HP Pelzer Group

Automotive Acoustic Systems and Trim Parts

Innovation with Design in the Automotive Industry

20. May 2006, Cologne



Introduction

"Innovation with Design in the Automotive Industry"

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

Dipl.- Des. Martin Mangold Head of Marketing & Design 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.

Engine Compartment



- Hood absorber
- insulation dash
- insulation tunnel
- under shield
- absorptive heat shield
- engine encapsulation
- wheelhouse lining
- trim underbody

Passenger Compartment



- trim A-B-C pillar
- insulation dash
- insulation floor
- insulation below seat
- carpet
- roof liner
- package tray
- side trim panel
- cover instrument panel
- expandables (baffles)

Luggage Compartment



- tailgate partition wall
- trunk floor
- side trim panel
- wheelhouse insulation
- tailgate closing wall
- spare wheel cover
- cover trunk lid

Exterior



- bumper
- wheel arch liners
- areodyn. undershields

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Basic Facts HP Pelzer Group



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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.











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HP Pelzer Group – Worldwide Locations



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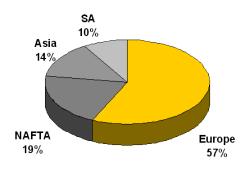
Customers

 Our customers and partners include the world's most important car manufacturers.

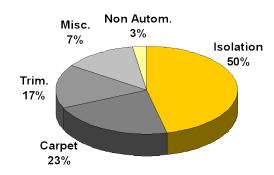


Region – Products – Customers

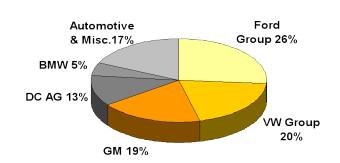
Region



Products



Customers



 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
VVV Group	Silice 14 years

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HP Pelzer Group – A Full Service Supplier

- 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.



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R & D Centers Worldwide



Rugby

- Advanced AcousticsDevelopment & Prediction
- Customer Program Support
- Process Optimization
- Product and Customer Support (in this region)





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



- Advanced Acoustics
- System Development
- Customer Program Support
- Application Engineering
- Material Development and Optimization
- 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)



Hwasung-City

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

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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.





