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IPAF Powered Access Rental Market Report – Europe

FOREWORD
Foreword

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 representing the interests of rental companies, manufacturers, distributors, users and training companies. It was formed in 1983 and celebrated its 25th anniversary in 2008.

- The IPAF training programme for access 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 more than 500 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.
Foreword

Additional copies of this report can be ordered at www.ipaf.org or from your nearest IPAF office. IPAF has also published the IPAF US Powered Access Rental Market Report 2011 – details available at www.ipaf.org or from your nearest IPAF office.
Foreword

Ducker

Ducker Worldwide is a primary research-led industrial market research and consulting company, dedicated exclusively to ad hoc business-to-business research and particularly specializing in the markets for construction equipment and materials in Europe and the US.

Ducker benefits from solid industry experience and a highly international team with the ability to survey 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.
- **International approach applied locally**: 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 is certified as conforming to ISO 9001 and works to the guidelines of the ESOMAR ethics standards.

More information on Ducker can be found at [www.ducker.com](http://www.ducker.com)
This report was produced by the European headquarters of Ducker Worldwide in cooperation with its US headquarters.

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Foreword – Objectives

This study assesses the MEWP (mobile elevating work platform) rental market value for Europe over a six-year period. A separate report is available covering the US market.

- Main objectives by country:
  - 2011 MEWP rental market value and fleet size
  - Trends and dynamics (2008–2013)
  - Operational indicators (investment, retention period, application)
  - In addition to the primary market value and fleet size objective, fleet mix was included in 2010 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.

- New in this report:
  - Information concerning main power sources of booms and scissors was added to the scope of the project this year.

- The current study does not examine rental company profitability.
- The study covers the time period 2008-2013, with particular focus on 2011.
- The conducting of all interviews in the first two months of 2012 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.
Foreword – Scope and Definitions

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 personnel lifts: all booms, scissor lifts and vertical masts
  - Both articulating and straight telescopic booms.
  - Self-propelled as well as vehicle-mounted, push-around, trailer-mounted/towable, hoists.
- Excluded are telescopic material handlers, forklifts, cranes, mast climbing work platforms, hoists.
- The European part of the study comprises the following ten countries:
  - Denmark (DK)
  - Finland (FI)
  - France (FR)
  - Germany (DE)
  - Italy (IT)
  - Netherlands (NL)
  - Norway (NO)
  - Spain (ES)
  - Sweden (SE)
  - United Kingdom (UK)
Foreword – Scope and Definitions

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 63% of their overall rental revenue.
  - MEWP manufacturers.
  - National rental associations.
- In addition, an emailing was sent to gather information via a self-administered web questionnaire.

- 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 take this opportunity to thank all industry representatives interviewed, without whose kind assistance it would not have been possible to conduct this research.
Foreword – Scope and Definitions

Definitions

- **MEWP rental revenue:**
  - 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:**
  - 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:**
  - 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.
Foreword – Scope and Definitions

Definitions

- Exchange rates:
  - The currency exchange rates used for countries outside the Euro Zone are as below. 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.

<table>
<thead>
<tr>
<th>Currency Unit</th>
<th>Converter to Euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK £</td>
<td>1.2</td>
</tr>
<tr>
<td>Denmark DKK</td>
<td>0.13448</td>
</tr>
<tr>
<td>Norway NOK</td>
<td>0.13187</td>
</tr>
<tr>
<td>Sweden SEK</td>
<td>0.11244</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

IPAF Powered Access Rental Market Report – Europe
Executive Summary

MEWP Rental Market Situation at End 2011

- MEWP rental revenue in the ten countries surveyed experienced a significant increase in 2011 (+7%). It is estimated at approximately €2.3bn in 2011. This figure represents around 80% of the total European* market, which would attain a MEWP rental market value of approximately €2.9bn.

- Most countries under study experienced MEWP rental revenue growth, thanks to streamlined fleets and increasing demand.

- The MEWP fleet in the ten countries surveyed experienced small growth (+2%) giving a total fleet of 226,000 units in 2011, which would represent about 300,000 units in the overall Europe*.
  - Investments made in 2011 continued to primarily replace old equipment.
  - Booms represent approximately 42% and scissors account for 47% of the MEWP fleet.
  - As predicted in last year’s report, 2011 saw the MEWP market experience a trend towards more demand for booms linked to the increasing activity in non-construction applications (property care, maintenance, cleaning, utilities, etc.) as well as the fact that large scissors are said to lack profitability. However, this trend is expected to slow down with the market rebound.

- The European market for MEWP rentals remains driven by specialists.

- While generalists suffered the most from recession in 2009 and 2010, both rental company types experienced similar growth in 2011.
  - Both company types experienced similar growth in utilisation rates and rental rates. However, being more confident in the future, specialists invested more to expand their fleets while generalists kept investments to a minimum primarily for fleet replacement.
Executive Summary

MEWP Rental Market Situation at End 2011

Three groups of countries stand out in the 2011 market:

1. One country where companies continued to struggle in 2011: Spain
   - In Spain, the continuous construction crisis added to an oversupply which led to a strong decrease of rental revenue (-26%).
   - Rental companies continued to de-fleet in 2011, and continued to reduce investments.
   - Rental rates kept on decreasing in 2011.
   - However, the market is expected to stabilise in 2012 and 2013, due to a lean, reduced fleet, as well as an improving construction market.

2. Countries which only slightly increased rental revenues in 2011: Italy and Netherlands
   - Fleet size remained stable in both countries in 2011.
   - Italian rental companies did not increase investments compared to 2010. In the Netherlands, companies anticipated a rebound in 2012 and started to strongly invest in the second half of 2011 in order to plan for fleet expansion in 2012.
   - Italian and Dutch rental companies lowered rental rates (-5% in Italy, -1% in the Netherlands) as a tool to significantly increase utilisation rates (+8% in Italy, +4% in the Netherlands).

3. For the vast majority of European countries the situation improved significantly compared to 2010, with rental revenue growth from 7% to 19%: Sweden and the UK (+7%), France (+9%), Germany (+12%), Norway (+13%), Denmark (+14%) and Finland (+19%)
   - MEWP fleet size increased by 3% to 7% (except in Denmark where the MEWP fleet was too large for national demand, and rental companies de-fleeted in 2011).
   - Investments increased across the board to renew and/or expand fleet.
   - Utilisation rates increased in most countries (except Sweden where rental companies strategically chose to increase rental rates at the expense of utilisation rates).
   - Rental rates were adjusted upwards (except in Denmark where rental companies remained cautious after a particularly strong recession).
Executive Summary

Market Perspective and Short-Term Trends

- The European MEWP market based on the ten countries under study is expected to confirm its growth in 2012 and 2013, however, at a much slower pace than in 2011: below 5% per year.
  - The European fleet is expected to continue its expansion at a slow pace in 2012.

- Rental companies from all countries under study expect an increase in their revenue in 2012, except Spain, which will only see its revenue stabilising after the strong recession (0% in 2012).
  - Rental revenue growth is expected to range from 1% (Italy, Netherlands) to 10% (Norway).
  - In 2013, growth is expected to be more limited than in 2012. UK, Denmark, Norway and Italy see highest forecast growth at 4%.

- Indicators are expected to remain positive in 2012 and 2013.
  - MEWP investments will continue to rise progressively in 2012 and 2013.
  - Time utilisation should increase in the Nordic countries and remain stable in all other countries in 2012.
  - Rental rate growth will continue in 2012 and 2013 in most countries except in Spain, Italy and the Netherlands.
MARKET SIZE 2011
The European MEWP market in the ten countries surveyed is estimated at approximately €2.3B in 2011.

- The figure represents about 80% of the total European market, which would give a total European* market at €2.9B. Germany is now the largest market in value, followed by France and the UK.

- Fleet mix both in France and Germany tends towards higher-value equipment which explains why both markets are now ahead of the UK in value terms.

- However, the UK remains the leading market in volume.

