



Bosch Group

Corporate Purchasing Mexico (CP/PIM)



Structure of the Bosch Group

Bosch Group
Sales: 45.1 billion euros¹⁾
Associates on Jan. 1, 2009:
281,717

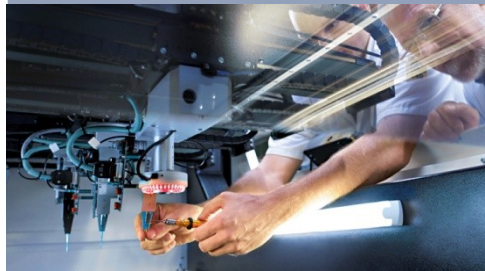
Automotive Technology

Sales: 26.5 billion euros
Share of total sales: 59%



Industrial Technology

Sales: 6.7 billion euros
Share of total sales: 15%



Consumer Goods & Building Technology

Sales: 11.9 billion euros
Share of total sales: 26%



¹⁾Including other business areas

Automotive Technology Business Sector

Automotive Electronics

Car Multimedia

Gasoline Systems

Diesel Systems

Starter Motors
and Generators

Chassis Systems Brakes

Chassis Systems Control

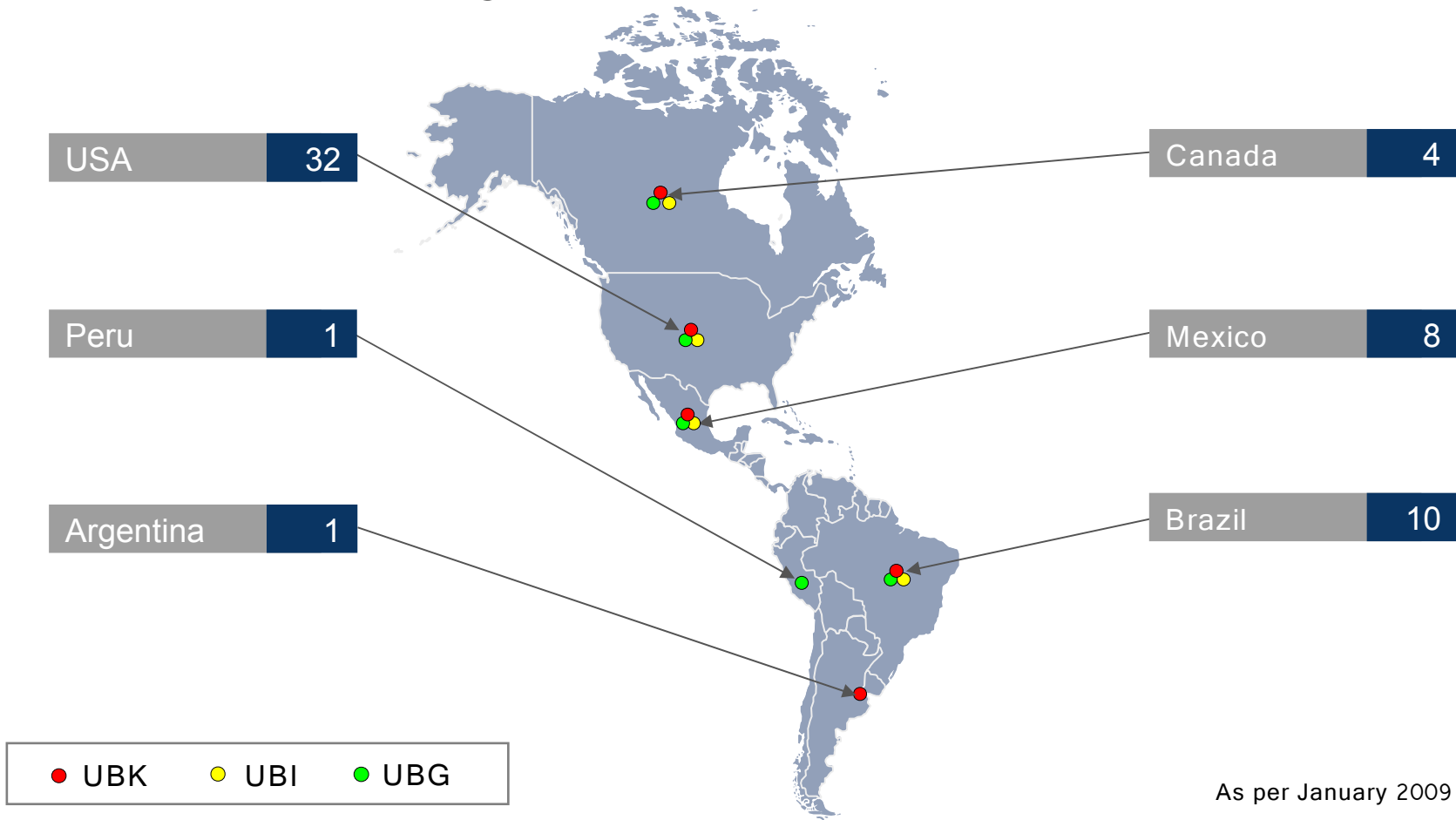
Electrical Drives

Steering Systems¹⁾

Automotive Aftermarket

¹⁾ ZF Lenksysteme GmbH (50 % Bosch)

56 manufacturing sites in the Americas



As per January 2009



8 manufacturing sites in Mexico



Associates:
7,509



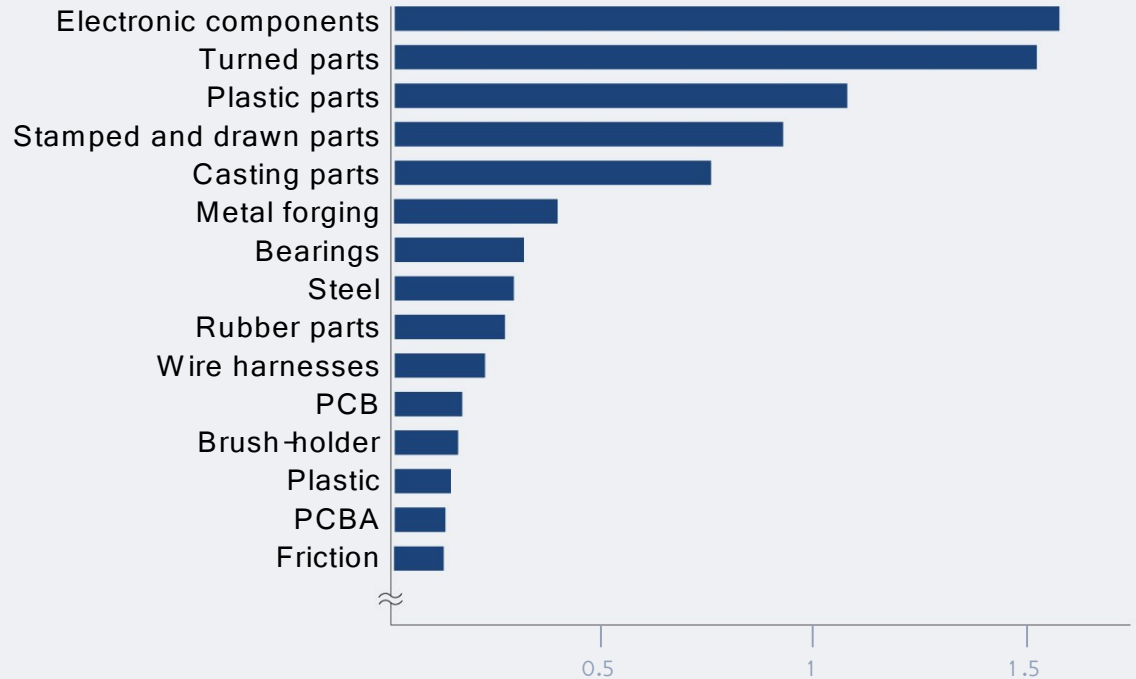
Purchasing volume Robert Bosch World 2008

