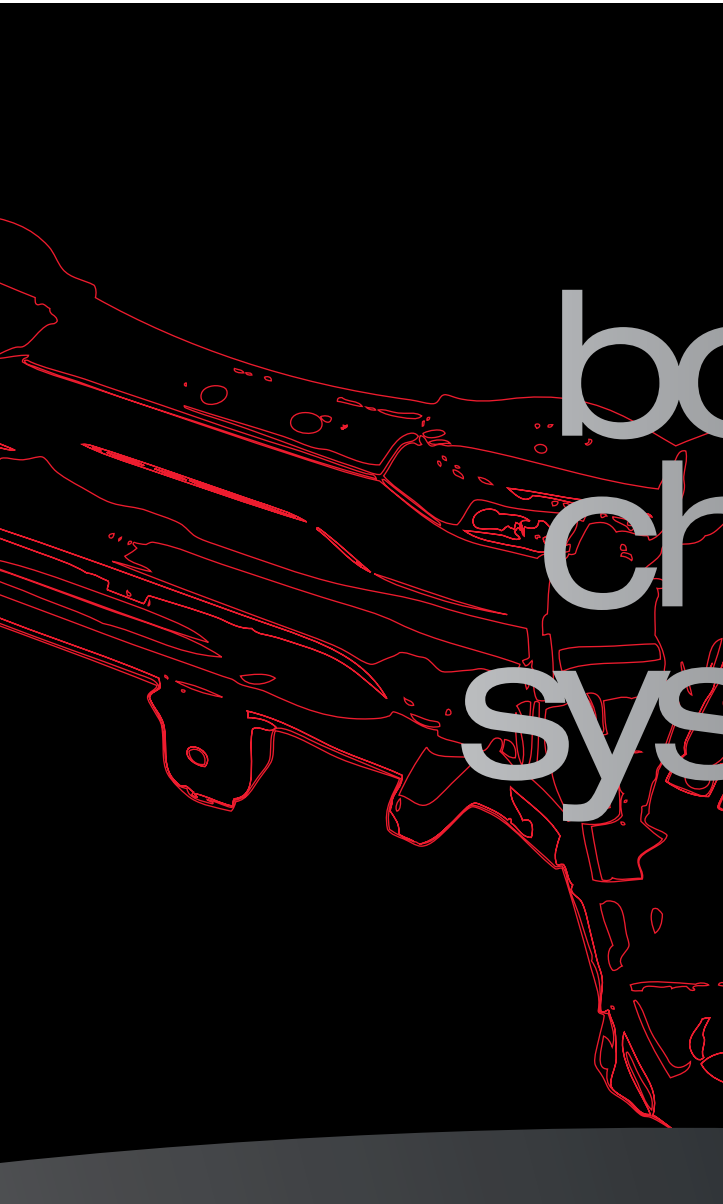


Magna International Inc.