- In rental companies that have a MEWP fleet, MEWPs represent on average 63% of rental revenues in 2011 (compared to 57% in 2010 and 48% in 2009).
  - This ranges from around 40% in Scandinavia to close to 70% and above (Netherlands, Germany, UK), due to a higher proportion of specialists.

---

**MEWP Rental Market (M€) - 2011**

10 European countries under study

Total = €2,275M

<table>
<thead>
<tr>
<th>Country</th>
<th>MEWP Rev. as % of Total Rental Rev.</th>
<th>MEWP Rental. Rev. as % of Total Co. Rev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DE</td>
<td>34%</td>
<td>34%</td>
</tr>
<tr>
<td>FR</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>UK</td>
<td>38%</td>
<td>38%</td>
</tr>
<tr>
<td>IT</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>NL</td>
<td>38%</td>
<td>38%</td>
</tr>
<tr>
<td>ES</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>SE</td>
<td>38%</td>
<td>38%</td>
</tr>
<tr>
<td>FI</td>
<td>25%</td>
<td>21%</td>
</tr>
<tr>
<td>DK</td>
<td>25%</td>
<td>24%</td>
</tr>
<tr>
<td>NO</td>
<td>27%</td>
<td>23%</td>
</tr>
</tbody>
</table>

---

*Defined as 27 EU countries + Norway + Switzerland + Slovenia + Croatia + Macedonia*
Some countries remain typically dominated by specialist rental companies: UK, Italy, Germany, Netherlands. In contrast France, Spain and the Nordic countries are dominated by generalists.

- The European level of specialisation did not change much in 2011 compared to 2010.
- Specialists still account for more than 60% of MEWP rental revenues.

All re-rental amounts have been eliminated from totals expressed in this report.
Cross-hire, i.e. rental by one rental company from another, represents 5% of the MEWP rental market.

- The share of cross-hire is very stable across the year, as it has remained at 5% since 2009.
- Similarly to what was observed in 2010, generalists tend to re-rent more than their specialist counterparts, in order to supply specific equipment, that they do not have in their fleet.

All re-rental amounts have been eliminated from totals expressed in this report.
The total number of MEWP units in 2011 is estimated at approximately 226,000 machines in the ten European countries surveyed, which would represent about 300,000 units in the overall Europe*.

- Being the most mature European MEWP market, the UK still holds the largest fleet.
- Due to a larger proportion of higher-value equipment, France and Germany and to a lesser extent Italy and the Netherlands continued to maintain the highest revenue per unit.
- However, while the average revenue per unit increased for most countries, in Spain it continued to decrease due to rental rate pressure (-5%) and a difficult economical situation.

* Defined as 27 EU countries + Norway + Switzerland + Slovenia + Croatia + Macedonia
Market Size 2011 - Power Sources

While the vast majority of European rental companies report that booms are typically diesel and scissors electric, some differences appear by country.

- In Spain and Germany, close to 50% of rental companies interviewed report that the majority of their booms are electric.
- The Nordic markets tend to be more driven towards electric scissors than other countries.

### Booms: Primary Power Sources - 2011

<table>
<thead>
<tr>
<th>Country</th>
<th>Diesel</th>
<th>Electric</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>82%</td>
<td>16%</td>
<td>2%</td>
</tr>
<tr>
<td>UK</td>
<td>89%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>FR</td>
<td>90%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>ES</td>
<td>53%</td>
<td>46%</td>
<td>4%</td>
</tr>
<tr>
<td>IT</td>
<td>96%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>DE</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>NL</td>
<td>78%</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td>DK</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>NO</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>SE</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>FI</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>

10 European countries under study

### Scissors: Primary Power Sources - 2011

<table>
<thead>
<tr>
<th>Country</th>
<th>Diesel</th>
<th>Electric</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>63%</td>
<td>37%</td>
<td>3%</td>
</tr>
<tr>
<td>UK</td>
<td>74%</td>
<td>26%</td>
<td>10%</td>
</tr>
<tr>
<td>FR</td>
<td>72%</td>
<td>28%</td>
<td>10%</td>
</tr>
<tr>
<td>ES</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>IT</td>
<td>51%</td>
<td>49%</td>
<td>6%</td>
</tr>
<tr>
<td>DE</td>
<td>66%</td>
<td>34%</td>
<td>6%</td>
</tr>
<tr>
<td>NL</td>
<td>76%</td>
<td>22%</td>
<td>11%</td>
</tr>
<tr>
<td>DK</td>
<td>78%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>NO</td>
<td>90%</td>
<td>10%</td>
<td>17%</td>
</tr>
<tr>
<td>SE</td>
<td>90%</td>
<td>10%</td>
<td>17%</td>
</tr>
<tr>
<td>FI</td>
<td>83%</td>
<td>17%</td>
<td>10%</td>
</tr>
</tbody>
</table>

10 European countries under study

- % of rental companies who stated their booms or scissors were primarily diesel, electric or other.
- Markets more driven towards electric booms.
- Stronger presence of electric scissors.
In 2011, the share of the European MEWP rental revenue generated from construction work remained stable compared to 2010.

However, differences appear by country:

- Scandinavian markets, which in 2010 were the most heavily driven by construction, are now clearly shifting towards more non-construction applications (especially in Denmark, Norway and Finland).
- Spain is the other market where in 2011 the MEWP revenue coming from non-construction applications increased compared to 2010, due to the continuous decrease of the construction market.
- On the other hand, in the UK, Italy and the Netherlands, construction’s share of MEWP revenue increased slightly compared to 2010, as the construction market showed some signs of recovery.

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

Construction includes new build and renovation; including all types of buildings, also industrial.
IPAF Powered Access Rental Market Report – Europe

MARKET DYNAMICS 2008-2013
After difficult times in 2009 and 2010, the rebound was confirmed in 2011.

- Only slight growth is expected in 2012-2013 from rate increases, held back by lack of confidence due to the uncertain economical context.
- Although market players expect slow continuous growth in 2012 and 2013, pre-recession levels will not be reached in the next two years.
- The crisis in Greece, Spain and the Euro Zone, as well as the upcoming elections in France are all contributing to a serious lack of confidence with many questions about the future.

![Diagram showing MEWP Rental Revenue & MEWP Rental Revenue Growth for 10 European countries under study from 2008 to 2013.](chart.png)
Europe’s market structure remains stable, although the share of specialists in rental revenue has increased just over five points since 2008.
Specialists and generalists experienced very similar growth in 2011.

- All countries saw growth in 2011, except Spain, which is not expected to start recovering before 2013.
- Nordic countries experienced higher growth than average as they are recovering from a particularly strong recession in 2010.

It is expected that both rental company types will experience similar growth trends in the next two years.
As forecast in the previous report, fleet expansion accelerated in 2011, albeit at a limited rate.

- Investments in 2011 were typically oriented towards replacement or conducted during the second half of the year, in order to anticipate 2012 fleet expansion.
Specialists grew their fleets slightly more in 2011 than generalists, who remain more conservative.

- All European countries under study increased fleets except Spain and Denmark.
- In 2010, the Spanish and Danish fleets were too large for market demand.
  - While de-fleeting in Denmark in 2010 and 2011 allowed for growth recovery, the Spanish fleet remains too large.
As forecast in last year’s report, the 2011 MEWP market experienced a slight increase in boom demand at the expense of scissors. However, in 2012 the mix is expected to fall back to 2010 figures.

- The trend towards booms seems durable only in France (50% of the fleet in 2012 vs. 40% in 2010).
- In the UK, Germany, Spain and the Netherlands, the share of booms in the overall fleet is decreasing progressively from 2010 to 2012.
- Large diesel scissors are seen to offer low return on investment. As a consequence rental companies preferred to invest in booms (truck-mounted or self-propelled) as well as smaller electric scissors.