Purchasing volume 2008
24 bn EUR

	bn EUR
Direct material ¹⁾	15.5
Resale goods	2.0
Indirect material / services	4.7
Capital goods	1.8



Major material fields



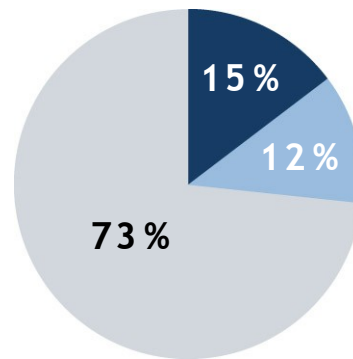
1) 50% BSH, ZFLS consolidated

Purchasing volume development and bundling

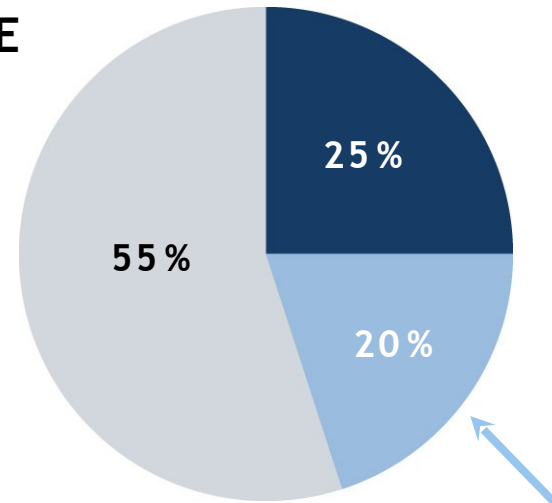
Volume development by regions

- Double purchasing volume (direct material) from 2006 to 2015
- Significant growth in America and Asia

