

# IAA MOBILITY 2021

Munich, Germany



The background of the slide is a horizontal band with a dark, abstract design. It features blue wireframe structures resembling architectural frameworks or data grids, overlaid with vibrant, diagonal red light streaks that create a sense of motion and energy.

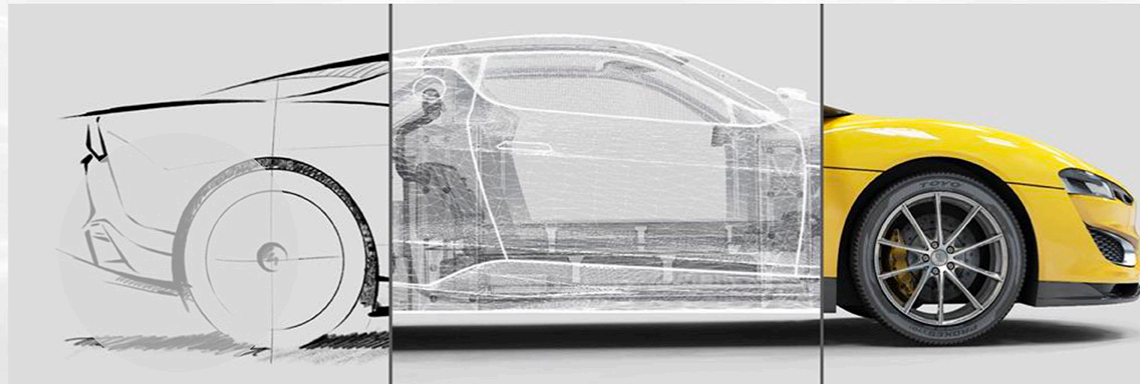
# New Mobility

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# One-Stop Shop: From ideas to reality

With the passion of our employees and our extensive automotive know-how, we enable our customers to successfully bring their vision of mobility to the road.



Magna Exclusive



Co-Development  
Opportunity

## Competitive advantage/differentiators

- We are an experienced & flexible partner from the first sketch to the start of production and beyond
- We transform our customers' ideas into automotive reality and offer highly flexible business models each tailor-made to the customers needs.
- Use of proven virtual development methods and highly efficient processes enable significant savings in time and cost
- Engineers work simultaneously with our manufacturing and ensure design to manufacturing
- In complete vehicle manufacturing we offer tailor-made solutions through a highly flexible body shop, a multi-OEM paint shop and extensive product options for vehicle assembly
- Our "Smart Factory" solutions support continuous improvement of production processes

## Applications

- Tailor-made turnkey solutions for your vehicle
- Consulting for feasibility check of first concept, definition of vehicle targets, supplier sourcing
- Engineering services from concept development to serial development to production launch
- Complete vehicle manufacturing on a premium level
- Platform management by usage of customer platform, integration of additional customers to share platforms, up to providing our Magna EV platform



18 engineering centers with around 4,000 high-skilled engineers guarantee world-class engineering solutions



# Complete Vehicle Engineering

Magna Steyr is the engineering partner for turnkey development from concept phase to product launch for traditional OEMs as well as new entrants. Our broad range of technical know-how in complete vehicle development and integration is based on our long-standing history of successfully delivered projects.



Smarter



Safer



Cleaner



Lighter



Electrification



Autonomy



Design



Co-Development  
Opportunity

## Competitive advantage/differentiators

- A global partner along the whole product development process: from target definition up to product release
- Innovative and validated virtual development methods and an efficient development process ensure high quality results plus savings in costs and timing
- In collaboration with our Manufacturing division we are also a one-stop shop from the first concept idea to the produced vehicle

## Features/Specifications

- Complete vehicle engineering and integration
- Development of modules and systems
- Platform development
- Integration of alternative drive systems (EV, H2, CNG)
- ADAS integration and validation
- Electrics/Electronics (HV Battery, Car2X, HMI, ...)
- Prototype shop: from show-car up to small series
- Testing and validation on complete vehicle and component level

# Virtual Development

The excellent long-term experience in the field of virtual development is a key success factor of Magna. Our proven simulation methods and efficient development processes are the core of this competence.



Smarter



Safer

## Competitive advantage/differentiators

- Prediction quality of digital prototypes at the highest quality level
- Very high degree of design maturity in early project phases
- Minimize development risks, reduce number of prototypes and save one-time costs

## Applications

- Continuous validation of new simulation methods to face changing technologies and functional requirements in automotive engineering.
- Virtual reality tools facilitate a global collaboration, ensure high information quality in every project phase and allow a quick decision-making process

# Complete Vehicle Manufacturing

Tailor-made solutions covering the whole portfolio from body-in-white to paint to assembly.



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Cleaner



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## Features/Specifications

- Flexible solutions from niche to volume vehicle production
- Complete body manufacturing, from steel constructions to material-optimized structural bodies
- Multi-OEM paint shop offers maximum flexibility, multi-material capability and highest quality
- Extensive product options for vehicle assembly, including integration of different products from one or more OEMs
- Smart factory applications enabling versatility, resource efficiency and shorter time-to-market for increased competitiveness