**MEWP Fleet Mix by Equipment Type**

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booms</td>
<td>24,977</td>
<td>26,651</td>
<td>29,594</td>
</tr>
<tr>
<td>Scissors</td>
<td>108,266</td>
<td>105,286</td>
<td>110,356</td>
</tr>
<tr>
<td>Others</td>
<td>88,719</td>
<td>93,650</td>
<td>92,117</td>
</tr>
<tr>
<td><strong>Total Fleet</strong></td>
<td><strong>221,962</strong></td>
<td><strong>225,587</strong></td>
<td><strong>232,067</strong></td>
</tr>
</tbody>
</table>

+7%  -3%  +11%  +5%  -2%  +7%  +11%

Others include: vertical lifts, vertical masts, vehicle-mounted booms.
Revenue per unit increased significantly in 2011, the overall rental revenue increasing more than fleet size. Average revenue per unit is expected to reach 2008 levels in 2012.
Rental companies’ revenue per unit in 2011 increased significantly in all countries except in Spain, where it deteriorated and in the Netherlands, where it remained stable.

Despite strong de-fleeting, rental companies in Spain suffered a decrease in revenue per unit in 2011 due to a decline in rental rates as well as in utilisation time.

There are no significant differences between specialists and generalists concerning the average revenue per unit.
IPAF Powered Access Rental Market Report – Europe

INVESTMENTS 2008-2013
Investments 2008-2013

Investments in new equipment increased significantly for both specialist and generalist rental companies. Specialists’ investments increased slightly more than generalists’.

- Investments made in 2011 continued to be primarily to renew fleet, especially for generalists. While specialists also increased investments primarily for replacement, they also slightly increased their fleet size.
- In 2012 investments are expected to continue to increase, but at a slower pace than in 2011.

- Investments increased significantly in all countries in 2011 as compared to 2010, except Spain.
- In the Netherlands significant investments were made in order to anticipate fleet expansion in 2012 (+6%).
OPERATIONAL ASPECTS
2009-2012
Rental revenues are the result of three main factors, namely equipment time utilisation rate, rental rates and fleet size/mix. Rental rates and fleet build-up are the two strategies that rental companies can choose to vary in order to influence utilisation and thereby, revenues.
Time utilisation increased in the majority of European countries in 2011.

- Utilisation rates decreased only in Spain (due to the economic situation and continuous construction recession) and in Sweden (due to strong rental rate increase).
- Overall time utilisation increased in 2011 primarily due to increasing market demand, limited rental rate increases and fleet growth.

### MEWP Avg Time Utilisation & Avg Time Utilisation Growth

<table>
<thead>
<tr>
<th>Country</th>
<th>Avg Time Utilisation 2011</th>
<th>Avg Time Utilisation Growth 2010-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>63%</td>
<td>+3.8%</td>
</tr>
<tr>
<td>UK</td>
<td>65%</td>
<td>+0.8%</td>
</tr>
<tr>
<td>FR</td>
<td>61%</td>
<td>+1.9%</td>
</tr>
<tr>
<td>ES</td>
<td>55%</td>
<td>-10.0%</td>
</tr>
<tr>
<td>IT</td>
<td>63%</td>
<td>+15.2%</td>
</tr>
<tr>
<td>DE</td>
<td>63%</td>
<td>+4.4%</td>
</tr>
<tr>
<td>NL</td>
<td>73%</td>
<td>+5.8%</td>
</tr>
<tr>
<td>DK</td>
<td>58%</td>
<td>+24.7%</td>
</tr>
<tr>
<td>NO</td>
<td>56%</td>
<td>+5.3%</td>
</tr>
<tr>
<td>SE</td>
<td>57%</td>
<td>-6.0%</td>
</tr>
<tr>
<td>FI</td>
<td>59%</td>
<td>+13.8%</td>
</tr>
</tbody>
</table>

Source: Ducker Worldwide for IPAF
Operational Aspects - Time Utilisation Rate

European MEWP utilisation rate in 2011 increased slightly compared to 2010. Specialists tend to have slightly higher utilisation rates than generalists.

- Rental companies do not anticipate any significant growth of utilisation rates in 2012.
Operational Aspects - Average Retention Period

Average retention period decreased slightly in 2011 due to higher investments in fleet replacement and to a lesser extent, fleet expansion.

- Retention periods differ by country depending on investments made in 2011.
- They decreased in most countries except Spain, Italy and Denmark.

7,9 = 7 years and 9 months
After a continuous decrease in rental rates since 2009, European rental companies started to slightly increase rental rates in 2011.

Major discrepancies exist between countries:

- Nordic countries applied the highest rental rate increases (except Denmark, where rental companies remained very cautious after the particularly strong recession in 2009 and 2010).
- In Spain, Italy, and to a certain extent the Netherlands, rental rates continued to decrease for different reasons:
  - Spanish rental companies were forced to continue decreasing rental rates due to the poor economical situation.
  - In Italy and the Netherlands, a decrease in rental rates caused an improvement in utilisation rates.
Operational Aspects - Rental Rates

2011 was the first year since 2008 in which rental companies in Europe did not decrease rental rates.

- While rental companies remain very conservative due to the economical uncertainty, they expect to increase rental rates by approximately 1% per annum in the next two years.
- As forecast in last year’s report, stabilisation of rental rates is driven by the streamlining of the MEWP fleet in most European markets as well as the growth of end-user demand.

Total - Growth in MEWP Rental Rates
10 European countries under study

-2%  -2%  -14%  -9%  -3%
-13%

2008  2009  2010  2011  2012 f  2013 f

Total  Specialist  Generalist

Source: Ducker Worldwide for IPAF
MARKET TRENDS AND DRIVERS
Small and large rental companies, specialists and generalists from more or less mature markets, all grew their rental revenue in 2011, except in Spain.
Country Population Penetration – MEWP rental revenue per inhabitant

<table>
<thead>
<tr>
<th>Country</th>
<th>MEWP Rental Revenue per Inhabitant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Europe</td>
<td>€6,4</td>
</tr>
<tr>
<td>UK</td>
<td>€7,0</td>
</tr>
<tr>
<td>FR</td>
<td>€7,2</td>
</tr>
<tr>
<td>ES</td>
<td>€2,6</td>
</tr>
<tr>
<td>IT</td>
<td>€4,3</td>
</tr>
<tr>
<td>DE</td>
<td>€5,9</td>
</tr>
<tr>
<td>NL</td>
<td>€12,1</td>
</tr>
<tr>
<td>DK</td>
<td>€12,4</td>
</tr>
<tr>
<td>NO</td>
<td>€13,8</td>
</tr>
<tr>
<td>SE</td>
<td>€10,9</td>
</tr>
<tr>
<td>FI</td>
<td>€15,2</td>
</tr>
<tr>
<td>US</td>
<td>€15,0</td>
</tr>
</tbody>
</table>

Source: Ducker Worldwide for IPAF
Market Trends and Drivers

GDP per capita

The Netherlands

Norway

Finland

UK

Denmark

Germany

France

Spain

Italy


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The MEWP rental market is typically more stable than the construction industry.

*New non-residential construction put in place based on Euroconstruct 2011*
Market Trends and Drivers

Long-term trends in the MEWP market were confirmed in 2011. Rental companies predict that environmentally friendly machines will become increasingly popular.

<table>
<thead>
<tr>
<th>Fleet specialisation</th>
<th>Superior service</th>
<th>Need for education / increased safety</th>
</tr>
</thead>
</table>
| ▪ Niche products for special applications:  
  ▪ Higher lifting capacity, higher reach capacities.  
  ▪ Increased popularity of environmentally friendly machines (electric, hybrid, bi-energy), also driven by new regulations regarding emissions.  
| ▪ Flexibility, availability, proximity, fast on-site deliveries, operator rental. |
| ▪ Safety remains a major concern for rental companies: operator training efforts should continue.  
  ▪ In addition, rental companies expect manufacturers to develop better fall-protection systems / anti-crush devices. |
IPAF Powered Access Rental Market Report – Europe

APPENDIX
Appendix – Countries included in Total Europe

Countries included in the total European market.

