NORTH AMERICAN Stamping Group

Company Overview

2024

Vision and Mission

Vision

North American Stamping Group strives to be a leading provider of innovative and sustainable manufacturing solutions, delivering exceptional value to our customers, team members, and stakeholders through operational excellence, technology leadership and a commitment to safety.

Mission

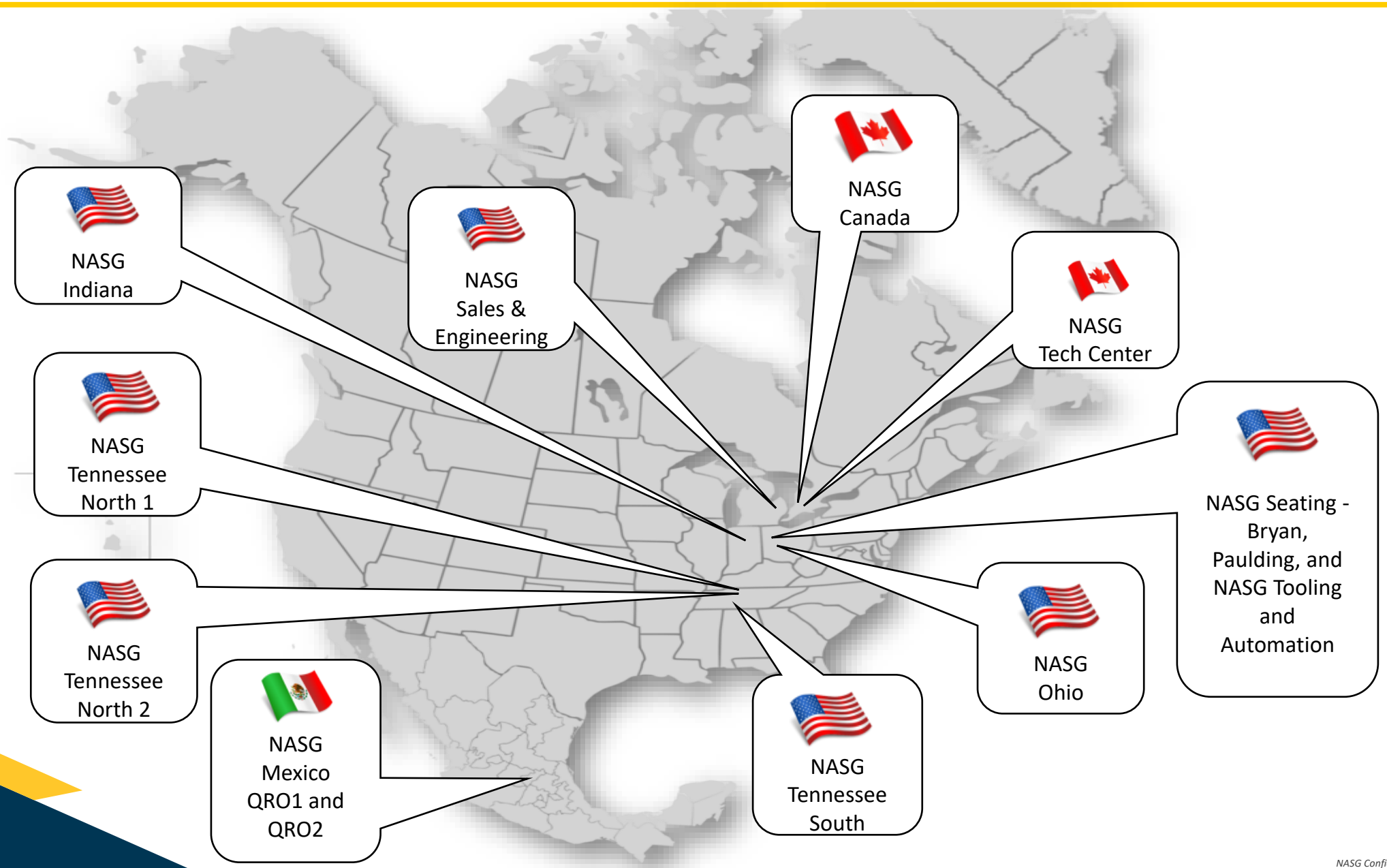
Our mission is to provide high-quality products and services that exceed our customers' expectations. We are committed to continuously improving our processes and investing in the latest technology to maintain our position as a leading Tier II Automotive Supplier. We operate with integrity, respect for our team members, and a dedication to environmental sustainability. Our goal is to create long-term value for our stakeholders while contributing to the economic growth of our community.

- NASG was founded in 1978.
- Today we are powered by 1,300+ team members, in 3 countries.
- At our 40th anniversary the decision was taken to transition the company to the 3rd family generation and beyond. We enacted this strategy to ensure a solid business continuity for our partners, shareholders, team members, customers, suppliers and the communities we serve.
- These changes included putting the company in a trust to protect against crippling estate taxes through an insurance vehicle.
- Further we hired and engaged a majority outside board of directors to guide the family trust and CEO.
- Over the last decade we have deployed nearly $210 million in capital spending for new facilities, expanded facilities, new equipment, technologies, processes and acquisitions.
- This investment allowed us to open up significant capacity throughout the entire USMCA region to support future growth requirements with our strategic customers.
- Our organization includes 10 manufacturing facilities, 2 machinery and tooling technical centers and 1 sales and engineering office encompassing 1.5 million square feet, 103 state of the art stamping presses up to 2000 tons, as well as hundreds of secondary assembly operations.
- Our sales have grown annually at a compounded rate of 8.5% for the last ten years, more than doubling our business, while making us one of the largest leading Tier II automotive stamping and assembly suppliers with annual sales approaching $500 million.

INTRODUCTION

- Our capital investments also includes Technical Centers in Canada and Ohio where we have the capacity to build a large portion of our internal stamping tooling, machinery, gauging, prototypes and offers simulation and spring back compensation technology that is consistent with the best Global tool sources.
- This investment is critical with the tooling capacity shortage predicted for North America.
- Our Product Launch and Advanced Engineering team is comprised of top talent throughout Canada, USA and Mexico, allowing us to provide Product Engineering and launch support that gives our customers the flexibility and efficiency required to improve lead times and reduce costs.
- NASG has a long history of assisting customers with tooling resourcing activities, including acquisitions, (38 offloads in the last 10 years worth $86 million in annual sales) during times of capacity and commercial constraints.

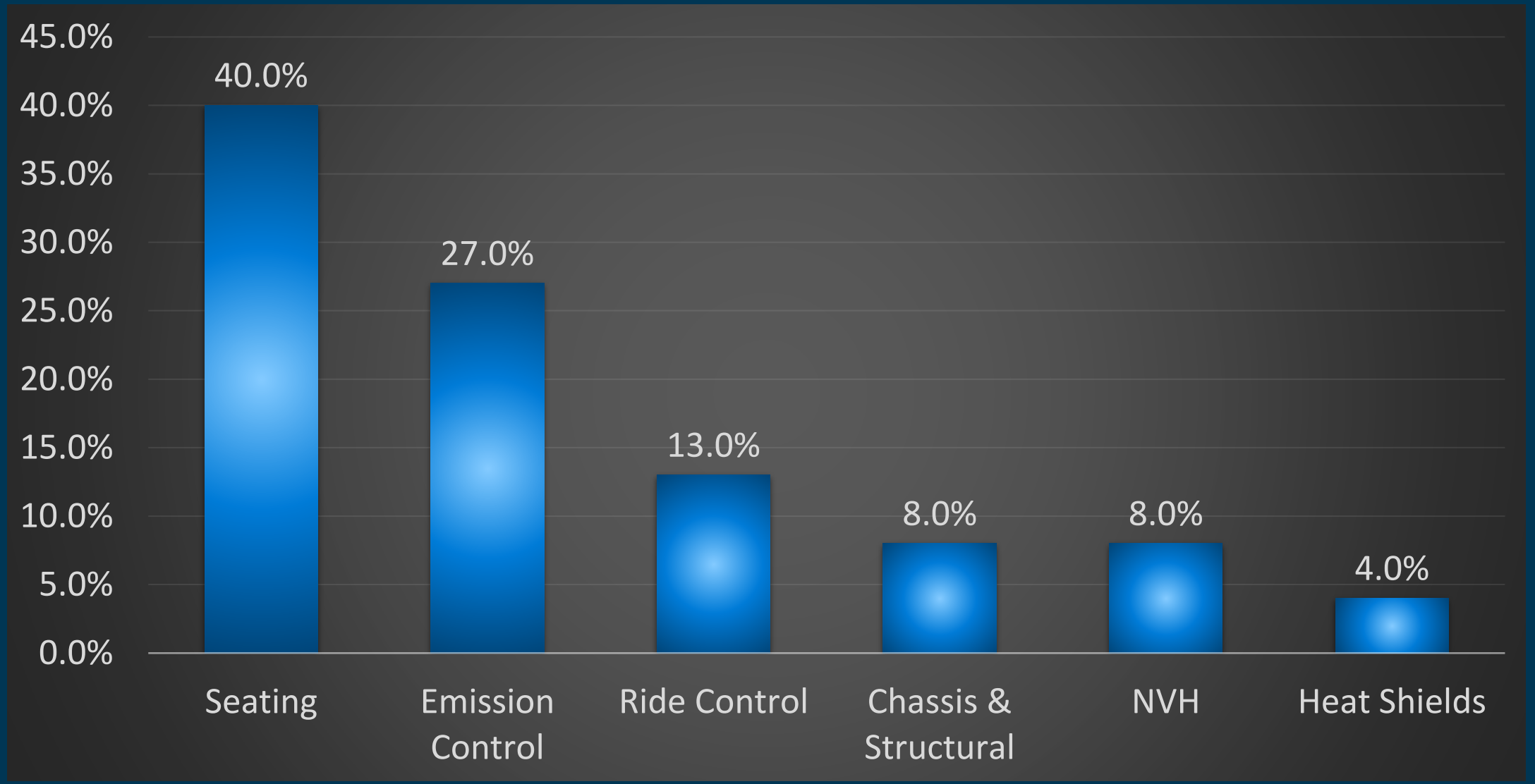
Manufacturing Footprint



Operating Strategy

- Quality is the cornerstone of our organization and future. We will continue our success through team members well trained in TQPS (Operational Excellence), disciplined systems / procedures, continued reinvestment in:
  - modern equipment;
  - innovative processes;
  - industry leading technologies;
  - and our USMCA manufacturing footprint to supply best in class quality to our customers.
- Through a targeted sales and marketing plan, managed by our shared services Sales & Engineering Team, in conjunction with our Technical Center, we are laser focused on market / product lines, that allows for the necessary technical competency to support and partner with our customers enabling us to achieve a diverse customer base, while allowing a managed growth strategy.

