

MettleWorx

Engineering Services and Procurement Partner

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What we do?

Procurement Consulting Services

I. Manufactured products

Connect global OEMs and tier customers with Indian manufacturers certified to international quality standards

- Product design, engineering and simulation services
- Supplier identification, auditing and qualification
- RFQ management, commercial negotiations and supplier nomination
- Production launch and post-launch management

II. Procurement for EPC projects

Procure standard industrial products from qualified global suppliers to meet project specifications

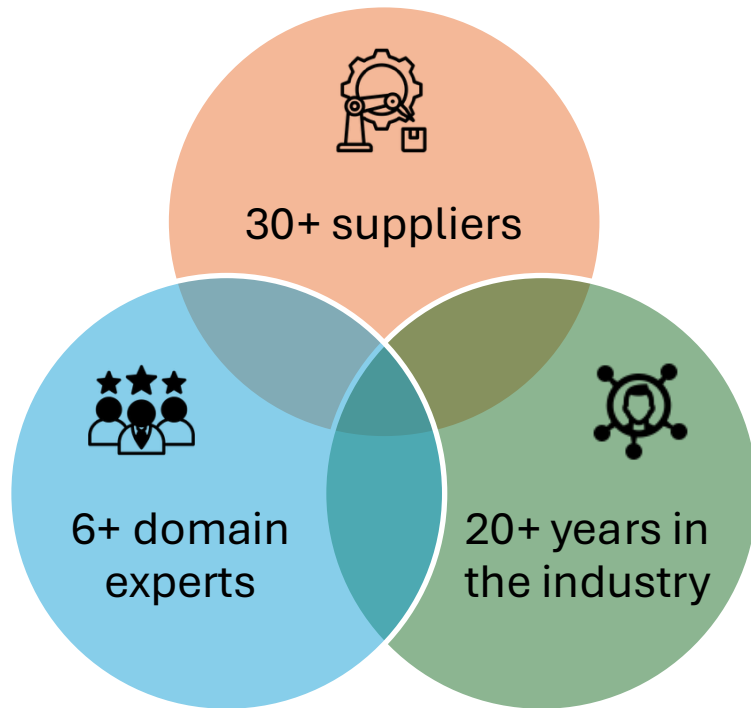
- Strategic cost optimization by leveraging best-cost supplier network across Asia and other countries
- Landed cost analysis from supplier to project site
- Consolidate large number of items across different domains such as mechanical, electrical, software, etc.

MettleWorx offers end-to-end engineering and procurement support—from concept to production—through a qualified manufacturing network across multiple industries



How we do it?

3 key enablers...



30+ suppliers certified by global customers, with experience in casting, forging, machining, stamping, extrusion, injection molding, fabrication, reverse engineering and more...



Our expert network of industry professionals helps us solve design and manufacturing challenges throughout the product launch cycle with a target of achieving first time right



Founders' experience working with organizations in the US, EU, Africa and Asia, helps them empathize with clients' needs and identify the right solutions

An extensive network of suppliers and industry experts, along with the founders' 20+ years of experience in the US market gives us a strong foundation to understand and fulfill clients' needs



Why we do it?

To Bridge a Market Gap...

Market gaps

Demand side needs

(Global companies looking to manufacture in India)

- No easy way to identify, audit and onboard Indian manufacturers
- Gap between suppliers' marketing materials and actual capabilities
- Communication challenges during project launch and post-launch
- Need continuous supplier monitoring after program launch

Supply side needs

(Indian manufacturers)

- No focused sales and marketing teams to identify clients
- Disconnect between client requirements and suppliers' on-the-ground action plans

What MettleWorx offers?



