



**Engineering Services & System Integration – Group (ESSI)  
Engineering Center Steyr GmbH & Co KG (ECS)**

**Dedicated for KULI User Meeting Shanghai 2008**



# MAGNA's Product & Engineering Capabilities



## Closures

- Closing Systems
- Door Modules
- Window Regulator Systems
- Electromechanical Drives



## Electronics

- Driver Assistance & Safety Systems
- Body Electronics Powertrain



## Roof Systems

- Softtops
- Hardtops
- Retractable Steel Tops
- Roof Modules



## Seating

- Seat Systems & Components
- Headrests & Armrests
- Seating Hardware Systems



## Vehicle Engineering & Assembly

- Vehicle Development
- Vehicle Production
- Comp., Modules & Tank Systems



## Powertrain

- Engineering Services & System Integration
- Engine-, Transmission Comp.
- Axle-, AWD/4x4 Systems
- Mechatronics



## Interiors

- Compl. Interior Integration
- Carpet & Interior Trim
- Cockpit Systems
- Roof Lining Systems



## Metallforming

- Chassis Systems
- Shaping Technologies
- Body Systems



## Exteriors

- Front & Rear Modules
- Sealing Systems
- Lighting systems
- Side Sills

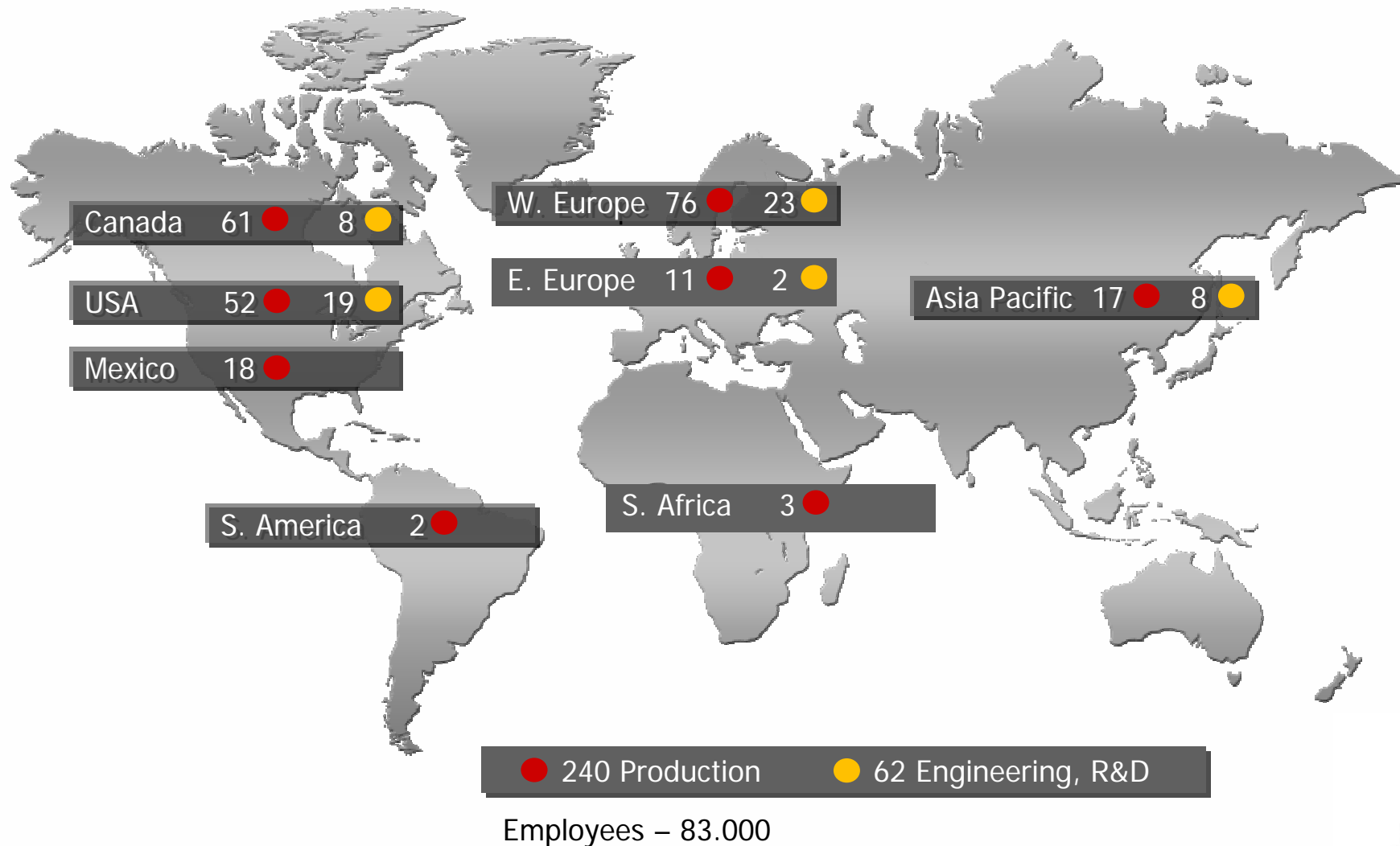


## Vision Systems

- Inside Mirrors
- Outside Mirrors
- Engineered Glass



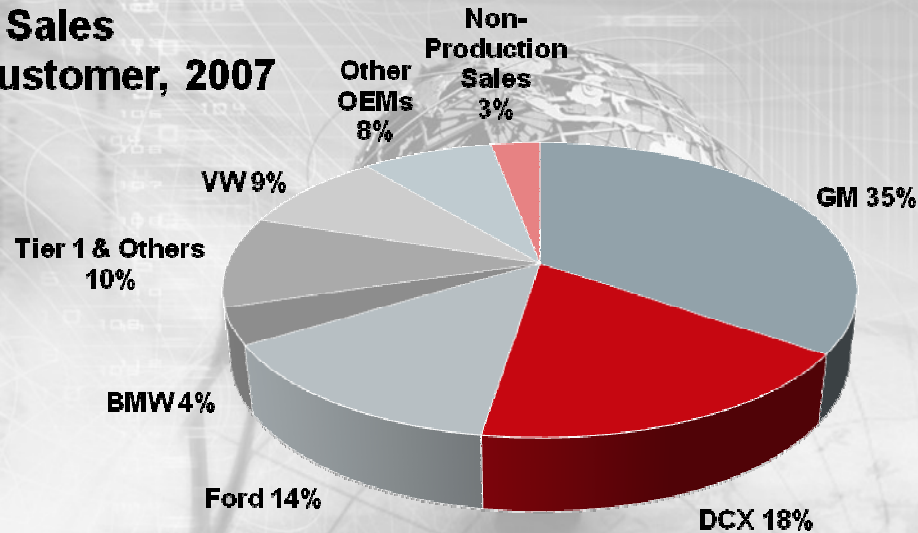
# Magna Global Footprint



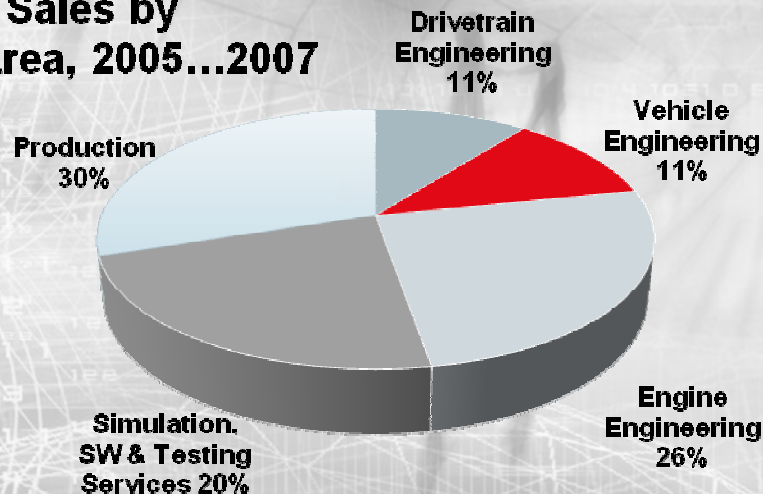
As of September 2007

# Magna Powertrain – Facts & Figures

## MPT Sales by Customer, 2007



## ESSI / ECS Sales by Business Area, 2005...2007



## MPT - Key figures:

- Total revenues 2007: US\$ 3,4 billions
- Over 11.000 employees
- 38 locations
- 9 design & engineering centers