Ten countries under study:

- Denmark
- Finland
- France
- Germany
- Italy
- Netherlands
- Norway
- Spain
- Sweden
- 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
Appendix - Construction Statistics

Europe - Construction Data

Construction put in place in million Euros based on Euroconstruct 2011

- Residential construction
- Non-residential construction
- Total construction
- Civil engineering

Source: Ducker Worldwide for IPAF
Appendix - Construction Statistics

UK

France

Germany

Spain

Italy

The Netherlands

Construction put in place in million Euros based on Euroconstruct 2011
Appendix - Construction Statistics

Construction put in place in million Euros based on Euroconstruct 2011

Denmark

Norway

Sweden

Finland

Prepared for The International Powered Access Federation by Ducker Worldwide
IPAF Powered Access Rental Market Report – Europe

COUNTRY REPORT
FRANCE
Key Findings

- In France, three main players represent more than a third of the overall market.

- France is not yet a very mature market concerning MEWP penetration and growth potential still exists.

- The MEWP market improved significantly in 2011 compared to 2010, with rental revenue growth increasing by 9%. This positive trend is expected to continue in 2012 and 2013, although at a slower pace (+5% and +2%).

- MEWP rental companies significantly increased their investments (+33%) in 2011 in order to expand fleets (+7%). They expect investments to continue to grow in 2012, but at a slower pace (+16%).
  - As a direct consequence of these investments, the average retention period slightly decreased in 2011 (-3 months).

- French rental companies remained conservative and chose to limit rental rate increases (+1%), in order to maintain satisfactory utilisation level (61%).
The French MEWP market confirmed its recovery in 2011 with more than €450M revenue, reaching pre-recession levels.

French rental companies expect the market to continue to grow, although at a slower pace, in 2012 and 2013.

Cross-hire remained at a similar level in 2011 compared to 2010.
France – Market Size in Units

MEWP fleet size increased significantly in 2011 compared to 2010. Fleet size should continue to grow at the same pace in 2012.

Thanks to a more dynamic construction market, rental companies continued to invest in 2011, primarily for fleet expansion.
In France, rental companies note an increasing demand for booms in the forthcoming years.

- While booms accounted for 40% of the fleet in 2010, they are expected to represent almost 50% of the MEWP fleet in 2012.
  - In France, small vertical lifts and vehicle mounted machines stand for almost 20% of the overall fleet which is significantly more than in other European countries.

**France – Market Size in Units**

**MEWP Fleet Mix by Equipment Type**

- **Total Fleet**
  - 35,768 in 2010
  - 38,112 in 2011
  - 40,602 expected in 2012

- **Booms**
  - 7,649 in 2010
  - 7,324 in 2011
  - 7,484 expected in 2012

- **Scissors**
  - 13,878 in 2010
  - 12,419 in 2011
  - 13,038 expected in 2012

- **Others**
  - 14,241 in 2010
  - 18,369 in 2011
  - 20,800 expected in 2012

**Others include:** vertical lifts, vertical masts, vehicle-mounted booms.

**% unit growth**

- **2010-2011**
  - Booms: +29%
  - Scissors: -11%
  - Others: +29%

- **2011-2012**
  - Booms: +2%
  - Scissors: +5%
  - Others: +9%
In France, the vast majority of rental companies’ booms are primarily diesel, while scissors are primarily electric.

% of rental companies who stated their booms or scissors were primarily diesel, electric or other.
France – Revenue per Unit

As revenue grew more rapidly than fleet size, the average revenue per unit in France continued to increase in 2011.

- Due to a larger proportion of higher-value equipment, France continued to maintain the highest revenue per unit (after Germany) compared to the other European markets under study.
France – Applications

The share of MEWP rental revenue coming from construction applications has remained relatively stable from 2009 to 2011.

- The fact that the construction market in France is expected to increase slightly in 2012 and 2013 will most likely allow rental companies to maintain this current mix between MEWP applications.

![MEWP Applications](image)

**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.
France – Investments

As the French market is clearly experiencing a rebound in 2011, rental companies continued to increase their purchases in 2011.

- While in 2010, investments were primarily to renew equipment, in 2011, rental companies’ purchases had the clear purpose to expand fleets.
France – Utilisation Rates

After major improvement in 2010, utilisation rates remained stable in 2011. They should also remain stable in 2012.

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

The retention period decreased in France in 2011 due to investments in new equipment. It is expected to remain largely stable in the next year.

9.4 = 9 years and 4 months

*Definition: Period of time that a machine is kept in fleet = selling age if acquired new*
France – Rental Rates

For the first time since 2008, 2011 saw a small improvement in rental rates. Rental companies limited rate increases in order to maintain utilisation rates.

- Rental rates are expected to continue increasing at the same slow pace in 2012 and 2013.
France – Future Trends

Despite a strong rebound in 2011, the French market future remains relatively uncertain.

- Most market players anticipate a rebound of the construction market that should positively influence MEWP rental activity.

- Market players in France report a great deal of uncertainty in the MEWP market in the coming years due to the current economic situation (the crisis in Greece, Spain, the Euro Zone, etc.), the lack of support from the banking system, as well as the upcoming presidential elections.

- Rental companies explain that the market is increasingly competitive and that they have to find ways to attract and retain customers. Some rental companies rely on services in order to differentiate (rental with operator, etc).

- In addition, as bank loans remain difficult to obtain, some rental companies focus more and more on refurbishing machines instead of replacing them.
APPENDIX
France - Construction Statistics

Construction put in place in million Euros based on Euroconstruct 2011

- Residential construction
- Non-residential construction
- Total construction
- Civil engineering

Source: Ducker Worldwide for IPAF
COUNTRY REPORT

GERMANY
Germany

Key Findings

- The German MEWP market remains very fragmented. Three main market players represent about a third of the overall market.

- Germany remains, along with Italy, one of the least mature markets covered by this study.

- After a limited crisis in 2009, and a rapid rebound in 2010, the German MEWP market continued to experience strong growth in 2011 (+12%). The forthcoming years however should see slower growth (3% in 2012).

- Investments in new equipment almost doubled in 2011 compared to 2010 (+86%) and were directed primarily to fleet replacement. Investments are expected to increase at a slower pace in 2012, but double again in 2013.
  - As a direct consequence of these new equipment purchases, the average retention period decreased in 2011 (-7 months).

- German rental companies remained conservative and chose to limit rental rate increases (+2%) in order to slightly improve utilisation levels (63% in 2012 vs. 61% in 2010).
Germany – Rental Market Value and Growth

After a rapid recovery in 2010, the German MEWP rental revenue continued to grow at fast pace in 2011, reaching €480M.

However, market growth is expected to be much more limited in 2012 and 2013.

Cross-hire decreased slightly in 2011 compared to 2010.
Germany – Market Size in Units

Rental companies massively increased investments in 2011 but only part of these investments were directed to fleet expansion, the main part being renewals.

- Subsequently, fleet size is expected to remain relatively stable in 2012.
Germany – Market Size in Units

In Germany, the share of booms in rental companies’ fleets is progressively decreasing from 2010 to 2012.

- The German market is more heavily weighted towards scissors.

Other equipment includes: vertical lifts, vertical masts, vehicle-mounted booms.

**MEWP Fleet Mix by Equipment Type**

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booms</td>
<td>1,528</td>
<td>1,795</td>
<td>2,746</td>
</tr>
<tr>
<td>Scissors</td>
<td>13,621</td>
<td>13,889</td>
<td>15,554</td>
</tr>
<tr>
<td>Others</td>
<td>16,104</td>
<td>16,434</td>
<td>14,139</td>
</tr>
</tbody>
</table>

**Total Fleet**

- 2010: 31,263
- 2011: 32,117
- 2012: 32,438

Source: Ducker Worldwide for IPAF

Others include: vertical lifts, vertical masts, vehicle-mounted booms.

\[ +X\% \text{ unit growth} \]
Germany – Power Sources

Germany is one of the European markets which is the most driven towards electric rather than diesel booms.

% of rental companies who stated their booms or scissors were **primarily** diesel, electric or other.
Germany – Revenue per Unit

As revenue grew more rapidly than fleet size, the average revenue per unit in Germany increased by 9% in 2011.

- Thanks to large, specialised equipment, Germany remains the country where the average MEWP revenue per unit is highest compared to other countries under study.
Germany – Applications

It has always been typical of the German MEWP market to be heavily driven by non-construction applications. This trend allowed Germany to limit the impact of the recession in 2009.

