HP Pelzer Group
Automotive Acoustic Systems and Trim Parts

Innovation with Design in the Automotive Industry

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Introduction

“Innovation with Design in the Automotive Industry”

Designmanagement Processes used as an integrational Strategy in the Automotive Supplier Business

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HP Pelzer Group
Automotive Acoustic Systems and Trim Parts

- The HP Pelzer Group develops and produces a broad range of acoustically effective parts for internal and external use on all existing vehicle constructions worldwide. From the mass production vehicle up to the superluxury sedan on a standardized product toolkit base.

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<th>Engine Compartment</th>
<th>Passenger Compartment</th>
<th>Luggage Compartment</th>
<th>Exterior</th>
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<tr>
<td>Hood absorber</td>
<td>trim A-B-C pillar</td>
<td>tailgate partition wall</td>
<td>bumper</td>
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<td>insulation dash</td>
<td>insulation dash</td>
<td>trunk floor</td>
<td>wheel arch liners</td>
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<td>insulation tunnel</td>
<td>insulation floor</td>
<td>side trim panel</td>
<td>areodyn. undershields</td>
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<td>under shield</td>
<td>insulation below seat</td>
<td>wheelhouse insulation</td>
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<td>absorptive heat shield</td>
<td>carpet</td>
<td>tailgate closing wall</td>
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<tr>
<td>engine encapsulation</td>
<td>roof liner</td>
<td>spare wheel cover</td>
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<tr>
<td>wheelhouse lining</td>
<td>package tray</td>
<td>cover trunk lid</td>
<td></td>
</tr>
<tr>
<td>trim underbody</td>
<td>side trim panel</td>
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</tbody>
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- expandables (baffles)
Organical growth of the HP Pelzer Group since foundation without acquisitions

- The HP Pelzer Group was founded in 1969 by Helmut Pelzer in Witten/Ruhr/Germany.
- The special application of polyurethanfoams for optimizing vehicle acoustics led to a continuous growth in sales, so that in 1979 the first foreign base Waterford/Ireland could be set up.
- In 1984 the construction of a development center in Speke/Great Britain followed and already in 1986 the construction of another development center in Incheon/South Korea took place.
- With opening the plant in Puebla/Mexico in 1990 Pelzer went to Central America.
- In 1991 the East European market was included with the establishment in Plzen/Czech Republik.
- The acquisition of Vegroteppichboden GmbH in Kirschau/Germany allows the independent development and production of needle punched carpets since 1993.
- In 1995 Pelzer Automotive Systems Inc. took up his activity in the North American market.
- The partial acquisition of Rossifloor in Marano Vicentino/Italy allowes the independent development and production of tuftingcarpets since 1999.
- With the opening of another co-operation in China this year the HP Pelzer Group owns today 30 establishments worldwide.
HP Pelzer Group – Worldwide Locations

BU North America
- Troy, MI (R&D)
- Kansas City, KS
- Port Huron, MI
- Sterling Heights, MI
- Thomson, GA
- Puebla

BU South America
- Camacari
- Taubaté
- Rio Grande do Sul

BU Europe
- Speke
- Zaragoza
- Valencia
- Tafalla
- Genk
- Witten (R&D)
- Neutraubling
- Saarwellingen
- Berka
- Kirschau
- Marano Vicentino (Rossifloor)
- Gliwice
- Plzen
- Mlada Boleslav
- Zatec
- Gebze
- Gölcük

BU Asia
- Chongqing
- Incheon/Seoul (R&D)
- Kunsan
- Kyong-Ju
- Hiroshima
- Kobe (R&D)
Customers

- Our customers and partners include the world’s most important car manufacturers.
The HP Pelzer Group produces worldwide more than 180,000 automotive parts per day.

Partnership and cooperation of the HP Pelzer Group with:

- GM since 35 years
- DaimlerChrysler since 20 years
- BMW Group since 19 years
- Ford Motor Company since 15 years
- VW Group since 14 years
The HP Pelzer Group serves its customers as a full service supplier from the very beginning of a project until the end of production.