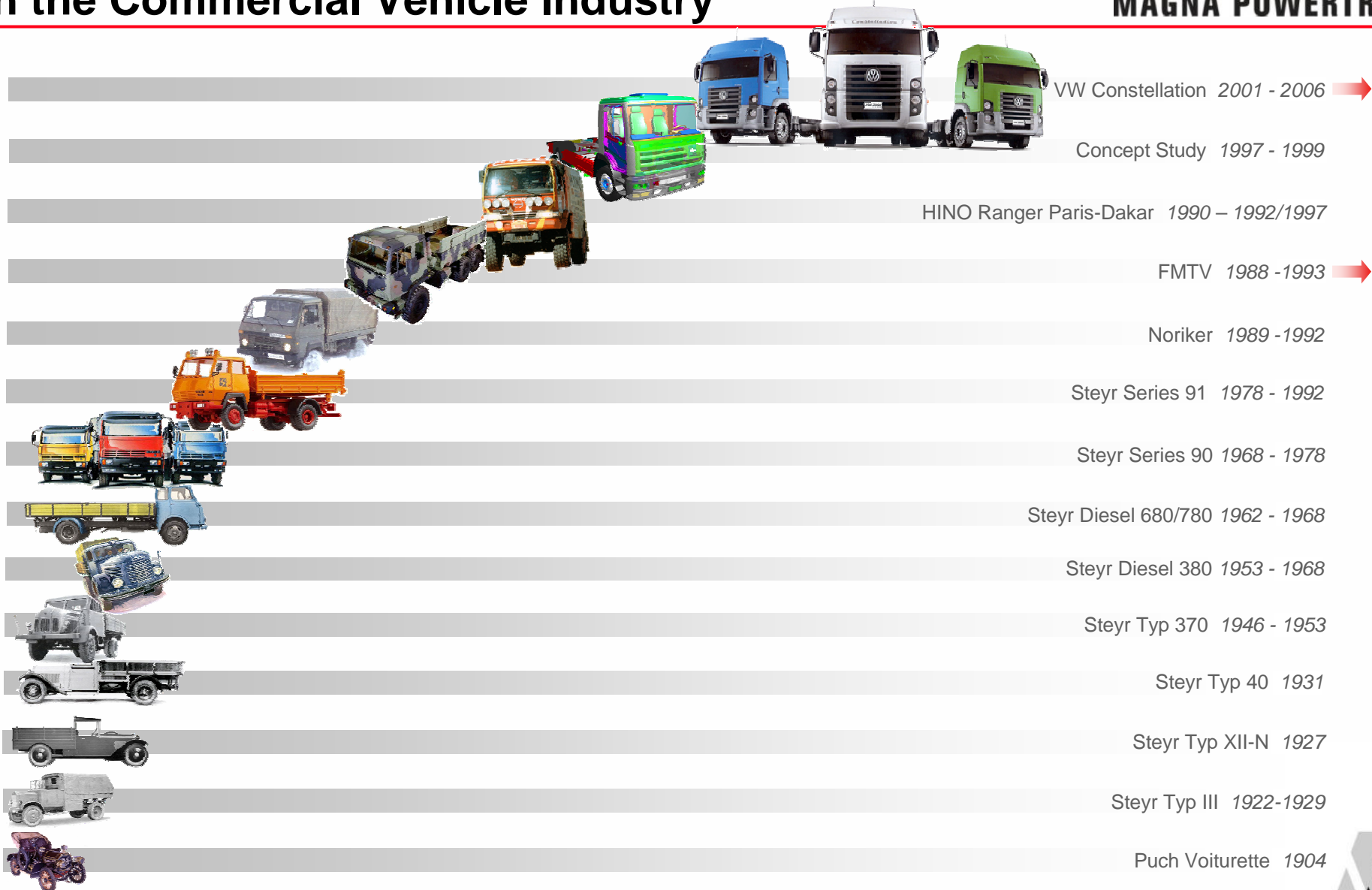
## ESSI / ECS - Key figures:

- Total revenues 2007: US\$ 65 millions
- 490 employees
- 7 locations
- 3 engineering centers
- 4 sales & support offices