Sales by Market / Product Type



NORTH AMERICAN Stamping Group

NASG Canada

Facility

Woodstock, Ontario

Current 253,680f^2 (23,568m^2)

14 Presses Ranging from

250 – 1650 tons

Capabilities

Progressive Stamping

Transfer Stamping

Resistance Welding

Robotic Mig Welding

Production Grinding

Assembly

Washing

Market

Seating

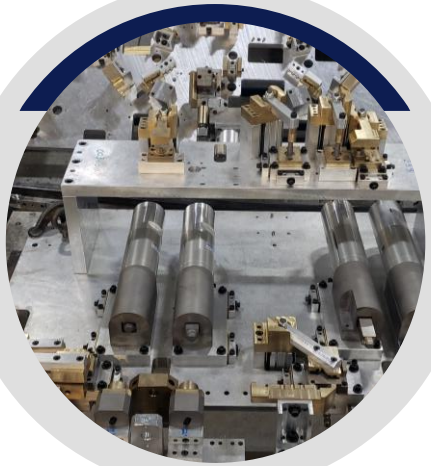
Emissions

NVH

Chassis & Structural

Heat Shields

NASG Canada - Technical Center



Facility

Woodstock, Ontario

Current 23,615f^2 (2,194m^2)

1 Press – 1600 Tons

Capabilities

Progressive Stamping Tools

Transfer Stamping Tools

Design & Engineering

Inspection Equipment

Electrical Discharge Machining

Surface Grinders

CNC's & Mills

Market

Seating

Emissions

NVH

Chassis & Structural

Ride Control

Heat Shields

NASG Ohio

Facility

Ada, Ohio

Current 25,872f^2 (2,403m^2)

9 Presses Ranging from

150 – 600 Tons

Capabilities

Progressive Stamping

Transfer Stamping

Hand Transfer

Resistance Welding

Robotic Mig Welding

Washing

Market

Heavy Truck Braking

Chassis & Structural

Heat Shields

NASG Paulding

Facility

Paulding, OH

Current 110,000f^2 (10,217m^2)

Capabilities

Wire Forming

Tube Bending

Automated Assembly

Mig Welding

Resistance Welding

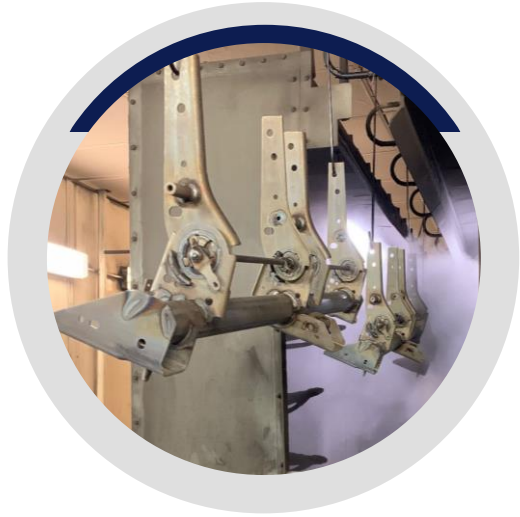
Dual Robotic Cells

Dial Resistance Cells

Market

Seating

NASG Bryan



Facility

Bryan, OH

Current 120,000f^2 (11,146m^2)

3 Presses Ranging from

200 – 300 Tons

Capabilities

Wire Forming

Tube Bending

Automated Assembly

Mig Welding

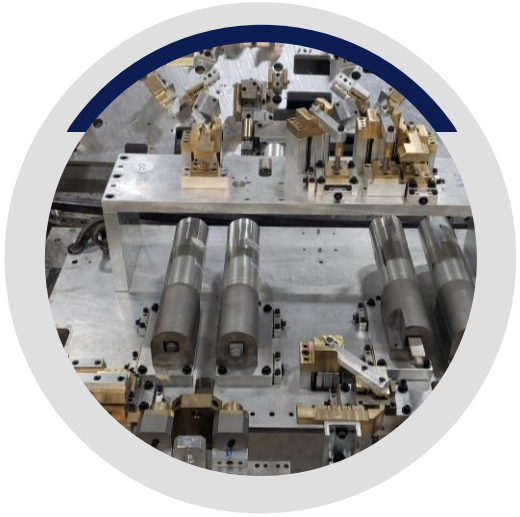
E-Coat Painting

Powder Coat Painting

Market

Seating

NASG Tooling & Automation



Facility

Ridgeville Corners, OH

Current 55,000f^2 (5,109m^2)

1 Press – 200 Tons

Capabilities

Complete Design / Build / Integration for Machinery, Tooling and Gages

Wire Frame Resistance Welders

Hand Transfer & Progressive Dies

Wire & Tube Formers

Robotic MIG Weld Fixtures

Low Volume Prototyping

Automated Special Equipment

CMM Layout

Market

Automotive Components

Machinery & Tooling

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NASG Indiana

Facility

Muncie, IN

Current 156,989f^2 (14,584m^2)

12 Presses Ranging from

300 – 800 Tons

Capabilities

Progressive Stamping

Transfer Stamping

Resistance Welding

Robotic Mig Welding

Assembly

Production Grinding

Deburring

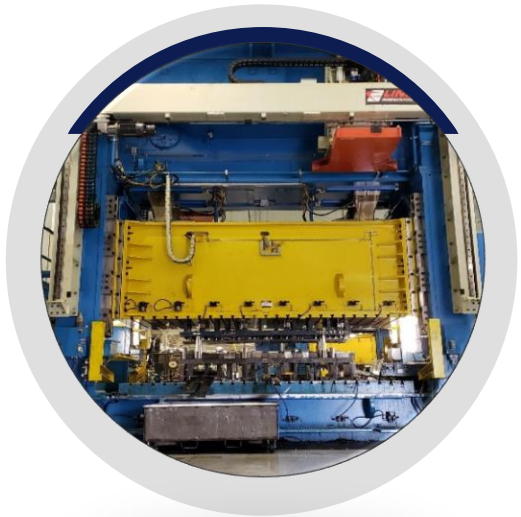
Washing

Market

NVH

Seating

NASG TN North 1



Facility

Portland, TN

Current 118,959f^2 (11,052m^2)

11 Presses Ranging from

150 – 800 Tons

Capabilities

Progressive Stamping

Transfer Stamping

Resistance Welding

Assembly

Deburring

Washing

Market

Ride Control

NVH

Seating

Chassis & Structural

Heat Shields

NASG TN North 2

Facility

Portland, TN

Current 234,984f^2 (21,830m^2)

12 Presses Ranging from

400 – 1500 Tons

Capabilities

Progressive Stamping

Transfer Stamping

Resistance Welding

Robotic Mig Welding

Assembly

Deburring

Washing

Production Grinding

Market

Seating

Emissions

Chassis & Structural

Front End Modules

Heat Shields

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NASG TN South

Facility

Pulaski, TN

Current 61,700f^2 (5,733m^2)

20 Presses Ranging from

75 – 250 Tons

Capabilities

Progressive Stamping

Resistance Welding

Riveting

Assembly

Deburring

Washing

Market

Seating

Ride Control

Chassis & Structural

Heat Shields

NASG Mexico QRO-1

Facility

Queretaro, Mexico

Current 244,718f^2 (22,735m^2)

20 Presses Ranging from

150 – 2000 Tons

Capabilities

Progressive Stamping

Transfer Stamping

Resistance Welding

Robotic GMAW Welding

Assembly

Washing

Market

Seating

Ride Control

Emissions

NVH

Chassis & Structural

Front End Modules

Heat Shields

NASG Mexico QRO-2

Facility

Queretaro, Mexico

Current 65,000f^2 (6,038m^2)

Secondary Operations & Assembly

Capabilities

Resistance Welding

Robotic Welding

Automated Assembly

Dual Robotic Cells

Dial Resistance Cells

Market

Seating

Ride Control

Emissions

NVH

Chassis & Structural

Front End Modules

Heat Shields

NASG Sales & Engineering Office

Facility

Farmington Hills, MI

Current 3,000f^2 (279m^2)

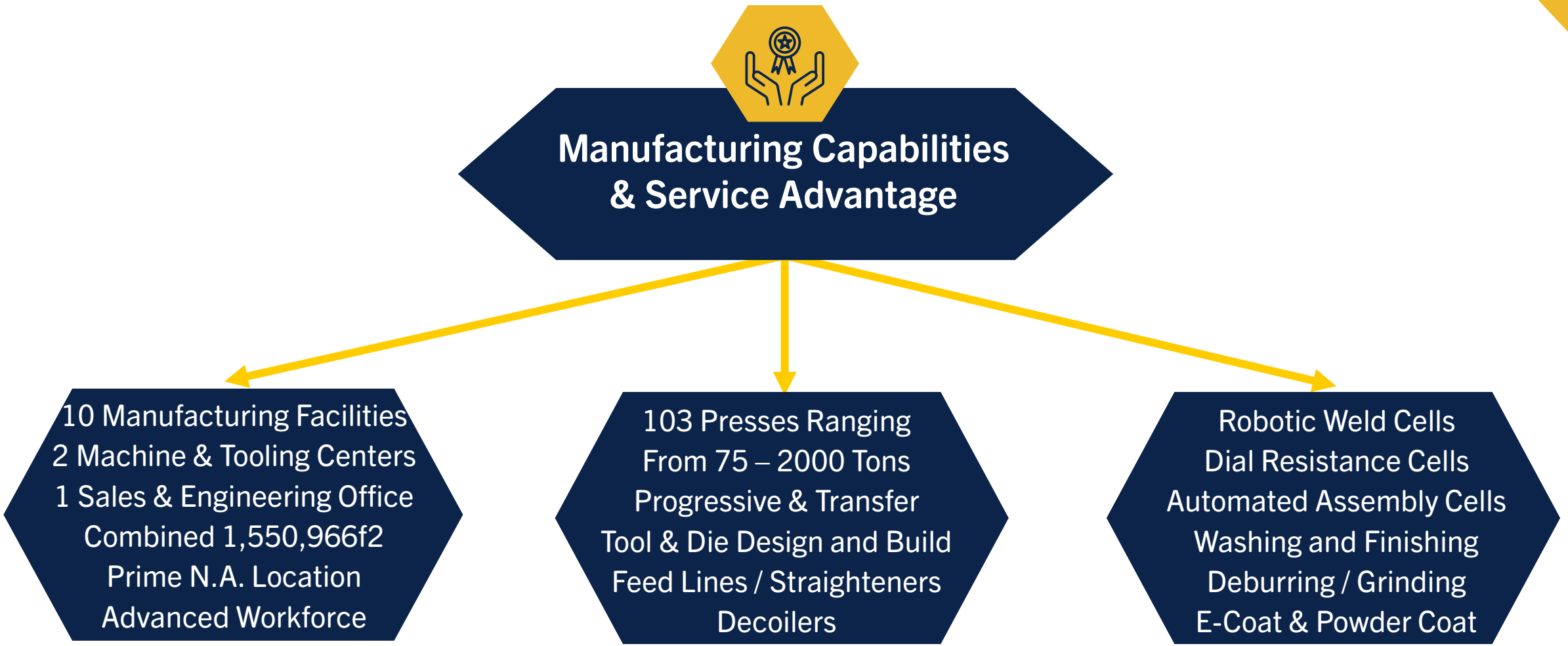
Capabilities

Through a targeted sales & marketing plan, managed by our shared services Sales & Engineering Team, we are laser focused on market / product lines, that allows for the necessary technical competency to support & partner with our customers enabling us to achieve a diverse customer base, while allowing a managed growth strategy.

