Contents

IPAF Powered Access Rental Market Report - Europe

- Foreword 3
- Executive Summary 13
- Market Size 2013 25
- Market Dynamics 2008-2015 33
- Investment 2008-2015 42
- Operational Aspects 2008-2014 44
- Market Trends & Drivers 51
- Chinese MEWP Market 61
- Appendix 65

Country Reports
- France 67
- Germany 88
- Italy 108
- Netherlands 128
- Nordic Region 148
- Spain 169
- UK 189
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 30th anniversary in 2013.

- 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 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.
Foreword

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 2014 – details available at www.ipaf.org/reports or from your nearest IPAF office.

**UK Head Office:**
IPAF, Moss End Business Village
Crooklands, Cumbria LA7 7NU, UK
+44 15395 66700
info@ipaf.org

**Germany:**
IPAF-Deutschland, Alter Schulhof 7
D-28717 Bremen, Germany
+49 421 6260 310
deutschland@ipaf.org

**Italy:**
IPAF-Italia, Via Chieti 8
I-20154 Milano (MI), Italy
+39 02 319 206 50
italia@ipaf.org

**Brazil:**
IPAF-Brasil, Rua Andaluz 140
13.280-000 Vinhedo São Paulo, Brazil
+55 11 39588590
portugues@ipaf.org

**UAE:**
IPAF-UAE, Villa 17, Courtyard 12C/AAldea
Dubiland, Dubai, United Arab Emirates (UAE)
+971 (0) 55 3094 333
uae@ipaf.org

**Netherlands:**
IPAF-Benelux, Oranjestraat 167
NL-3295 AS’s – Gravendeel,
Netherlands
+31 6 30 421042
benelux@ipaf.org

**Spain:**
IPAF-Iberia
Edificio Europa, 4ª planta
c/ Vía de Francia s/n
Interior Zona Franca
E-11011 Cadiz, Spain
+34 677 889 049
espana@ipaf.org

**Switzerland:**
IPAF-Basel, Dufourstrasse 11
CH-4052 Basel, Switzerland
+41 61 227 9000
basel@ipaf.org

**South East Asia:**
IPAF-South East Asia,
21 Bukit Batok Crescent
#29-73 WCEGA Tower
Singapore 658065
+65 9686 4191
sea@ipaf.org

**US:**
IPAF-US, 225 Placid Drive
Schenectady, NY 12303, US
+1 518 280-2486
usa@ipaf.org
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 MEWP 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.

Ducker Research Europe (European Headquarters)
89, route de la Reine
F-92773 Boulogne Billancourt cedex, France
www.duckereurope.com
Tel: +33 1 46 99 59 60

Paul Mooney, Principal
paul.mooney@duckereurope.com
Audrey Courant, Associate Principal
audrey.courant@duckereurope.com

Ducker Worldwide
1250 Maplelawn Drive
Troy, MI 48084, US
www.ducker.com
Tel: 248-530-2011

Nicole McGregor, Principal
nicolem@ducker.com
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:**
  - 2013 MEWP rental market value and fleet size
  - Operational indicators (investment, retention period, 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.
  - Level of fleet’s compliance with Stage IIIB.
  - Estimated size of the 2013 MEWP rental fleet worldwide, with a breakdown by region and by machine type.

- **New in this report:**
  - Included in the fleet mix is the estimated share of vehicle mounted platforms held by rental companies owning self-propelled fleets
  - As a bonus, the report includes for the first time an introduction to the Chinese MEWP rental market.

- **The current study does not examine rental company profitability.**
- **The study covers the time period 2008-2015, with particular focus on 2013.**
- **The conducting of all interviews in the first two months of 2014 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 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)
  - France (FR)
  - Germany (DE)
  - Italy (IT)
  - Netherlands (NL)
  - Norway (NO)
  - Spain (ES)
  - Sweden (SE)
  - United Kingdom (UK)

These represent 88% of the European* market in value.

* Defined as 27 EU countries + Norway + Switzerland + Croatia + Macedonia
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 66% 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, Editor of International Rental News for his contributions and commentary on the current rental market.
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 (average annual 2013 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.

<table>
<thead>
<tr>
<th>Currency Unit</th>
<th>Converter to Euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>£ 1,1780</td>
</tr>
<tr>
<td>Denmark</td>
<td>DKK 0,134</td>
</tr>
<tr>
<td>Norway</td>
<td>NOK 0,128</td>
</tr>
<tr>
<td>Sweden</td>
<td>SEK 0,116</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY
Executive Summary

The European market has been stable since 2011, held back by flat economies (GDP), and a depressed construction sector (e.g. -4% in 2013 in non-residential construction).

![Europe - GDP per Capita](image1)

![Europe - Unemployment Rate](image2)

![Non Residential Construction Put in Place](image3)

**Europe - GDP per Capita**

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013e</th>
<th>2014f</th>
<th>2015f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>29.3</td>
<td>30.8</td>
<td>31.2</td>
<td>31.0</td>
<td>30.9</td>
<td>31.2</td>
<td>30.8</td>
</tr>
</tbody>
</table>

Thousand Euro at 2012 prices. 10 countries under study. Source: Ducker Worldwide for IPAF based on Euroconstruct 2013

**Europe - Unemployment Rate**

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012f</th>
<th>2013f</th>
<th>2014f</th>
<th>2015f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>6.1%</td>
<td>8.0%</td>
<td>8.6%</td>
<td>8.5%</td>
<td>9.1%</td>
<td>9.7%</td>
<td>9.7%</td>
<td>9.3%</td>
</tr>
</tbody>
</table>

Source: International Monetary Fund, World Economic Outlook Database, April 2013

**Non Residential Construction Put in Place**

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012e</th>
<th>2013e</th>
<th>2014f</th>
<th>2015f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>435</td>
<td>439</td>
<td>395</td>
<td>374</td>
<td>373</td>
<td>351</td>
<td>338</td>
<td>337</td>
<td>342</td>
</tr>
</tbody>
</table>

Billion Euros

Construction put in place in billion Euros based on Euroconstruct 2013
Executive Summary

MEWP Rental Market Situation at End 2013.

- More countries faced difficulty in 2013 compared to 2012:
  - The Spanish, Dutch and Italian markets experienced tough economic times, driving down demand.
  - Surprisingly in Finland, we find that although the MEWP market started to recover in 2011 and 2012, the market worsened in 2013, with a drop in demand.
  - Denmark and France which witnessed small growth in 2012, returned to a deterioration in 2013.

- On the contrary, UK and Sweden maintained similar positive growth levels compared to 2012...

- …and Germany and Norway continued to take the lead thanks to higher end-market diversification (i.e. industrial applications, oil and gas exploration, etc.), and a relatively healthy economical situation.

- Overall rental companies in Europe only slightly expanded fleets, at the expense of rental rates and utilisation rates.
While rental companies continued to expand fleets slightly in 2013, utilisation and rental rates suffered as a consequence.
Executive Summary

US rental market growth continues to outpace that of Europe.

<table>
<thead>
<tr>
<th>Region</th>
<th>2012 revenue growth</th>
<th>2012 revenue</th>
<th>2012 fleet size growth</th>
<th>2012 fleet size</th>
<th>Utilisation rate growth</th>
<th>Rental rate growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe*</td>
<td>+ 0%</td>
<td>€ 2.3Bn</td>
<td>+ 2%</td>
<td>232 163</td>
<td>- 1 pt</td>
<td>- 1%</td>
</tr>
<tr>
<td>USA</td>
<td>+ 9%</td>
<td>€ 5.2Bn</td>
<td>+ 6%</td>
<td>481 697</td>
<td>+ 3 pts</td>
<td>+ 4%</td>
</tr>
</tbody>
</table>

- Compared to Europe, the US MEWP market experienced solid and continuous growth in 2013, led by the shift towards rental as opposed to ownership and the slight construction market improvement.

- The European average revenue per unit figure continued to deteriorate in 2013, but continued to improve in the US.

![MEWP Average revenue per unit graph](image)
Executive Summary

MEWP penetration in the European overall rental market is significantly lower than in the US and accounts for approximately 9% of the overall equipment rental revenue (€26.5Bn, source ERA).

- The level of MEWP rental as a percentage of total construction equipment rental revenue has been stable in recent years.

ERA overall equipment rental revenue includes:
1. General Plant
2. Tools & General Equipment
3. Access
4. Power generation & Temperature Control
5. Accommodation & Fencing
6. Industrial Machinery
7. Crane

**Exchange rate:**

\$1 = €0.7244

ARA overall equipment rental revenue includes:
1. Party & Event
2. General tool
3. Construction & Industrial Equipment

**Source:** Ducker Worldwide for IPAF

---

**Graphs:**

**MEWP Rental Revenue Share vs. Overall Equipment Rental Revenue - 2013**
- 10 European countries under study
- MEWP Rental Revenue: €2.3Bn (9% of €24.2Bn)

**MEWP Rental Revenue Share vs. Overall Equipment Rental Revenue - USA**
- MEWP Rental Revenue: €5.2Bn (22% of €18.9Bn)

---

Prepared for The International Powered Access Federation by Ducker Worldwide
Executive Summary

European rental revenue and fleet per capita are significantly beneath the US, showing lower market maturity.

- Contrary to the US market, which confirmed its recovery in both 2012 and 2013, the European MEWP rental market has remained flat since 2011.

- The European rental fleet per inhabitant has been on the increase slightly over the past 4 years, although the rental revenue as not improved.
Executive Summary

Nordic countries are the most mature MEWP rental markets in Europe, followed by the Netherlands and the UK.

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

![MEWP Rental Fleet per 100,000 Inhabitants](chart)

**Maturity Index**

<table>
<thead>
<tr>
<th>Country</th>
<th>Total Europe</th>
<th>UK</th>
<th>FR</th>
<th>ES</th>
<th>IT</th>
<th>DE</th>
<th>NL</th>
<th>DK</th>
<th>NO</th>
<th>SE</th>
<th>FI</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>65</td>
<td>81</td>
<td>65</td>
<td>43</td>
<td>39</td>
<td>44</td>
<td>106</td>
<td>141</td>
<td>169</td>
<td>144</td>
<td>213</td>
<td>152</td>
</tr>
</tbody>
</table>

**Average European index**

- UK: 1.9
- FR: 1.5
- ES: 1.0
- IT: 0.9
- DE: 1.0
- NL: 2.5
- DK: 3.3
- NO: 4.0
- SE: 3.4
- FI: 5
- US: 3.6

**Most mature**

- FI: 213
- US: 152

**Least mature**

- ES: 106
- SE: 144

Source: Ducker Worldwide for IPAF
Executive Summary

High market growth potential lies in Europe, based on countries’ maturity levels.

- Based on the average European maturity index (10 countries under study), and assuming this index could potentially be reached by less mature countries, the total European* fleet could reach 563,000 units.

<table>
<thead>
<tr>
<th>Current MEWP Fleet</th>
<th>Overall Europe*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe 10 countries</td>
<td>270,000 units</td>
</tr>
<tr>
<td>Overall Europe*</td>
<td>232,163 units</td>
</tr>
<tr>
<td>Europe 10 countries</td>
<td>390,000 units</td>
</tr>
<tr>
<td>Overall Europe*</td>
<td>563,000 units</td>
</tr>
</tbody>
</table>

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

Currently at 50% of the overall European potential

Currently at 60% of the potential (10 countries)
Executive Summary

MEWP rental revenue in the ten countries surveyed remained stable in 2013 (+0%). It is estimated at approximately €2.3bn.

- Three groups of countries stand out in the 2013 market:
  - Six countries struggled in 2013: Spain, the Netherlands, Italy, Finland, and to a lesser extent Denmark and France.
  - Two countries only slightly increased rental revenues: Sweden and the UK.
  - Two countries experienced significant growth: Germany and Norway.

Note: market maturity index based on the ratio: country fleet size / country population

Note: bubble size reflects market size (value).