# ECS – originated in the Steyr Truck Division



# 100 Years of Experience in the Commercial Vehicle Industry



# Engineering Center STEYR – Range of Services

**System Integration**



**Drivetrain & Axle Engineering**



**Commercial Truck Engineering**



**Engine Engineering**



**Simulation & Testing Services**

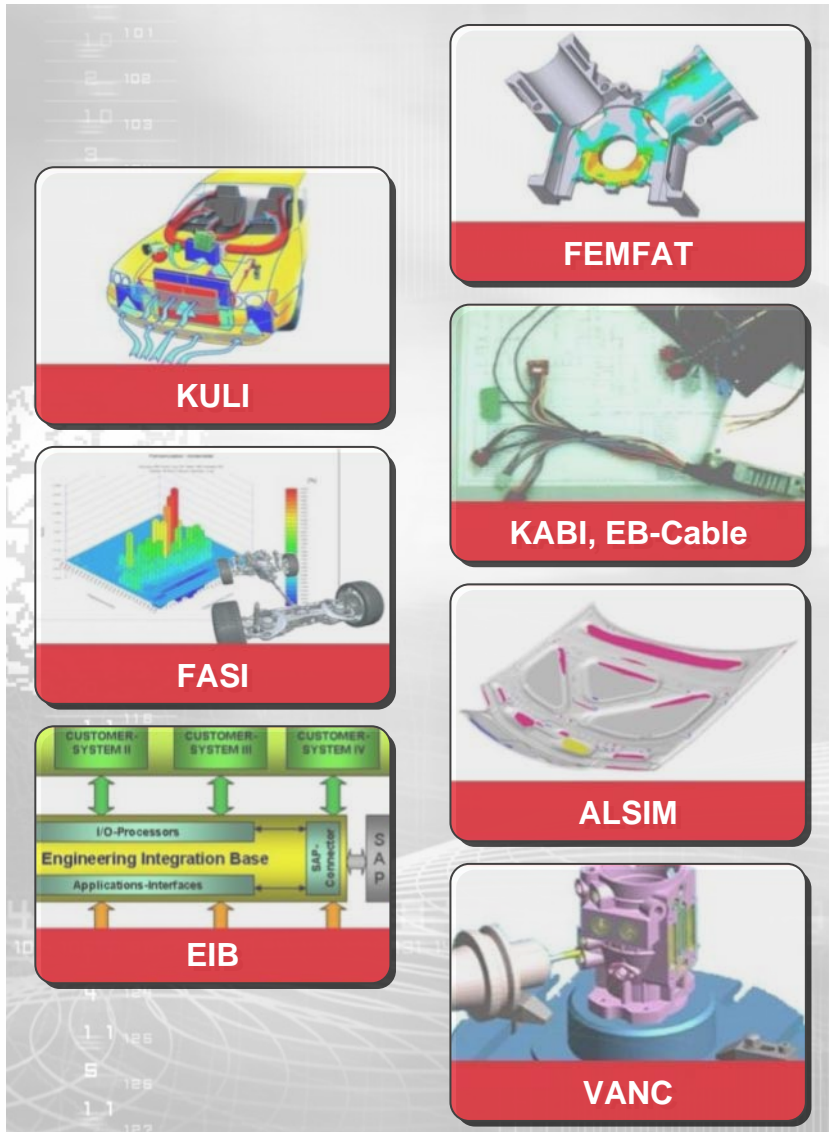


**Technical Application / Software & Support**



**Production In Low Volumes**





## Software Development & Support

- **FEMFAT**  
FEM based Fatigue Prediction  
([www.femfat.com](http://www.femfat.com))
- **KULI**  
Simulation of the Vehicle Thermal Management  
([www.kuli.at](http://www.kuli.at))
- **KABI, EB-Cable**  
Integration of CAD/CAM with Electric Engineering  
([www.kabi.at](http://www.kabi.at))
- **FASI**  
Driving Simulation  
([www.fasi.at](http://www.fasi.at))
- **ALSIM**  
CAD based Simulation of the Dip-Coating Process  
([www.alsim.at](http://www.alsim.at))
- **EIB**  
Engineering Integration Base
- **VANC**  
CAM System for Drilling, Milling and Turning



- Long History around the World, widely used by famous OEMs and suppliers
- Quickly developing in China
- Platform of Vehicle Thermal Management ,an efficient tool for strict requirement of emission-CO<sub>2</sub>, Exhaust Pollutants, for more comfortable Driving Condition
- Platform of Technology and Experience Share and Communication



**Wish You Have a Pleasant and Successful Day!**

**Thank you for your attention.**

