of GB Access.
- In AFI, the UK also has one of the most ambitious access rental players in Europe. The company made three acquisitions in 2015 and finalised a £70 million refinancing deal that will allow it to further expand in the UK and the Middle East.
- Other notable news from the UK came in the form of the return to the rental industry of former Speedy Hire CEO Steve Corcoran, now at the helm of Ardent Hire, the new name for the merged Fork Rental and One Call Hire. Access players will be wondering if a move into access is on the cards.
- Finally, alongside an uncertain economy there is one other thing for UK access rental companies to think about: the referendum on membership of the EU. Current polls point to the UK remaining in the EU, but there is no second-guessing the electorate.

APPENDIX

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• Exchange rate:

- The currency exchange rate used for the UK is shown below. The same rate has been used throughout the time period (2015) in order to eliminate variation in growth rates due to exchange rate fluctuations rather than to the actual MEWP rental market.

	Currency Unit	Converter to Euro
UK	£	1,377

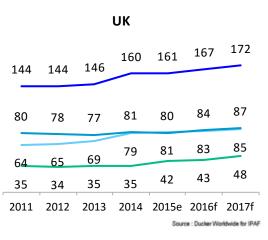


In 2015, both construction and GDP pursued their positive growth initiated several years ago in the UK.

CAGR 15-17 = 3,13%

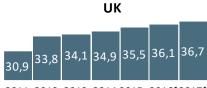
Europe - Construction Data 2015e 2016f 2017f Source : Ducker Worldwide for IPAF

CAGR 15-17 = 3,20%



Construction put in place in billion Euros based on Euroconstruct 2015.

CAGR 15-17 = 1,62%



2011 2012 2013 2014 2015e2016f 2017f

UK GDP per Capita in thousand euros - estimates based on Euroconstruct 2015.

Residential construction
Non-residential construction
Total construction
Civil engineering

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