A **true engineering partner** for customers and suppliers across product lifecycle phases



1-stop solution for customers – relieving them from having to search and manage multiple suppliers across various regions



Broadcast capabilities of Indian suppliers to the global markets **creating a win-win situation** for both – high quality parts at competitive prices for customers and long-term business opportunities for suppliers

MettleWorx strives to bridge the gap between the buyer and seller sides by offering an end-to-end procurement consulting and project operationalization solutions



About the Founders



Nitin Jadhav

- 15 years of experience with leading engineering, manufacturing and technology firms in the USA
- Held various technical, commercial and business roles at automotive OEM and tier-1 suppliers
- MSME (Michigan Tech); MBA (Uni. of Michigan)



Suhas Patil

- 11 years of experience as a mechanical engineer and strategic consultant
- Held R&D roles in engineering organizations, entrepreneurship in digital marketing, and data-driven consulting for small businesses
- MSME (Michigan Tech)

Our Experience

- Component design, DFM and CAE
- RFQ process management and strategic supplier nomination
- Product portfolio management - make vs buy analysis, mitigate component proliferation
- Global project management, technical partnerships for R&D
- Product bundling and pricing strategies

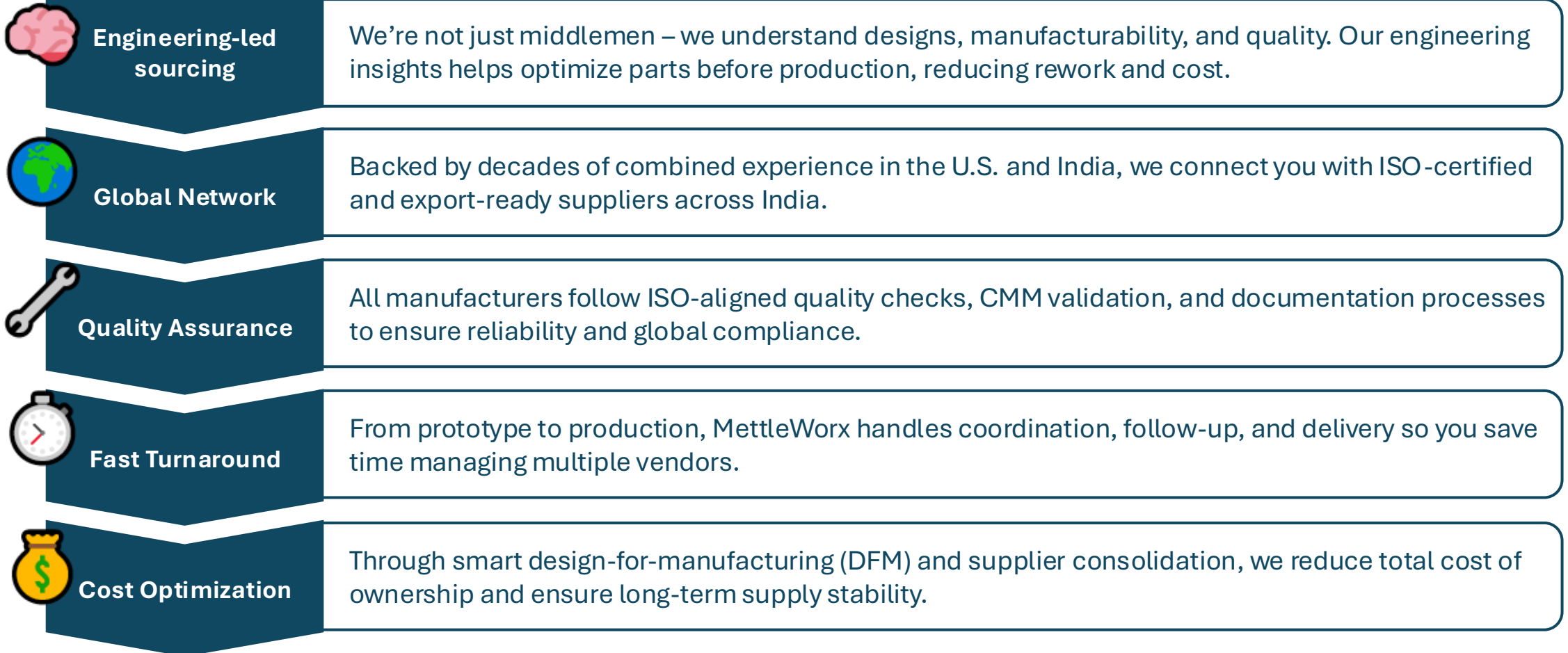
- DFMEA, root cause identification (RCA), and continuous improvement using six sigma tools
- Component design and product optimization for scalability
- Supplier & partner network management
- Data analytics to support critical business decision-making
- Digital marketing

The founders seek to leverage their knowledge of working with the US organizations and their network of suppliers in India to offer high quality engineering and manufacturing services to global customers

The name MettleWorx reflects our character, resilience and commitment to provide innovative yet practical engineered solutions to solve clients' challenges.