2013 MEWP Rental Revenue Growth

- Specialist
- Generalist

Source: Ducker Worldwide for IPAF
### Executive Summary

<table>
<thead>
<tr>
<th>Region</th>
<th>Market Situation 2013</th>
<th>GDP</th>
<th>No-residential construction</th>
<th>MEWP Rental Market</th>
<th>Key Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td></td>
<td>↓ - 1%</td>
<td>↓ -14%</td>
<td>↓ -9%</td>
<td>Fleet contraction</td>
</tr>
<tr>
<td>NL</td>
<td>Dropping demand led to continuous market downturn</td>
<td>↓ - 2%</td>
<td>↓ - 5%</td>
<td>↓ - 8%</td>
<td>Fleet contraction</td>
</tr>
<tr>
<td>Italy</td>
<td></td>
<td>↓ - 2%</td>
<td>↓ - 5%</td>
<td>↓ - 7%</td>
<td>Rental rates down</td>
</tr>
<tr>
<td>Finland</td>
<td></td>
<td>↓ - 1%</td>
<td>↓ - 5%</td>
<td>↓ - 5%</td>
<td>Rental rates down</td>
</tr>
<tr>
<td>France</td>
<td>Market deterioration vs. 2012 due to flat demand</td>
<td>≈ 0%</td>
<td>↓ - 3%</td>
<td>↓ - 1%</td>
<td>Rental rates down Utilisation down</td>
</tr>
<tr>
<td>Denmark</td>
<td></td>
<td>≈ 0%</td>
<td>↑ + 2%</td>
<td>↓ - 1%</td>
<td>Rental rates down</td>
</tr>
<tr>
<td>Sweden</td>
<td>Trend towards rental vs. ownership drove slight market improvement</td>
<td>≈ 0%</td>
<td>↓ - 2%</td>
<td>↑ + 1%</td>
<td>Slight fleet expansion</td>
</tr>
<tr>
<td>UK</td>
<td>Fleet diversification and slight economic upturn drove continuous growth</td>
<td>↑ + 1%</td>
<td>↓ - 5%</td>
<td>↑ + 3%</td>
<td>Fleet expansion</td>
</tr>
<tr>
<td>Germany</td>
<td>Market driven by demand in non-construction end-applications (industry)</td>
<td>≈ 0.5%</td>
<td>↓ - 1%</td>
<td>↑ + 7%</td>
<td>Fleet expansion</td>
</tr>
<tr>
<td>Norway</td>
<td>Market driven by non-construction end-applications (oil)</td>
<td>↑ + 3%</td>
<td>↑ + 1%</td>
<td>↑ + 7%</td>
<td>Fleet expansion</td>
</tr>
<tr>
<td>Europe (10 countries)</td>
<td>Flat demand</td>
<td>≈ 0%</td>
<td>↓ - 4%</td>
<td>≈ 0%</td>
<td>Fleet expansion</td>
</tr>
</tbody>
</table>
Executive Summary

Worldwide MEWP Rental Fleet Size is estimated at approximately 1,020,000 units. This represents a 6% increase compared to 2012, due to an adjustment of 2012 figures for Asia.

<table>
<thead>
<tr>
<th>Region</th>
<th>Articulated Booms</th>
<th>Straight Booms</th>
<th>Scissors</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Articulated Booms</td>
<td>70 200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Straight Booms</td>
<td>140 450</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scissors</td>
<td>291 650</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>37 800</td>
<td></td>
<td></td>
<td></td>
<td>37 800</td>
</tr>
<tr>
<td>Total</td>
<td>540 100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Articulated Booms</th>
<th>Straight Booms</th>
<th>Scissors</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin America*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Articulated Booms</td>
<td>5 100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Straight Booms</td>
<td>12 200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scissors</td>
<td>15 800</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>2 900</td>
<td></td>
<td></td>
<td></td>
<td>2 900</td>
</tr>
<tr>
<td>Total</td>
<td>36 000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Articulated Booms</th>
<th>Straight Booms</th>
<th>Scissors</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASIA - PAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Articulated Booms</td>
<td>13 900</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Straight Booms</td>
<td>25 900</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scissors</td>
<td>60 600</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>45 100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>145 500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Articulated Booms</th>
<th>Straight Booms</th>
<th>Scissors</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Articulated Booms</td>
<td>69 200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Straight Booms</td>
<td>37 300</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scissors</td>
<td>149 000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>39 300</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>294 800</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
Note: Chinese data (included in Asia) exclude local unidentified Chinese brands which are negligible as of today
IPAF Powered Access Rental Market Report – Europe

MARKET SIZE 2013
The MEWP Rental Market (10 European countries under study) is estimated at approx. €2.3B in 2013. Total European* market value is estimated at €2.6B.

- The largest market remains Germany, which continued to grow compared to the previous year.
- The UK now exceeds France in terms of rental revenue, and is the second largest market in value.

The UK remains the leading market in volume. In 2013, total fleet size and rental revenue reached pre-recession levels.

The share of MEWP rental revenues of total rental revenue remained stable in 2013. After suffering the recession for many years, rental companies are entering a phase of consolidation and expect gradual recovery.

### 2013 Rental Revenue as % of Total Company Revenue

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>UK</th>
<th>FR</th>
<th>ES</th>
<th>IT</th>
<th>DE</th>
<th>NL</th>
<th>DK</th>
<th>NO</th>
<th>SE</th>
<th>FI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rental Revenue as % of Total Company Revenue</td>
<td>55%</td>
<td>53%</td>
<td>60%</td>
<td>35%</td>
<td>56%</td>
<td>45%</td>
<td>52%</td>
<td>69%</td>
<td>70%</td>
<td>79%</td>
<td>65%</td>
</tr>
<tr>
<td>MEWP Revenue as % of Total Rental Revenue</td>
<td>66%</td>
<td>87%</td>
<td>68%</td>
<td>52%</td>
<td>54%</td>
<td>76%</td>
<td>66%</td>
<td>30%</td>
<td>34%</td>
<td>27%</td>
<td>32%</td>
</tr>
<tr>
<td>MEWP Rental Revenue as % of Total Company Revenue</td>
<td>33%</td>
<td>47%</td>
<td>41%</td>
<td>18%</td>
<td>31%</td>
<td>34%</td>
<td>34%</td>
<td>20%</td>
<td>24%</td>
<td>21%</td>
<td>21%</td>
</tr>
</tbody>
</table>

*Defined as 27 EU countries + Norway + Switzerland + Slovenia + Croatia + Macedonia*
MEWP rental penetration rate has been decreasing slowly but surely over the last three years, despite a growing rental market.

- MEWP rental penetration rate is expected to remain fairly stable in the next two years.

<table>
<thead>
<tr>
<th>Year</th>
<th>MEWP Rental Penetration Rate</th>
<th>Other Equipment Rental Revenue</th>
<th>Total Rental Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>9.13%</td>
<td>€23,330 M</td>
<td>€28,114 M</td>
</tr>
<tr>
<td>2011</td>
<td>8.96%</td>
<td>€25,392 M</td>
<td>€28,114 M</td>
</tr>
<tr>
<td>2012</td>
<td>8.67%</td>
<td>€26,226 M</td>
<td>€28,114 M</td>
</tr>
<tr>
<td>2013</td>
<td>8.59%</td>
<td>€26,520 M</td>
<td>€28,114 M</td>
</tr>
<tr>
<td>2014</td>
<td>8.63%</td>
<td>€27,253 M</td>
<td>€28,114 M</td>
</tr>
<tr>
<td>2015</td>
<td>8.75%</td>
<td>€27,253 M</td>
<td>€28,114 M</td>
</tr>
</tbody>
</table>

Source for Total Rental Turnover: ERA 2013 Report.
Major differences exist in MEWP rental penetration by countries.

- The Netherlands, Finland, Italy and Denmark each show the highest MEWP rental penetration, while in Norway, Sweden, Spain and the UK, the penetration rate remains below 10%.

**Source for Total Rental Turnover:** ERA 2013 Report.
Total level of cross-hire remained stable in 2013 and accounts for 7% of the MEWP rental market.

For the first time, we see that Germany surpasses the UK in its cross-hire practices.
MEWP total fleet size is estimated at approx. 232,000 units (in the ten countries under study in Europe). MEWP total fleet size is estimated at approximately 270,000 units in Europe overall.

- The UK remains the largest European MEWP fleet.
- In Germany, France, the Netherlands and Italy, the average revenue per unit is higher than other countries, due to a larger proportion of high-value equipment.
- Spain is still suffering from deep recession with a very low and even decreasing revenue per unit.
- Average revenue per unit is below 2012 levels in all countries, except in Norway, where rental revenue increased more than fleet size.
Two thirds of the total boom fleet has an internal combustion power source. More than 70% of the scissor fleet is electric.

- Slightly more than a third of the fleet is Stage IIIB compliant in the 10 European countries under study; remaining stable on 2012.
- Companies with Stage IIIB compliance state that, in order to absorb the higher cost of these machines, they intend to purchase fewer new machines. They cannot pass the price burden to their rental rates.
Construction accounts for the lion’s share of the MEWP rental revenue. However, non-construction holds its ground.

- Building maintenance (electricity works, HVAC, windows and facade cleaning, painting...) represents most of the non-construction customer category. This segment is attractive due to its slightly lower price-sensitivity than construction companies.
- Markets suffering from continuing recession are forced to turn to other segments than construction, hence the strong share of the non-construction sector in Spain, for example.
IPAF Powered Access Rental Market Report – Europe

MARKET DYNAMICS 2008-2015
European MEWP rental revenue has stabilised since 2011. It remains at €2.3Bn, which gives a total European* market of approximately €2.6Bn.

- The flat economy and a depressed construction sector are the main barriers to market growth.
- Rental companies remain cautious but optimistic. Respondents in most markets recognise that the overall economic and construction environment is improving and the market is now in recovery.
While European MEWP rental revenue remained stable in 2013, strong differences exist among the 10 European countries.

- No major differences exist between specialist and generalist rental companies’ revenue trends.

- Germany, Norway and the UK have been on a path of continued growth since 2011, relying on fleet expansion as a driver of revenue.

- As in 2012, Spain, the Netherlands and Italy experienced decline.

- Contrary to 2012, Finland saw its MEWP rental revenue decrease in 2013 due to construction contraction.
Forecasts made in 2012 were accurate and the European fleet size grew slightly in 2013 by 2%.

- As expected in 2012, Norway, Germany and the UK saw the greatest fleet expansion.
- Spain, Italy and the Netherlands continued to de-fleet in order to align their offer with low market demand and decreasing revenue; investments were directed towards fleet renewals.
- Total fleet size in the 10 European countries is not expected to reach pre-recession level in 2014.

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

End of the year data

MEWP Fleet Size & MEWP Fleet Size Growth
10 European countries under study

Source: Ducker Worldwide for IPAF
In 2013, specialists and generalists both expanded fleets at a similar level.

Countries with decreased rental revenues (Spain, Italy and the Netherlands) tended to opt for de-fleeting.

Germany and Norway led fleet size growth, followed closely by the UK and France.
Scissor and boom fleets grew at a similar pace in 2013. Scissors account for approximately 50% of the European fleet.

- Booms can be used for a larger number of applications; they are the most versatile equipment.
- Electric scissors offer a good return on investment. They are heavily used for non-construction, indoor applications.

### MEWP Fleet Mix by Equipment Type

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>2012</th>
<th>2013</th>
<th>2014 f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booms</td>
<td>14,298</td>
<td>14,684</td>
<td>14,877</td>
</tr>
<tr>
<td>Scissors</td>
<td>82,216</td>
<td>83,698</td>
<td>86,156</td>
</tr>
<tr>
<td>Vehicle Mounted Platforms</td>
<td>114,867</td>
<td>117,518</td>
<td>120,542</td>
</tr>
<tr>
<td>Others</td>
<td>16,539</td>
<td>16,262</td>
<td>16,252</td>
</tr>
<tr>
<td><strong>Total Fleet</strong></td>
<td><strong>227,920</strong></td>
<td><strong>232,163</strong></td>
<td><strong>237,827</strong></td>
</tr>
</tbody>
</table>

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 2012 to 2013.

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

Please note that the volume of vehicle mounted platforms indicated above only concerns the share owned by rental companies owning self-propelled fleets.
Articulated booms continued to represent 2/3 of the European boom fleet in 2013.

- The UK and France show the highest proportion of articulated booms, followed by Italy and Germany.
- Nordic rental companies still operate more straight booms than articulated. These are increasingly substituted for scaffolding and ladders to fit with users’ safety concerns in construction applications.

