European Leaf Spring Market By Vehicle Type, Material and Country - Trends and Forecast to 2021

Description: The leaf spring suspension system is one of the oldest suspension technologies used in automobiles. Leaf springs have been frequently featured in automobiles since the 1970s. Leaf spring suspension is considered the simplest and subsequently the most suitable suspension technology for commercial vehicles. The emergence of coil spring independent suspension has led to a decline in the demand for leaf spring suspension in the passenger car segment. The European automotive industry is one of the largest and oldest industries. Germany is the fourth-largest vehicle producer in the world, after China, the U.S., and Japan. Commercial vehicle production in Europe increased by 9% in 2015 compared to 2014. This rise in production will likely drive the demand for leaf springs in the region.

Additionally, the emission standards in Europe are especially stringent; automotive OEMs as well as leaf spring manufacturers in the region have conducted extensive R&D to enable their products to comply with these standards. Some leaf spring manufacturers have developed composite leaf springs that are lighter and offer structural strength equal to that of steel.

Based on the scope of the study, the European leaf spring market has been segmented by vehicle type (LCVs and HCVs), by material (steel and glass fiber reinforced plastic) and by country (Germany, U.K., France, Spain, Italy, and Turkey).

The European leaf spring market is estimated to be USD 394.6 million in 2016, and is projected to reach USD 471.7 million by 2021, growing at a CAGR of 3.63% from 2016 to 2021. The OEM demand for leaf springs is directly linked to commercial vehicle production, and increased production has spurred the demand for leaf springs in the region. Commercial vehicle production increased by 9% in 2015 compared to the previous year. This indicates promising growth potential, as several countries in the region are still recovering from the economic crisis of 2008. Germany is estimated to be the largest market for leaf springs in the region, followed by Turkey and Italy.

Higher production is estimated to be the main driver for the growth of leaf spring market in LCV segment. The leaf spring market in LCV segment is projected to grow at the nominal CAGR of 3.07% during the review period. Furthermore, growing environmental and health concerns have compelled automakers to decrease vehicle weight in order to reduce harmful emissions and increase fuel economy. Substantial research has therefore been conducted to decrease the weight of the leaf spring suspension system. Newer materials, such as GFRP, which are lighter and perform as well as steel, have been developed for leaf springs. However, their application is limited, owing to high cost.

LCVs are estimated to hold the largest share in the leaf spring market in terms of volume, owing to their increased production in the region. LCV production in Europe grew by 9.43% in 2015 compared to 2014. Similarly, HCV production increased by 2% in 2015. Several LCV manufacturers have continued to use leaf spring suspension in their models; however, the trend is declining. Leaf spring suspension is best suited for HCVs, as it distributes the vehicle weight equally across the chassis of the vehicle. Furthermore, the load-carrying capacity of the leaf spring is higher than any other type of suspension system. These factors make the leaf spring the preferred suspension system for HCVs. The HCV segment of the European leaf spring market is projected to grow at a CAGR of 4.13% from 2016 to 2021.

Steel leaf springs are estimated to dominate the European leaf spring market during the forecast period. As per the product mapping, till 2015, both, LCVs and HCVs were predominantly equipped with steel leaf springs, with GFRP leaf springs having a limited presence (equipped from the OE's end). However, there are multiple aftermarket options for GFRP leaf springs; for instance, the Mercedes Sprinter. GFRP leaf springs are expected to be introduced in the OE market by 2021. These springs are projected to reach a market size of USD 4.2 million by 2021. This growth can be attributed to the growing pressure from regulatory bodies to curb vehicular emissions and increase fuel efficiency. GFRP leaf springs can be more than 80% lighter than steel leaf springs. This helps in reducing the overall weight of the vehicle, thereby improving fuel efficiency. Currently, extensive research is being conducted to create lightweight technologies for vehicle suspension systems. Numerous companies are attempting to develop new materials and efficient manufacturing processes to reduce production costs.
Objectives Of The Study

- To define, describe, and forecast the European leaf spring market

- To forecast the market size of the European leaf spring market on the basis of material (steel and glass fiber reinforced plastic (GFRP)), vehicle type (light commercial vehicles (LCVs) and heavy commercial vehicles (HCVs)) and countries (Germany, U.K., France, Spain, Italy, and Turkey)

- To strategically profile key players and comprehensively analyze their core competencies

- To provide a detailed technological overview of leaf springs on the basis of their material, cost, weight, manufacturing process, and size

- To track and analyze competitive developments such as joint ventures, mergers & acquisitions, new product launches, expansions, and other activities carried out by key industry participants

Contents:

1 Introduction
1.1 Objectives Of The Study
1.2 Market Definition
1.3 Market Scope
1.3.1 Markets Covered
1.3.2 Years Considered For The Study
1.4 Currency
1.5 Package Size
1.6 Limitations