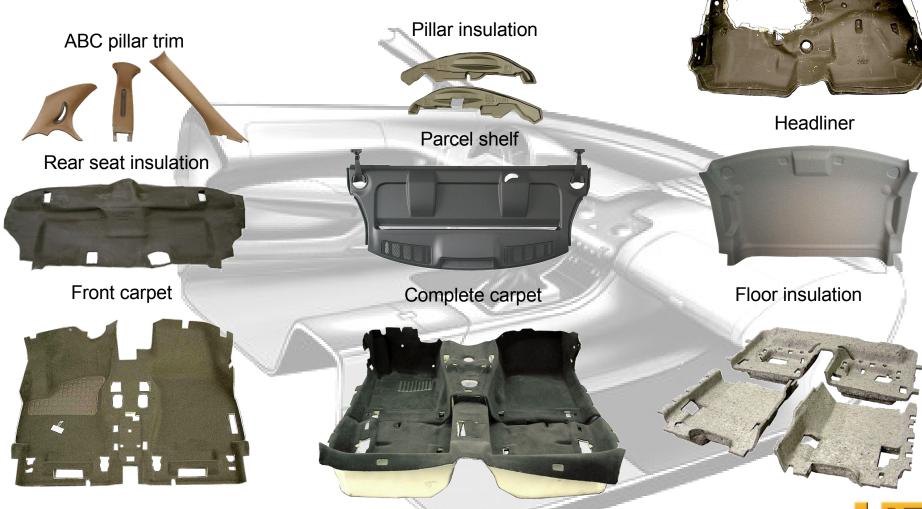
Engine Compartment Components

Serial production components



Passenger Compartment Components

Serial production components

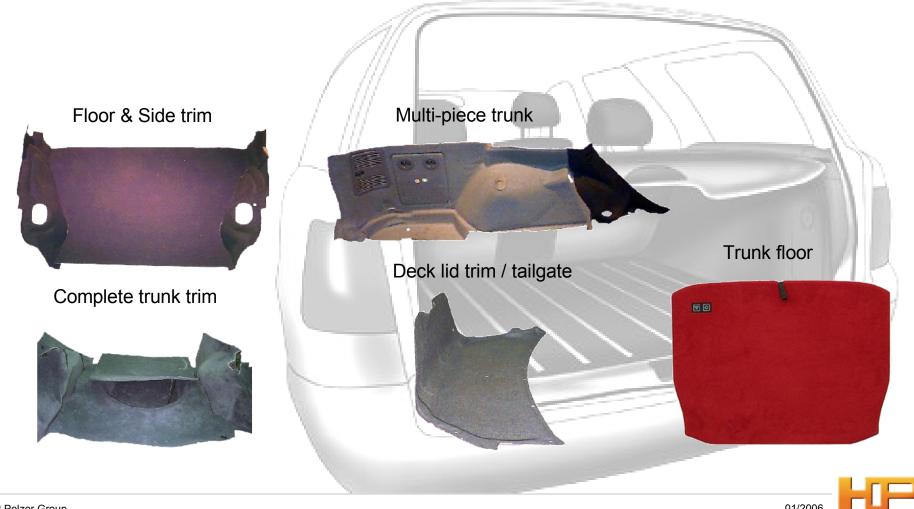


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Inner dash insulation

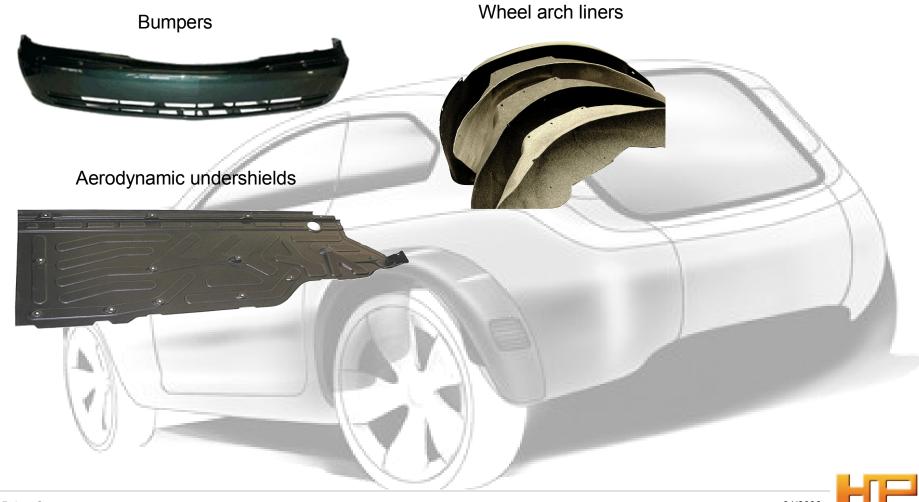
Luggage Compartment Components

Serial production components



Exterior

Serial production components



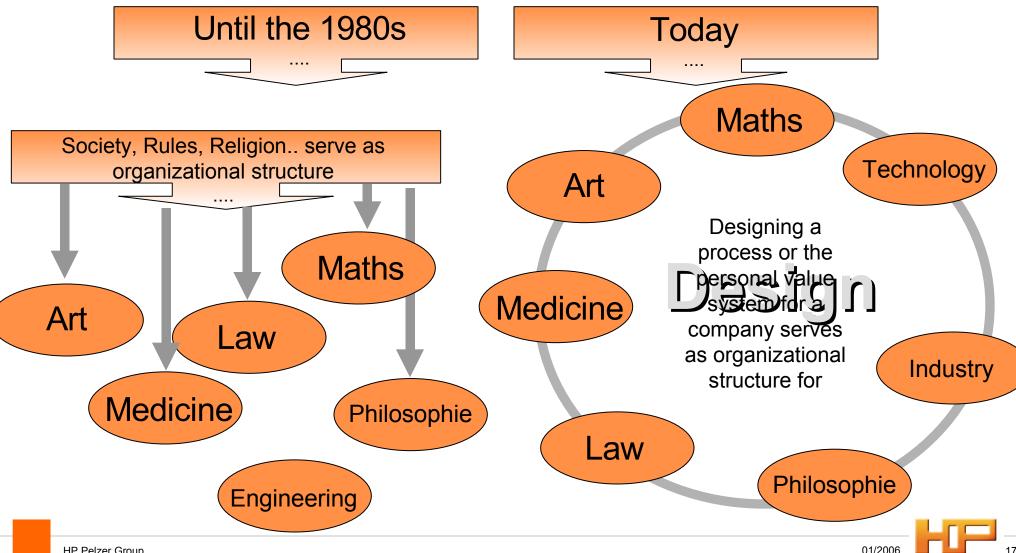
References

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