Why Partner with MettleWorx?





Supplier network | Certified suppliers serving domestic and international clients through prototype and production phases

30+

SUPPLIERS ACROSS INDIA



100%

ISO
CERTIFIED

With suppliers holding industry specific certifications such as IATF, UL, ISO, etc.



10+

MANUFACTURING
PROCESSES

Includes stamping, casting, forging, extrusion, machining, fabrication, wire harnessing, gear manufacturing, plastic and rubber molding



8+

INDUSTRIES
SERVED

Automotive – 4 wheelers, 2-wheeler, EVs and commercial vehicles, defense, aerospace, construction, oil and gas, food processing, agriculture, energy, home appliances



Expert network | Our experts are always reachable and support us hit the ground running on new projects

Why leverage experts?

- Bridges potential technical gaps, both in customers and suppliers' teams
- Helps leverage experience from similar projects with other customers and suppliers
 - Helps catch any design issues early
 - Ensures design for manufacturing
 - Pre- and post-production problem-solving support

Expert 1

- 15+ years of experience in developing forged components
- Expertise in global trade across multiple industries and products

Expert 2

- 30+ years of experience in developing drill taps for diverse applications
- Global trade experience within the machine tools portfolio

Expert 3

- Expertise in developing and manufacturing gears for automotive and industrial applications in both domestic and international markets
- Currently serves multiple Indian and German OEMs

Expert 4

- 30+ years in the procurement domain working with domestic and international suppliers of components made of metals and non-metals
- Expert in supplier vetting, product pricing and launch-readiness assessment

and many more...

Supplier Portfolio

I. Manufactured Product

- *We partner with suppliers certified to the international standards and have extensive experience in working with both domestic and international clients*
- *Our suppliers are predominantly based in India with support from suppliers in some Asian and European countries*



Machining Capabilities

Manufacturing capabilities

- Multi-axis machining
- Post-machining of cast, forged and stamped parts
- Computer Aided Manufacturing (CAM)
- Die and gauge design / manufacturing

Manufacturing Equipment

- Conventional machining – drilling, grinding, cutting, etc.
- CNCs, HMCs and VMCs
- Plating and paint booth

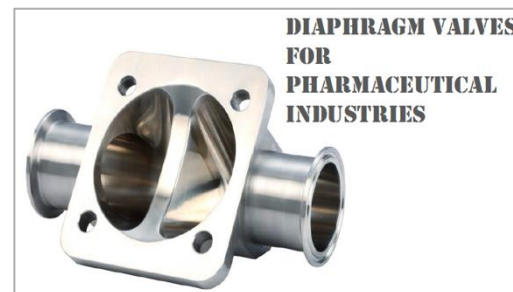
Inspection equipment

- Coordinate Measuring Machine (CMM)
- Vision Measurement Machine (VMM)
- Custom gauges

Materials machined

Steel, Aluminum, Stainless Steel, Brass, Copper, Inconel, Titanium, PTFE, Nylon, Polycarbonate

Example parts





Stamping Capabilities / Press parts

Capabilities

- High-volume and batch production
- Tool design and development
 - Progressive and transfer
 - Prototype tooling
- Simulation – AutoCAD, Delcam, Polyworks, UG-NX, Catia, IDEAs

Manufacturing and inspection equipment

- Presses across a wide range of tonnage – 30 ton to 1000 ton
- CNCs, HMCs and VMCs
- CED coating and plating
- CMM, surface profile tester, FARO arm

Part details

- Thickness range: 0.4 to 8 mm based on material
- Wide range of materials including steel, aluminum, copper, high strength materials

Example parts





Casting Capabilities – GDC and PDC

Capabilities

- Gravity and pressure die casting - aluminum
- 0.020 kgs to 30 kgs
- Mold flow analysis