2 Research Methodology
2.1 Research Data
2.2 Secondary Data
2.2.1 Key Secondary Sources
2.3 Data From Secondary Sources
2.4 Primary Data
2.4.1 Sampling Techniques & Data Collection Methods
2.4.2 Primary Participants
2.5 Market Size Estimation
2.6 Data Triangulation
2.7 Assumptions

3 Executive Summary

4 Market Dynamics
4.1 Drivers
4.1.1 Increasing Commercial Vehicle Production
4.1.2 Advent Of GFRPLeaf Springs
4.2 Restraints
4.2.1 Emergence Of New Suspension Technologies
4.3 Opportunities
4.3.1 GFRPLeaf Springs For Sports Utility Vehicles And Multipurpose Vehicles
4.4 Challenges
4.4.1 Maintaining A Balance Between The Cost & Quality Of Advanced Technologies

5 Technology Overview
5.1 Introduction
5.2 Comparison Between GFRP& Steel Leaf Springs
5.2.1 Vibration
5.2.2 Weight
5.2.3 Cost
5.3 Recent Industry Developments
5.4 Manufacturer-Wise Analysis Of Leaf Spring Mass Production
5.5 Manufacturing Process
5.5.1 Composite Leaf Spring
5.5.2 Steel Leaf Spring
5.5.2.1 Rolling Mill
5.5.2.2 Shearing
5.5.2.3 Eye-Rolling
5.5.2.4 Taper-Rolling, Trimming, & Hand-Rolling
5.5.2.5 Trimming & Bending
5.5.2.6 Nibbing/Buttoning
5.5.2.7 Heat Treatment
5.5.2.8 Shot Peening
5.5.2.9 Bushing, Reaming, & Grinding
5.6 Model-Wise Spring Sizes

6 European Leaf Spring Market, By Country
6.1 Introduction
6.1.1 European Leaf Spring Market, By Country
6.1.1.1 Germany: Leaf Spring Market, By Material & Vehicle Type
6.1.1.2 U.K.: Leaf Spring Market, By Material & Vehicle Type
6.1.1.3 France: Leaf Spring Market, By Material & Vehicle Type
6.1.1.4 Spain: Leaf Spring Market, By Material & Vehicle Type
6.1.1.5 Turkey: Leaf Spring Market, By Material & Vehicle Type
6.1.1.6 Italy: Leaf Spring Market, By Material & Vehicle Type
6.1.1.7 Rest Of Europe: Leaf Spring Market, By Material & Vehicle Type

7 European Leaf Spring Market, By Material Type
7.1 Introduction
7.1.1 Steel
7.1.2 GFRP

8 Company Profiles
(Overview, Financials, Products & Services, Strategy, And Developments)*
8.1 Introduction
8.2 Frauenthal Holding Ag
8.3 Sogefi Group
8.4 Hendrickson International Corporation
8.5 Olguncelik A.S.
8.6 Mubea Fahrwerkstechnologien GmbH
*Details On Overview, Financials, Product & Services, Strategy, And Developments Might Not Be Captured In Case Of Unlisted Company

List Of Tables
Table 1 Weight Reduction Potential In Various Automotive Systems
Table 2 Natural Frequencies Of Materials Used For Leaf Springs
Table 3 Weight Reduction With Composite Leaf Springs
Table 4 Vehicle Weight Reduction Using Composite Materials & Cost Summary, By System
Table 5 Cost & Weight Structure For Composite Leaf Springs
Table 6 Leaf Spring Capacity Across Major Global Players, 2015
Table 7 Spring Width
Table 8 European Leaf Spring Market, By Country, 2014 - 2021 (’000 Units)
Table 9 European Leaf Spring Market, By Country, 2014 - 2021 (USD Million)
Table 10 Germany: Leaf Spring Market, By Material & Vehicle Type, 2014 - 2021 (’000 Units)
Table 11 Germany: Leaf Spring Market, By Material & Vehicle Type, 2014 - 2021 (USD Million)
Table 12 U.K.: Leaf Spring Market, By Material & Vehicle Type, 2014 - 2021 (’000 Units)
Table 13 U.K.: Leaf Spring Market, By Material & Vehicle Type, 2014 - 2021 (USD Million)
Table 14 France: Leaf Spring Market, By Material & Vehicle Type, 2014 - 2021 (’000 Units)
Table 15 France: Leaf Spring Market, By Material & Vehicle Type, 2014 - 2021 (USD Million)
Table 16 Spain: Leaf Spring Market, By Material & Vehicle Type, 2014 - 2021 (’000 Units)
Table 17 Spain: Leaf Spring Market, By Material & Vehicle Type, 2014 - 2021 (USD Million)
Table 18 Turkey: Leaf Spring Market, By Material & Vehicle Type, 2014 - 2021 (’000 Units)
Table 19 Turkey: Leaf Spring Market, By Material & Vehicle Type, 2014 - 2021 (USD Million)
Table 20 Italy: Leaf Spring Market, By Material & Vehicle Type, 2014 - 2021 (’000 Units)
Table 21 Italy: Leaf Spring Market, By Material & Vehicle Type, 2014 - 2021 (USD Million)
Table 22 Rest Of Europe: Leaf Spring Market, By Material & Vehicle Type, 2014 - 2021 (’000 Units)
Table 23 Rest Of Europe: Leaf Spring Market, By Material & Vehicle Type, 2014 - 2021 (USD Million)
Table 24 European Leaf Spring Market, By Material, 2016 - 2021 ('000 Units)
Table 25 European Leaf Spring Market, By Material, 2016 - 2021 (USD Million)