- The share of non-construction applications did not change in 2011 and is not expected to vary in the coming 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.
Germany – Investments

German rental companies almost doubled their investments in 2011 compared to 2010. The majority of the equipment purchases were for replacement.

- Investments are expected to increase slightly in 2012 and then double again in 2013.
Germany – Utilisation Rates

After a major increase in utilisation rates in 2010, it is expected that utilisation levels only slightly improved in 2011.

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

The average German retention period decreased significantly in 2011 thanks to investments in new equipment. In 2012, when investment growth expected is lower, the retention period is expected to remain stable.

7.2 = 7 years and 2 months

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

After drastic rental rate decreases in 2009 and to a lesser extent in 2010, German rental companies started to make small increases to rental rates in 2011.

- It is expected that rental companies will continue to increase rental rates in the next few years at a slighter pace still.
The German market remains one of the least mature European markets.

- Rental companies explain that the MEWP market has been increasingly competitive in the last few years. In order to differentiate from competitors, rental companies rely on:
  - Building strong relationships with clients.
  - Offering more services (transport of the equipment, rental with operator, etc.).

- There are still tremendous efforts to be done in the German market to increase end-user demand. Market players report the need for training and education towards end-users to prove the value of MEWPs compared to scaffolding.
Germany - Construction Statistics

Construction put in place in million Euros based on Euroconstruct 2011

- Residential construction
- Non-residential construction
- Total construction
- Civil engineering

Source: Ducker Worldwide for IPAF
IPAF Powered Access Rental Market Report – Europe

COUNTRY REPORT
ITALY
Italy

Key Findings

- The Italian market remains very fragmented, composed of many small regional rental companies, which have a strong local presence.
  - Only a few companies can be considered as national.

- Italy was one of the European MEWP markets coping best with the economic downturn in 2009 and 2010. However, in 2011 the market experienced one of the smallest increases of the ten countries under study (+4%).
  - In addition, market growth is expected to remain limited in the coming years (+1% in 2012, +4% in 2013).

- MEWP rental companies increased their investments in 2011 (+17%), but only for fleet replacement. They believe investments will continue to grow, although at a much slower pace in 2012.
  - Fleet size remained stable with just under 25,000 units.
  - Smaller vertical lifts and truck-mounted platforms saw their popularity increasing in 2011, at the expense of scissors.

- Rental companies strategically chose to push utilisation levels (63% in 2011 vs. 55% in 2010) by lowering rental rates in 2011 (-5%).
After having resisted the recession relatively well in 2009 and 2010, the Italian market increased in 2011 to reach €262M.

- Italian rental companies expect the market to continue to grow slightly in 2012 and 2013.
  - However, it is expected that the bad winter weather conditions in early 2012 will affect the overall year revenue.
- Cross-hire increased significantly in 2011 compared to 2010, possibly to avoid expanding on fleets.
Italy – Market Size in Units

While rental companies increased fleets drastically in 2009 and 2010, 2011 saw a stabilisation of the Italian MEWP fleet at approximately 24,800 units.

- Rental companies expect to limit investments in the coming years and as a consequence, fleet size should remain relatively stable.
  - Rental companies confirm the trend identified last year concerning increased refurbishment of existing equipment.

![MEWP Fleet Size & MEWP Fleet Size Growth](chart)

Source: Ducker Worldwide for IPAF
Italy – Market Size in Units

In Italy, rental companies note an increasing demand for smaller vertical lifts and truck-mounted machines.

- The share of these vertical lifts and truck-mounted equipment in the overall fleet was 8% in 2010 and is expected to reach 12% in 2011.
- As anticipated last year, the popularity of booms over scissors kept increasing in 2011 due to their higher versatility.

![MEWP Fleet Mix by Equipment Type](chart)

Others include: vertical lifts, vertical masts, vehicle-mounted booms.

Source: Ducker Worldwide for IPAF

87
Italy – Power Sources

In Italy, the vast majority of rental companies’ booms are primarily diesel-powered.

However, the Italian market seems to be driven more towards diesel scissors than other European countries, similar to Spain and the Netherlands.

% of rental companies who stated their booms or scissors were **primarily** diesel, electric or other.
Italy – Revenue per Unit

Following two years of deterioration, the Italian MEWP market finally saw an increase in average revenue per unit.

- The Italian revenue per unit is however already one of the highest of the ten countries under study due to the historically strong presence of truck-mounted platforms (which typically cost more than other platform types).
Italy – Applications

The share of construction applications in Italian MEWP revenue slightly increased in 2011 due to a stabilised construction industry.

- In addition, as the construction industry is expected to recover in 2012 and 2013, the share of construction applications should remain stable or increase slightly in the coming years.

![MEWP Applications Chart]

**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.
Italy – Investments

Rental companies slightly increased their investments in 2011, more than in 2010. These investments will remain directed to fleet replacement.

- Rental companies expect to remain conservative in their investments in the forthcoming years and even foresee a new decline in purchases in 2013.
Italy – Utilisation Rates

Rental companies strategically chose to increase utilisation levels by lowering rental rates in 2011.

<table>
<thead>
<tr>
<th>Year</th>
<th>Utilisation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>66%</td>
</tr>
<tr>
<td>2009</td>
<td>60%</td>
</tr>
<tr>
<td>2010</td>
<td>55%</td>
</tr>
<tr>
<td>2011</td>
<td>63%</td>
</tr>
<tr>
<td>2012</td>
<td>63%</td>
</tr>
</tbody>
</table>

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

Due to cautious investments, the average retention period increased slightly in 2011.

- Despite a slight fleet increase forecast in 2012, the average retention period should remain stable in the next few years, due to a trend towards refurbishment.

7.8 = 7 years and 8 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new
Italian rental companies chose to further decrease rental rates in order to improve utilisation levels. Only 2013 should see an improvement in rental rates.
Italy – Future Trends

The Italian market remains one of the least mature European markets.

- Italian rental companies explain that customers’ insolvency remained their main concern in 2011. Many small rental companies’ existence was threatened for this reason.
  - Also the major (and continuous) rental rate decrease strongly affected overall profitability.
  - In order to differentiate from competition, rental companies offer additional services, e.g. operator services, etc.

- Tremendous efforts still need to be done to increase end-user demand. In particular, market players report the need for training and education towards end-users to prove the value of MEWPs compared to scaffolding.
IPAF Powered Access Rental Market Report – Italy

APPENDIX
Italy - Construction Statistics

Construction put in place in million Euros based on Euroconstruct 2011

Source: Ducker Worldwide for IP AF

Europe

Italy
IPAF Powered Access Rental Market Report – Europe

COUNTRY REPORT
NETHERLANDS
**Netherlands**

**Key Findings**

- The **Netherlands are**, with the UK, the most mature of the ten European markets under study. As a consequence, growth potential is relatively limited.

- The MEWP market improved only slightly in 2011 with rental revenue growing by 1%. A similar trend is expected in the following years.

- MEWP rental companies significantly increased their investments (+33% compared to 2010) in 2011 almost exclusively in order to renew fleets.
  - Fleet expansion was limited to 1%.
  - Average retention period decreased.
  - Growth of purchases is expected to slow down in the coming years due to market uncertainty.

- Dutch rental companies remained cautious and chose not to increase rental rates (-0.5%) in order to improve utilisation (73% in 2011 compared to 69% in 2010).
  - Utilisation rates are amongst the highest compared to other European countries. In the Netherlands, the market maturity and rental company professionalism has led to optimised fleet management and higher utilisation rates.
Netherlands – Rental Market Value and Growth

In 2011, Dutch rental companies experienced slow growth. The market future is relatively uncertain and companies only plan for market stabilisation in the next two years.

- The Dutch market is one of the most mature in Europe. As a consequence, growth perspectives are rather limited.
- Cross-hire increased in 2011 compared to 2010, possibly to avoid expanding on fleets.
Netherlands – Market Size in Units

After significant fleet expansion in 2010, rental companies limited their investments primarily to replacement in 2011.