Market

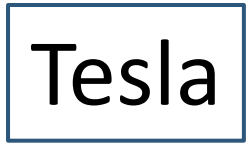
Automotive Components

Our Manufacturing Capabilities and Service Advantage

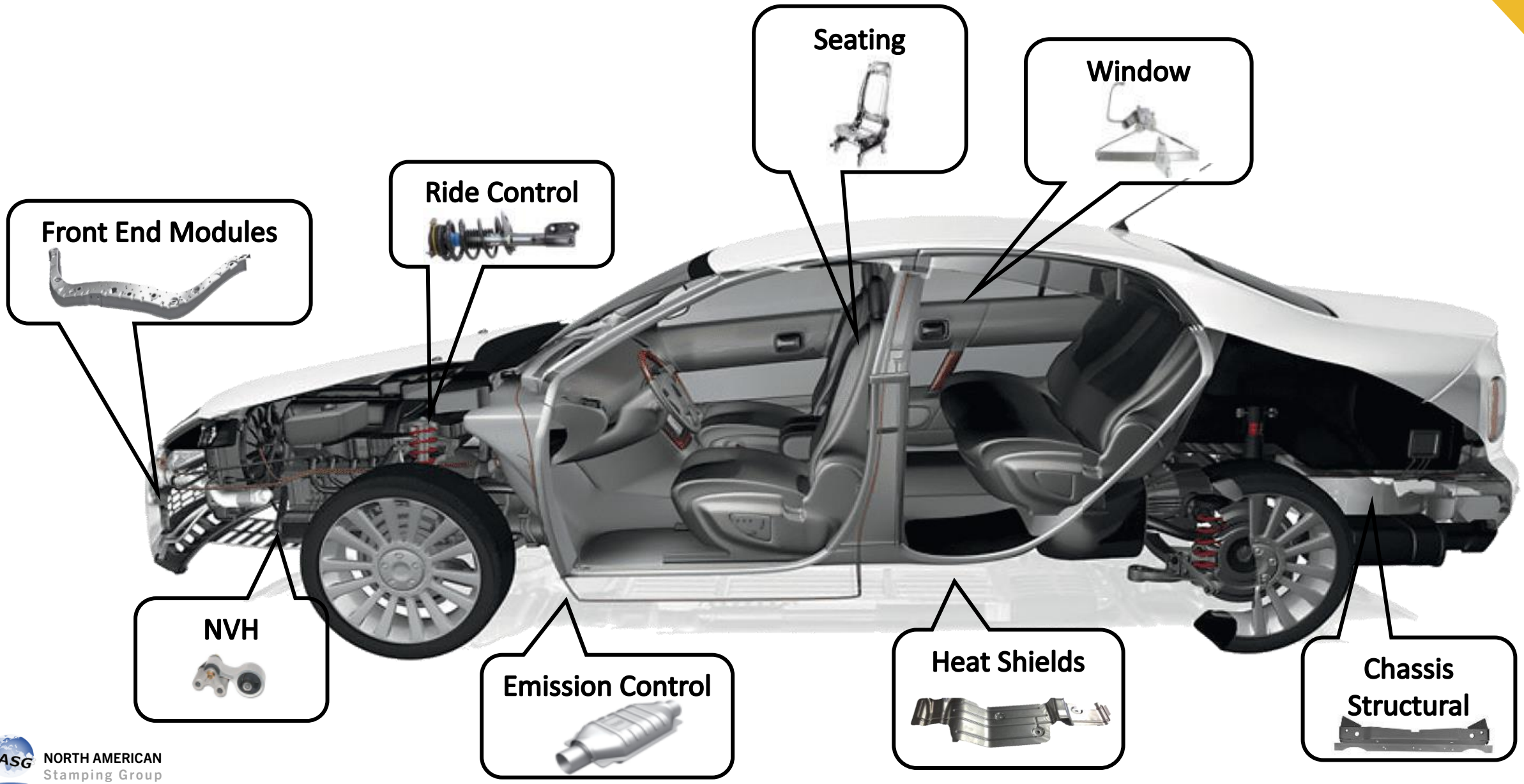


OEM Support

Through Our Tier 1 Partners



Core Products



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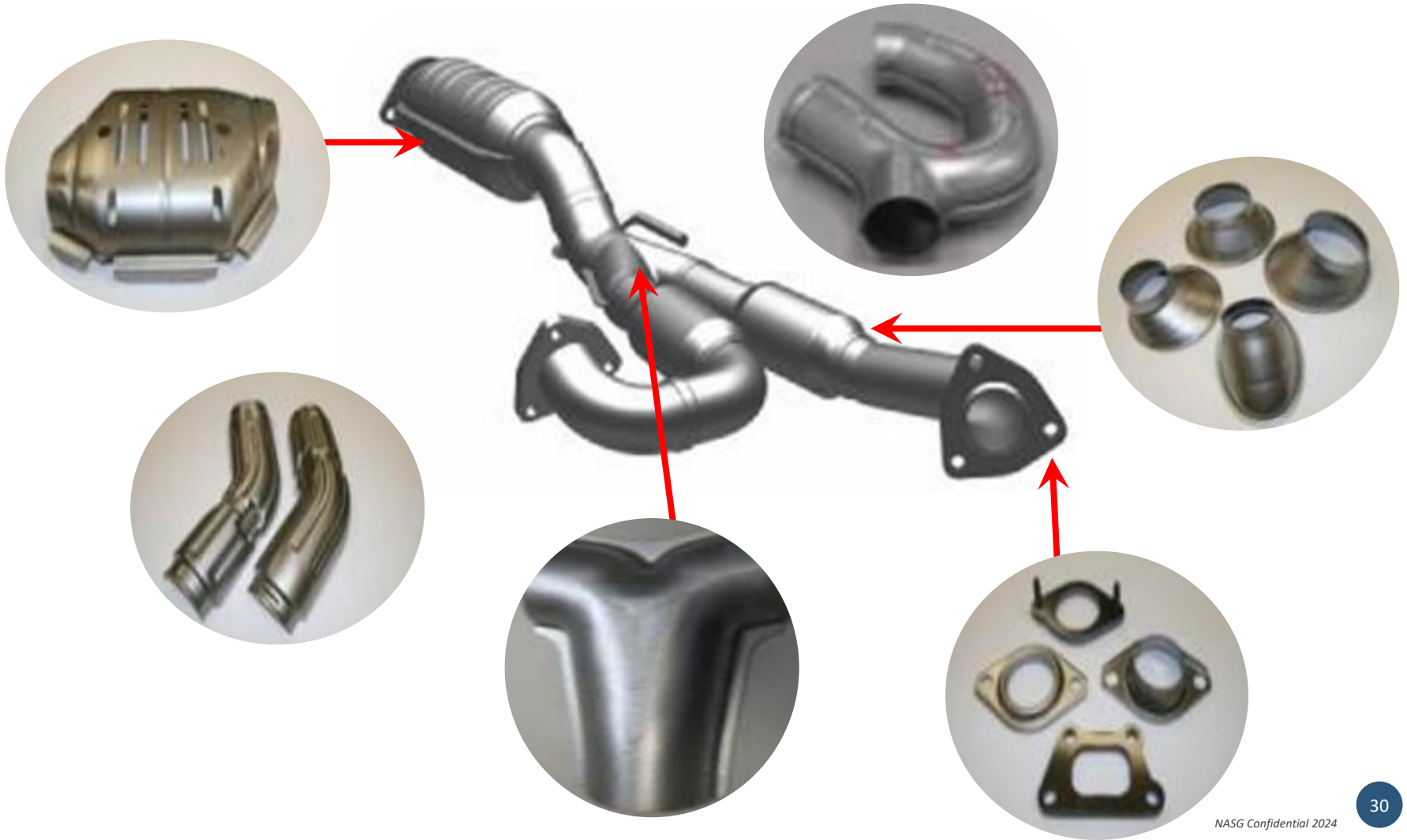
Emissions Components & Assembly

- Manifold
  - Shells
  - Collectors
- Muffler
  - Shells
  - Flat Bodies
  - Perf Tubes
  - Heads
  - Baffles

Emissions Components & Assembly

- Converters
  - Sub Assemblies
  - Cones
  - Flats
  - ½ Shells
  - Heat Shields
- System
  - Y Pipes
  - Brackets
- Flanges
  - Ground Heavy Flanges
  - Thin Gauge Flanges



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Selective Catalytic Reduction Components

Diesel Particulate Filter Components

- ❖ Manifold
  - Shells
  - Collectors
- ❖ Muffler
  - Shells
  - Flat Bodies
  - Perf Tubes
  - Heads
  - Baffles