List Of Figures

Figure 1 European Leaf Spring Market: Markets Covered
Figure 2 Research Design
Figure 3 Research Methodology Model
Figure 4 Breakdown Of Primary Interviews: By Company, Designation, & Region
Figure 5 European Leaf Spring Market: Bottom-Up Approach
Figure 6 Germany Estimated To Be The Largest Market For Leaf Springs In The European Region, 2014 - 2021 (USD Million)
Figure 7 Light Commercial Vehicles To Constitute The Largest Market For Leaf Springs, 2014 - 2021 ('000 Units)
Figure 8 Glass Fiber Reinforced Plastic Leaf Springs: Growing Market, 2014 - 2021 (USD Million)
Figure 9 European Leaf Spring Market Dynamics
Figure 10 Europe: Commercial Vehicle Production, 2012 - 2015
Figure 11 HP-RTM Process For Composite Leaf Spring
Figure 12 Market Share, By Value, Of Key Countries In The European Leaf Spring Market, 2016
Figure 13 European Leaf Spring Market, By Material, 2021 (USD Million)
Figure 14 Frauenthal Holding Ag: Business Overview
Figure 15 Sogefi Group: Business Overview
Figure 16 Hendrickson International Corporation
Figure 17 Olguncelik A.S.: Business Overview
Figure 18 Mubea Fahrwerkstechnologien Gmbh: Business Overview

Order by Fax - using the form below
Order by Post - print the order form below and send to

Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Ireland.
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct and select the format(s) you require.

Product Name: European Leaf Spring Market By Vehicle Type, Material and Country - Trends and Forecast to 2021
Web Address: http://www.researchandmarkets.com/reports/3750337/
Office Code: SC2GRJXT

Product Formats
Please select the product formats and quantity you require:

<table>
<thead>
<tr>
<th>Product Formats</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic (PDF) -</td>
<td>□</td>
<td>USD 2650</td>
</tr>
<tr>
<td>Single User:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic (PDF) -</td>
<td>□</td>
<td>USD 3250</td>
</tr>
<tr>
<td>1 - 5 Users:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic (PDF) -</td>
<td>□</td>
<td>USD 4505</td>
</tr>
<tr>
<td>Site License:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic (PDF) -</td>
<td>□</td>
<td>USD 5150</td>
</tr>
<tr>
<td>Enterprisewide:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The price quoted above is only valid for 30 days. Please submit your order within that time frame to avail of this price as all prices are subject to change.

Contact Information
Please enter all the information below in BLOCK CAPITALS

Title: Mr □ Mrs □ Dr □ Miss □ Ms □ Prof □
First Name: ____________________________ Last Name: ____________________________
Email Address: * ____________________________
Job Title: ____________________________
Organisation: ____________________________
Address: ____________________________
City: ____________________________
Postal / Zip Code: ____________________________
Country: ____________________________
Phone Number: ____________________________
Fax Number: ____________________________

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:
Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer: Please transfer funds to:

<table>
<thead>
<tr>
<th>Account number</th>
<th>833 130 83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sort code</td>
<td>98-53-30</td>
</tr>
<tr>
<td>Swift code</td>
<td>ULSBIE2D</td>
</tr>
<tr>
<td>IBAN number</td>
<td>IE78ULSB98533083313083</td>
</tr>
<tr>
<td>Bank Address</td>
<td>Ulster Bank, 27-35 Main Street, Blackrock, Co. Dublin, Ireland.</td>
</tr>
</tbody>
</table>

If you have a Marketing Code please enter it below:

Marketing Code: __________________________

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp

Please fax this form to:

(646) 607-1907 or (646) 964-6609 - From USA
+353-1-481-1716 or +353-1-653-1571 - From Rest of World