ISO 9001:2015 Certified

Metro Technologies Ltd.

Building on Innovation, Creativity, and Advancement.

METRO TECHNOLOGIES LTD.
1462 E. BIG BEAVER RD. TROY, MI, 48083-1950
Phone: (248)-528-9240 Fax: (248)-528-0845
Web Site: http://www.mtl-troy.com

Plant 2: 40712 Brentwood dr.
Sterling Heights , Mi 48310

35TH
1983 - 2018
ANNIVERSARY

Metro Technologies is a Troy Michigan self certified WOSB Women owned small business, established in 1983.

We are a leading producer of check fixtures, weld fixtures and tooling for the vehicle transportation industry. Our Advanced Manufacturing Group specializes in turn key automated manufacturing systems, as well as aluminum part and structural assembly manufacturing for medium to low volume specialty vehicles.

Metro is an ISO 9001:2015 certified preferred supplier and recommended fixture manufacturer for Ford Motor, Daimler Truck, Chrysler, Honda, General Motors, and General Dynamics Land Systems.

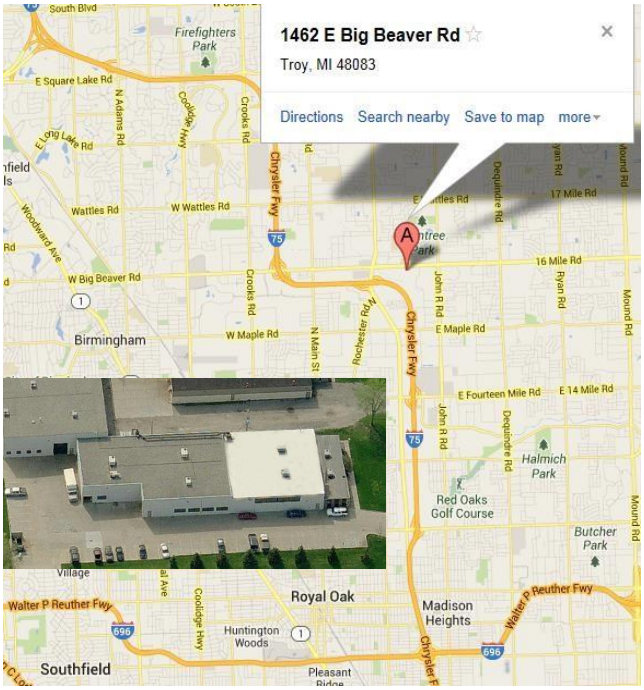
Our large customer base of Tier 1 and Tier 2 suppliers extends throughout the world with each receiving the individual attention that they require.

Metro Technologies operates a 33,000 square ft. air conditioned facility in Troy off East Big Beaver Rd. and a new 14,500 sq. ft facility in Sterling Heights off Brentwood near 18 mile and Mound Rd.
Forty five skilled employees comprise two shifts and offer a combined productivity of 20 hours + per day.

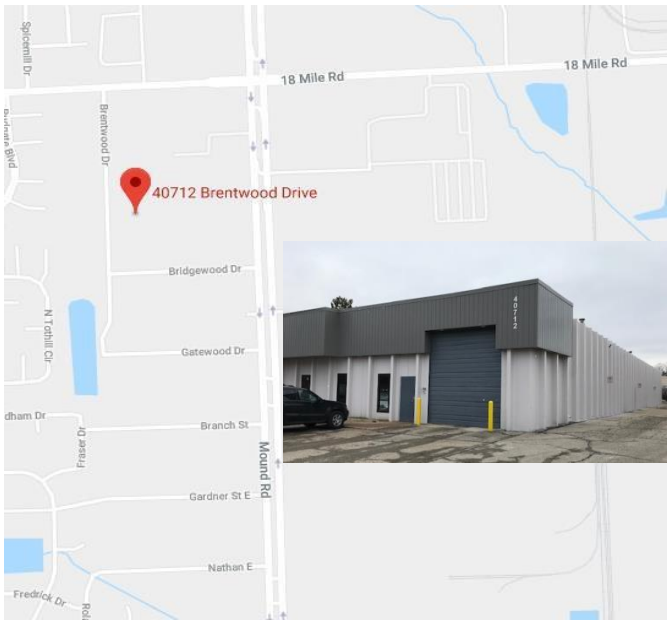
The innovation, creativity and knowledge of our dedicated staff are the core of Metro Technologies Ltd, which have helped us to gain our reputation for quality, accuracy, competitive pricing and the ability to meet pressing delivery dates.