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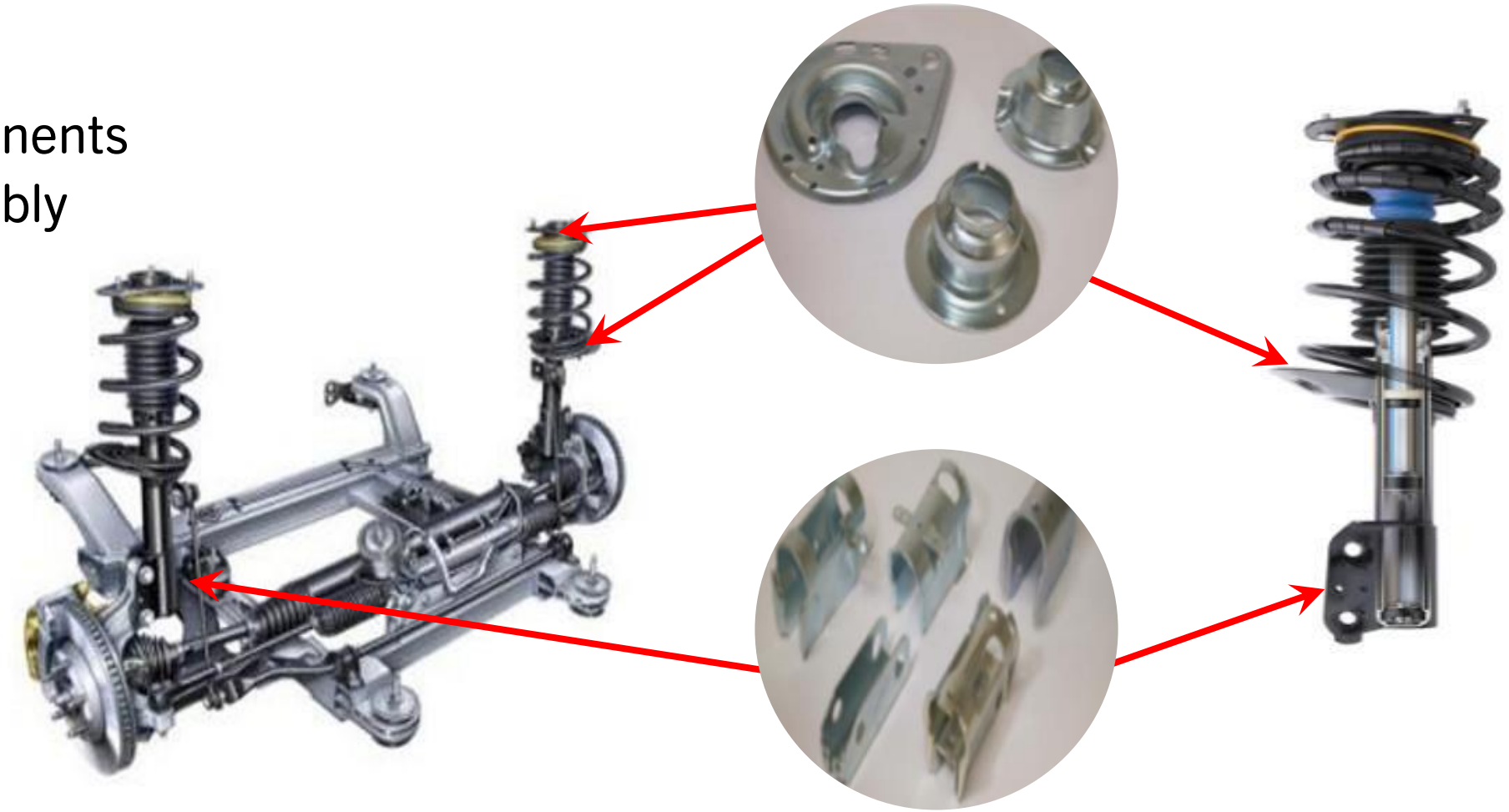
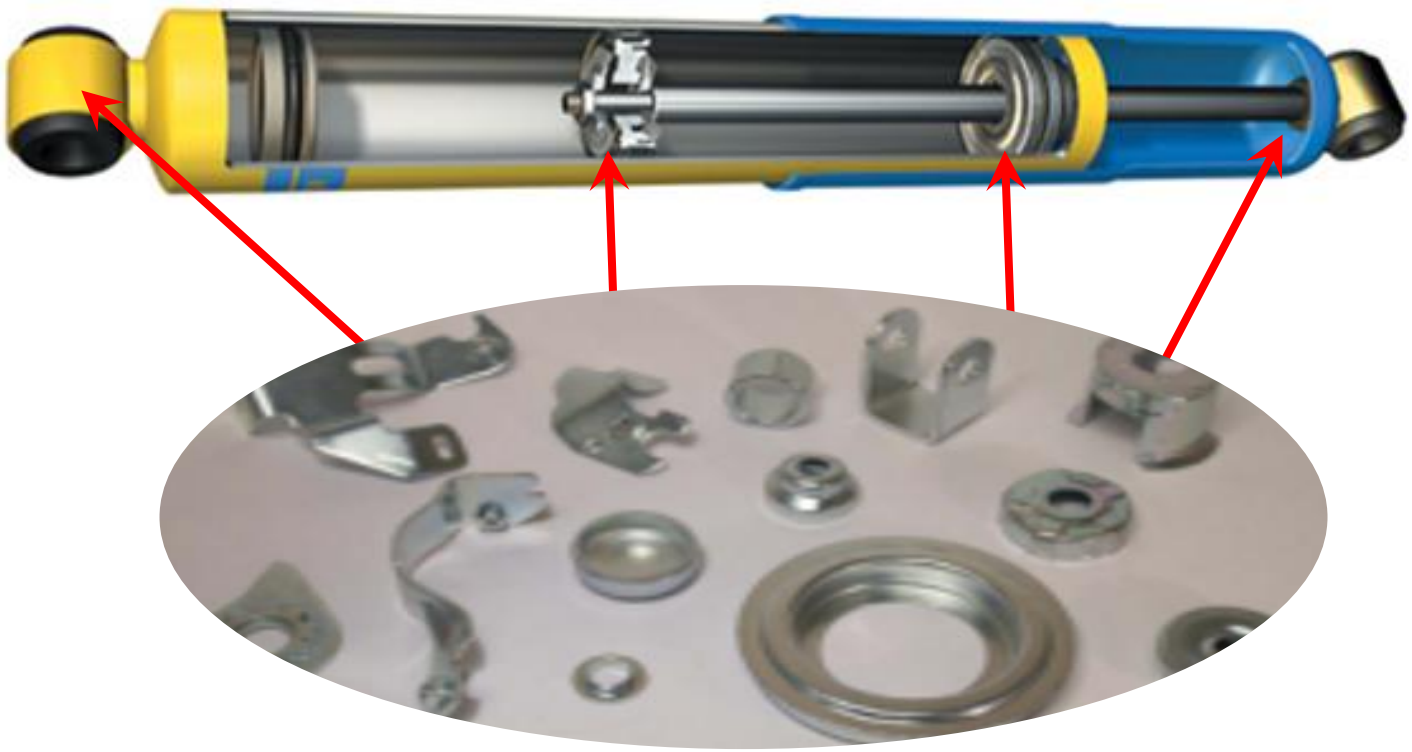
Ride Control Components & Assembly

- Struts
  - Internal Components
  - Knuckle Assembly
  - Spring Seats
  - Misc Brackets



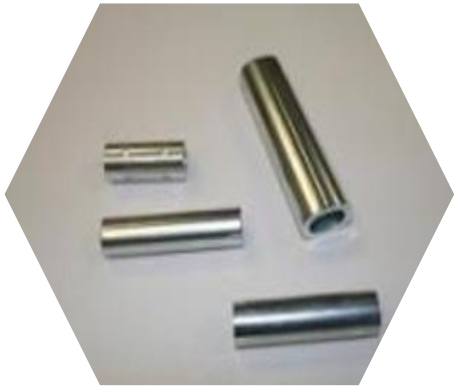
Ride Control Components & Assembly

- Shocks
  - Internal Components
  - Misc Brackets
  - Loops
  - End Caps
  - Clevis



NVH Components

- Body Mounts
- Transmission Mounts
  - Window Metals
  - Inserts
  - Inners
  - Outers


NVH Components

- Body Mounts
- Transmission Mounts
  - Window Metals
  - Inserts
  - Inners
  - Outers

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Seating Components & Assembly

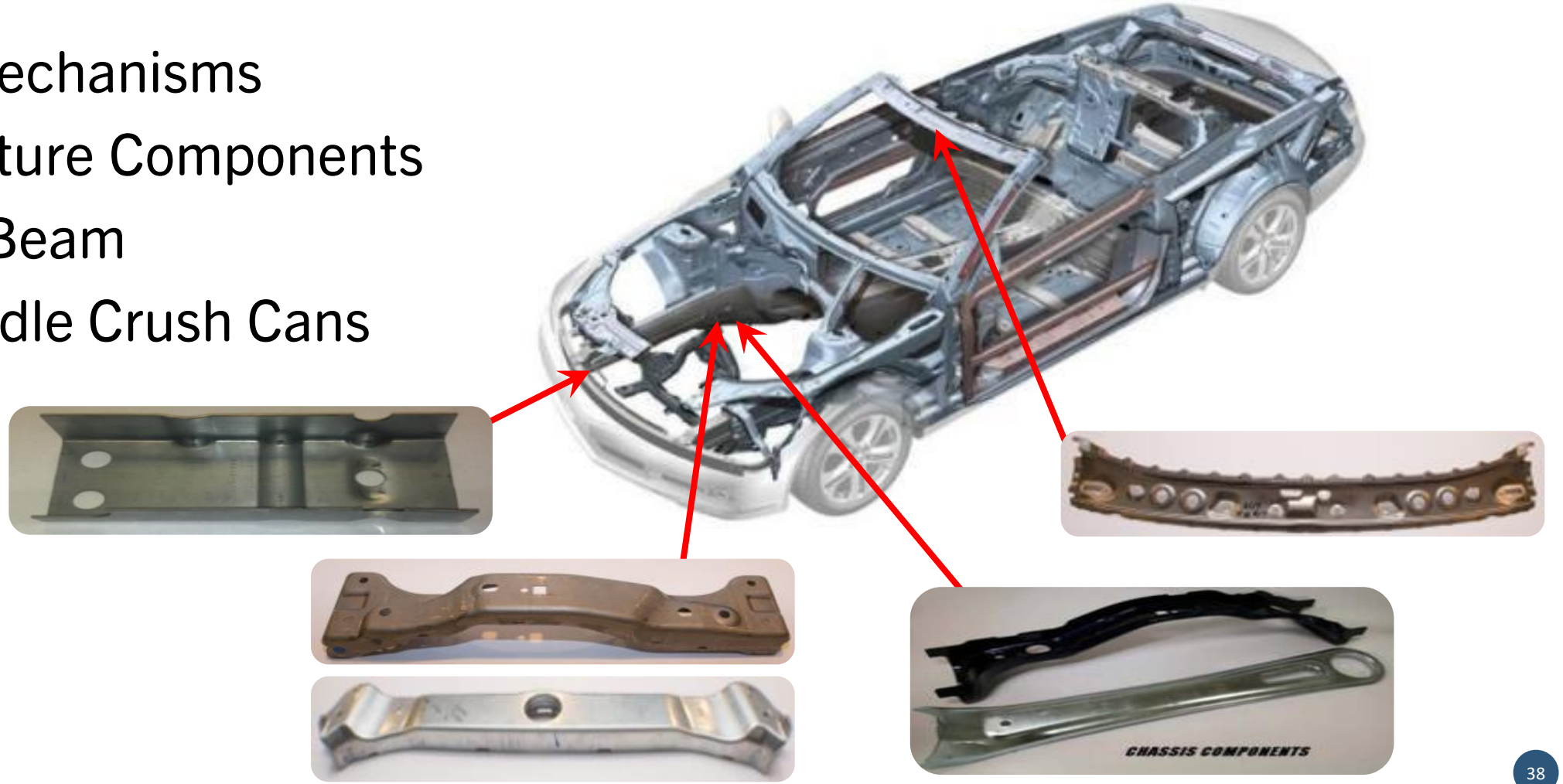
- Structure
  - Frame Assembly
  - Side Members
  - Cross Members
  - Seat Pans
  - Risers