### MEWP Booms Fleet Mix by Type - 2012

- **Total**: 68%
- **UK**: 32%
- **FR**: 11%
- **ES**: 13%
- **IT**: 54%
- **DE**: 38%
- **NL**: 47%
- **DK**: 44%
- **NO**: 67%
- **SE**: 60%
- **FI**: 60%

Articulated Booms (56 004) Straight Booms (26 212)

### MEWP Booms Fleet Mix by Type - 2013

- **Total**: 65%
- **UK**: 35%
- **FR**: 15%
- **ES**: 18%
- **IT**: 85%
- **DE**: 43%
- **NL**: 36%
- **DK**: 57%
- **NO**: 54%
- **SE**: 58%
- **FI**: 53%

Articulated Booms (54 651) Straight Booms (29 047)

End of the year data
Revenue per unit continued to deteriorate in Europe in 2013, due to fleet expansion linked with decreasing rental rates.

- 2014 should see the beginning of an improvement of the average revenue per unit as rental companies expect to increase rental rates and limit fleet growth.
Revenue per unit only grew in Norway and remained stable in Germany.

- The average revenue per unit declined for both specialists and generalists, with a stronger decline for generalists.

- The revenue per unit decreased the most in Finland, Spain, France and Italy.

- Revenue per unit only grew in Norway and remained stable in Germany.

- The average revenue per unit declined for both specialists and generalists, with a stronger decline for generalists.

- The revenue per unit decreased the most in Finland, Spain, France and Italy.

- Revenue per unit only grew in Norway and remained stable in Germany.
IPAF Powered Access Rental Market Report – Europe

INVESTMENT 2008-2015
Investment in new MEWPs increased again in 2013, following the same trend as in 2012.

- A large part of investment was dedicated to fleet renewal, in order to maintain an attractive offer to customers.
- Investments increased in France, Germany, Denmark and the UK due to a combination of fleet renewal and expansion.
- Fleet renewal characterised investment in Norway.
- Investments value decreased in Spain, Italy and all other Nordic countries.
IPAF Powered Access Rental Market Report – Europe

OPERATIONAL ASPECTS
2008-2014
Rental revenues are the result of three main factors, namely time utilisation rate, rental rates and fleet size/mix. Rental rates and fleet composition are the two strategies that rental companies can vary in order to influence utilisation and thereby, revenues.
Overall, time utilisation decreased in 2013, mainly due to a poor start to the year in most of the 10 European countries.

- The only countries where average time utilisation grew, were the Nordic countries and Germany.
- Utilisation rates continued to deteriorate in Spain and the Netherlands, where the market situation remains critical.
- In France, time utilisation decreased significantly as rental companies increased fleet size but were faced with stable demand.

![MEWP Average Time Utilisation & Average Time Utilisation Growth](image)

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

Time utilisation has progressively deteriorated since 2011. Specialists maintained higher utilisation rates than generalist rental companies.

- Despite hoping for a significant improvement, rental companies believe that time utilisation will more likely remain stable in 2014.
- Articulated booms and electrics scissors are the most highly utilised categories of equipment.

![Chart showing average time utilisation rates for 10 European countries from 2008 to 2014, with specialist rates consistently higher than generalist rates.](chart.png)
MEWP average retention period was stable in 2013 but is expected to contract slightly in 2014.

- Booms are typically kept for longer periods than scissors.

- Retention period increased in all Nordic countries but decreased in the UK, France and Spain.
### Operational Aspects – Rental Rates

Rental rates fell in the majority of the 10 European countries in 2013. They remained stable in the most dynamic markets.

- The UK, Germany and Norway are the only countries where rental rates were maintained or very slightly increased.
- Strongest rental rate reductions occurred in Italy and the Nordic countries (with the exception of Norway).
- In all countries, fierce competition and customers’ price-sensitivity drove rates down.

#### Growth in MEWP Rental Rates - 2013

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>UK</th>
<th>FR</th>
<th>ES</th>
<th>IT</th>
<th>DE</th>
<th>NL</th>
<th>DK</th>
<th>NO</th>
<th>SE</th>
<th>FI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth</td>
<td>-1%</td>
<td>0%</td>
<td>-2%</td>
<td>-2%</td>
<td>-4%</td>
<td>-2%</td>
<td>-4%</td>
<td>-4%</td>
<td>-3%</td>
<td>-4%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Ducker Worldwide for IPAF
Operational Aspects – Rental Rates

Rates should stabilise in 2014 and increase slightly in 2015 but uncertainties remain.

- Since 2009, companies have barely had the opportunity to increase rental rates. They kept offering further reductions to customers.
- In Spain and Italy, rental companies believe they have now reached the lowest point at which they can stay operational, and expect no more rate reductions.
- Specialist companies expect to improve rental rates as early as 2014.

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

2008 -14% -9% -2% -2% 2009 -13% -3% -4% 2010 +1% +1% +0% 2011 +0% +0% +1% +1% +1% +1% +1% +1% 2013 +1% +0% +2% +2% +1% 2014 f 2015 f

Source: Ducker Worldwide for IPAF
MARKET TRENDS AND DRIVERS
Market Trends and Drivers

MEWP rental revenue per inhabitant and MEWP rental fleet per inhabitant.

---

**MEWP Rental Revenue per Inhabitant**

- **Total Europe**: €6.3, €7.1, €7.3, €7.2
- **UK**: €2.1, €1.9
- **FR**: €3.8, €3.6
- **ES**: €6.2, €6.6
- **IT**: €11.4, €10.5
- **DE**: €12.5, €12.4
- **NL**: €14.7, €15.4
- **DK**: €11.1, €11.1
- **NO**: €15.9, €15.0
- **SE**: €21.0, €21.7
- **FI**: €11.1, €15.0
- **US**: €22.7

*Source: Ducker Worldwide for IPAF*  

**MEWP Rental Fleet per 100,000 Inhabitants**

- **Total Europe**: 64, 65, 79, 81, 63, 65
- **UK**: 45, 43, 40, 39, 41, 44
- **FR**: 112, 106, 138, 141, 163, 142, 144
- **ES**: 138, 141, 163, 142, 144
- **IT**: 212, 213
- **DE**: 212, 213
- **NL**: 144, 152
- **DK**: 159, 166
- **NO**: 144, 152
- **SE**: 159, 166
- **FI**: 144, 152
- **US**: 159, 166
- **CAN**: 144, 152

*Source: Ducker Worldwide for IPAF*
Market Trends and Drivers


### Europe - GDP per Capita

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>29.3</td>
</tr>
<tr>
<td>2010</td>
<td>30.8</td>
</tr>
<tr>
<td>2011</td>
<td>31.2</td>
</tr>
<tr>
<td>2012</td>
<td>31.0</td>
</tr>
<tr>
<td>2013e</td>
<td>30.9</td>
</tr>
<tr>
<td>2014f</td>
<td>31.2</td>
</tr>
<tr>
<td>2015f</td>
<td>30.8</td>
</tr>
</tbody>
</table>

*Thousand Euro at 2012 prices. 10 countries under study.*

*Source: Ducker Worldwide for IPAF based on Euroconstruct 2013*

### Europe - Unemployment Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>6.1%</td>
</tr>
<tr>
<td>2009</td>
<td>8.0%</td>
</tr>
<tr>
<td>2010</td>
<td>8.6%</td>
</tr>
<tr>
<td>2011</td>
<td>8.5%</td>
</tr>
<tr>
<td>2012f</td>
<td>9.1%</td>
</tr>
<tr>
<td>2013f</td>
<td>9.7%</td>
</tr>
<tr>
<td>2014f</td>
<td>9.7%</td>
</tr>
<tr>
<td>2015f</td>
<td>9.3%</td>
</tr>
</tbody>
</table>

*Source: International Monetary Fund, World Economic Outlook Database, April 2013*
Market Trends and Drivers

GDP per capita

The Netherlands

Norway

Finland

UK

Germany

Spain

Italy

Sweden

Denmark

Thousand Euro at 2012 prices. Source: Ducker Worldwide for IPAF based on Euroconstruct 2013
Market Trends and Drivers

Increase in residential construction will lead total construction recovery in Europe, starting in 2014.

![Europe - Construction Data](chart)

*Construction put in place in billion Euros based on Euroconstruct 2013*

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

Source: Ducker Worldwide for IPAF
Market Trends and Drivers

The contraction in the non residential field is compensated by growth in other construction sectors.

Construction is not expected to recover before 2015.

All construction sectors experience a continuous increase.

Construction put in place in billion Euros based on Euroconstruct 2013
Market Trends and Drivers

Construction is still declining at strong pace; stabilisation is likely to happen in 2015.

Construction will reach its lowest point in 2014 and should recover slowly in 2015.

No growth is expected in 2014. All sectors should increase in 2015.

Construction put in place in billion Euros based on Euroconstruct 2013

Residential construction
Non-residential construction
Total construction
Civil engineering
Market Trends and Drivers

Residential construction drove the slight increase in 2013. All sectors are expected to slowly take off.

Construction will reach its 2011 level in 2015, mainly driven by an increase in the residential sector.

Constant growth should continue in the coming years.

The contraction initiated in 2012 should prolong until 2015; residential construction should then start to improve.

Construction put in place in billion Euros based on Euroconstruct 2013
Market Trends and Drivers

While the construction industry experienced large variations of its activity over the last years, the MEWP rental market has remained more stable thanks to high penetration and companies relying even more on rentals during recession periods.

![Graph showing Non-Residential Construction & MEWP Rental Market trends from 2008 to 2015.](image)

*New non-residential construction put in place based on Euroconstruct 2013*
### Market Trends and Drivers

Rental players are confident that the penetration rate will keep increasing, as end-users are more and more reluctant to invest in their own equipment. Rental appears as the safest option to avoid costly expenses.

<table>
<thead>
<tr>
<th><strong>Market consolidation</strong></th>
<th>Major companies currently absorbing the smallest ones in Nordic countries, France, the UK, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Better fleet management</strong></td>
<td>Adapting the fleet size to the demand: de-fleeting in countries with decreasing demand, and, on the contrary, increasing in growing markets. &lt;br&gt;Renewing older equipment to attract customers.</td>
</tr>
<tr>
<td><strong>Increased focus on safety</strong></td>
<td>Ladders and scaffolding are increasingly replaced by MEWPs, driving the growth of MEWP rental business.</td>
</tr>
<tr>
<td><strong>Need for more environmentally friendly equipment</strong></td>
<td>Drives the use of electric and bi-energy equipment. &lt;br&gt;Also Stage IIIB compliance makes the equipment more costly to purchase and maintain. Users prefer to rent instead of owning.</td>
</tr>
</tbody>
</table>
IPAF Powered Access Rental Market Report – Europe

CHINESE MEWP MARKET
Chinese MEWP Rental Market

The Chinese MEWP rental market is experiencing continuous fleet size growth.

- The MEWP rental fleet grew by an average rate of 20% per year over the last three years. Total fleet size has reached approx. 6,000 units in 2013.

- The MEWP rental fleet is expected to grow at the same pace in the next three years.

- Scissors represent approx. 65% of total MEWP fleet size, while booms represent 25%. Vehicle mounted platforms and other smaller equipment represent approx. 10% of the fleet.

- Scissors are preferred for their flexibility and low price. Booms are largely used in shipyards, public or industrial buildings, and truck-mounted platforms are primarily used in municipal and utility projects.

- Most of the MEWP equipment used in China is locally manufactured, with the exception of specific machines (i.e. specific working heights - 120 feet, specific foreign brands: Airo, Upright, Tadano, have no production facilities locally).

- There are less than 100 rental companies in China, and a limited number of major generalist players dominate the market.

- The typical rental period for MEWPs is 3-6 months.
**Increasing MEWP awareness**

- The awareness of MEWP rental is expected to increase in coming years. The geographical coverage, which now remains limited to major cities (MEWP rental business is mostly developed in Tier 1 and Tier 2 cities of China), is expected to broaden.

**Scaffolding substitution**

- There is no mandatory regulation in China yet to protect workers working at height. But the government “12th five-year plan” lists traditional scaffolding and ladders as equipment being gradually phased-out, and encourages the use of MEWPs.

**Increased focus on worker safety**

- Market players expect safety standards to be put in place within the next 3 to 5 years.
Macro-economic indicators show positive forecast, leading to an enhanced construction environment.

- From 2006 to 2013, China’s economy kept growing quickly: the annual GDP grew at an average rate of 10%.

- Although GDP growth has slowed down in recent years, forecasts show steady increase of approx. +7.5% per year for the next 3 years.