With over 35 years of experience, we have the expertise to provide you and your company with exemplary products and services.

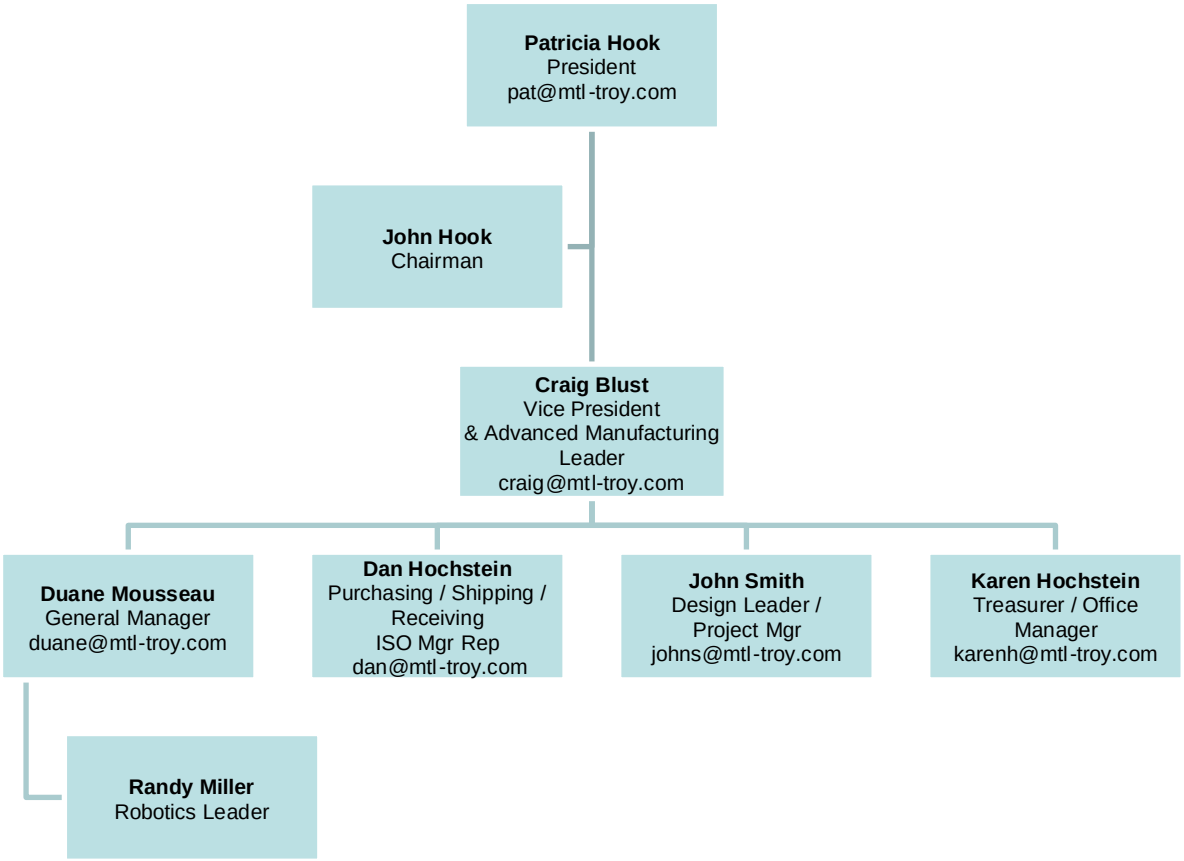
We look forward to working with you,



Pat Hook / John Hook / Craig Blust



Metro Technologies Ltd.