Where it all comes together™



body & chassis systems

body systems
chassis systems
technology, engineering &
tooling systems

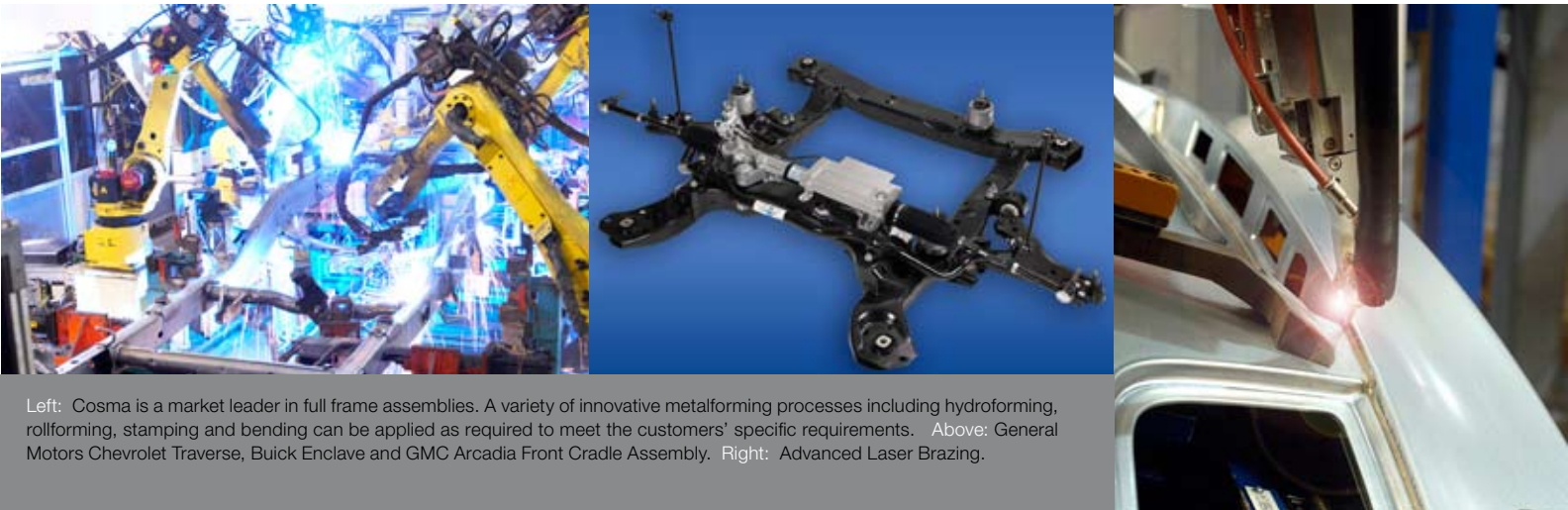
BODY & CHASSIS SYSTEMS | POWERTRAIN SYSTEMS | EXTERIOR SYSTEMS
SEATING SYSTEMS | INTERIOR SYSTEMS | VISION SYSTEMS | CLOSURE
SYSTEMS | ROOF SYSTEMS | ELECTRONIC SYSTEMS | HYBRID & ELECTRIC
VEHICLES/SYSTEMS | COMPLETE VEHICLE ENGINEERING & ASSEMBLY

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Body & Chassis Systems

Cosma International, an operating unit of Magna International, manufactures a comprehensive range of metal body systems, components, assemblies and modules including complete vehicle frames, chassis systems and body-in-white systems using a variety of innovative processes including hydroforming, stamping and roll forming.



Left: Cosma is a market leader in full frame assemblies. A variety of innovative metalforming processes including hydroforming, rollforming, stamping and bending can be applied as required to meet the customers' specific requirements. Above: General Motors Chevrolet Traverse, Buick Enclave and GMC Arcadia Front Cradle Assembly. Right: Advanced Laser Brazing.

Customer Base

Aston Martin, Audi, BMW, Chrysler, Daimler, Freightliner, Ford (Mazda, Volvo), General Motors (Opel), Honda, Hyundai/Kia, Infiniti, Jaguar, Mercedes-Benz (Smart), Mitsubishi, PACCAR, Porsche, PSA Peugeot Citroen, Renault-Nissan, Skoda, Skyline, Subaru, Suzuki, Toyota, Volkswagen (Audi), Western Star and their respective operating divisions and subsidiaries.

Capabilities

Body Systems

- » Complete Body-In-White
- » Floor Pans
- » Underbody Assemblies
- » Door, Hood & Deck Assemblies
- » Roof Panels
- » Fender & Quarter Panels
- » Tailgate & Liftgate Assemblies
- » A, B, C & D Pillars
- » Bumper Beams
- » Door Intrusion Systems
- » Oil Strainers
- » Heat Shields

Chassis Systems

- » Crossmember Assemblies
- » Radiator Supports
- » Shock Towers
- » Engine Cradles
- » Front & Rear Sub-Frame Assemblies
- » Front & Rear Suspension Modules
- » Control Arms
- » Frame Rails
- » Full Frame Assemblies

Technology, Engineering & Tooling Systems

- » Program Management
- » Program Engineering
- » CAE Design Verification
- » Prototype Build
- » Testing & Validation
- » Tooling & Automated Systems
- » Research & Development

Innovations

Stamping

Cosma began as a metal stamping supplier to the automotive industry. From the smallest reinforcement, to the largest body system, Cosma's expertise in providing innovative stamping solutions includes the forming of a wide range of materials such as advanced high strength steels and aluminum.

Hydroforming

Cosma has pioneered the application of hydroforming to the automotive industry in a variety of products such as frames, subframes, and front end structures. This innovative process allows for considerable flexibility in product design, reduction in the number of components in the overall system, and considerable benefits in many areas of vehicle performance.

Rollforming

For products such as bumper beams, frame rails and roof bows, where the safety of the vehicle occupant is dependent on rigidity and structural integrity of these components, Cosma offers expertise in the process of rollforming ultra high strength materials. With the ability to tightly bend (sweep), pierce and weld rollformed components in sequence, along with less material waste, the customer sees the full benefit of this cost effective process.