- Rental companies expect to increase their fleet size again in 2012. However, part of these investments may ultimately be directed towards operations in other countries.
Netherlands – Market Size in Units

Fleet composition in the Netherlands has not changed compared to 2010 and is not expected to change in 2012. Booms will continue to represent about half of the MEWP market.

MEWP Fleet Mix by Equipment Type

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>2010</th>
<th>2011</th>
<th>2012 f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booms</td>
<td>8,582</td>
<td>8,736</td>
<td>9,343</td>
</tr>
<tr>
<td>Scissors</td>
<td>9,444</td>
<td>9,477</td>
<td>10,106</td>
</tr>
<tr>
<td>Others</td>
<td>18,883</td>
<td>19,071</td>
<td>20,305</td>
</tr>
</tbody>
</table>

Others include: vertical lifts, vertical masts, vehicle-mounted booms.
The Dutch market seems to be driven more towards diesel rather than electric scissors than other European countries.

<table>
<thead>
<tr>
<th>Booms</th>
<th>Scissors</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of companies - The Netherlands</td>
<td>% of rental companies who stated their booms or scissors were primarily diesel, electric or other.</td>
</tr>
<tr>
<td>100%</td>
<td>76%</td>
</tr>
<tr>
<td>24%</td>
<td></td>
</tr>
</tbody>
</table>

Primary MEWP Power Sources - 2011

Source: Ducker Worldwide for IPAF
Netherlands – Revenue per Unit

After two years of continuous decrease, the average revenue per unit stabilised in 2011, but a decrease is expected again in 2012.

- The Dutch revenue per unit is one of the highest of the ten countries under study. The rental fleet is characterised by a high share of specialised machines, which explains the high revenue per unit.
Netherlands – Applications

In 2011, the share of revenue coming from construction applications increased again to reach 50%.

- In 2010, rental companies had made strong efforts to diversify their activities in non-construction applications to compensate for the construction slowdown. The construction market stabilisation in 2011 allowed for a return to construction applications.

![MEWP Applications Chart]

**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.
Netherlands – Investments

In 2011 Dutch rental companies invested significantly more, primarily for fleet replacement.

However, purchase growth is expected to fall again in the following years due to market uncertainty.

Investment in New MEWPs

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012 f</th>
<th>2013 f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth</td>
<td>+665%</td>
<td>-39%</td>
<td>-16%</td>
<td>+33%</td>
<td>-6%</td>
<td>0%</td>
</tr>
</tbody>
</table>

The Netherlands

Source: Ducker Worldwide © 2012
Netherlands – Utilisation Rates

Utilisation rates increased significantly in 2011, reaching pre-recession levels. Rental companies limited rental rate increases in order to push utilisation.

- Utilisation rates are amongst the highest compared to other European countries due to market maturity and optimised fleet management.
- Rental companies aim to maintain the high level of utilisation by cutting purchases in 2012.

Definitions:
- **Utilisation Rates**: Physical number of machines out on hire as % of total number in fleet at any given time.

Source: Ducker Worldwide for IPAF
The average retention period decreased in the Netherlands in 2011 thanks to investments directed toward fleet replacement. It should remain relatively stable in 2012.

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Avg Retention Period (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>8.4</td>
</tr>
<tr>
<td>2010</td>
<td>8.1</td>
</tr>
<tr>
<td>2011</td>
<td>7.7</td>
</tr>
<tr>
<td>2012</td>
<td>7.8</td>
</tr>
</tbody>
</table>

7.7 = 7 years and 7 months
Netherlands – Rental Rates

Rental rate pressure continued in 2011 in the Netherlands. Price stabilisation is expected in 2012. No price increase is forecast by rental companies in the near future.

- Rental companies did not increase rental rates in 2011 in order to push utilisation levels.

![Graph showing Stated Growth in MEWP Rental Rates in The Netherlands from 2008 to 2013](Source: Ducker Worldwide for IPAF)
Netherlands – Future Trends

The Dutch rental market is most likely to experience limited growth in the coming years as it is one of the most mature European countries.

- Market players report a clear trend to greener machines (electric, hybrid, etc.) and they expect these to be an area of focus for manufacturers’ product development in a near future.

- Dutch rental companies explain that in order to differentiate from competition, they invest more in communication/advertising. In addition, they tend to offer more services, e.g. transport of the equipment to site, operator services, etc.

- There are clear signs of market growth in “low-level” access equipment, i.e. push-round and self-propelled platforms in working heights from 3 to 5 metres.
IPAF Powered Access Rental Market Report – The Netherlands

APPENDIX
Netherlands - Construction Statistics

Construction put in place in million Euros based on Euroconstruct 2011

- Residential construction
- Non-residential construction
- Total construction
- Civil engineering
IPAF Powered Access Rental Market Report – Europe

COUNTRY REPORT

NORDIC REGION
Nordic Region

Key Findings

- Apart from Denmark, MEWP markets in Scandinavia remain relatively consolidated with few major players (some active in several countries) representing typically more than 75% of the MEWP markets.

- The four MEWP markets of the Nordic region clearly improved in 2011 (+13%).
  - All countries, except Sweden (+7%) experienced double-digit growth: Finland (+19%), Denmark (+14%) and Norway (+13%).
  - This growing trend should continue for all countries in 2012 and 2013, though at a slower pace.

- As anticipated in 2010, fleet size increased across Scandinavia (+3%), except in Denmark.
  - In Denmark, rental companies continued to de-fleet (-4%) due to a heavily saturated market.
  - Scandinavian fleets are heavily weighted towards scissors, due to the high share of construction end-applications in these countries compared to other European MEWP markets studied.
Nordic Region

Key Findings

- The fleet size growth in most Scandinavian markets followed a significant increase in investments (+55%). In the forthcoming years, rental companies expect to remain conservative in their investments and foresee a decline in purchases in 2012 (-16%).

- All indicators are positive in 2011:
  - Rental companies increased rental rates in all countries (+5%) except Denmark (0%) and foresee a continuous improvement in 2012 and 2013 (+5%).
  - Utilisation levels, boosted by end-user demand, reached 57% (compared to 54% in 2010). They are expected to keep improving in 2012 (59%).
All countries experienced an increase of MEWP rental activity in 2011. The positive growth trend should continue in 2012 and 2013, though at a much slower pace.

- Finland (19%), Denmark (14%) and Norway (13%), experienced the highest growths of the European countries under study, while in Sweden, growth was more limited (+7%).
- The level of cross-hire remained relatively stable in 2011 compared to 2010.
Nordic Region – Market Size in Units

While in 2010 Scandinavian markets de-fleeted (except Norway), 2011 saw the return to investments in fleet renewal and expansion. A similar trend is expected to continue in 2012.

- Due to a clear need to streamline the Danish fleet, rental companies in Denmark alone continued to de-fleet in 2011 (-4%).
- Sweden, Finland and Norway increased their fleets by 4 to 6%.

![MEWP Fleet Size & MEWP Fleet Size Growth Chart]
Nordic Region – Market Size in Units

Fleet mix in Scandinavia is vastly different from most countries under study, with a fleet heavily driven towards scissors, vertical lifts/masts and truck-mounted platforms.

- This can be traced back to the high share of construction applications compared to other European countries.
- All Nordic countries experienced an increase in vertical lifts and truck-mounted machines in 2011. This trend is expected to continue in 2012.

**MEWP Fleet Mix by Equipment Type**

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012 f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booms</td>
<td>7,291</td>
<td>8,284</td>
<td>9,312</td>
</tr>
<tr>
<td>Scissors</td>
<td>21,824</td>
<td>21,575</td>
<td>21,716</td>
</tr>
<tr>
<td>Others</td>
<td>10,479</td>
<td>10,861</td>
<td>10,957</td>
</tr>
</tbody>
</table>

Scandinavia

** Others include: vertical lifts, vertical masts, vehicle-mounted booms. **

 preparado por Ducker Worldwide para la IFAB del Reino Unido
Nordic Region – Power Sources

Nordic countries (especially Norway and Sweden) are significantly more driven towards electric scissors than other European countries versus diesel booms.