Seating Components & Assembly

- Recliner Mechanisms
  - Mounting Brackets
  - Close Tolerance Components

Dual Phase, HSLA Chassis Components & Assembly

- Recliner Mechanisms
- Misc Structure Components
- Cross Car Beam
- Engine Cradle Crush Cans



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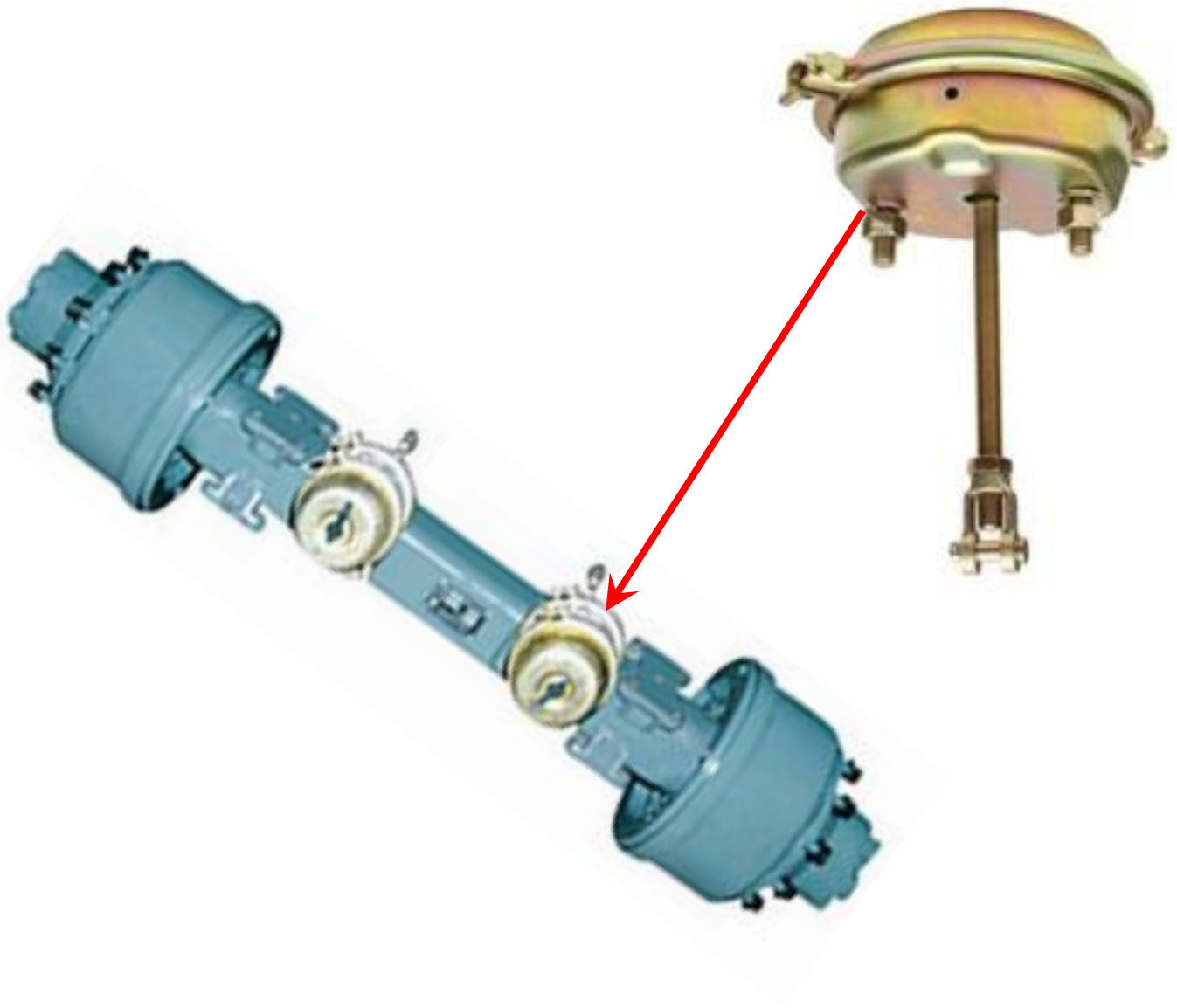
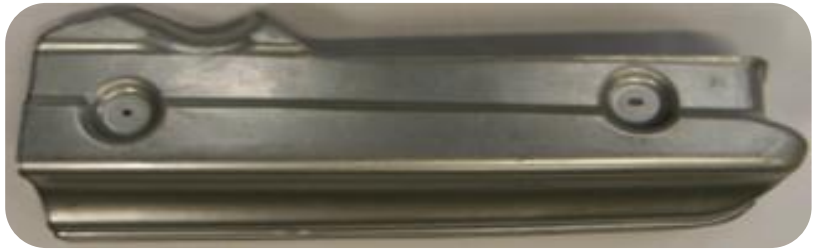
Air Brake Components (Heavy Truck)

- Canister Shells
- Shell Assembly
- Clamp Bands
- Piston Assembly
  - Clevis
  - Piston



Heat Shields



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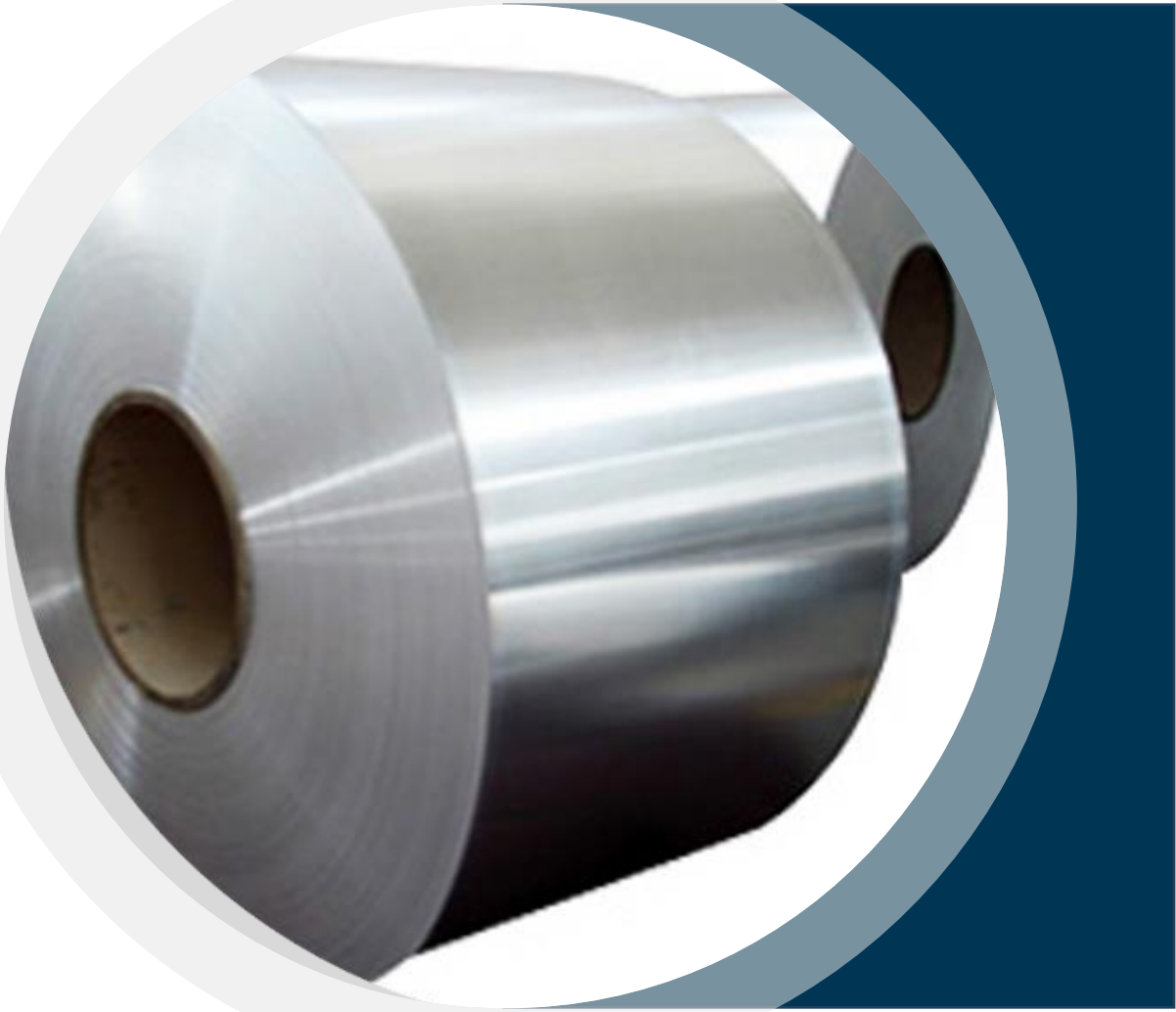
General Stampings & Assemblies