Core Values:

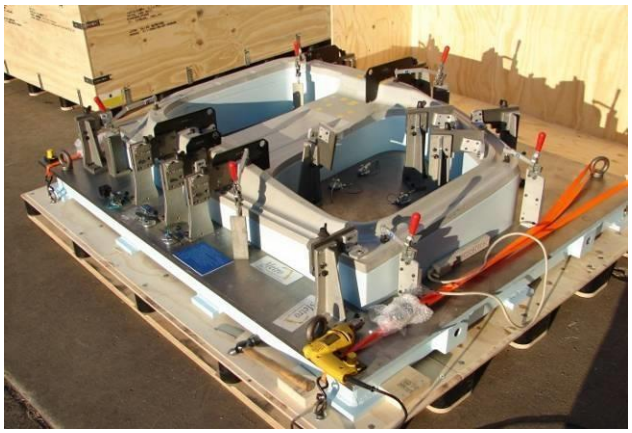
Build on Innovation, Creativity and Advancement.
Profit by Excellence, Hard Work and Customer Satisfaction.
Preserve Ethics, Honesty and Integrity.

Quality Policy

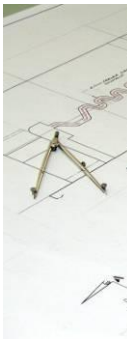
We are committed to producing reliable, maintainable and durable quality products, by providing services which meet or exceed our customer requirements, through knowledge, experience, organization and team work.

Work Profile :

Computer Aided Design (CAD) / Computer Aided Machining (CAM)
(CNC) Small and Large Mill Machining / (CNC) Auto Feed Lathe Machining
Detail Part Attribute Checking Fixtures (Prototype & Production)
Assembly Attribute Check Fixtures (Prototype & Production)
Laser Cutting Fixtures (Prototype & Production)
Welding Fixtures (Prototype & Production)
Automated Laser Vision Inspection Systems
Prototype- Hemming Dies & Hemming Fixtures
Manufacturing Tooling Aids and Die Models (Cad & Manual)
Advanced Manufacturing Engineering and Assembly Process Development
Research & Development – Auto Body Manufacturing
Coordinate Measuring Machine – Fixture & Tool Certification (CMM)
Turn Key - Robotic Mig Weld Cells
Light Weight Vehicle Space-frame and Structure Manufacturing
Fabricated Structural Weldments
Prototype & Production Aluminum Extrusion Part Manufacturing
Prototype & Production Robotic Mig Welding (Pulse and CMT)
Aluminum Mig / Tig Welding (Robotic / Manual)
Aluminum & Sheet metal stamped parts (Prototype & Low Vol. Production)
Foam Foundry Patterns
Carbon Fiber - Part Simulations and Light Weight Jigs
Prototype Zinc- Sheet metal Stamping Tools
Production Steel- Sheet metal Stamping Tools
Laser Surface Scan & Digitizing (Reverse Eng.)



COMPUTER AIDED & MANUAL FIXTURE AND TOOL DESIGN

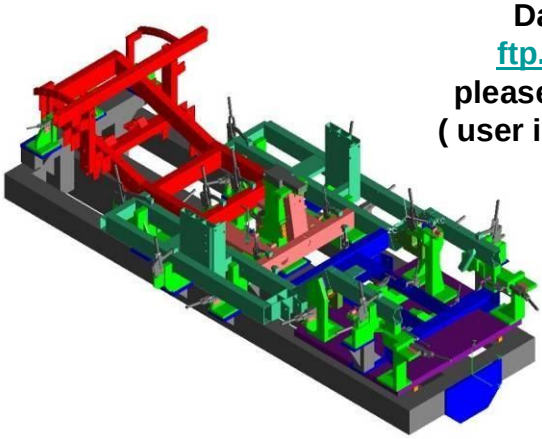


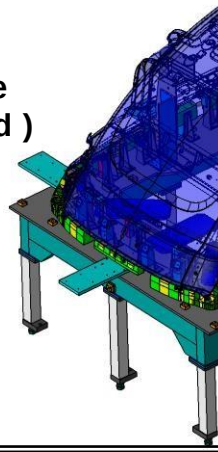
10 CAD SYSTEMS

Unigraphics Version NX12
Catia V5-R26 2016
Auto Desk Inventor 2019
Auto Cad 2019
VISI Modeling 2018 R1
Work NC 2017 w / 5 axis

E-mail: cad@mtl-troy.com

Data transfer:
ftp.mtl-troy.com
please call for ftp site
(user id and password)





CAM - TOOL PATH COORDINATE MEASURING MACHINES (CMM) INSPECTION & VALIDATION DEPARTMENT

TARUS GANTRY - EASY DIMAS

CMM INSPECTION MACHINE

(1) Double Column – with air bearings

(144" x 96" x 60")

TARUS 9300 - EASY DIMAS

CMM INSPECTION MACHINES

(2) Single Column with CNC Control

(90 x 60 x 60 inches)

(1) Semiconductor Laser Digitizer

NUMERICALLY CONTROLLED MILLING MACHINES (CNC)

New Schienke large 5 axis and Haas VF9 mill - expanding our capabilities.