Direct material in bn E



12 bn EUR 2006



25 bn EUR 2015

Europe
Asia
America

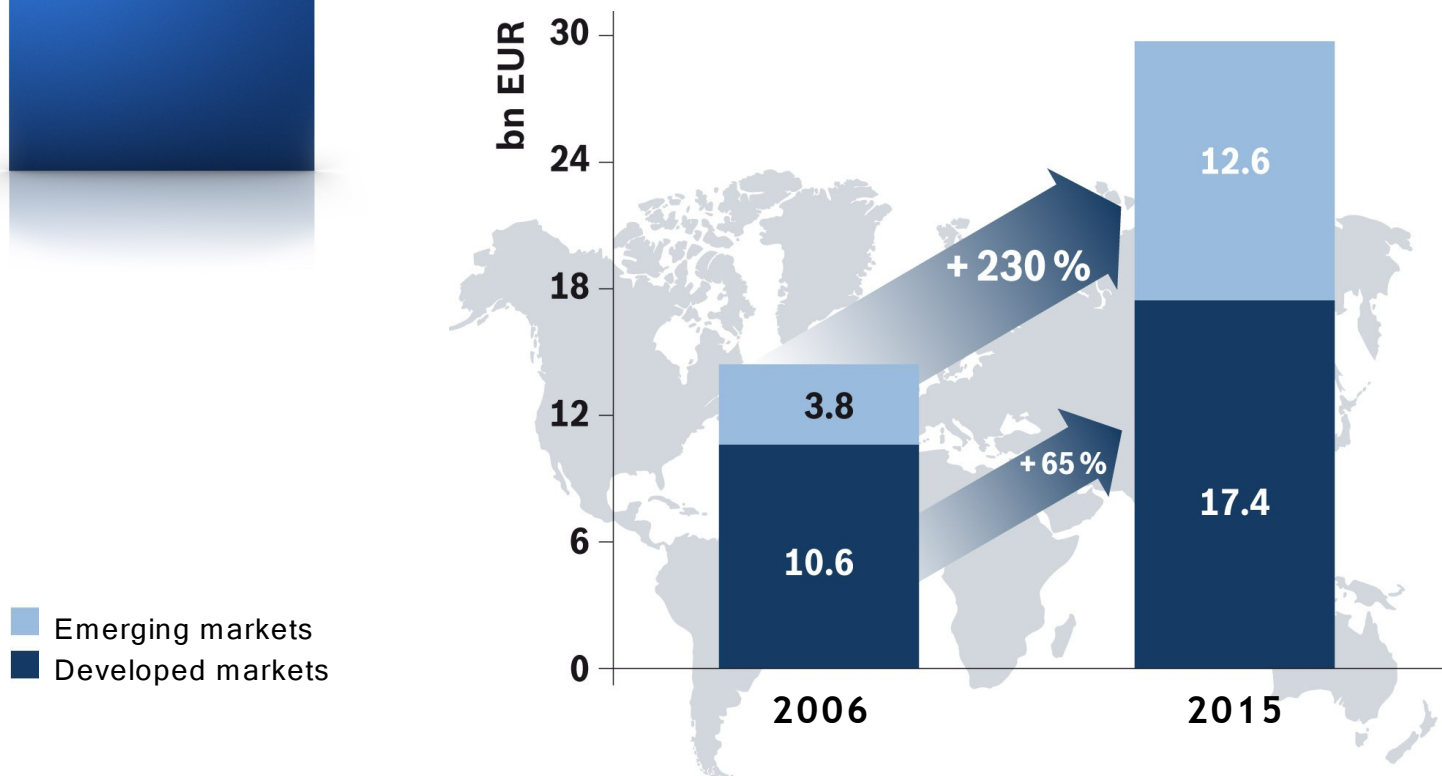
Volume without BSH, ZFLS

Sourcing in emerging markets

Sourcing in emerging markets

→ Increase of emerging markets from 3.8 to 12.6 bn EUR in 2015

→ Expansion of purchasing activities



Bosch Group: Needs for North America

Automotive Sector



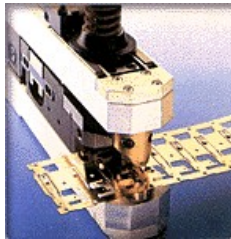
Consumer Goods



Industrial Sector



Stamped Parts Turned Parts



Deep draw
Fine Blanking
Laminations
Rolled parts
Small stamped

High Precision Machining
Grinding
Heat Treatment

Plastics & Rubber



Inserts
Gears
Gear housing
Microinjection
BTFE injection

Casting



Alu Die
Alu Gravity
Nodular Iron
+ Machined

Forged



Warm/Hot & Cold + Machined

Electronics & Wire



Cables
Connectors
PCB
Resistors
Others

Raw Materials: Steel / Copper / Resins

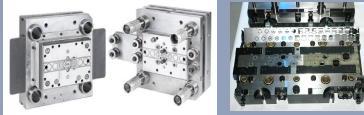
Stamping tooling characteristics

Tooling

Press machine

Products

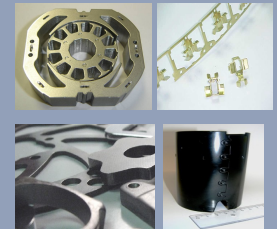
Progressive



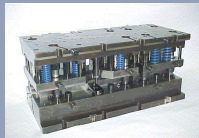
- Hydraulic press
- Up to 2mm / 300 ton



- Clips, brush guides
- Laminations
- Fine blanking
- Rolled housings
- Small deep drawn