Raw Material Capabilities

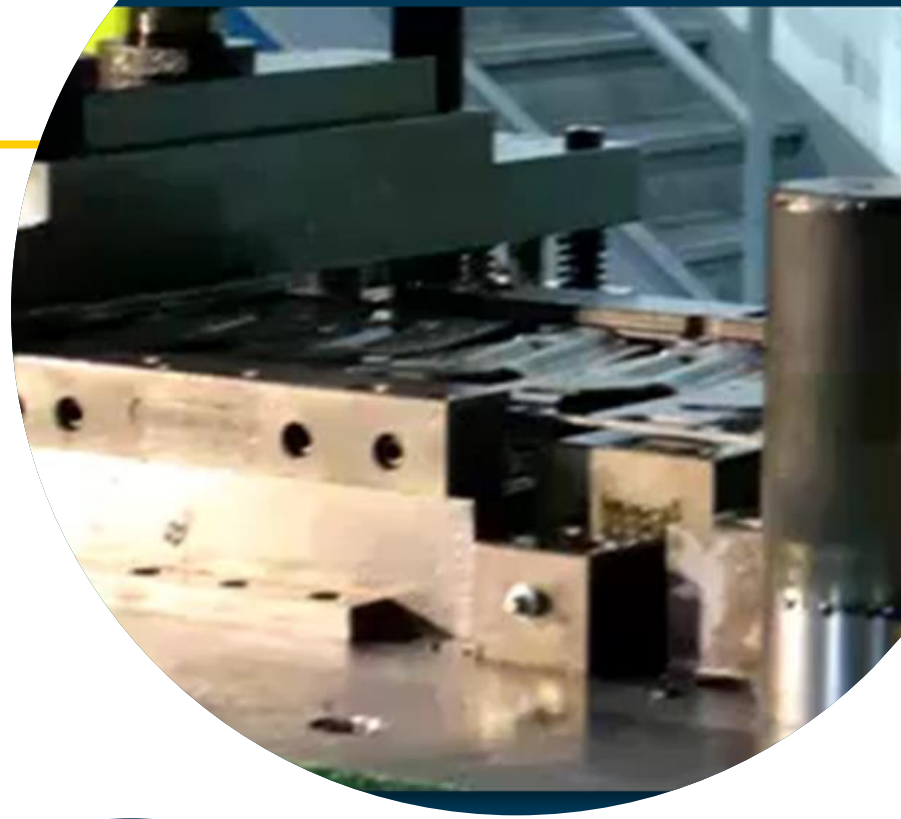
Experience in processing a broad range of material types, grades and gauges.

- Low Carbon
  - Grades 1006 – 1010
- High Carbon
  - Grades 1020 ~
- High Strength Low Alloy (HSLA)
  - Grades up to 550MPa
- Ultra High Strength Steel (UHSS)
  - Grades up to 110ksi
- Dual Phase
  - Grades up to 1100MPa
- Stainless
  - Series 300 – 400
- Aluminum

In house sourcing or the utilization of resale programs such as ERMA, HTA and other customer or OEM based raw material resale programs.



In Die Value Add (Tapping)



❖ Advantages:

- Elimination of secondary operations.
- Elimination of fastener.

❖ Considerations:

- Must be roll formed threads.
- Thin gauge material requires conical or drawn structural extrusion to achieve required number of threads.
- Conical extrusions can be done with minimal cost as they are a single hit process but provide reduced torque results than typical fasteners.
- Drawn extrusions are designed to allow a height of 1.5 times bolt diameter to achieve typical design requirements of a standard fastener.
- Drawn extrusion tooling is at a higher cost due to the added number of stations (typically 8-12) and will create shock lines that may affect a profile (see pictorials).
- **[Caution]** Thicker material can be tapped without adding an extrusion but requires a shave operation to compensate for the breakout. Initial hole size must allow for good die practice.

In Die Value Add (Welding)

❖ Advantages:

- Elimination of secondary operations

❖ Considerations:

- Initial Tooling and Capital Cost Higher
- Best suited for High Volume Programs
- Reduced Stamping Speed

In Die Value Add (Fasteners)

❖ Advantages

- Elimination of secondary operations

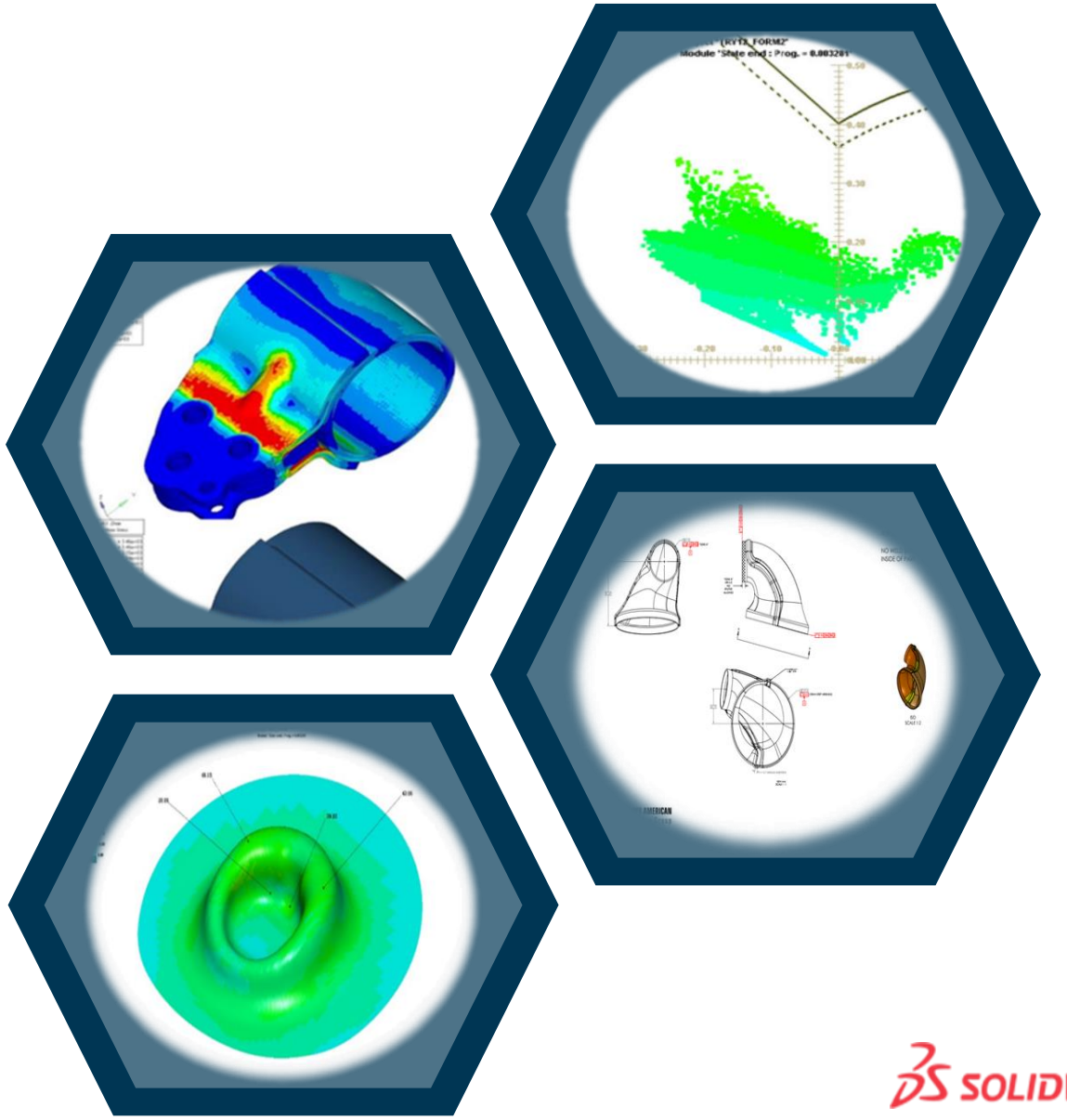
❖ Considerations

- Initial Tooling Higher
- Best suited for High Volume Programs
- Reduced Stamping Speed

❖ Types

- Flange Form
- SPAC
- Specialty

Product Engineering



- Design for Manufacturability
  - On Staff Product Development Team
  - Product Design Assistance & Optimization
  - Product design FEA – A to B Comparison
  - Multi Step Forming Simulation
  - Production Intent Prototypes
  - Assembly Print GD&T Development
  - Component Print GD&T Development
  - Product Feasibility Reviews

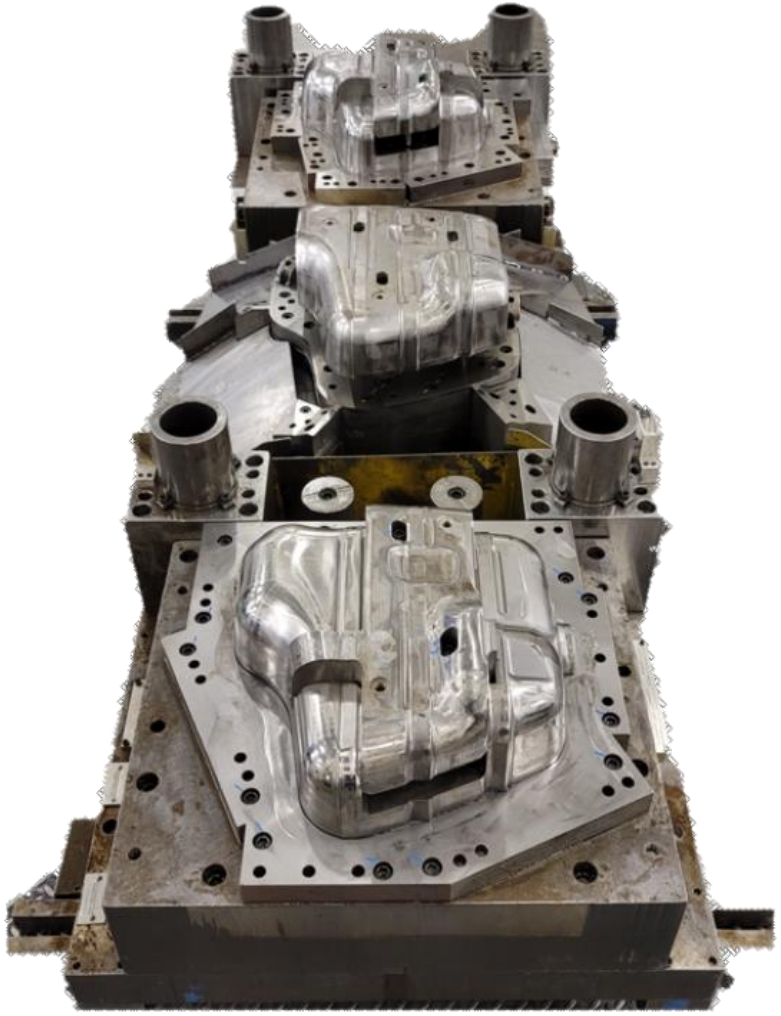
SOLIDWORKS AUTOFORM NX UNIGRAPHICS

Tooling Capabilities

ONE Stop Tooling Source

Utilization of our two (2) captive Technical Centers, domestic North American tooling shops and also partnering with LCC Suppliers and Foreign Tool / Automation Facilities for cost competitiveness.