NEW 2019 (1)SCHIENKE -5 Axis (120x90x56)

2010 TARUS 3+2 - CNC VERTICAL MILL

Full Rotational Head / 600 inches per min cut

(120x96x60inches) 20hp (20,000 table load)

TARUS CNC MILL (Picture not shown)
(80x60x40inches) 15hp.

(1) FADAL VMC 8030
CNC MILL
(80x30x24inches) 15hp

(2) FADAL VMC 6030
CNC MILLS
(60x30x24inches) 15hp

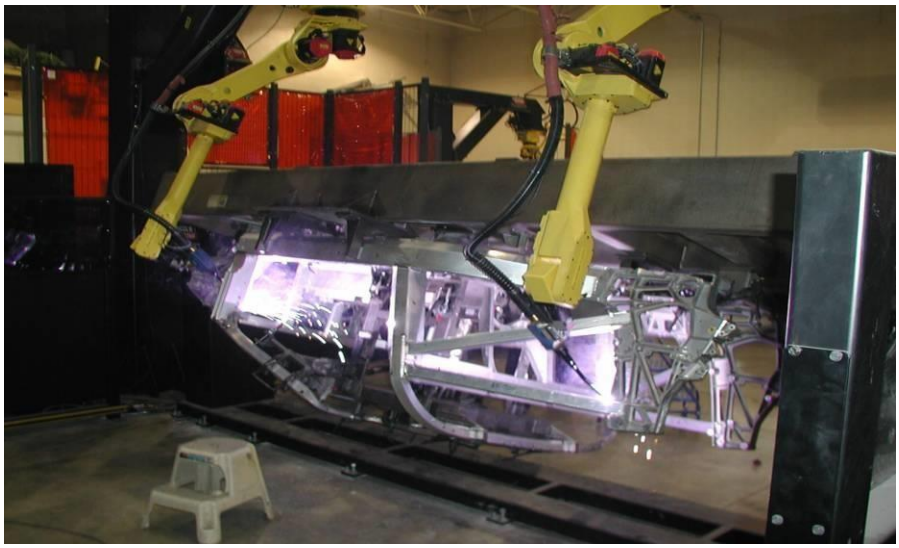
(1) 2017 HAAS VF9
(84x40x30 inches) 15hp

(3) 2014 HAAS VF-6 / VF-6SS CNC MILLS
(64x32x24 inches) 15hp

(1) 2012 HAAS ST-10 CNC LATHES

METRO TECHNOLOGIES Cuts a Large Variety of Material :
STEEL (CRS , D2, T1, 01, S7, 4140 etc..) ALLOYS (ALUMINUM , BRASS , COPPER)
ALUMINUM PARTS: EXTRUSIONS AND CASTINGS (Prototype and Production)
CASTING TOOLS: (ALUMINUM, MAGNESIUM, KIRKSITE / ZINC , IRON)
TOOL PLANK, FIXTURE PLANK, DIE PLANK, WOOD & FOAM

Advanced Manufacturing Group
Ford GT Aluminum Spaceframe



Robotically Mig welded Aluminum World Class Space Frame

Metro Technologies is one of seven companies called upon by Ford Motor Company to design and build the Ford GT super-car. It was our responsibility to manufacture the aluminum space-frame from concept into production. As a member of the Ford design group, we concentrated on manufacturability, developed all of the GDT, assembly process and manufacturing requirements for the space-frame. Our fixture and tool group manufactured all of the pre-production tooling, weld cell fixtures, CNC part machining fixtures and inspection fixtures. Metro's advanced manufacturing group integrated all of the tooling and programmed all of the robotic weld cells. Metro also organized and managed the team of eleven specialized tier 2 suppliers. With their help, the first prototype space-frame was manufactured in 10 weeks and the project was completed from concept into production in less than two years.