- More construction opportunities are expected to arise in the non-residential sector i.e. airports, exhibition centers, stadiums, museums and industrial parks.

**China - GDP per Capita**

![Graph showing China's GDP per Capita from 2009 to 2015](chart)

Thousand US dollars at 2013 prices.
Source: International Monetary Fund, World Economic Outlook Database, October 2013
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:

- France
- Germany
- Italy
- Netherlands
- Nordic Region (Denmark, Finland, Norway, Sweden)
- 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
IPAF Powered Access Rental Market Report – Europe

COUNTRY REPORT
FRANCE
Key Findings

- The French MEWP rental market remains one of the largest markets among the 10 European countries under study.

- Nevertheless, it is one of the least mature countries (along with Italy, Spain and Germany): there are still huge opportunities to grow the MEWP fleet.

- Following the trend initiated in 2012, market growth slowed down due to economic uncertainties and limited construction activity.

- Market consolidation is currently underway; smaller companies are being absorbed by larger ones, who have higher investment capacities and are more price competitive.

- 2014 is expected to be a difficult year and market rebound should not occur before 2015.
Key Findings

- Despite the current flat market situation, rental companies kept investing in fleet expansion and renewals (+35% in investment). As a consequence, fleet size increased by +4%.

- Rental companies hope to keep increasing investments, though at a slower pace (+5% expected in 2014).
  - Fleet expansion had a direct impact on the utilisation rate, which went down by 4 points in 2013.
  - The average retention period decreased but still remains one of the highest amongst the 10 European countries under study. Rental companies are trying to optimise the maintenance of their equipment.

- Rental rates deteriorated in 2013 (-2%) and companies do not expect them to increase again before 2015.
As forecast last year, 2013 and 2014 will have been years of stabilisation for the French market. Growth is not expected before 2015.

- After three years of improvement, market growth stabilised in 2013.
- Further improvement is not expected in the short-term.
- Cross-hire is negligible in the French rental market.
- Companies do not expect any future change in the proportion of cross-hire.
MEWP rental penetration has been stable and close to 12% over the last four years.

- MEWP rental penetration has remained stable over the past few years, in a stable rental market.
- Penetration is expected to increase slightly above 12% in 2015.

<table>
<thead>
<tr>
<th>Year</th>
<th>MEWP Rental Penetration Rate</th>
<th>Total Rental Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>11.68% €3,551 M</td>
<td>€3,551 M</td>
</tr>
<tr>
<td>2011</td>
<td>11.89% €3,811 M</td>
<td>€3,811 M</td>
</tr>
<tr>
<td>2012</td>
<td>11.84% €3,915 M</td>
<td>€3,915 M</td>
</tr>
<tr>
<td>2013</td>
<td>11.86% €3,865 M</td>
<td>€3,865 M</td>
</tr>
<tr>
<td>2014 f</td>
<td>11.88% €3,875 M</td>
<td>€3,875 M</td>
</tr>
<tr>
<td>2015 f</td>
<td>12.05% €3,970 M</td>
<td>€3,970 M</td>
</tr>
</tbody>
</table>

Source for Total Rental Turnover: ERA 2013 Report.
As forecast in last year’s report, fleet size growth slowed down somewhat in 2013. It will continue to slow down in 2014.

Despite the flat economic situation and construction market, rental companies expanded fleets at the expense of rental rates and utilisation rates.

Note: included are powered access: all booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers
Both boom and scissor fleets grew in 2013, maintaining a relatively similar split. Booms still account for 44% of the market.

- Few rental companies are able to comment on the impact of Stage IIIB regulations.
- Those who can, report that engines are less reliable due to poor quality fuel used on construction sites.

Note: included are powered access: 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 4% from 2012 to 2013.

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

Please note that the volume of vehicle mounted platforms indicated above only concerns the share owned by rental companies owning self-propelled fleets.
France, along with the UK, has the highest proportion of booms in its fleet.

- Although the proportion of straight booms increased in 2013, four booms out of five remain articulated booms.
The proportion of diesel booms and scissors decreased in 2013. The majority of scissors are now electric, as in other European countries.

- Rental companies reported that most fleet renewal purchases consisted of electric equipment.

![MEWP segmented by Power Sources - 2013](chart.png)
France – Revenue per Unit

Average revenue per unit went down in 2013, due to fleet size increase and rental rates deterioration.

- The same trend is expected in 2014, though at a slower pace.

Note: included are powered access: all booms, scissor lifts and vertical masts

Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers
Although construction is still the largest source of revenue, it decreased significantly as a proportion in 2013.

- Rental companies had to develop new sources of revenue due to the poor state of the construction market.

### MEWP Applications

- **France**
  - **2009**: 67% Construction, 33% Non-Construction
  - **2010**: 67% Construction, 33% Non-Construction
  - **2011**: 65% Construction, 35% Non-Construction
  - **2012**: 65% Construction, 35% Non-Construction
  - **2013**: 60% Construction, 40% Non-Construction

**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.
Rental companies continued to increase the level of investment in 2013.

- Investment was in fleet expansion and renewal.
- Rental companies had retained their equipment longer than expected during recession and now need to progressively replace them, in addition to expanding the fleet.
France – Utilisation Rates

As fleet size increased in a market characterised by flat demand, utilisation rates deteriorated in 2013.

- Utilisation rates in France are now among the lowest of the 10 European countries studied.
- They are expected to remain low in 2014.

<table>
<thead>
<tr>
<th>Year</th>
<th>Utilisation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>55%</td>
</tr>
<tr>
<td>2009</td>
<td>52%</td>
</tr>
<tr>
<td>2010</td>
<td>60%</td>
</tr>
<tr>
<td>2011</td>
<td>61%</td>
</tr>
<tr>
<td>2012</td>
<td>59%</td>
</tr>
<tr>
<td>2013</td>
<td>55%</td>
</tr>
<tr>
<td>2014</td>
<td>55%</td>
</tr>
</tbody>
</table>

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

Source: Ducker Worldwide for IPAF
France – Retention Period

Although slightly reduced in 2013, the retention period in France is still among the highest in Europe.

- Rental companies are working hard to prolong equipment operating life.

**Avg Retention Period (Years)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Retention Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>9,7</td>
</tr>
<tr>
<td>2010</td>
<td>9,7</td>
</tr>
<tr>
<td>2011</td>
<td>9,4</td>
</tr>
<tr>
<td>2012</td>
<td>9,3</td>
</tr>
<tr>
<td>2013</td>
<td>8,8</td>
</tr>
<tr>
<td>2014</td>
<td>8,6</td>
</tr>
</tbody>
</table>

8,8 = 8 years and 8 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new
Rental companies could not maintain rates in 2013, due to fierce competition and flat demand especially in the first half of the year.

- When they did not reduce rates, rental companies offered more discounts.
- No short-term improvement is expected in 2014, but rental companies hope for a slight rate improvement in 2015.
As forecast last year, the market remains uncertain and significant recovery is not expected before 2015.

- French market players are hoping the market returns to growth (+4%) in 2015, but uncertainty remains.

- Market consolidation is currently happening, with larger rental companies absorbing smaller ones. Small rental companies are struggling to invest and renew their fleet and they had to reduce rental rates more than large companies.

- Rental companies expect more sophisticated equipment to enter the rental market, requiring better trained operators to ensure safe equipment use.
IPAF Powered Access Rental Market Report – France

A PERSPECTIVE FROM THE EDITOR OF INTERNATIONAL RENTAL NEWS
The French rental market illustrates the difficulties in assessing how an industry is performing with reference only to statistics.

France’s economy is underperforming and sluggish at best, and according to the European Rental Association was one of the slow growth rental markets last year, and with little prospect for any significant upturn this year. Construction activity is expected to shrink by as much as 2% this year.

That France remains a difficult market was confirmed in early 2014 by Loxam’s results for 2013, showing a 4.2% fall in revenues in its general rental business in France. Its specialist divisions, which include Loxam Access, were flat. Likewise Acces Industrie – the largest access specialist in France – managed growth of less than 2% in the year.

The country’s rental companies are also among those reporting the most difficult trading conditions in the quarterly ERA/IRN RentalTracker survey: not one French respondent to the survey at the end of the first quarter of the year reported improving conditions, and French renters were also among the least likely to have aggressive expenditure plans this year.
And yet, France remains a market that can provide returns. It was the only one of Lavendon’s European businesses that saw revenue growth last year – 7% up – and profit margins also improved. Similarly, Riwal was reporting growth of its French business in an interview with Access International during 2013 – it opened its 10th depot in the country during the year.

The year also saw a continuation of the acquisition activity that has been evident in France for the past few years, although at a lower scale. Leading the way was Kiloutou, making two acquisitions during the year, the most significant from an access perspective being that of Most Location, a renter strong in aerials in the north and east of France.

There is more to the French rental industry than Loxam, but it was significant during the year that the company decided to shift to a single brand for its French operations. That decision will see the phasing out of three famous rental brands in the country, Laho Equipement, Locarest and Loueurs de France.
IPAF Powered Access Rental Market Report – France

APPENDIX
France - Construction Statistics

Construction in France is not expected to recover before 2015.

Construction put in place in billion Euros based on Euroconstruct 2013

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

France GDP estimates based on Euroconstruct 2013
Key Findings

- The German MEWP market is significantly less mature than many other European markets: strong future potential exists for MEWP rental.

- The German market is currently one of the most dynamic in Europe and has been experiencing continuous growth since 2010. The 2013 growth rate even exceeded 2012 (+7% vs. +5%) and forecasts show a similar positive trend (between 5 and 7% growth per year).

- In order to face increasing demand, rental companies expanded fleets extensively (+7%). Scissors are the primary MEWP segment, and grew more rapidly than other equipment types. In 2014 though, the whole range of equipment will expand in similar proportions.
  - The German fleet complies with environmental requirements with a dominance of electric MEWPs (59% of booms and 85% of scissors) and a large majority of equipment complying with Stage IIIB regulations.

- Investment in new MEWPs grew by 30% in 2013 and may have reached its highest level (-6% expected for 2014).
  - Furthermore both the average utilisation rate (64%) and the average retention period remained stable (7 years).
Germany – Rental Market Value and Growth

The German MEWP rental market maintained continuous growth in 2013, with substantial revenue increase for the fourth year in a row.

- Rental revenue grew faster in 2013 than in 2012.
- Market growth is expected to stabilise between 5% and 7% per year for the forecasted period.
- The level of cross-hire increased in 2013.
MEWP rental penetration rate has increased since 2011 and reached 15% in 2013.

- The MEWP rental market is expected to grow faster than the total rental market. As a result, penetration should reach almost 16% in 2015.

![MEWP Rental Penetration Rate Chart](chart.png)

*Source for Total Rental Turnover: ERA 2013 Report.*
Fleet size witnessed its strongest growth since 2010. Total fleet size now exceeds 35,000 units.

Fleet expansion will be maintained at a fast pace in the coming years.

Note: included are powered access: all booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers
All MEWP segments increased in 2013; scissors benefited most.

- As in most European countries, scissors represent the primary MEWP type. They are largely used for both construction and non-construction applications (storage, building maintenance).
- Rental companies plan to maintain stable fleet mixture for the forecasted period.

### Germany – Market Size in Units

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>2012</th>
<th>2013</th>
<th>2014 f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booms</td>
<td>12 711</td>
<td>13 198</td>
<td>13 858</td>
</tr>
<tr>
<td>Scissors</td>
<td>1 909</td>
<td>1 962</td>
<td>2 060</td>
</tr>
<tr>
<td>Vehicle Mounted Platforms</td>
<td>3 445</td>
<td>3 567</td>
<td>3 745</td>
</tr>
<tr>
<td>Others</td>
<td>3 713</td>
<td>3 630</td>
<td>3 796</td>
</tr>
<tr>
<td><strong>Total Fleet</strong></td>
<td>33 323</td>
<td>35 655</td>
<td>37 438</td>
</tr>
</tbody>
</table>

**MEWP Fleet Mix by Equipment Type**

Note: included are powered access: 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 4% from 2012 to 2013.

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

Please note that the volume of vehicle mounted platforms indicated above only concerns the share owned by rental companies owning self-propelled fleets.
Although the share of straight booms increased in 2013, articulated booms still hold the lion’s share.