- **Sourcing (Large Network of Domestic and LCC Vendors)**
  - NASG Technical Centers
  - Domestic
  - Offshore LCC
  - In House KIT Tools
- **Simulation (Full Incremental Simulation)**
  - In House Forming Simulation Support
- **Design (3D CAD Design)**
  - Tooling Engineers on Staff
    - Review of Outsourced Tooling
    - Design of Internal KIT Tooling
- **Management of Tool Vendor Source (On Site)**
  - Full Time Staff for Tooling Build Support
    - Domestic (on site tracking, engineering and build support)
    - Off Shore LCC (on site tracking, engineering and build support)



Mastercam

iebis THE CAD/CAM EXPERTS

Forming Simulation: Pre-Source Product Development

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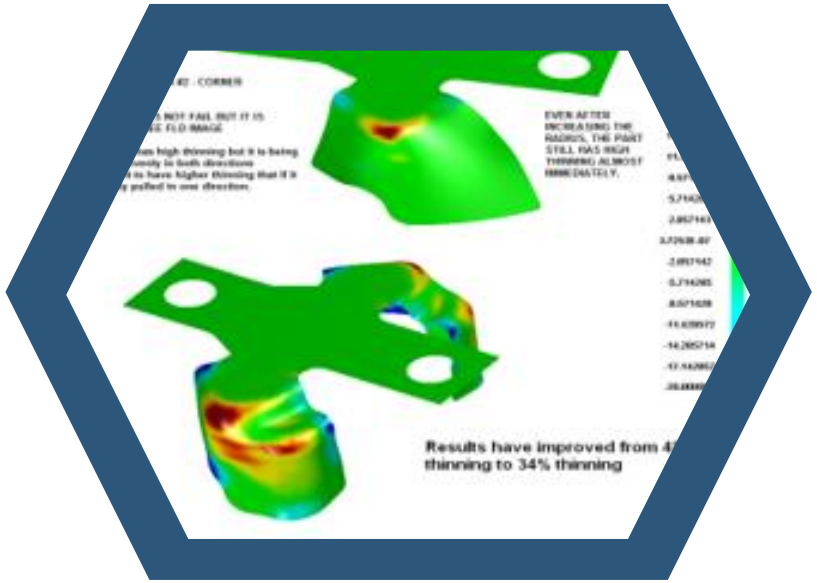
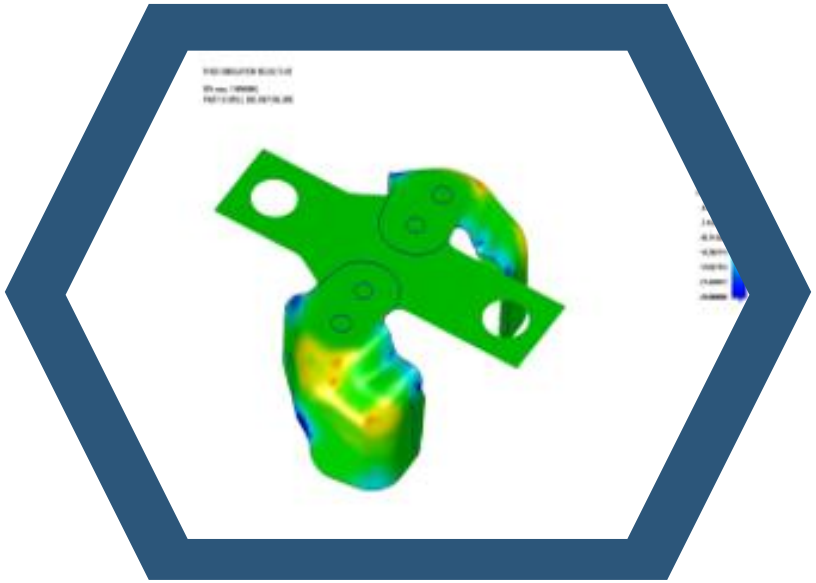
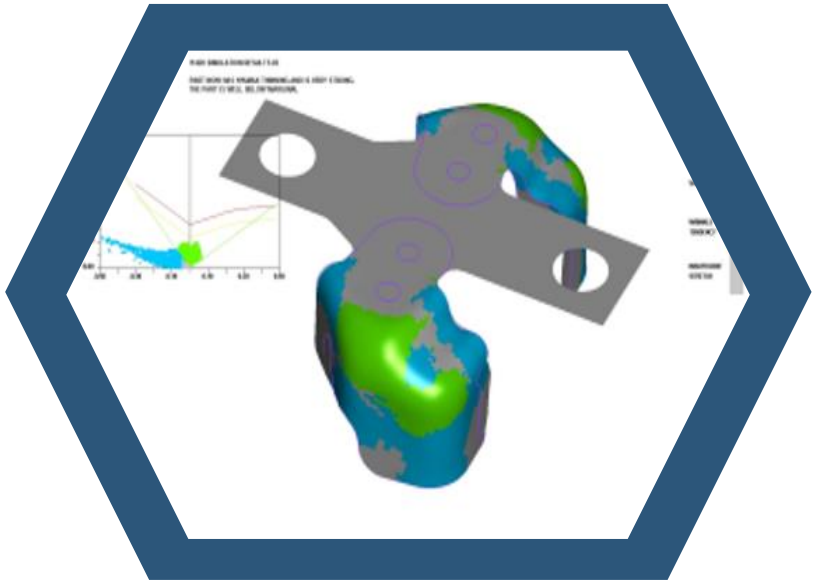
NASG performs pre-source simulations on complex product to determine manufacturability and works direct with Product Engineering to eliminate foreseen manufacturability issues.

- ❖ Pre-Source
  - Simulation results are provided to customers in the event an issue is determined with the products formability as designed.