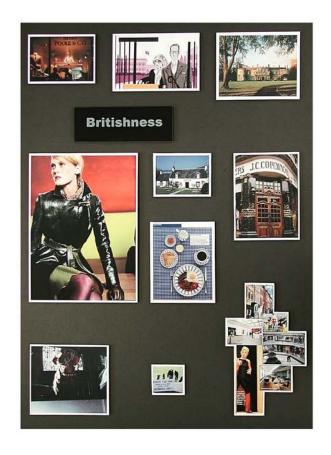


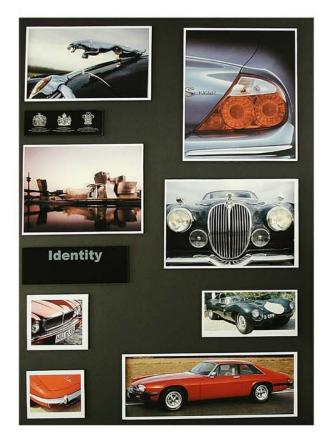
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Building new structures with the Involvement of Design

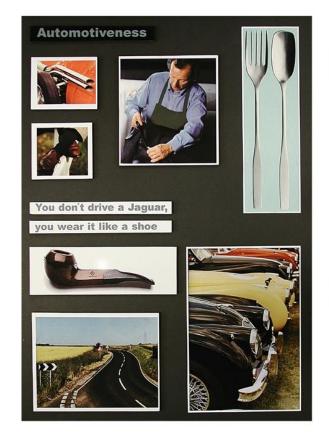


Contact with Jaguar





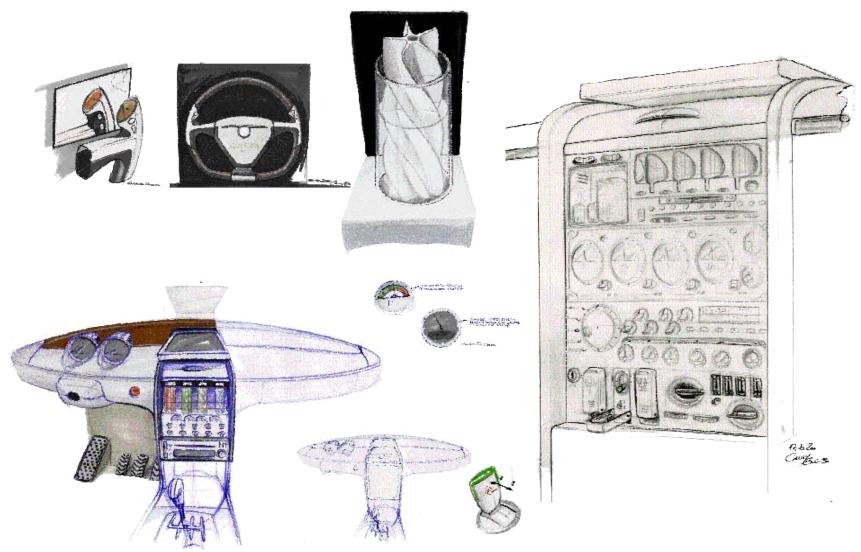
Contact with Jaguar



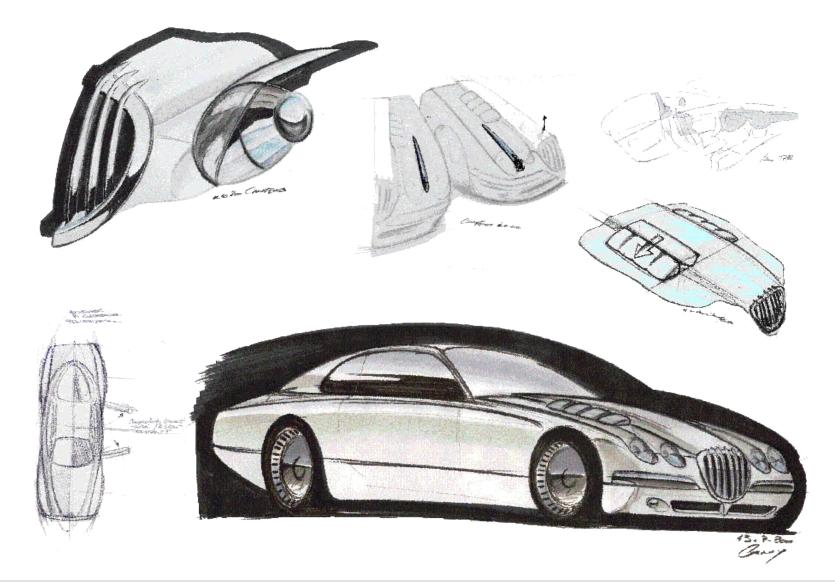




Ideas Interior



Ideas Exterior



Communication internally started through the model



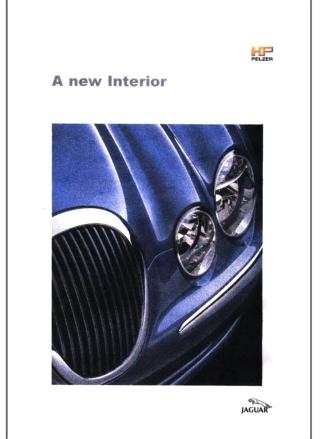
Communication externally fosters value sensitivity