Thank You,

Craig Blust - V.P Metro Technologies

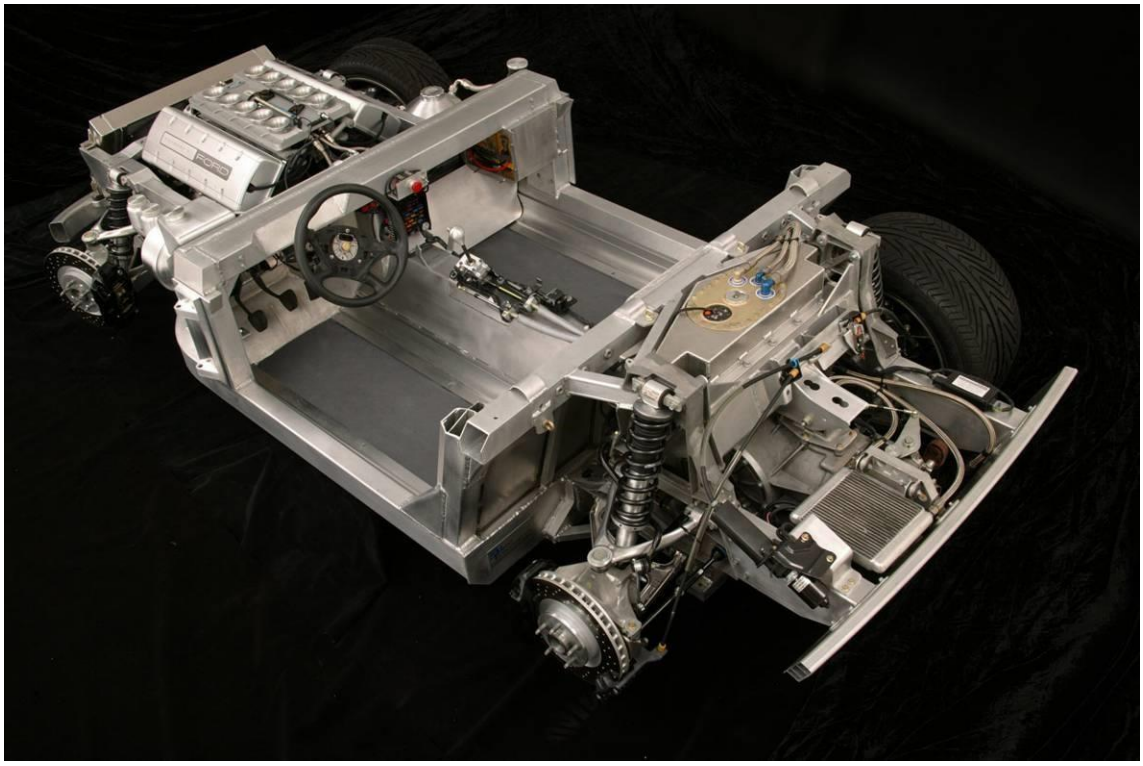
Metro Technologies – Ford GT Spaceframe

- prototype and production launch -

Ford GT – Aluminum Spaceframe shown with