Transfer



- Hydraulic presses
- Up to 6mm / 3000 ton



- Pole housings (deep drawn)
- Booster shells
- Base plates



Multi-slide



- Multi-slide, four slide
- Bihler machines

- Clips, retainers, small brackets, rolled parts

Plastic tooling characteristics

Tooling

Machine

Products

Cold runner

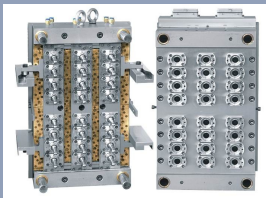


- Vertical & horizontal injection machine



- Free Falling Parts
- Small Gears
- Simple Reservoirs and Caps
- Thermosetting

Hot runner



- Vertical & horizontal injection machine



- Free Falling Parts
- Gears
- Reservoirs and Caps
- Tanks
- Flanges

Inserts mold



- Vertical & horizontal injection machine



- Gears with inserts
- Connectors
- Complex and simple inserts
- Electronic inserts

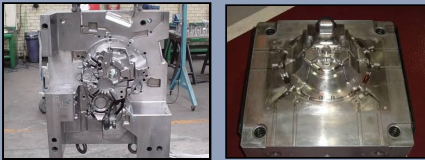
Casting tooling characteristics

Tooling

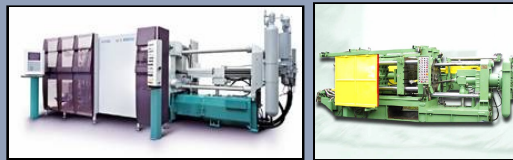
Machine

Products

Alu Die Casting HPDC



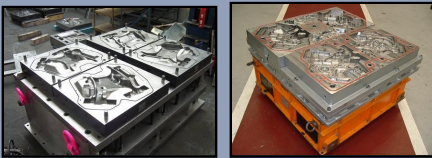
- Horizontal Injection Machine
 - Size: 150T – 900T
 - Multicavities (1 -8)



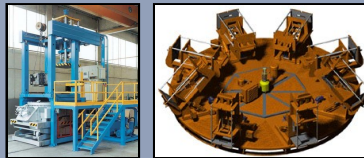
- Electric, Valve Housings
- ECU Plate & Covers
- Cover, Shields
- Heat Sinks
- Flanges



Alu Low Pressure LPDC



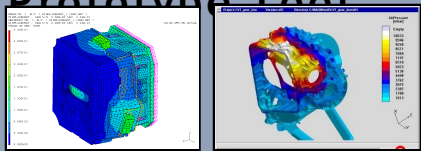
- Vertical LPDC machine
- Tilting Gravity (Rotary table)



- Master Cylinder Hsg. (Housing)
- Transmission Parts
- Turbo Hsg.
- Pump Hsg.



Alu Die Casting Prototype Tool

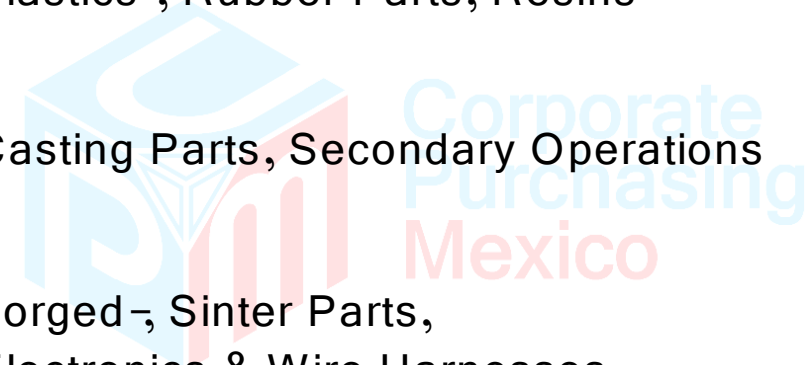


- Precision Sand Casting
- Plaster casting
- Lost Foam Casting
- Direct Casting

- Heat Sinks
- Throttle valve Housings
- ECU Plate & Covers
- Cover, Shields

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Merci / Gracias / Danke / Thank you



BOSCH

Innovación para tu vida