S-Type
Interior



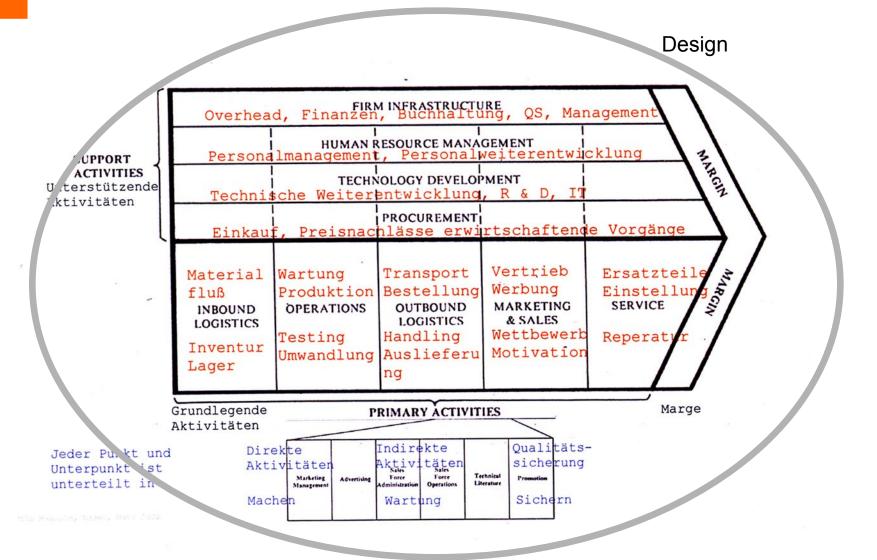




The Model and its strategic Influences



Porters Value Chane with Design as Communication



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For more Information

 HP Pelzer Beteiligungsholding GmbH, Germany http://www.pelzer.de

 HP Pelzer Automotive Systems, Inc., USA http://www.hppelzer.com

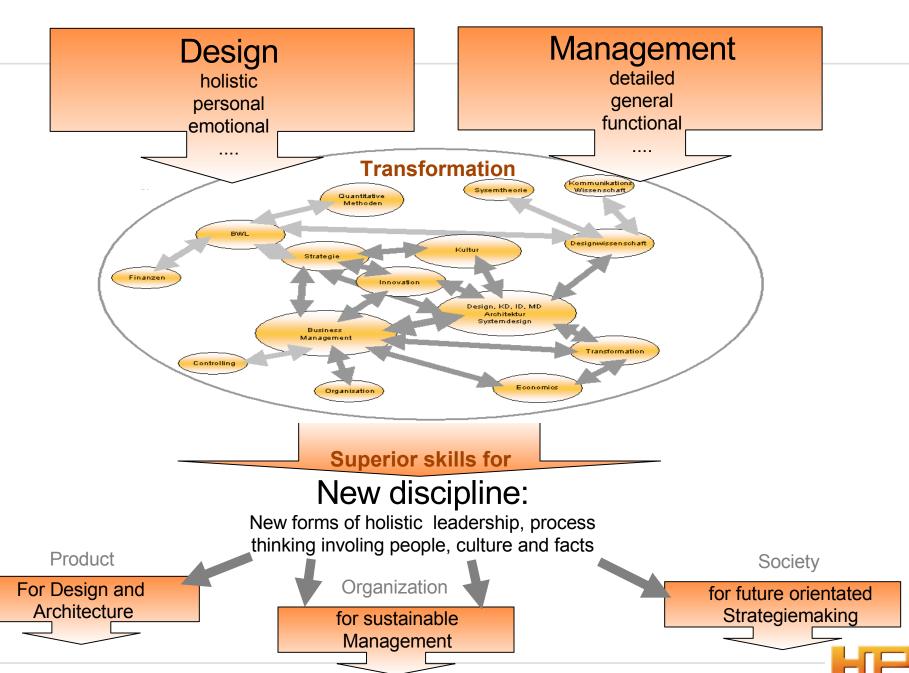
HP Pelzer Japan K.K., Japan http://www.pelzer.co.jp

Rossifloor S.P.A., Italy http://www.rossifloor.it

 Vegroteppichboden GmbH, Germany http://www.vegro.de



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