**MEWP Booms Fleet Mix by Type - Germany - 2012**
- Total Booms Fleet: 12,711
  - Articulated Booms (7,872)
  - Straight Booms (4,839)

**MEWP Booms Fleet Mix by Type - Germany - 2013**
- Total Booms Fleet: 13,198
  - Articulated Booms (7,134)
  - Straight Booms (6,064)
The electric power source dominates the German market, in both boom and scissor segments.

- Electric booms account for the majority of the boom fleet, contrary to other European countries.
- Electric power is increasingly required in important non-construction indoor applications.
- More than half of the German fleet is deemed Stage IIIB compliant. Although equipment purchase price is recognised as more expensive, companies do not intend to pass the increase to customers.
Germany – Revenue per Unit

The average revenue per unit remained stable in 2013, where slight rental rates improvement compensated for fleet expansion.

- The average revenue per unit should be stable in 2014.

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

MEWP Avg Revenue per Unit & Avg Revenue per Unit Growth

Source: Ducker Worldwide for IPAF
German rental companies continue to focus more on non-construction end-applications.

Non-construction customers are reported to be less price-sensitive than construction companies, allowing rental companies to improve rates and revenues.

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.
Benefiting from a positive market demand, rental companies expanded fleets and increased investments in 2013.

- Investments have continuously grown since 2009.
- However, it seems that the peak of investment was reached in 2013. Total amount of investments will slightly decrease for the remainder of the forecasted period.

![Investment in New MEWPs](chart.png)

Source: Ducker Worldwide for IPAF
Germany – Utilisation Rates

Time utilisation rate remained stable over the last few years.

- Rental companies chose to meet the increasing demand by expanding fleet size, rather than more intensive use of equipment.

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Time Utilisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>57%</td>
</tr>
<tr>
<td>2009</td>
<td>54%</td>
</tr>
<tr>
<td>2010</td>
<td>61%</td>
</tr>
<tr>
<td>2011</td>
<td>63%</td>
</tr>
<tr>
<td>2012</td>
<td>63%</td>
</tr>
<tr>
<td>2013</td>
<td>64%</td>
</tr>
<tr>
<td>2014</td>
<td>64%</td>
</tr>
</tbody>
</table>

Source: Ducker Worldwide for IPAF
Germany – Retention Period

After decreasing significantly from 2009 to 2011, average retention period is now stable, at 7 years.

- Retention period is expected to remain stable in 2014.

### Avg Retention Period (Years)

<table>
<thead>
<tr>
<th>Year</th>
<th>Retention Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>8.1</td>
</tr>
<tr>
<td>2010</td>
<td>7.9</td>
</tr>
<tr>
<td>2011</td>
<td>7.2</td>
</tr>
<tr>
<td>2012</td>
<td>7.0</td>
</tr>
<tr>
<td>2013</td>
<td>7.0</td>
</tr>
<tr>
<td>2014</td>
<td>7.0</td>
</tr>
</tbody>
</table>

7,0 = 7 years and 0 month

Definition: Period of time that a machine is kept in fleet = selling age if acquired new
Rental companies continue to increase rental rates every year.

- Germany is one of the only European countries under study where rental companies managed to increase rates in 2013.
- Although they hope for more significant rate improvements, rental companies forecast reasonable +1% growth in 2015.
Germany – Future Trends

The German market remains highly fragmented, with a majority of small rental companies. However market players believe consolidation is currently underway.

- Rental companies plan to increase their focus on more profitable targets, i.e. non-construction customers, such as private maintenance companies.

- Safety concerns have become more important since 2010, after a regulation on authorised work height was put in place:
  - Since then training services have been constantly increasing.

- The environment is expected to become a stronger concern, especially regarding the level of emissions allowed in urban areas.
IPAF Powered Access Rental Market Report – Germany

A PERSPECTIVE FROM THE EDITOR OF INTERNATIONAL RENTAL NEWS
A Perspective from the Editor of *International Rental News*

In some ways Germany’s powered access market seems unchanging, even if behind the scene things are constantly shifting.

The venerable old names in the business are the same, but not quite – for example, Mateco celebrated its 40\textsuperscript{th} anniversary last year, although now as part of the Belgian-owned TVH Group.

Germany’s aerial platform market remains in a pretty good condition, still with its large number of family-owned mid-sized firms, but with the addition of rental players from outside Germany, including Boels Rental and Cramo.

These outside players are likely to exercise an increasing influence on the aerial platform market in the coming years. In Cramo’s case it is expanding the old Theisen business by adding products that Cramo favours in its other markets, including aerial platforms and accommodation. Boels, meanwhile, is famously aggressive and will be adding aerials to the Baurent locations it acquired late in 2012 (Baurent was focused more on earthmoving equipment.)

Germany’s home grown players are also investing in access, notably Zeppelin Rental, which now has a large fleet of low-level platforms in its fleet. Zeppelin has been making acquisitions in the industrial maintenance sector, a move that will help it expand the rental of aerials and other equipment to non-construction markets.
Zeppelin is also playing its part in growing the rental market overall, recently acquiring contractor Hochtief’s internal rental business, Streif Baulogistik.

Germany also has two of the largest access rental alliances in the whole of Europe, Partner Lift with a total access fleet of around 7000 units and System Lift, with 8000 lifts.

The level of optimism in the German market is indicated by the scale of investment planned by these organisations. In early 2014 Partner Lift announced that its members would invest a combined €53 million in new aerials in 2014, equating to around 1200 units.

Germany’s overall rental growth rate was around 2% in 2013, making it one of the best performers Europe-wide. That status is reflected in the generally positive results from German companies in the most recent ERA/IRN RentalTracker survey – for example, 60% of companies were planning to employ more staff in the second quarter of 2014, with 64% reporting year-on-year growth in quarterly business levels.

Surveys don’t always tell the full story, of course, but in the context of a still-recovering European market, positive results can only be good news.
APPENDIX
All construction sectors experienced a continuous increase.

Construction put in place in billion Euros based on Euroconstruct 2013

Residential construction
Non-residential construction
Total construction
Civil engineering

Germany GDP estimates based on Euroconstruct 2013
IPAF Powered Access Rental Market Report – Europe

COUNTRY REPORT

ITALY
Key Findings

- The Italian market is the least mature of all 10 European countries under study. When economic recovery starts, high market potential can be expected.

- The MEWP rental market is suffering from strong lack of demand. Rental revenue recorded a 7% decrease in 2013, primarily due to lower rental rates (-4%).

- Rental companies continued to de-fleet (-3%). However this defleeting did not allow for better average revenue per unit (-4%).
  - Rental companies sold-off older equipment, especially scissors which account for a large part of the Italian MEWP market.
  - Investment slowed down (-4%) and was focused on fleet renewals. Most companies do not consider expanding fleets before the market takes off again (possibly in 2015).

- Apart from rental rates, other operational indicators remained relatively stable:
  - Time utilisation remained at 60%.
  - Retention period is stable at 7 years and 6 months.
For a third consecutive year, the MEWP rental revenue decreased in 2013.

- Rental revenue value is at its lowest since 2008.
- Forecasts show market stagnation in 2014, and market recovery starting in 2015.
- Cross-hire in 2013 remained at levels similar to 2012. It is a "shock absorber" for rental companies looking at meeting customers’ demands, even when de-fleeting.
MEWP rental revenue represents 16.6% of the overall rental revenue in Italy.

- The Italian MEWP rental penetration rate is the second highest rate in the 10 European countries under study after Finland.

Source for Total Rental Turnover: ERA 2013 Report.
Companies de-fleeted again in 2013. Companies hope to maintain stable fleet size in 2014.

- Rental companies reduced fleet to adapt to low demand levels.

Note: included are powered access: all booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers
While scissors continue to be the main MEWP segment in Italy, rental companies sold off more scissors than other equipment types in 2013.

- No change in the fleet mix is expected in 2014.

<table>
<thead>
<tr>
<th>MEWP Fleet Mix by Equipment Type</th>
<th>2012</th>
<th>2013</th>
<th>2014f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booms</td>
<td>12053</td>
<td>11374</td>
<td>11385</td>
</tr>
<tr>
<td>Scissors</td>
<td>9299</td>
<td>9277</td>
<td>9286</td>
</tr>
<tr>
<td>Vehicle Mounted Platforms</td>
<td>1849</td>
<td>1782</td>
<td>1790</td>
</tr>
<tr>
<td>Others</td>
<td>1230</td>
<td>1228</td>
<td>1230</td>
</tr>
<tr>
<td><strong>Total Fleet</strong></td>
<td>24430</td>
<td>23662</td>
<td>23690</td>
</tr>
</tbody>
</table>

| Italy                           |       |       |       |

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

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

Please note that the volume of vehicle mounted platforms indicated above only concerns the share owned by rental companies owning self-propelled fleets.

% unit growth, e.g. Booms fleet increased by 0% from 2012 to 2013.
The Italian boom fleet is dominated by articulated booms.

- The proportion of articulated booms is the largest of all 10 European countries under study.

MEWP Booms Fleet Mix by Type - Italy - 2012

Total Booms Fleet: 9 299

- Articulated Booms (6 157) 66%
- Straight Booms (3 141) 34%

Source: Ducker Worldwide for IPAF

MEWP Booms Fleet Mix by Type - Italy - 2013

Total Booms Fleet: 9 277

- Articulated Booms (5 961) 64%
- Straight Booms (3 316) 36%

Source: Ducker Worldwide for IPAF
Italy – Power Sources

As in most other European countries, the main power source is internal combustion for booms and electric power for scissors.

- Rental companies owning Stage IIIB equipment are primarily renting them in major city areas, where regulations are more stringent.

![MEWP segmented by Power Sources - 2013](source: Ducker Worldwide for IPAF)
Average revenue per unit decreased by 4% in 2013, due to rental rate deterioration. Rental companies hope for stabilisation in 2014.

Note: included are powered access: all booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers
Construction accounts for more than half of MEWP rental revenues.

- After a significant increase in the proportion of non-construction applications in 2010, the split between construction and non-construction remained fairly stable.

**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.
After significant increase in 2012, the level of investments was slightly reduced in 2013.

- The large majority of investments are directed towards fleet renewals.

Investment in New MEWPs

Source: Ducker Worldwide for IPAF
After a surge in 2011, utilisation has been progressively decreasing and is at 60%.

- It is not expected to change over the short-term.

*Definition: Physical number of machines out on hire as % of total number in fleet at any given time.*
Average retention period is stable at 7 years and 6 months.

- Despite continuous market recession, rental companies maintained similar replacement rates for their equipment, in order to preserve machine quality and safety, and retain/attract customers.

*Definition: Period of time that a machine is kept in fleet = selling age if acquired new*
Rental rates decreased for the sixth consecutive year.

- With decreasing demand, rental companies had no choice but to reduce rental rates, in order to remain attractive against fierce competition.
The Italian market is still experiencing major troubles. Market players hope for slight recovery in 2015.

- 2014 is expected to be a year of stagnation and adjustment before construction recovery kicks-in, which should positively impact the MEWP rental market in 2015.

- Italian rental companies are trying to prepare market recovery by renewing their fleet as much as their financial situation allows them to.
  - They try as much as possible to meet customers’ specific needs, i.e. regarding safety and environmental concerns (Stage IIIB, emissions in city centres).
  - However, equipment return on investment has deteriorated, and rental companies are working with banks to renegotiate loans in order to be able to invest in new equipment.
IPAF Powered Access Rental Market Report – Italy

A PERSPECTIVE FROM THE EDITOR OF INTERNATIONAL RENTAL NEWS
A Perspective from the Editor of *International Rental News*

It is not surprising that so many of Italy’s many aerial platform manufacturers are expanding – or trying to expand – their export activities, such is the downbeat nature of today’s Italian economy and, by extension, its rental market.

There were several indicators of this difficult environment during 2013 and 2014: the Samoter show, which is normally a major European exhibition, took place as normal in May 2014, but only after some soul-searching by the key exhibitors and organiser and on a much-depleted scale. Participation by aerial platform suppliers was minimal.

In terms of equipment sales, data from the construction equipment segment show that sales of excavators in 2013 were down 20%, while road-building equipment sales were down a third. It was the sixth successive year of declining excavator sales, with volumes now just a fifth of what they were at the peak.

In the past six years the output of Italy’s construction market has fallen by around 30%, with the rental market in 2013 seeing a decline of about 4%, which is significant.