Final Robotic Weld Cell Production Tooling

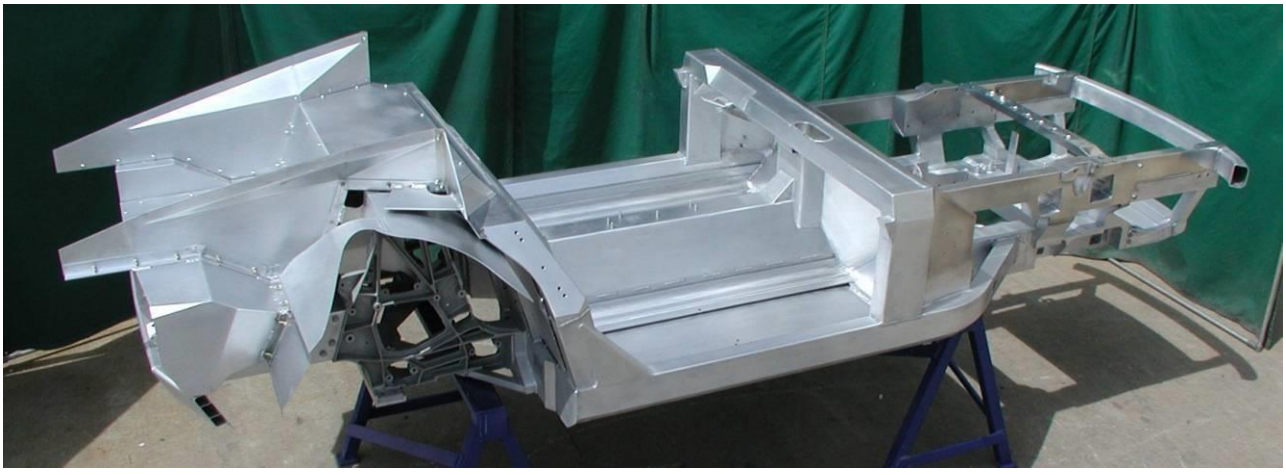
Metro Technologies - Spaceframe
- show vehicle build -



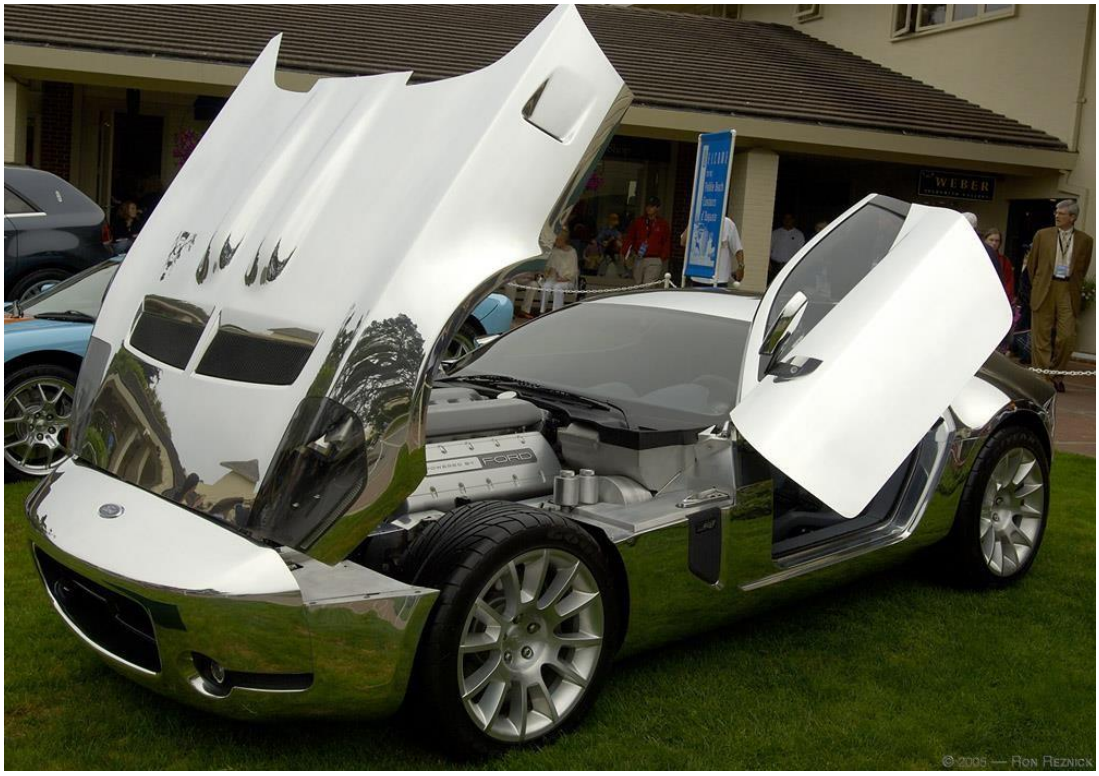
Ford Shelby Cobra - Show car Aluminum Frame