In five R&D-centers worldwide highly skilled, fast and flexible individuals develop and implement custom made acoustic solutions on a standardized product toolkit base.
R & D Centers Worldwide

- **Troy**
  - Advanced Acoustics
  - System Development
  - Customer Program Support
  - Application Engineering
  - Material Development and Optimization
  - Process Optimization
  - Product and Customer Support (in this region)

- **Rugby**
  - Advanced Acoustics Development & Prediction
  - Customer Program Support
  - Process Optimization
  - Product and Customer Support (in this region)

- **Witten**
  - Advanced Material Development
  - Advanced Acoustics Development & Prediction
  - Advanced Process Development
  - System Development
  - Customer Program Support
  - Application Engineering
  - Material Development and Optimization
  - Process Optimization
  - Product and Customer Support (all OEM’s)

- **Kobe**
  - Acoustics
  - Part Design
  - Material Development
  - Quality Assurance
  - Application Lab

- **Hwasung-City**
  - Advanced Acoustics
  - System Development
  - Customer Program Support
  - Application Engineering
  - Material Development and Optimization
  - Process Optimization
  - Product and Customer Support (in this region)
Computer Aided Acoustic Optimization

The SEA Software developed by the HP Pelzer Group

- The use of acoustic prediction tools in all R & D-centers of the HP Pelzer Group helps to achieve a faster and more economic development of high performance acoustic packages.

- With the Statistical Energy Analysis (SEA) program the HP Pelzer Group is able to develop and simulate materials, components, subsystems and full vehicles years before the prototype itself is being built.

- With even 25 years of acoustic experience and an excessive material database the HP Pelzer Group knows, how to achieve the acoustic targets with a minimum of weight, time and cost.
Engine Compartment Components

- Serial production components

- Hood liner
- Wheelhouse liner
- Undershield
- Outer tunnel insulator
- Engine cover
- Outer dash panel insulator
Passenger Compartment Components

- Serial production components

  - ABC pillar trim
  - Rear seat insulation
  - Front carpet
  - Pillar insulation
  - Parcel shelf
  - Complete carpet
  - Inner dash insulation
  - Headliner
  - Floor insulation
Luggage Compartment Components

- Serial production components

Floor & Side trim

Complete trunk trim

Multi-piece trunk

Deck lid trim / tailgate

Trunk floor
Exterior

- Serial production components

- Bumpers

- Wheel arch liners

- Aerodynamic undershields
References

- Acoustic components development
- Design - Process – Integration as sustainable Strategy
- Manufacturing

Opel Meriva  Porsche Cayenne  Maybach
1er BMW  MY Dodge Ram Truck
Building new structures with the Involvement of Design

Until the 1980s

Society, Rules, Religion.. serve as organizational structure

....

Art

Maths

Law

Medicine

Philosophie

Engineering

Today

Maths

Art

Technology

Medicine

Industry

Philosophie

Law

Designing a process or the personal value system for a company serves as organizational structure for
Contact with Jaguar
Contact with Jaguar

Automotiveness

You don’t drive a Jaguar, you wear it like a shoe

People

Technology
Ideas Exterior
Communication internally started through the model
Communication externally fosters value sensitivity

S-Type Interior

A new Interior

JAGUAR
The Model and its strategic Influences

S-Type Interior
Porters Value Change with Design as Communication
For more Information

- HP Pelzer Beteiligungsholding GmbH, Germany
  http://www.pelzer.de
- HP Pelzer Automotive Systems, Inc., USA
  http://www.hppelzer.com
- HP Pelzer Japan K.K., Japan
  http://www.pelzer.co.jp
- Rossifloor S.P.A., Italy
  http://www.rossifloor.it
- Vegroteppichboden GmbH, Germany
  http://www.vegro.de
New discipline:
New forms of holistic leadership, process thinking involving people, culture and facts

Superior skills for

For Design and Architecture
Product

Organization
for sustainable Management

for future orientated Strategiemaiking
Society