Manufacturing equipment - GDC

- Horizontal gravity machines
- Melting and holding furnaces

Manufacturing equipment - PDC

- 130 – 720 MT machines

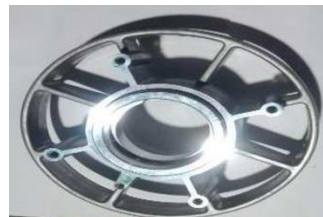
Other equipment

- Tumble and blast type shot blasting
- Vibro deburring and finishing machine
- Heat treatment, core making shop
- CNC/VMC machine shop
- 6-axis robot

Inspection equipment

- UTM, Spectro m/c for chemical analysis, profile projector, hardness tester, CMM, gas evaluation for molten metal

Example parts





Forging Capabilities

Capabilities

- Forging
- Metallurgical analysis
- Tool and Die development

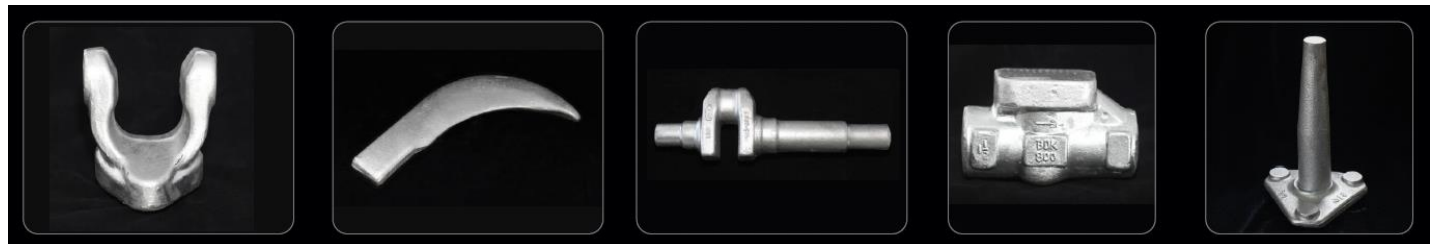
Manufacturing equipment

- Multiple shearing and bandsaw machines
- Electrotherm 200, 300 KW
- Forging hammers: 0.5 - 2.5 MT
- Trimming presses: 100 - 200 MT
- Forging press: 1000 to 1600 MT
- Induction heating, trimming machines
- CNCs and VMCs

Inspection equipment

- Spark, Spectra and Magnaflux (ability for 100% Spectra inspection)
- Hardness tester, microscope analysis

Example parts





Plastic Injection Molding Capabilities

Capabilities

- Injection molding
- Insert molding, hot forming
- Ultrasonic welding
- Tool design using Creo, UG, DelCAM, Power Shape, AutoCAD

Manufacturing equipment

- 100 to 1000 MT injection molding machines
- 3 axis and 5 axis VMCs
- EDM and wire EDM cell
- Assembly cell (manual)

Inspection equipment

- 3D scanner
- Profile inspector, sharp point tester in addition to conventional gauges

Materials molded

Wide range of materials including Acetol, Nylon, HDPE, LDPE, Polycarbonate, Polyester, Polypropylene, Polystyrene, PVC, TPE

Example parts





Pipe Bending Capabilities

Capabilities

- Tube bending, flaring and squeezing
- Project welding, spot welding, CO2 welding – manual and robotic