With this backdrop, Italian aerial platform suppliers have been trying to exploit new market opportunities, such as fitting solar panels. However, Nacanco, one of Italy’s largest access rental specialists, reported recently that this market – until recently growing at double digit rates – has now “collapsed” because of an ending of government incentives.
A Perspective from the Editor of *International Rental News*

The big two access renters in Italy, Venpa and Nacanco, have responded to the difficult conditions in various ways. As reported last year, Venpa entered into an alliance with three non-access rental companies to offer major customers a ‘one-stop-shop’ for a wide range of equipment. It seems that this effort has had some success, with the alliance, 4punto1, winning work on projects including the new Metro 5 line in Milan, a Hotel Marriott project on Sacca Sessoly Island in Venice and the Expo2015 site in Milan.

Nacanco, meanwhile, tried to focus on winning business with small and medium sized contractors with an ‘express’ offering, an initiative aimed at making it easy and quick for small customers to rent equipment.

Some of Italy’s smaller access rental companies continued to invest in their fleets, often buying truck mounted platforms that are less reliant on the construction sector for work. Examples included Antoniolli and Rentalift.

At the time of writing the outlook remains rather downbeat. Italian respondents to the ERA/IRN RentalTracker survey for the first quarter of 2014 were in the bottom two places for all the indices, including investment plans, utilisation rates, employment intentions and year-on-year growth. And ominously, they were joint bottom of the ‘optimism’ league table, with not a single Italian respondent anticipating business to be ‘much better’ in a year’s time.
IPAF Powered Access Rental Market Report – Italy

APPENDIX
Construction has reached its lowest point and should recover slowly in 2015.
IPAF Powered Access Rental Market Report – Europe

COUNTRY REPORT
THE NETHERLANDS
Key Findings

- The Dutch market is, similar to the Nordic markets, one of the most mature European markets.

- The Dutch market suffered over the last two years: rental revenue was down by 6% in 2012 and 8% in 2013.

- Market stabilisation is expected in 2014 and recovery could happen in 2015 with the construction sector taking off again.

- Due to deteriorating demand, rental companies de-fleeted massively (-6%) by getting rid of older scissors mainly.
  - Investments kept increasing for fleet renewals, but they will stabilise over the next two years.
  - Average retention period was maintained at 76 months.

- Rental rates went down (-2%) for the sixth year in a row, due to fierce competition and lack of demand.
  - Rental companies cannot envision continuous rate decrease, and hope for rate stabilisation in the next two years.
The Netherlands – Rental Market Value and Growth

The Dutch rental market hit its lowest point in 2013, with a total value of €176M. As forecast last year, a soft recovery will start in 2014.

- Construction is still down in the Netherlands, but should start recovering in the second half of 2014 and in 2015.

- Cross-hire continued to decreased slightly and is now back at 2009 / 2010 levels.
MEWP rental penetration rate was affected slightly by market deterioration in 2013. It now represents approx. 22% of the overall Dutch rental market.

- The Dutch MEWP rental penetration rate remains the highest of the 10 European countries under study.
- It will remain stable over the next two years.

Source for Total Rental Turnover: ERA 2013 Report.
Due to decreasing market demand, rental companies de-fleeted massively in 2013.

- The Dutch fleet size reached its lowest level in 2013.
- It is expected that the fleet starts expanding again in 2014.

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

Rental fleets massively reduced their scissor fleets.

- Rental companies sold off their oldest machines, typically scissors, but maintained the boom fleet, in order to keep a full range of equipment on offer.
- All MEWP categories should benefit from slight fleet expansion in 2014.

### MEWP Fleet Mix by Equipment Type

<table>
<thead>
<tr>
<th>Year</th>
<th>Booms</th>
<th>Scissors</th>
<th>Vehicle Mounted Platforms</th>
<th>Others</th>
<th>Total Fleet</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>18,869</td>
<td>1,047</td>
<td>6,348</td>
<td>1,0553</td>
<td>18,307</td>
</tr>
<tr>
<td>2013</td>
<td>17,737</td>
<td>1,064</td>
<td>6,395</td>
<td>9,319</td>
<td>20,545</td>
</tr>
<tr>
<td>2014</td>
<td>18,869</td>
<td>1,088</td>
<td>6,633</td>
<td>9,605</td>
<td>26,195</td>
</tr>
</tbody>
</table>

Note: included are powered access: 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 2012 to 2013.

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

Please note that the volume of vehicle mounted platforms indicated above only concerns the share owned by rental companies owning self-propelled fleets.
The Netherlands – Market Size in Units

Straight booms represent the majority of the Dutch boom fleet.

- Rental companies expect no further increase in the proportion of straight booms in the coming years.

**MEWP Booms Fleet Mix by Type - The Netherlands - 2012**

- Total Booms Fleet: 6,348
- Articulated Booms: 2,981 (53%)
- Straight Booms: 3,367 (47%)

**MEWP Booms Fleet Mix by Type - The Netherlands - 2013**

- Total Booms Fleet: 6,395
- Articulated Booms: 2,675 (58%)
- Straight Booms: 3,720 (42%)

Source: Ducker Worldwide for IPAF
Similar to the majority of European countries, booms are mostly diesel whereas scissors are electric.

- The share of Stage IIIB equipment remained stable. Slightly less than 25% of the fleet is Stage IIIB compliant.

![MEWP segmented by Power Sources - 2013](image)

Source: Ducker Worldwide for IPAF
The Netherlands – Revenue per Unit

As forecast in last year’s report, the average revenue per unit deteriorated again in 2013, though at a slower pace than in 2012.

- Fleet size reduction did not compensate for the reduction of both rental rates and utilisation levels.
- Similar trends should be sustained in 2014.

Note: included are powered access: all booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers
The share of revenue coming from construction and non-construction activities remained stable in 2013. Construction holds a slight majority.

**The Netherlands – Applications**

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.
In 2013, investment growth slowed down somewhat. The level of investment should remain stable in the next two years.

- Investments in 2013 were primarily driven towards fleet replacement. Decreasing demand did not allow rental companies to expand fleets.
Despite de-fleeting, rental companies were unable to maintain utilisation rates in 2013.

- Many construction companies stopped their activity for prolonged periods (especially in winter times) due to a lack of demand, which drove MEWP utilisation down.

**The Netherlands – Utilisation Rates**

**Avg Time Utilisation**

<table>
<thead>
<tr>
<th>Year</th>
<th>Utilisation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>73%</td>
</tr>
<tr>
<td>2009</td>
<td>65%</td>
</tr>
<tr>
<td>2010</td>
<td>69%</td>
</tr>
<tr>
<td>2011</td>
<td>73%</td>
</tr>
<tr>
<td>2012</td>
<td>70%</td>
</tr>
<tr>
<td>2013</td>
<td>65%</td>
</tr>
<tr>
<td>2014</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.*
After a significant decrease in 2012, MEWP retention period was maintained at 76 months.

- Average retention period should remain relatively stable in the coming years.

6.4 = 6 years and 4 months

*Definition: Period of time that a machine is kept in fleet = selling age if acquired new*
As announced last year, further rate decline occurred in 2013. Stabilisation is expected in 2014.

- Fierce competition and lack of demand forced rental companies to lower rates.
The Dutch market is expected to continue to suffer from the weak construction sector. A quick recovery remains unlikely.

- Possible drivers for market recovery include the improvement of the construction sector, which should not happen before 2015 at the earliest.

- In parallel, growing safety concerns are expected to positively influence the use of MEWPs instead of ladders and scaffolding.

- Rental companies try to resist these damaged market conditions by maintaining an attractive offer, including:
  - Competitive prices,
  - Mixed fleet / full equipment range,
  - Renewed equipment.
A PERSPECTIVE FROM THE EDITOR OF INTERNATIONAL RENTAL NEWS
The Netherlands is home to two of Europe’s most expansive and acquisitive rental businesses - Boels Rental and Riwal - but 2013 would have to be described as a relatively quiet year in their domestic markets.

This reflects an overall flat year in the country’s rental market – the ERA was forecasting just 0.2% growth in the Netherlands rental market in 2013.

Riwal may well have added a fourth depot in its home market, but the action tended to be elsewhere. It did manage the acquisition of Saren’s access fleet in neighbouring Belgium, as well as a 30% increase in CapEx overall as a group, but the growth opportunities were in other areas, whether Brazil, India, France or the UK.

Boels, meanwhile, while continuing to invest in its fleet – including a very big order for JCB telehandlers – seemed to be taking a breather following the many acquisitions it had made in previous years, including that of Baurent in Germany.
Other developments including an ending of the ProDelta-JLG re-rental business Ri-Rent. ProDelta is an owner of Riwal, so perhaps it was a reflection of the growing maturity of Riwal’s European business that led ProDelta to curtail the re-rental business, serving as it did many of Riwal’s competitors. For JLG, it could be that the link with Riwal, even if indirect, was an unnecessary complication for its wider sales business in Europe.

Meanwhile, Peinemann divested some of its forklift rental and distribution activities to focus on its crane and access businesses.

At the start of 2014 there were some signs that business confidence was improving, with half of the Netherlands companies in the ERA/IRN RentalTracker survey for the first quarter reporting improving utilisation and a respectable 40% expecting to recruit more staff in the second quarter of this year.

Investment goes on even in flat years, with Colle Rental, for example, making the notable addition of a 90 m Palfinger Platform to its European re-rental fleet.
APPENDIX
No growth is expected in 2014. All sectors should increase in 2015.
IPAF Powered Access Rental Market Report – Europe

COUNTRY REPORT
NORDIC REGION
Nordic Region

Key Findings

- Denmark, Sweden, Finland and Norway have the highest MEWP maturity level among the European countries under study.
  - Norway experienced the strongest growth in 2013 (+7%), with highly positive outlooks for the near future (+5% per year).
  - In Denmark and Sweden revenue kept stagnating at similar levels compared with 2012 (respectively, -1% and +1%).
  - Finland suffered more (-5%), primarily due to the deteriorating construction market.

- All countries increased fleet size moderately (1-2%), except Norway which expanded fleet significantly (+6%).
  - As in most other European countries, scissors account for the major part of the fleet.

- After a few years of significant increase in investments (+26% in 2012 and +56% in 2011), and as forecasted last year, 2013 investments decreased slightly (-3%) as rental companies remained cautious.

- Apart from average utilisation rates which remained stable at 59%, other indicators fluctuated:
  - Retention period was increased to 109 months (approx. 9 years).
  - Average rental rates dropped by 3%.
The overall rental revenue growth in the Nordic countries masks a variety of situations: rental revenue growth worsened in Finland and Denmark but improved in Norway and Sweden.

- Strongest revenue growth occurred in Norway (+7%), while in Sweden revenue grew by 1%. Finland (-7%) and Denmark (-1%) faced a more challenging market in 2013.
- Forecasts are positive for all four countries with positive growth expected in 2014.
- The level of cross-hire should continue to decrease slightly as companies intend to expand their own fleets.
MEWP average rental penetration level is low in the Nordic Region and following a stable trend.

- However, major variations exist between countries:
  - Finland is leading with approx. 18%, while in Norway MEWP penetration rate is approx. 1%.
  - MEWP rental penetration is approx. 16% in Denmark and reaches almost 7% in Sweden.

Source for Total Rental Turnover: ERA 2013 Report.
Nordic Region – Market Size in Units

Total MEWP fleet size increased slightly in 2013 for all countries in the Nordic region.

- Norway experienced a more sustained fleet expansion (+6%), while other Nordic countries only slightly increased fleet size (between 1 and 2%).

Note: included are powered access: all booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers
Fleet mix remains dominated by a large majority of scissors.

- All fleet segments are expected to grow at a similar pace in 2014.

Note: included are powered access: all booms, scissors 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 2012 to 2013.

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

Please note that the volume of vehicle mounted platforms indicated above only concerns the share owned by rental companies owning self-propelled fleets.
Nordic Region – Market Size in Units

The boom fleet mix did not change in 2013: straight booms clearly dominate.

- Danish rental companies expect large tertiary construction projects to be carried out in 2014 (hospitals), which should drive the demand for straight booms.

![Diagram showing MEWP Booms Fleet Mix by Type - Nordic Region - 2012 and 2013](source: Ducker Worldwide for IPAF)
As in most European countries, booms remain dominated by internal combustion power source, while scissors are more driven towards electric.