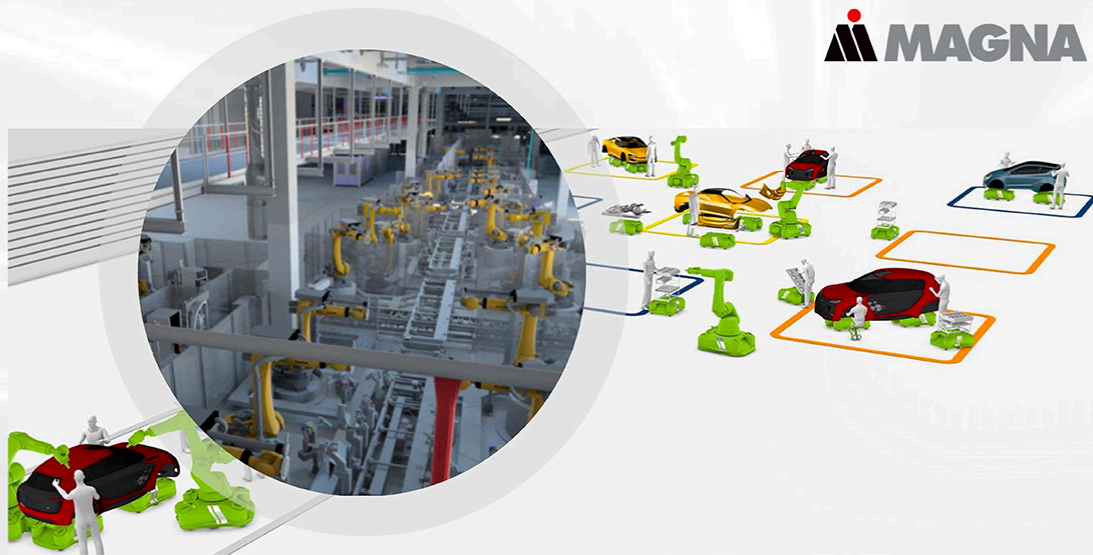
## Competitive advantage/differentiators

- First contract manufacturer to produce vehicles with different powertrains (ICE, Plug-in hybrid, purely electric) on one production line
- Number one in multi-OEM vehicle contract manufacturing
- More than 3.7 million vehicles – of 30 different models – produced to date
- One-stop shop: From Virtual Engineering to Vehicle Production



# Smart Factory

With our innovative solutions we are positioning ourselves at the forefront of future oriented automotive production. Leveraging digital inter-connectivity and intelligent equipment and systems, we increase efficiency and productivity to respond quickly and precisely to customers' needs.



Smarter



Safer

## Competitive advantage/differentiators

- Digital factory planning allows us to reduce the period from start-up to production peak.
- With a fully autonomous transport of parts a significant reduction of cost and non-value-added time can be achieved.
- Future human machine interactions such as visual support in a mixed reality environment will improve processes, data quality, and error prevention.

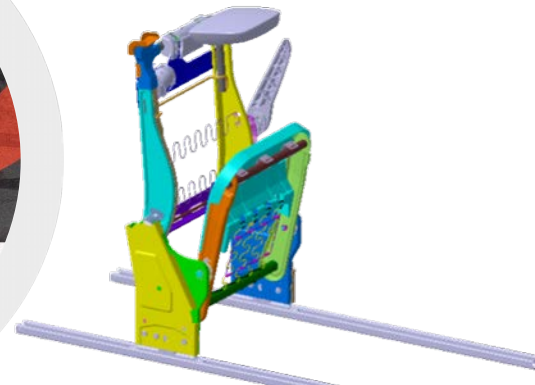
## Applications

- Through our Smart Factory approach in complete vehicle manufacturing, we master increasing product complexity and react quickly to dynamic market changes.



# IP Nesting

The passenger seat nests into the instrument panel by combining stadium cushion flip-up and long rails to provide cargo storage space for improved mobility. The use of a stadium cushion and long rails provides additional cargo storage space and an enhanced user experience by offering an adaptable, flexible interior.



Smarter



First to Market  
Opportunity



Co-Development  
Opportunity



New Mobility



Autonomy



Electrification



Magna Exclusive



Patent Pending



Industry First

## Competitive advantage/differentiators

- One step, single-handed operation to move seat to IP nesting position
- Seat back recline
- Fore/aft comfort adjustment
- Integrated restraint system (ABTS capable)
- Option for power IP nesting

## Applications

- Coupes, Sedans, MPVs, SUVs and Commercial Vehicles

SOP

Ideation

Discovery

Concept

Development

Serial Preparation

in Production

# Long Rails

Magna's power Long Rail technology provides ease of reconfigurability and flexibility for various occupant and cargo situations. The vehicle cabin can be reshaped to offer a more useable and collaborative interior for the autonomous vehicle, ride sharing and car sharing scenarios of the future.



Smarter



New Mobility



Electrification

## Competitive advantage/differentiators

- Enables conference / cargo mode seat arrangements
- Power version with quick and comfort adj
- Manual override ability
- Removable seat attachment
- Mountable inside the floor

## Applications

- 2 row or 3 row SUV and Commercial Vehicle configurations

## Additional Information

- These weights are estimates and based on CAD, they are subject to change
- Manual Long Rail –
  - Generic Lower Channel (Mass: 2.3735 gm/mm)
  - Generic Upper Channel (Mass: 1.1686 gm/mm)
- Power Long Rail -
  - Generic Lower Channel (Mass: 3.872 gm/mm)
  - Generic Upper Channel (Mass: 1.3083 gm/mm)

SOP

Ideation

Discovery

Concept

Development

Series Preparation

in Production



# Stadium Swivel Seat

Magna's Stadium Swivel Seat technology provides a flexible, reconfigurable seating solution for future mobility scenarios including autonomous vehicles, ride sharing and car sharing. The ease of operation and adaptable interior space enhance the occupant's experience.



Smarter



New Mobility

## Competitive advantage/differentiators

- Enables conference / campfire seat arrangements
- Best-in-class swivel mechanism package and stadium cushion enable compact swivel arc
- Low rotational efforts and high rotational stability through use of rolling elements in swivel mechanism

## Applications

- 2 row or 3 row SUV and Commercial Vehicle configurations
- Improves consumer social engagement

SOP

Ideation

Discovery

Concept

Development

Series Preparation

in Production



Forward. For all.