Metro Technologies - Spaceframe

- show vehicle build -



Ford GR1- Show car Aluminum Frame

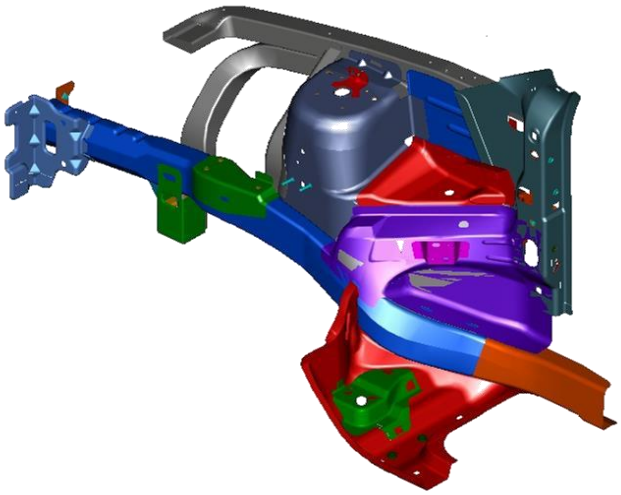


GDLS - AGMV - Show and Test Vehicle - Aluminum

Everything painted tan was built by Metro

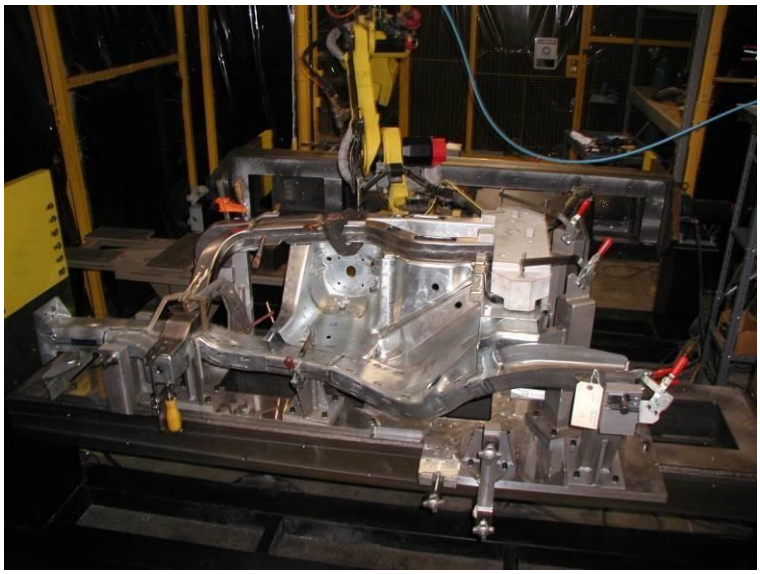
Metro Technologies Ltd.

Metro Technologies - prototype vehicle



FRONT END STRUCTURE

Hydro formed Rails supplied, Metro responsible for all tooling, stampings and assembly.