- Rental companies reported a very low demand for hybrid or bi-energy MEWPs. However, they are ready to start purchasing such equipment if demand arises.
- Although some rental companies are not very familiar with the Stage IIIB regulations, most report that more than 1/3 of their fleet is compliant.

### MEWP segmented by Power Sources - 2013

<table>
<thead>
<tr>
<th>Power Source</th>
<th>Booms</th>
<th>Scissors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Combustion (I/C)</td>
<td>75%</td>
<td>1%</td>
</tr>
<tr>
<td>Electric</td>
<td>22%</td>
<td>78%</td>
</tr>
<tr>
<td>Others (e.g. LPG, propane, hybrid, bi-energy)</td>
<td>2%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Source: Ducker Worldwide for IPAF
Rental rates deteriorated while fleet expanded in 2013 and as such the average revenue per unit decreased by 2%.

- Average revenue per unit is expected to slightly improve in 2014.

Note: included are powered access: all booms, scissor lifts and vertical masts
Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers
Nordic countries are among the European countries with the highest share of revenue generated from construction applications.

- The share of revenue directed to construction applications remained stable in 2013.

### 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>
<tr>
<td>2012</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>2013</td>
<td>71%</td>
<td>29%</td>
</tr>
</tbody>
</table>

*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.
Nordic Region – Investments

Total investment decreased slightly in 2013.

- After many years of strong investment increases, the short-term trend suggests stabilisation.
- Investments were reduced in all countries, except Denmark (+12%). Strongest reduction occurred in Sweden (-10%), followed by Finland (-8%), while Norway only slightly reduced investments (-2%).
- More equipment purchases are expected in 2015.
Nordic Region – Utilisation Rates

Average time utilisation is slowly but surely increasing.

- Rental companies in all four countries anticipate a continuous improvement of utilisation time driven by higher demand, especially in Norway and Sweden.

![Avg Time Utilisation](image)

*Definition: Physical number of machines out on hire as % of total number in fleet at any given time.*
MEWP average retention period was extended by 6 months in 2013.

- All countries of the Nordic region reported an increased retention period.
- Average retention period is expected to remain stable in 2014.

9,1 = 9 years and 1 month

Definition: Period of time that a machine is kept in fleet = selling age if acquired new
Rental companies reduced rental rates quite significantly in 2013.

- All countries, except Norway, were obliged to decrease rental rates, due to intense competition. Finland and Denmark experienced a 4% rate deterioration, while Sweden decreased rates by 3%.
- On the contrary, in Norway, where demand was driven up by non-construction applications, rental companies were able to raise rental rates slightly (+1%).

![Graph showing Stated Growth in MEWP Rental Rates in the Nordic Region from 2008 to 2015. The graph indicates a range of percentage changes, including a peak of +5% and a low of -16%.]
Nordic Region – Future Trends

Nordic countries are the most mature MEWP markets in Europe, with the highest number of units per inhabitant.

- The 2014 to 2015 outlook is positive for all Nordic countries. The MEWP rental market is expected to continue improving, driven by further construction upturn.

- However, rental companies will remain cautious in investments and rates increases in the next few years, due to tough market competition.

- Safety is already a major concern in the market and it will continue to be an important topic across the Region.
  - MEWPs are expected to replace ladders and scaffolding more than they currently do.
IPAF Powered Access Rental Market Report – Nordic Region

A PERSPECTIVE FROM THE EDITOR OF INTERNATIONAL RENTAL NEWS
Grouping Denmark, Finland, Sweden and Norway under the single ‘Nordic’ banner no doubt irritates companies in the region, given that they are different markets with their own market dynamics.

It has been clear for some time that the four have distinct rental industries, and often performing out of sync, with Norway in recent years being Europe’s strongest performer – double digit rental growth not being exceptional – and Denmark occupying the less attractive end of the growth spectrum.

In 2013 all four countries performed better than the European average in terms of rental market growth, with Norway still topping the list at an estimated 4.4% growth, followed by Sweden at 2.4%, Denmark with 1.8% and Finland bringing up the rear with 1.1%.

In fact, construction market analyst was estimating that construction markets actually declined in 2013 in Finland and Sweden, increasing in Denmark and Norway. The same body is forecasting growth in all four markets this year, benefitting rental, although a slowdown in Norway in the final quarter of 2013 did not bode well.
A Perspective from the Editor of *International Rental News*

The year saw some very significant deals in the rental market, and in particular the aerial platform sector. Most notable was Loxam’s acquisition of Dansk Lift, giving it a business with revenues of around €17 million in 2012 and with six depots in Denmark, four in Norway, and one branch in Malmö, Sweden. It signalled not only Loxam’s intent to be an operator in the Nordic rental market, but the importance of aerial platforms in doing so.

One interesting development was Ramirent’s increasing use of outsourcing – during the year it outsourced the maintenance of its aerial platform fleet in Finland to an outside provider. What’s more, it shifted its Finnish scaffolding workforce to an employment agency. These moves could well be a sign of things to come among Europe’s bigger rental players.

The action isn’t always with Cramo and Ramirent. Swedish rental company Stavdal AB made its own acquisition in 2013, acquiring Rentex AB, a Malmo-based rental company with annual revenues of around SEK 67 million (€7.7 million). Stavdal is now a €45 million rental business in Sweden.

And there were also some significant equipment orders during 2013 and early 2014. Stavdal placed a big order with Italy’s Braviisol for vertical mast, low-level platforms, and in April 2014 Denmark’s BMS ordered five new trucks including the 103 m working height WT1000 from Palfinger Platforms. It is emblematic of Europe’s ‘joined-up’ rental market for large machines that BMS says the 103 m unit will be rented all over the continent.
IPAF Powered Access Rental Market Report – Nordic Region

APPENDIX
Construction is increasing again in most of the Nordic Region. 1/2

Construction put in place in billion Euros based on Euroconstruct 2013

GDP estimates based on Euroconstruct 2013

Source: Ducker Worldwide for IPAF
Construction is increasing again in most of the Nordic Region. 2/2

Construction put in place in billion Euros based on Euroconstruct 2013

GDP estimates based on Euroconstruct 2013
IPAF Powered Access Rental Market Report – Europe

COUNTRY REPORT

SPAIN
Key Findings

- The Spanish market is among the least mature of the 10 European countries under study as the number of MEWP units per inhabitant is the lowest (along with Italy).

- 2013 was another tough year for Spanish MEWP rental companies. Rental revenue went down by 9% and at best market stagnation is expected in 2014.

- Rental companies are still in the process of de-fleeting (-4%), in order to adapt their offer to decreasing demand.
  - As in other European countries, scissors are the largest category of equipment.
  - The de-fleeting effort did not allow rental companies to maintain utilisation rates (-3%).

- Rental companies cannot invest in new equipment (-2%) and tend to increase retention period (+ 5 months).
As forecasted in last year’s report, the Spanish MEWP rental market hit its lowest point in 2013 (€87M). Recovery is not expected before 2015.

- MEWP rental revenue went down for the sixth consecutive year.
- The market is expected to stabilise in 2014, and then start recover in 2015.
- Similar to 2012, the level of cross-hire remained very low.
Spain – MEWP Rental Penetration

MEWP rental penetration also hit its lowest point in 2013, at 6.7%.

- Penetration rate should grow again over the next two years.
- MEWP rental market recovery is aligned with total rental market recovery, expected to happen in 2015.

MEWP Rental Penetration Rate

- 2010: 8.09%
- 2011: 7.31%
- 2012: 6.67%
- 2013: 6.65%
- 2014 f: 7.11%
- 2015 f: 7.32%

Spain

Total Rental Turnover

Source for Total Rental Turnover: ERA 2013 Report.
Rental companies kept de-fleeting to adapt to a continuous decreasing demand.

- Fleet size will decline again in 2014. Rental companies remain cautious and wait for significant market improvement before investing in new equipment.

Note: included are powered access: all booms, scissor lifts and vertical masts Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers
All equipment segments were reduced, except scissors, which are in the most demand by customers.

- Scissors represent the largest fleet segment, as in most of the European countries under study.

Spain – Market Size in Units

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

MEWP Fleet Mix by Equipment Type

2012

Booms
9,014
-14%
Scissors
691
-13%
Vehicle Mounted Platforms
10,383
-0%
Others
992
-8%
Total Fleet
20,680

2013

Booms
9,014
Scissors
19,774
-12%
Vehicle Mounted Platforms
10,359
-11%
Others
8308
-2%
Total Fleet
20,174

2014 f

Booms
19,181
Scissors
524
Vehicle Mounted Platforms
10,174
Others
8,026
Total Fleet
20,201

% unit growth, e.g. Booms fleet decreased by 8% from 2012 to 2013.

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

Please note that the volume of vehicle mounted platforms indicated above only concerns the share owned by rental companies owning self-propelled fleets.
Spain – Market Size in Units

Articulated booms represent approx. 60% of total boom fleet.

- Rental companies sold off more straight booms than articulated in 2013.
- Articulated booms are more popular due to their higher versatility.

### MEWP Booms Fleet Mix by Type - Spain - 2012

- **Total Booms Fleet: 9 014**
  - **Articulated Booms**: 4,851 (46%)
  - **Straight Booms**: 4,163 (54%)

### MEWP Booms Fleet Mix by Type - Spain - 2013

- **Total Booms Fleet: 8 308**
  - **Articulated Booms**: 4,747 (57%)
  - **Straight Booms**: 3,560 (43%)

Source: Ducker Worldwide for IPAF
Booms are mainly using internal combustion power source; while scissors are primarily electric.

- Rental companies anticipate that they will buy more electric machines if and when they start to replace their older equipment. The proportion of Stage IIIIB machines is reported to be extremely low as companies have limited their new equipment purchases since 2011.
Spain – Revenue per Unit

As anticipated in last year’s report, the average revenue per unit decreased by 5% in 2013, also hitting its lowest point.

☑ Slight uptake could occur in 2014: utilisation should improve while fleet size should be reduced again.

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

Source: Ducker Worldwide for IPAF
Spain – Applications

The share of construction applications among total MEWP rental revenue is the lowest of the 10 European countries under study.

- Construction applications represent only 1/3 of total MEWP rental revenue. With the drastic drop of the construction market, rental companies were forced to diversify.

![MEWP Applications](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.
Investments are low and directed towards only the most urgent replacement needs.

- The level of investments should start increasing again in 2014.
Average time utilisation continued to decrease in 2013, despite de-fleeting. It is the lowest of the European countries under study.

Utilisation rates should get back to better levels in 2014.

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

Retention period was extended by 5 months in 2013.

- Rental companies are forced to maintain equipment as long as possible.
- Retention period is expected to remain stable at 7 years in 2014.

**Avg Retention Period (Years)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Spain Avg 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>6.5</td>
</tr>
<tr>
<td>2013</td>
<td>7.0</td>
</tr>
<tr>
<td>2014</td>
<td>7.0</td>
</tr>
</tbody>
</table>

7,0 = 7 years and 0 month

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

Rental rates were also pushed down, for the sixth consecutive year.

After many years of continuous rates decrease, rental companies believe they have no other choice but to keep them stable for the future.

<table>
<thead>
<tr>
<th>Year</th>
<th>Stated Growth in MEWP Rental Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>-8%</td>
</tr>
<tr>
<td>2009</td>
<td>-12%</td>
</tr>
<tr>
<td>2010</td>
<td>-5%</td>
</tr>
<tr>
<td>2011</td>
<td>-5%</td>
</tr>
<tr>
<td>2012</td>
<td>-5%</td>
</tr>
<tr>
<td>2013</td>
<td>-2%</td>
</tr>
<tr>
<td>2014 f</td>
<td>0%</td>
</tr>
<tr>
<td>2015 f</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Ducker Worldwide for IPAF
Spanish rental companies know they have to fight to survive for one more year but hope that the first market recovery signs will be visible sooner than later.

- Rental companies are struggling to maintain their business, with extremely low rental rates and no profits. Many companies ceased operation in 2013.

- However, the last quarter of 2013 last quarter proved better than previous quarters for several rental companies, and market players expect market revenue to stop decreasing in 2014. That being said, best-case scenario consists in market stagnation: no growth is expected in 2014.
  - Fleet size will decrease even more, to approx 19,000 units.

- The construction market is unlikely to recover before 2015, and the Spanish MEWP rental market will reflect this fact.
IPAF Powered Access Rental Market Report – Spain

A PERSPECTIVE FROM THE EDITOR OF INTERNATIONAL RENTAL NEWS
Is the worst over for Spain? There are some who are at least willing to make that case, and there are statistics to back it up.