*Primary MEWP Power Sources - 2011*

- **Booms**: 94% Diesel, 6% Electric, 0% Others
- **Scissors**: 85% Diesel, 15% Electric

% of rental companies who stated their booms or scissors were *primarily* diesel, electric or other.
The Scandinavian MEWP revenue per unit increased significantly in 2011 compared to 2010, primarily thanks to rental rate improvement and higher utilisation.

- The average revenue per unit is typically lower than in other countries under study, primarily due to a different fleet mix (higher proportion of smaller vertical lifts and scissors). The Norwegian average revenue per unit remains the highest in Scandinavia.
Scandinavian rental companies significantly reduced their revenue share directed to construction applications.

- Nevertheless, the Nordic region remains the most heavily weighted towards construction.

**MEWP Applications**

<table>
<thead>
<tr>
<th>Year</th>
<th>Construction</th>
<th>Non-Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>2010</td>
<td>84%</td>
<td>16%</td>
</tr>
<tr>
<td>2011</td>
<td>71%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Scandinavia

*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.
Nordic Region – Investments

Further to reduced purchases and de-fleeting in 2009 to 2010, Nordic rental companies increased equipment purchases in 2011. Denmark and Sweden experienced the highest investment growth.

- These investments were made for both fleet replacement and fleet expansion.
- Rental companies expect to remain conservative in their investments in the forthcoming years and even foresee a new decline in purchases in 2012.

![Investment in New MEWPs](chart)
Nordic Region – Utilisation Rates

In 2011, Nordic rental companies report an increase in utilisation levels, driven by the slight improvement in construction activity.

- The four Nordic countries under study experienced similar utilisation levels in 2011.
- Time utilisation should continue to improve in 2012.

Definition: Physical number of machines out on hire as % of total number in fleet at any given time.
Nordic Region – Retention Period

Due to a significant increase in fleet renewals as well as fleet expansion, the average retention period decreased in the Nordic region.

- As investments will slow down in 2012, the retention period should remain relatively stable.

\[
\begin{align*}
\text{Avg Retention Period (Years)} \\
2009 & 8.0 \\
2010 & 8.1 \\
2011 & 7.6 \\
2012 & 7.6 \\
\end{align*}
\]

Source: Ducker Worldwide for IPAF

7.6 = 7 years and 6 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new
Nordic Region – Rental Rates

For the first year since 2008, rental companies were able to increase rental rates in 2011.

- Denmark was the only Nordic country where rental rates did not improve as rental companies remained very cautious after the particularly strong recession in 2009 and 2010.
Nordic Region – Future Trends

The Scandinavian market experienced the highest growth in 2011 compared to other market under study.

- Rental companies are relatively confident that this positive trend should continue in the coming years, thanks to a growing construction industry.
  - Market players anticipate several major construction projects that should drive the MEWP market (Copenhagen underground, sports arenas in Stockholm, etc.).

- Market players report a trend to more specific machines: larger sizes, higher reach capabilities, smaller electric machines, etc. In addition, a major trend is emerging concerning greener platforms: full electric and hybrid.

- Rental companies also reiterate the need for more training of equipment operators in order to improve safety.
IPAF Powered Access Rental Market Report – Nordic Region

APPENDIX
Exchange rates:
- The currency exchange rates used for Scandinavian countries outside the Euro zone are shown below. The same rate has been used throughout the time period in order to eliminate variation in growth rates due to exchange rate fluctuations rather than to the actual MEWP rental market.

<table>
<thead>
<tr>
<th>Currency Unit</th>
<th>Converter to Euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark DKK</td>
<td>0.13448</td>
</tr>
<tr>
<td>Norway NOK</td>
<td>0.13187</td>
</tr>
<tr>
<td>Sweden SEK</td>
<td>0.11244</td>
</tr>
</tbody>
</table>
Nordic Region - Construction Statistics

Europe

Construction put in place in million Euros based on Euroconstruct 2011

Source: Ducker Worldwide for IPAF
COUNTRY REPORT
SPAIN
Spain

Key Findings

- The Spanish fleets have been saturated ever since 2008. However the market is still considered as having a low level of maturity and growth potential exists but in the long term.

- The MEWP rental market remains dominated by two very large general rental companies.

- While the MEWP market grew rapidly with the construction boom between 2004 and 2008, the market started to decline in 2008 and has continued to deteriorate.

- Due to the bursting of the construction bubble, the MEWP rental market in Spain has had a much slower and more painful recovery than other European markets.

- Most market players now expect the Spanish market to start to slowly recover in 2013. However, the de-fleeting conducted in the past years may not be sufficient to allow for a significant upturn.
Spain

Key Findings

- The Spanish rental market continued to decline strongly in 2011 (-16%) to reach €118M. However, market players expect a stabilisation of the market in 2012, and possibly even a small increase in 2013 (+3%).

- In this difficult market, investments continued to decrease in 2011. They are expected to be close to zero in 2012 and start increasing slightly in 2013.

- Rental companies kept on reducing their MEWP fleets in 2011 by 12% on average which has led to a national fleet of around 23,000 machines.
  - While scissors remain the largest segment (45%), smaller vertical lifts and vehicle-mounted machines are gaining popularity at the expense of booms, whose share is slightly but constantly shrinking.
  - The retention period has progressively lengthened as rental companies tend to increasingly refurbish their MEWP equipment in order to limit investments.

- Also, other indicators remained negative in the Spanish MEWP market in 2011:
  - Utilisation time deteriorated (55%)
  - Rental rates continued to decrease (-5%). However, they are expected to stabilise in 2012.
Spain – Rental Market Value and Growth

As forecast in the previous report edition, Spanish rental companies continued to suffer a strong revenue decline in 2011 with an estimated MEWP rental revenue at €118M.

- However, 2012 is expected to be the first year of market stabilisation.
- In addition, rental companies plan for a small market growth in 2013.
- While the share of cross-hire in the MEWP rental revenue had decreased in 2010, it is now close again to 2009 levels.
Spain – Market Size in Units

Rental companies kept on de-fleeting massively in 2011, even more than in 2010. The de-fleeting is expected to continue, though at a slower pace, in 2012.

- In order to de-fleet, numerous rental companies have sent MEWP equipment to other regions of the world, especially North Africa, the Middle East and South America.

![MEWP Fleet Size & MEWP Fleet Size Growth](image)
Spain – Market Size in Units

Fleet composition experienced a slight but constant decline in the share of booms due to the increasing popularity of vertical lifts and vehicle-mounted machines. This trend is expected to continue in 2012.

- However, scissors are still the largest segment of the Spanish fleet (45%).

![MEWP Fleet Mix by Equipment Type]

*Others include: vertical lifts, vertical masts, vehicle-mounted booms.*

+X% % unit growth
Spain – Power Sources

In Spain more than half of rental companies interviewed report that the majority of booms are electric, which is different from other European countries.

- On the other hand, the Spanish market seems to be driven more towards diesel scissors than other countries.
Spain – Revenue per Unit

The average revenue per unit in Spain continued to decrease in 2011, though at a much slower pace than in 2010. It is expected to start improving slightly in 2012.

- The average Spanish revenue per unit is the lowest of the ten European countries under study.
Spain – Applications

Due to the continuing construction industry recession, the share of non-construction applications kept on increasing in 2011. However, this has still not compensated for the loss of value in 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.
Spain – Investments

Investments kept on decreasing in 2011, however at a much lower pace than in 2010.

- While growth of purchases is expected to be close to zero in 2012, rental companies plan to start increasing investments again in 2013.
- Rental companies’ investments in 2011 were primarily for renewals.

![Graph showing investment in New MEWPs from 2008 to 2013 with percentages for each year: -37% in 2008, -70% in 2009, -71% in 2010, -11% in 2011, -2% in 2012, and +9% in 2013.](image_url)
Spain – Utilisation Rates

Utilisation rates decreased significantly in 2011, falling back to 2009 levels. They are expected to remain relatively low in 2012.

- Articulated booms and diesel scissors tend to have lower utilisation rates as they are primarily used in construction applications. However, rental companies report higher utilisation levels for smaller, electric machines.