Robotic Mig & Spot Weld Fixtures

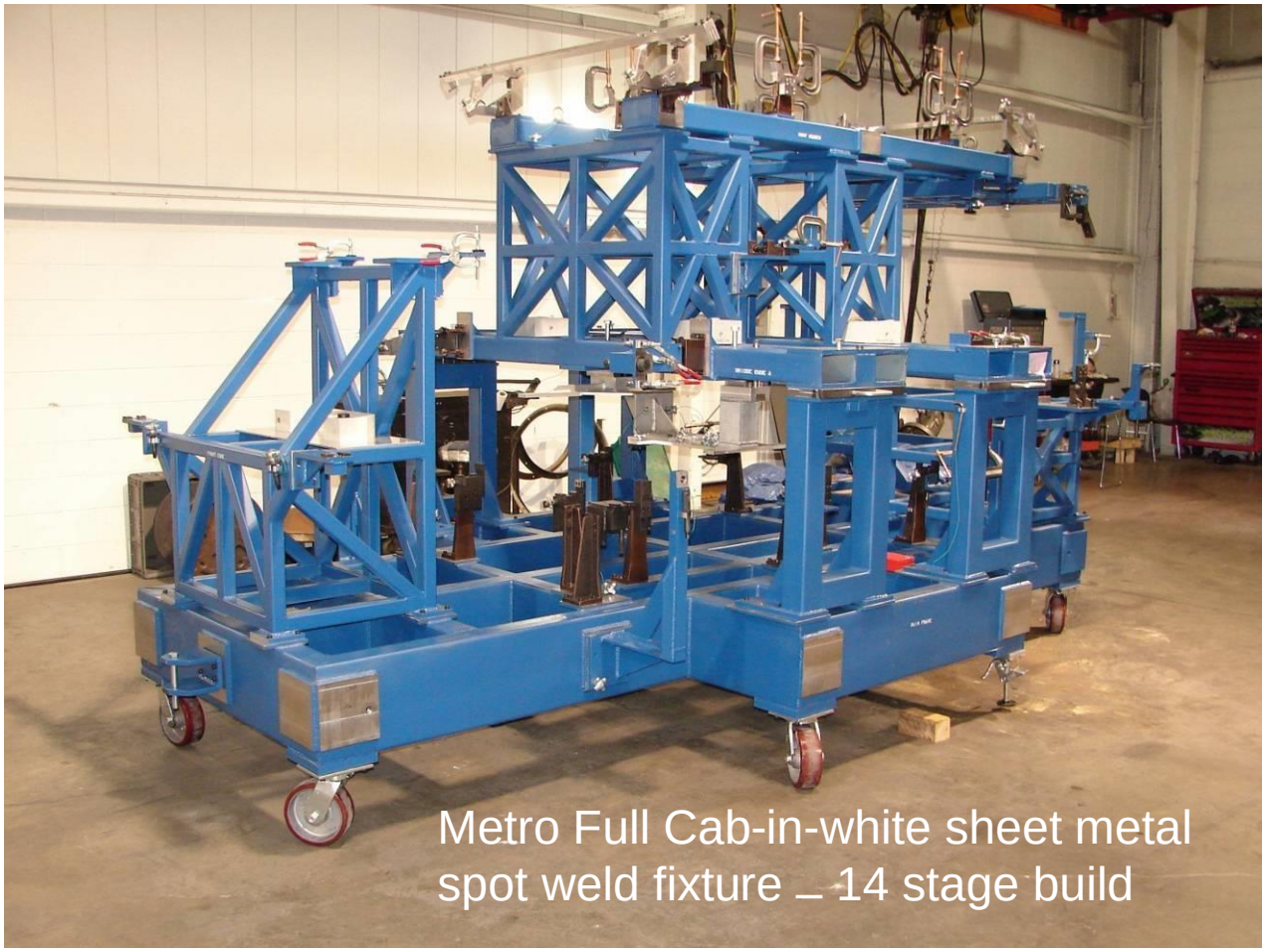
builds Assembly Tooling

Metro Technologies Ltd.

Metro Technologies - prototype vehicle builds
Assembly Tooling

Ford GT

Prototype
Manual Mig
Weld Fixture



Metro Full Cab-in-white sheet metal spot weld fixture – 14 stage build

Metro Technologies Ltd.

PERRY JOHNSON REGISTRARS, INC.

Certificate of Registration

Perry Johnson Registrars, Inc., has audited the Quality Management System of:

Metro Technologies, Ltd.

1462 East Big Beaver, Troy, MI 48083 United States

(This is a campus scheme. See Appendix for site specific details.)

(Hereinafter called the Organization) and hereby declares that Organization is in conformance with:

ISO 9001:2015

This Registration is in respect to the following scope:

Design and Production of Fixtures and Tooling with Advanced Engineering and Manufacturing

This Registration is granted subject to the system rules governing the Registration referred to above, and the Organization hereby covenants with the Assessment body duty to observe and comply with the said rules.

PERRY JOHNSON REGISTRARS, INC.

ANAB ACCREDITED ISO/IEC 17021-1 MANAGEMENT SYSTEMS CERTIFICATION BODY

PERRY JOHNSON REGISTRARS, INC. UKAS MANAGEMENT SYSTEMS 0105

Terry Boboige

Terry Boboige, President

Perry Johnson Registrars, Inc. (PJR)
755 West Big Beaver Road, Suite 1340
Troy, Michigan 48084
(248) 358-3388

The use of the UKAS accreditation symbol is in respect to the activities covered by the Accreditation Certificate Number 0105.

The validity of this certificate is dependent upon ongoing surveillance.

Effective Date: May 14, 2019
Expiration Date: May 13, 2022

Certificate No.: C2019-01443