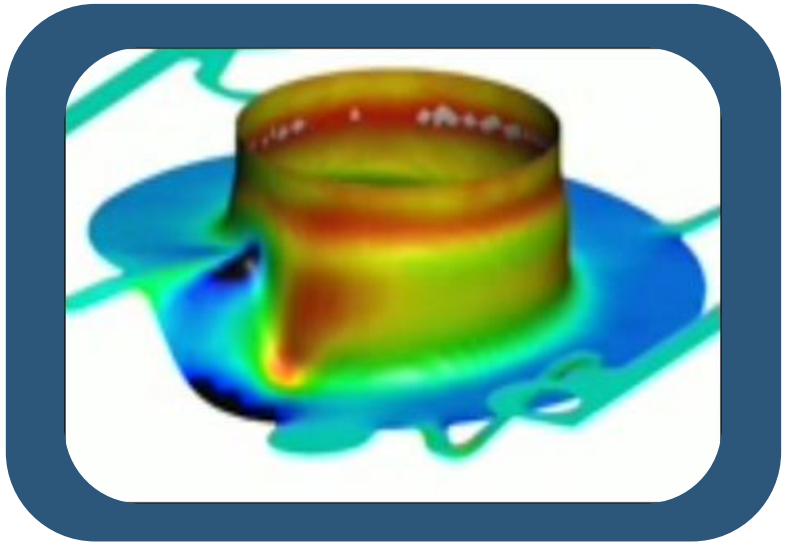


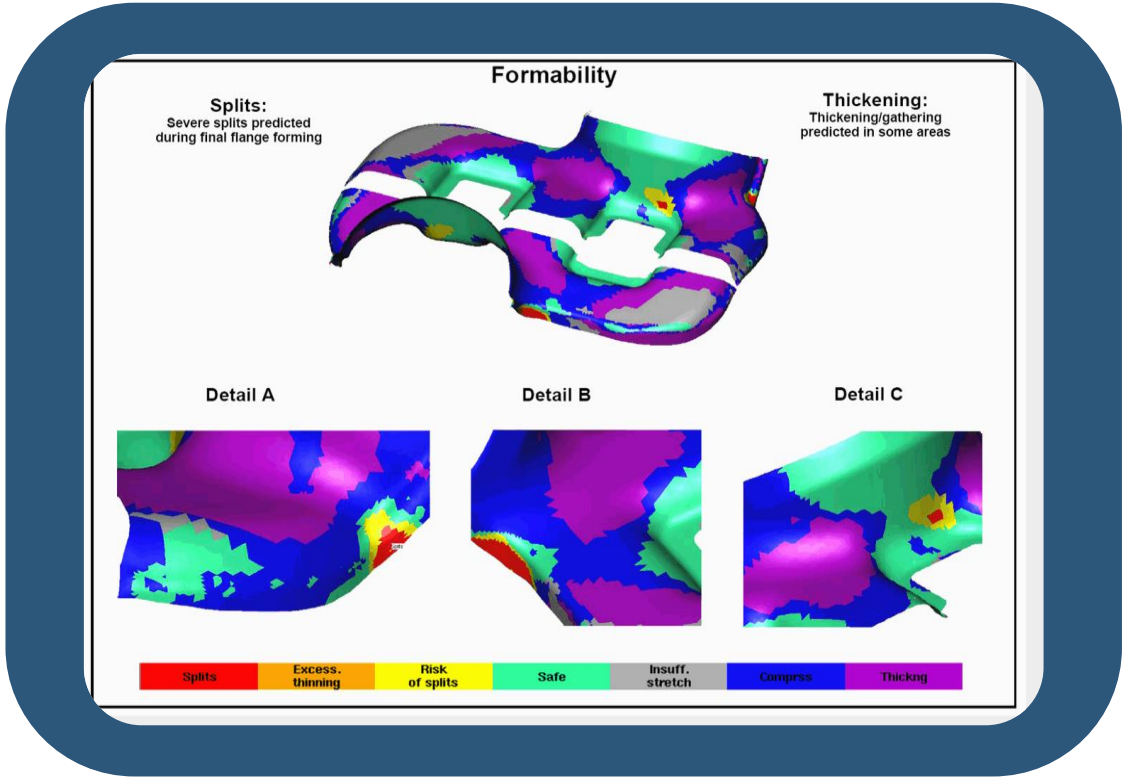


Forming Simulation: Post-Source Process Development

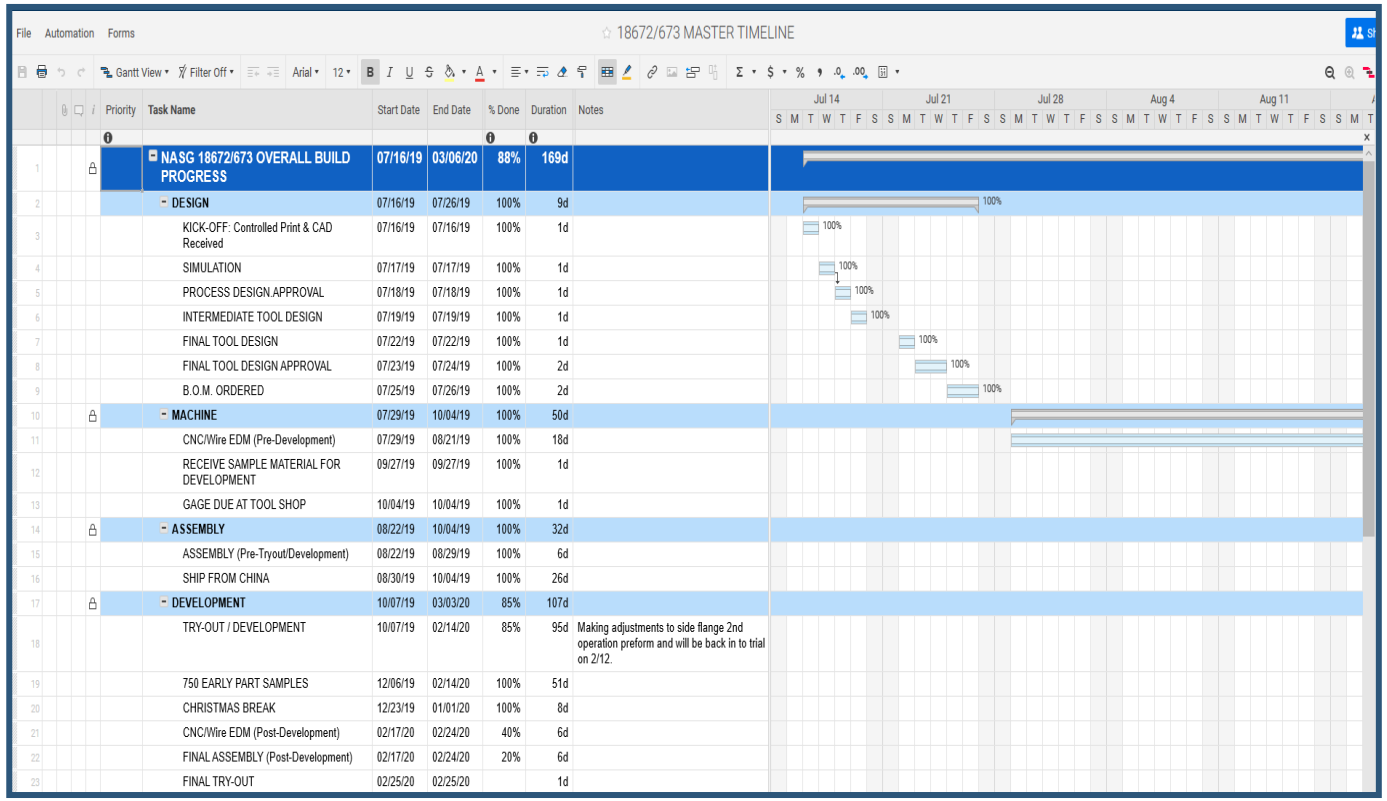
NASG performs post-source simulations to ensure that tooling processing is optimized and end product is one of the highest quality.

- ❖ Post-Source
  - Simulations are provided to tool vendors and are utilized to improve:
    - Tooling Design
    - Forming Processes
    - Trim Development
    - Blank Nesting Optimization





Program Management Support



- **On Staff**
  - Account Managers
  - Product Engineers
  - Advanced Engineering Manager
  - Research & Development Manager
  - Program Managers
  - Tooling Engineers
  - Manufacturing Engineers
- **In House Engineering / Program Management**
  - APQP Program Tracking
    - Weekly Internal Meetings
    - Weekly Customer Meetings
    - Weekly Timeline Updates and Reports
- **Early Product Containment**
  - 30 day min containment on all new product launches

In House Tooling Support

Full Service In-House Tooling Support

- Preventive Tooling Maintenance
- Management of Engineering Changes

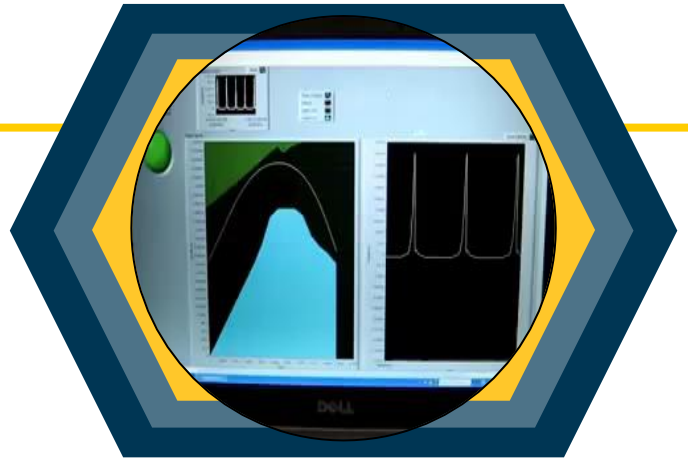
Engineering Support

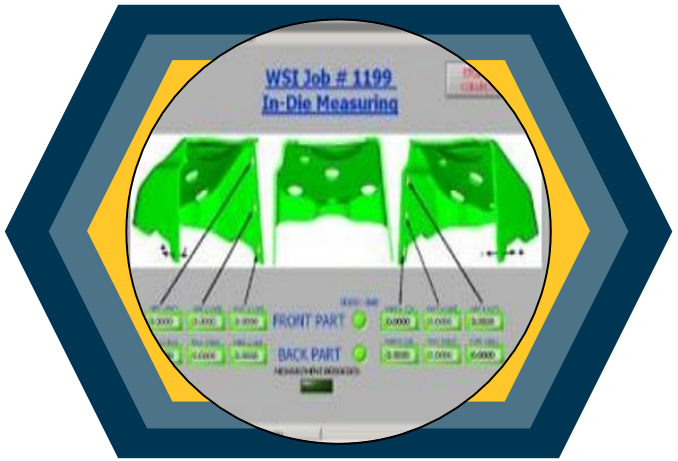
- Estimating of Engineering Changes
- Implementation of Engineering Changes
- Tooling Improvements
- Tooling Refurbishment
- VA/VE Support
- Reverse Engineering of Takeover Tooling
  - Tooling Detail Scanning
  - Development of Replacement Detail CAD & Drawings

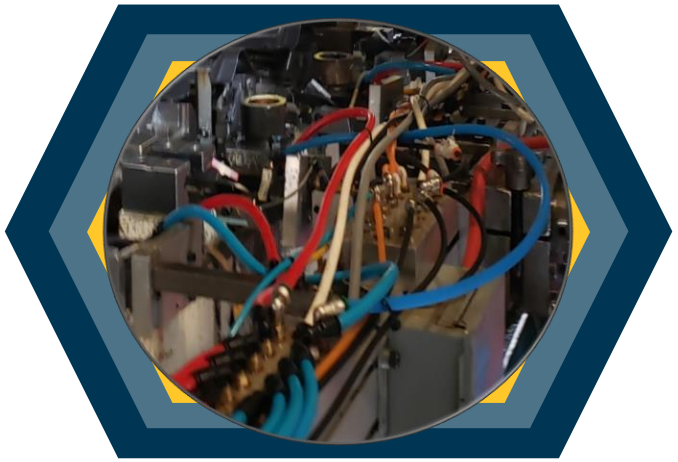
- Large Network of Tooling Vendors for Continuous 24-hr Support

In House Tooling Support

In Process Mistake Proofing

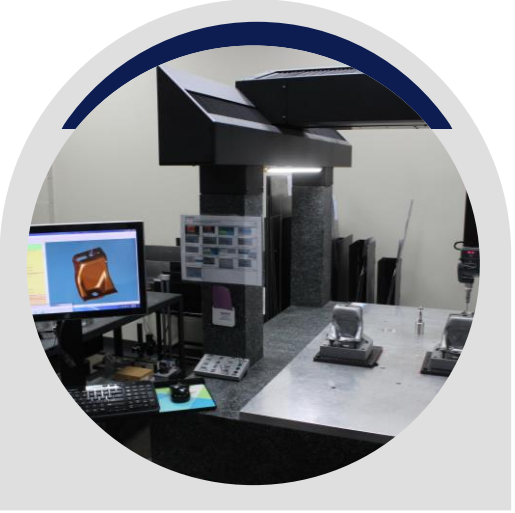






- In House Sensor Development & Application
  - Extensive use of in-die sensors
    - Proximity – Analog – Load Cells
  - Detection of Items such as
    - Feed Advance
    - Slug Detection
    - Part Out Detection
    - Strain Gauges / Punch Breakage
  - Extensive use of In Process Sensors & Physical Poke Yoke in Assembly
    - Cameras – Proximity – Analog
  - Detection of Items such as
    - Component Presence
    - Feature Detection

Quality Control



NASG utilizes the latest technology for in house quality control needs and is standardized at all NASG facilities.

- Measurement Software:
  - PC DMIS
  - Offline Programming
- Vision Systems
- 3D Printer
- Electronic Inspection Data Collection
  - Statistical Process Control

- 3D Coordinate Measurement Machines:
  - Brown & Sharps CMM
  - Portable Shop Floor CMM
  - Portable Romer Arm
    - Laser Scan Head
- Quality Documentation Software
  - Auto DCP
- White Light Scanning & Measurement

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All NASG facilities are Intertek Registered.

Intertek

NASG Summary

- Strong growth with existing and new partners.
- Financially sound, excellent working capital.
- 1,550,966 sq. ft. of production space, sales and engineering and tool & die capability between 13 facilities strategically located in North America.
- Intertek registered at all facilities.
- Full Program Management Capabilities.
- Support Services, (CAD/CAM) Forming Simulations Software.
- Market leader in innovative manufacturing such as; in die welding and in die tapping.
- Over 40 years of experience providing unique and diversified products.
- Equipment and skilled resources to support large production and tooling off loads.
- Six Sigma and Lean Manufacturing Engineers on staff.

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Thank You.

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