![Utilisation Rates Graph]

*Definition: Physical number of machines out on hire as % of total number in fleet at any given time.*
Spain – Retention Period

The Spanish retention period continued to increase as rental companies kept on reducing their investments in new equipment. As purchases should be relatively stable in 2012, the retention period is expected to remain at the same level.

### Avg Retention Period (Years)

<table>
<thead>
<tr>
<th>Year</th>
<th>Retention Period (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>4.7</td>
</tr>
<tr>
<td>2010</td>
<td>5.5</td>
</tr>
<tr>
<td>2011</td>
<td>6.1</td>
</tr>
<tr>
<td>2012</td>
<td>6.2</td>
</tr>
</tbody>
</table>

**6.1 = 6 years and 1 months**

*Definition: Period of time that a machine is kept in fleet = selling age if acquired new*
Spain – Rental Rates

As forecast in the previous report edition, the deterioration of rental rates continued in 2011. After four consecutive years of decrease, they should stabilise in 2012.

![Stated Growth in MEWP Rental Rates](image)
Spain – Future Trends

The most optimistic market players expect the Spanish market to recover in 2013, but others think that only 2015 will see real improvement.

- The Spanish market continues to encounter two major issues: the number of units in the fleet is too high for new market conditions and the country is experiencing a particularly complicated economic situation with an intense construction market crisis.

- While de-fleeting continued in 2011, it might not yet be sufficient to allow for market recovery. Some market players believe that the Spanish fleet should be streamlined even more to reach 18,000 to 20,000 machines.

- Major company consolidations are forecast in the future of the Spanish MEWP market.
APPENDIX
Spain - Construction Statistics

Construction put in place in million Euros based on Euroconstruct 2011
COUNTRY REPORT
UNITED KINGDOM
In 2011, the UK MEWP market confirmed the growth trend identified in 2010. The market grew by as much as 7% in 2011 and is expected to continue growing at a slightly lower pace in 2012 and 2013.

After strong investments directed to renewal in 2010 (+76%), rental companies increased purchases in 2011 by a further 30% this time primarily for fleet expansion.

As a consequence, fleet size increased by 5% in 2011 reaching approximately 48,000 units.

- The fleet mix between booms and scissors remained similar in 2010, and is expected to remain so in 2011. Personnel lifts are the machines where the highest growth is expected (+10%) in 2011, but they still represent a very limited share of the overall fleet.
- Scissors still represent about 60% of the overall fleet.
- The retention period decreased significantly in 2011 thanks to new equipment purchases.

Other indicators remain positive in 2011:

- Utilisation rates remained stable compared to 2010, at a relatively high level (65%).
- Rental rates started to increase (+3%) for the first year since 2008 and are expected to continue to slowly but regularly increase in 2012 (+3%) and 2013 (+2%).
UK – Rental Market Value and Growth

The UK MEWP market confirmed its recovery in 2011 with more than €430M revenue. 2008 revenue levels should be reached in 2013.

- UK rental companies expect the market to continue to grow in 2012 and 2013, but at a slower pace.
- Cross-hire remained at a similar level in 2011 compared to 2010 and 2009.
UK – Market Size in Units

MEWP fleet size increased significantly in 2011 compared to 2010. Fleet size should continue to grow, though at a slower pace in 2012.
UK – Market Size in Units

Fleet composition has not changed greatly compared to 2010 and is not expected to change in 2012.

- The UK fleet is heavily driven towards scissors, which represent approximately 60% of the overall MEWP fleet.

![MEWP Fleet Mix by Equipment Type](chart)

*Others include: vertical lifts, vertical masts, vehicle-mounted booms.*
UK – Power Sources

Although dominated by electric scissors and diesel booms, the UK market is the only European market where some rental companies primarily own bi-energy or hybrid booms.

% of rental companies who stated their booms or scissors were primarily diesel, electric or other.
UK – Revenue per Unit

As revenue increased a little more than fleet size, the average revenue per unit rose slightly in 2011.

Exchange rate £1 = 1.2€
**UK – Applications**

In 2011, the share of revenue coming from construction applications increased again to reach more than 50%.

- In 2010, rental companies had made strong efforts to diversify their activities in non-construction applications to compensate for the construction slowdown in 2009. The construction rebound in 2010 allowed for a return to construction applications in 2011.

### MEWP Applications

<table>
<thead>
<tr>
<th>Year</th>
<th>Construction</th>
<th>Non-Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>54%</td>
<td>46%</td>
</tr>
<tr>
<td>2010</td>
<td>45%</td>
<td>55%</td>
</tr>
<tr>
<td>2011</td>
<td>52%</td>
<td>48%</td>
</tr>
</tbody>
</table>

**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.
Investments increased in 2011, however at a slower pace than in 2010, when purchases had to make up for a drop in 2009. They are expected to continue to grow at similar levels in 2012, but to slow down in 2013.

While in 2010, investments were primarily to renew equipment, in 2011, rental companies’ purchases had the clear purpose to expand fleets. Continued expansion is expected in 2012.
UK – Utilisation Rates

Utilisation rates remained stable in 2011 compared to 2010. Rental companies strategically chose to increase rental rates, which limited utilisation level increase.

- As rental companies plan on pursuing this strategy, utilisation levels should remain stable in 2012.

![Utilisation Rates Graph](image)

**Definition:** Physical number of machines out on hire as % of total number in fleet at any given time.
UK – Retention Period

The retention period decreased in the UK in 2011 due to investments in new equipment as of 2010. It is expected to remain largely stable in the next year.

- While in 2010, rental companies invested massively in fleet renewals, thus reducing the retention period reported in 2011, investment in 2011-2012 should be directed towards fleet expansion, enabling a stabler retention period.

![Chart showing retention period in UK from 2009 to 2012]

**Avg Retention Period (Years)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Retention Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>8.7</td>
</tr>
<tr>
<td>2010</td>
<td>9.3</td>
</tr>
<tr>
<td>2011</td>
<td>7.7</td>
</tr>
<tr>
<td>2012</td>
<td>8.0</td>
</tr>
</tbody>
</table>

7.7 = 7 years and 7 months

*Definition: Period of time that a machine is kept in fleet = selling age if acquired new*
For the first time since 2008, 2011 saw an improvement in rental rates. Rental rates are expected to continue increasing at a similar pace in 2012 and 2013.
UK – Future Trends

The UK market remains the most mature market in the ten countries under study.

- Most market players anticipate a slight but solid growth in the next two years.

- Several rental companies expect more stringent environmental regulations in the coming years. As a consequence, they believe that the MEWP rental market will be more driven towards electric machines, as well as hybrid and bi-energy machines, already present more than in other countries.
  - The same rental companies are willing to offer these types of equipment in order to differentiate against competition.

- Safety remains a major concern for rental companies in the UK. They expect more training of operators. In addition, they expect manufacturers to develop anti-crush devices and fall-protection systems.
IPAF Powered Access Rental Market Report – UK

APPENDIX
UK – Exchange Rates

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

<table>
<thead>
<tr>
<th>Currency Unit</th>
<th>Converter to Euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK £</td>
<td>1,2</td>
</tr>
</tbody>
</table>
UK - Construction Statistics

Construction put in place in million Euros based on Euroconstruct 2011

Source: Ducker Worldwide for IPAF

<table>
<thead>
<tr>
<th>Year</th>
<th>Europe</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>1086</td>
<td>148</td>
</tr>
<tr>
<td>2008</td>
<td>964</td>
<td>145</td>
</tr>
<tr>
<td>2009</td>
<td>868</td>
<td>126</td>
</tr>
<tr>
<td>2010</td>
<td>839</td>
<td>134</td>
</tr>
<tr>
<td>2011</td>
<td>844</td>
<td>130</td>
</tr>
<tr>
<td>2012</td>
<td>858</td>
<td>127</td>
</tr>
<tr>
<td>2013</td>
<td>862</td>
<td>133</td>
</tr>
</tbody>
</table>

Source: Ducker Worldwide for IPAF
This concludes our report. Thank you.

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