While 2013 saw a continuation of the year-on-year falls in construction activity that Spain has been experiencing for five years or more, January 2014 produced a 17.6% rise in construction output compared to the same month in 2013. One month does not make a recovery, but it is a positive sign.

Likewise, the Smopyc exhibition in early April 2014 found some companies forecasting a slight recovery in equipment sales this year, albeit from very low numbers. Bobcat, for example, said that sales could increase by 15% fueled by investment by contractors and rental companies.

The recent successful refinancing of one of Spain’s largest contractors, FCC, which is active globally, is another positive sign that the contracting sector is entering a new phase in the recovery. FCC called the refinancing a major milestone in its efforts to turn around the business.
There are also the first signs of an upturn in confidence among rental companies in Spain. The results of the ERA/IRN RentalTracker survey for the first quarter of 2014 saw a clear majority of Spanish rental companies reporting improving year-on-year utilisation rates and business activity levels - perhaps a sign that years of de-fleeting have finally led to a better balance between supply and demand. Spanish renters – based on a relatively small sample size – were also among the most optimistic looking 12 months ahead.

Spain’s rental market retains its two big players – GAM and HUNE – although talks of a merger between the two seem to have abated. GAM was at least reducing its losses during 2013, if not quite getting into profitable territory. The company’s strategy remains internationalisation, with its activities in South America still a major focus, and boosted last year by a new joint venture in Peru.

There are also signs that it is possible to grow a rental business in Spain. Germans Homs 1852, established four years ago by Vincent Homs, is a general rental company that now has four branches in the Barcelona area and has a strategy of providing a good, local service to its clients, as well as a true eCommerce capability.

This desire to create a professional rental business in the midst of economic carnage is being reinforced by Spain’s rental associations, including aerial platform body ANAPAT, which together recently announced an initiative to create a voluntary certification scheme for rental companies. If Spain’s rental industry is to grow again, it hopes to do so in a professional way.
IPAF Powered Access Rental Market Report – Spain

APPENDIX
Spain - Construction Statistics

Construction is still declining at a strong pace. Stabilisation is likely to happen in 2015.

Construction put in place in billion Euros based on Euroconstruct 2013

Spain GDP estimates based on Euroconstruct 2013
IPAF Powered Access Rental Market Report – Europe

COUNTRY REPORT
UNITED KINGDOM
Key Findings

- The UK MEWP rental market has continuously improved since 2010. In 2013, market growth reached 3%. This rate is expected to double in the next two years (+6% annual growth), maintaining a stable penetration rate among the overall rental market (close to 8%).

- Fleet expansion grew at the same pace as in 2012 (+4%) and total fleet size has now reached pre-recession levels.
  - The UK MEWP rental market is relatively mature, however less mature than the Nordic countries, and the Netherlands. There is still room for growth and total fleet has not reached its maximum size yet.

- After investing less in 2012, rental companies significantly raised their investment in 2013 (+22%) to both expanding and renewing fleets. Granted, they invested a lot in low level access, however they also acquired bigger booms and scissors.
Key Findings

- The UK fleet now exceeds 51,000 units (excluding low-level access equipment below 3m high).
  - The fleet mix remains unchanged with more than half of the fleet being derived from scissors (approximately 60%). Booms account for 35% while truck mounts and other equipment represent less than 10% of total fleet size.
  - Both boom and scissor segments are expected to grow in similar proportions.
  - Retention period decreased by more than one year (now at 100 months) due to fleet renewal.

- Other indicators remained stable and aligned with previous years.
  - Utilisation rate is maintained at 65%.
  - Rental rates did not change in 2013. Rental companies do not expect to be able to raise them before 2015.
The market grew in 2013 at a similar pace as in 2012. Significant growth is expected over the next two years.

The UK MEWP rental market is expected to exceed 2008 revenue levels in 2014.

Cross-hire slightly decreased in 2013. Rental companies do not expect to increase cross-hire in the future.

Total revenue in 2014 is expected to be approximately £417M.
UK – MEWP Rental Penetration

The MEWP rental market represented 8% of the total UK rental market in 2013. (source ERA)

- MEWP rental penetration of the total rental market has remained relatively stable over time. It is expected to follow the same trend over the next two years.

![MEWP Rental Penetration Rate](chart)

**Source for Total Rental Turnover:** ERA 2013 Report.
The UK fleet expanded in 2013 and has now reached pre-recession levels. It is expected to maintain similar growth in 2014.

- The UK fleet has the highest share of Stage IIIB compliance among the countries surveyed.

Note: included are powered access: all booms, scissor lifts and vertical masts. Excluded: low-level access equipment (<3m high), telescopic material handlers, forklifts, cranes, mast climbers.
Scissors represent the largest share of the UK MEWP fleet. Both scissors and booms are growing at a similar pace.

Scissors represent 57% of the total MEWP fleet. Rental companies believe that scissors offer a better return on investment than booms.
Articulated booms account for the large majority of the boom fleet in the UK.

- Articulated booms are deemed more versatile. Although the proportion of straight booms increased slightly in 2013, no significant change is expected in the next few years.

**MEWP Booms Fleet Mix by Type - UK - 2012**

- Total Booms Fleet: 16,775
- 89% Articulated Booms (14,879)
- 11% Straight Booms (1,896)

**MEWP Booms Fleet Mix by Type - UK - 2013**

- Total Booms Fleet: 17,654
- 85% Articulated Booms (15,058)
- 15% Straight Booms (2,596)
The UK is the country with the highest share of hybrid and propane powered, among European countries surveyed.

- There are significantly more diesel than electric booms. In contrast the trend towards more electric scissors was confirmed in 2013.
UK – Revenue per Unit

As forecast last year, the average revenue per unit went down by 1% in 2013 as rental rates remained stable while fleet expanded.

- Despite several years of decrease, the average revenue per unit remains higher than in 2009.
- In 2014, the average revenue per unit is expected to grow again and reach pre-recession levels.

MEWP Avg Revenue per Unit & Avg Revenue per Unit Growth

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

Exchange rate £1 = 1.1780€
The split between construction and non-construction applications has not changed significantly since 2011.

- Construction applications are slightly more important than non-construction.

**UK – Applications**

**MEWP Applications**

<table>
<thead>
<tr>
<th>Year</th>
<th>Construction</th>
<th>Non-Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>2010</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>2011</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>2012</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>2013</td>
<td>47%</td>
<td>53%</td>
</tr>
</tbody>
</table>

*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.
UK – Investments

After limiting investment in 2012, rental companies increased investment in 2013.

- Investment in 2013 was directed towards both fleet renewal and expansion.
- Fleet expansion targeted all heights of booms and scissors.
- Investments are expected to increase at a much lower rate in 2014 and may even reduce slightly in 2015.

![Graph showing investment in New MEWPs from 2008 to 2015](image-url)
UK – Utilisation Rates

Time utilisation rates remained stable over the last four years, at 65%.

- Rental companies reacted to the increasing demand by expanding fleets, which maintained utilisation rates at similar levels as previous years.

![Avg Time Utilisation Chart](chart.png)

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

The average retention period diminished by more than one year in 2013 compared to 2012.

- Rental companies are keen to maintain an attractive MEWP fleet in order to differentiate themselves from other companies. Accordingly in 2013, they renewed equipment more frequently than before.


- Diagram with data showing the average retention period from 2009 to 2014 for the UK.

8,4 = 8 years and 4 months

Definition: Period of time that a machine is kept in fleet = selling age if acquired new
UK rental companies maintained stable rates in 2013 due to fierce market competition.

- Rates have not yet reached pre-recession levels. Equipment purchase prices have been raised in the last few years, reducing rental companies’ profitability.
- Rental companies do not expect to increase rental rates before 2015.

Stated Growth in MEWP Rental Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>-17%</td>
</tr>
<tr>
<td>2009</td>
<td>+1%</td>
</tr>
<tr>
<td>2010</td>
<td>-3%</td>
</tr>
<tr>
<td>2011</td>
<td>+3%</td>
</tr>
<tr>
<td>2012</td>
<td>0%</td>
</tr>
<tr>
<td>2013</td>
<td>0%</td>
</tr>
<tr>
<td>2014</td>
<td>+0%</td>
</tr>
<tr>
<td>2015</td>
<td>+4%</td>
</tr>
</tbody>
</table>

Source: Ducker Worldwide for IPAF
UK – Future Trends

Market forecasts are rather optimistic. This is driven by environmental and safety concerns.

- Rental companies are increasingly optimistic primarily due to a recovering construction sector. They expect higher rental revenues and profitability in 2015 at the latest.

- Environmental issues such as noise and biodegradable fuels will grow, driving the use of hybrid and propane equipment. Also the share of Stage IIIB equipment will remain high.

- Overall safety procedures should be reinforced, with the tightening up of loading / unloading procedures and the increasing emphasis on better training, conducted by more qualified people on all types of machines.

- One major safety trend mentioned is the development of secondary guarding devices, starting with booms and then with scissors.

- Rental companies have already started to install the devices on some equipment, for a cost of around £700 per machine.
IPAF Powered Access Rental Market Report – UK

A PERSPECTIVE FROM THE EDITOR OF INTERNATIONAL RENTAL NEWS
At the time of writing - April 2014 – the UK was in the enviable position of being one of the most positive rental markets in an otherwise uncertain Europe.

That optimism, based on the beginnings of a wider UK economic recovery, was already building through 2013, and made evident by a clear increase in capital investment by rental companies and a renewed appetite for acquisitions, depot openings and other initiatives.

It was emblematic of the year that in late December Ashtead Group joined the select group of FTSE 100 companies – the top 100 companies by market value traded on the London stock exchange. Ashtead is, of course, now dominated by its US Sunbelt Rentals business, but its UK operation A-Plant remains a historic name and was itself showing definite signs of improvements in 2013.

On the acquisitions side the most notable was HSS’ deal to buy UK Platforms from Haulotte. HSS is on the acquisitions trail – also making big deals in the power rental sector – and the addition of UK Platforms made it, at a single stroke, a major UK access player. HSS has always had access equipment, but exclusively small scissors and vertical mast machines.
The better outlook in the market was reflected also in further investment, with Nationwide Platforms spending around £30 million on new fleet during the year, including a fleet of around 1000 small Pecolifts – highlighting the continued interest in low level access in the UK.

Other signs of life in the market included investment by Horizon Platforms – the Wakefield-based independent that now has former Lavendon CEO Kevin Appleton as its chairman – and a fourth depot opening in the country by Riwal. The sector also got a new player, with demolition rental firm Sandhurst creating a new access division.

Hewden launched its ‘core fleet’ initiative, including access machines – promising next day delivery on key products – and said it would be investing around £180 million over the 2014-2016 period in its fleet. A-Plant, meanwhile, launched its city-centre ‘Express’ store concept.

The truck mounted sector, too, saw significant spending, with Outreach Access in Scotland buying Palfinger Platforms machines and Facelift investing heavily in Ascendant models.

Any round-up of UK development cannot ignore the awful news of the fatality in 2013 involving a Genie Z-135/70 boom owned by Kimberly Access. At the time of writing the industry was still waiting for the HSE report on the accident, with the focus likely to be on the calibration of the machine. In an otherwise positive year, that accident and the intense and necessary debate that it generated cast an unavoidable shadow.
IPAF Powered Access Rental Market Report – UK

APPENDIX
Exchange rate:

- The currency exchange rate used for the UK is shown below. The same rate has been used throughout the time period (2013) 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>£ 1,1780</td>
</tr>
</tbody>
</table>
The contraction in the non-residential field is compensated by growth in other construction sectors.
This concludes our report. Thank you.

This report was prepared by Ducker Research SAS. Opinions and estimates constitute judgment as of the date of this material and are subject to change without notice. Any interpretations derived from these findings are the sole responsibility of the client. Reproduction without the explicit consent of Ducker Research SAS is strictly prohibited.

For more information regarding our strategic services, expertise and to learn how Ducker Worldwide can help you, please contact one of our team members at +33 1 46 99 59 60 or visit our website at www.ducker.com

Visit www.ipaf.org/reports to order additional copies of this report. Also available is IPAF’s report on the US Powered Access Market.

www.ipaf.org
info@ipaf.org
Switzerland: +41 61 227 9000
US: +1 518 280 2486