Manufacturing equipment

- CNC pipe bending machines

Part details

- Pipe thicknesses up to 4 mm and brackets up to 16 mm thick

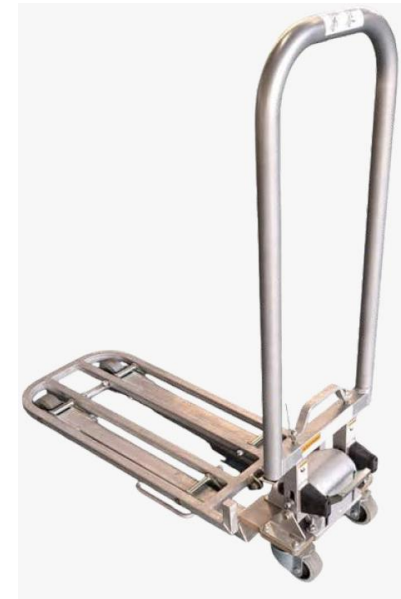


TUBE FLARING



TUBE SQUEEZING

Example parts





Heat Sink Capabilities

Capabilities

- Pressure die casting of aluminum and post-machining

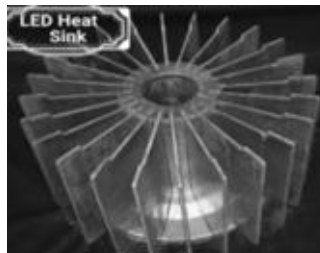
Manufacturing equipment

- PDC machines: 160 to 700 tons
- Melting furnaces
- Shot blasting – rotary and hanger
- Trimming press
- Machine shop – CNCs, VMCs, conventional machines, SPMs

Inspection equipment

- Density testing equipment
- CMM, surface roughness, hardness tester, microscope, UTM
- Spectroscope

Example parts





Wire Harness Capabilities

Capabilities

- Wire harnessing
- Electro-mechanical assemblies and box building
- Control units
- UPS assemblies

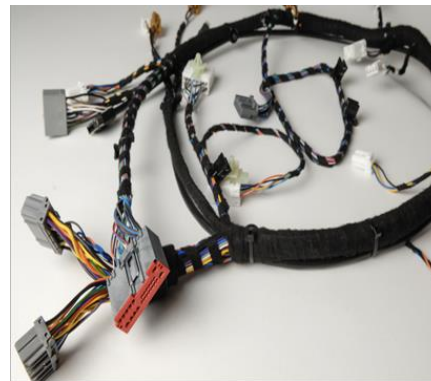
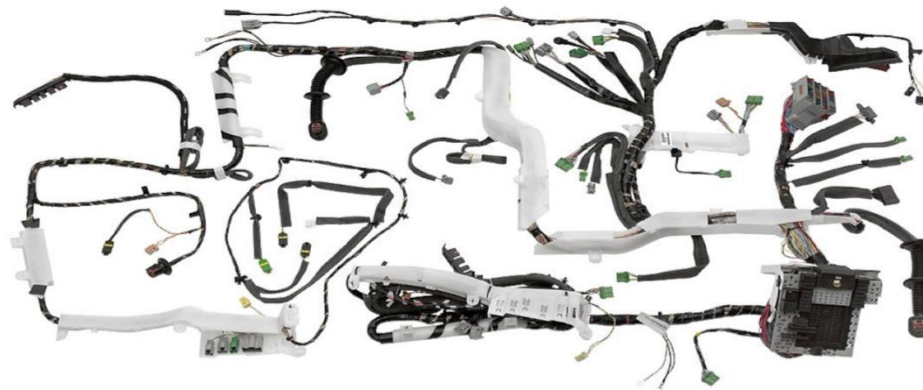
Manufacturing equipment

- Fully automatic sleeve cutting machine
- Cable tag/ ferrule printing machine
- Semi-automatic lug crimping machine
- Dowel crimping machine
- Heat gun

Inspection equipment

- Crimp cross-section analyzer
- Motorized pull tester
- Crimp Force Monitor (CFM)
- Cathode Ray Oscilloscope (CRO)
- Megger
- DC test kit
- Relay test kit
- Variac transformer

Example parts





Gear Manufacturing Capabilities

Manufacturing capabilities

- Gear hobbing, shaping, shaving, grinding

Manufacturing Equipment

- CNC gear hobbing: Pfauter PE-200, Gleason GH-125
- Gear shaping: Fellows 6A, Liebherr LC-350, Lorenz LS-154
- Gear grinder: Reishauer NZA
- Cylindrical grinders, automatic bandsaw

Inspection equipment

- Lead & Profile Tester: MAAG – PH60 and MAAG – PH40
- Height gauge, bore dial gauge, span micrometer

Materials machined

Ferrous, non-ferrous, plastics

Example parts





Aluminum Extrusion Capabilities

Manufacturing capabilities

- Aluminum extrusion, heat treatment, painting, laser marking

Manufacturing Equipment

- Extrusion presses ranging from 4" to 9", continuous extrusion presses, cold draw extrusion setup
- Anodizing, powder coating, machining, laser marking equipment
- Tool room equipment – VMC, CNC, EDM, conventional machine tools

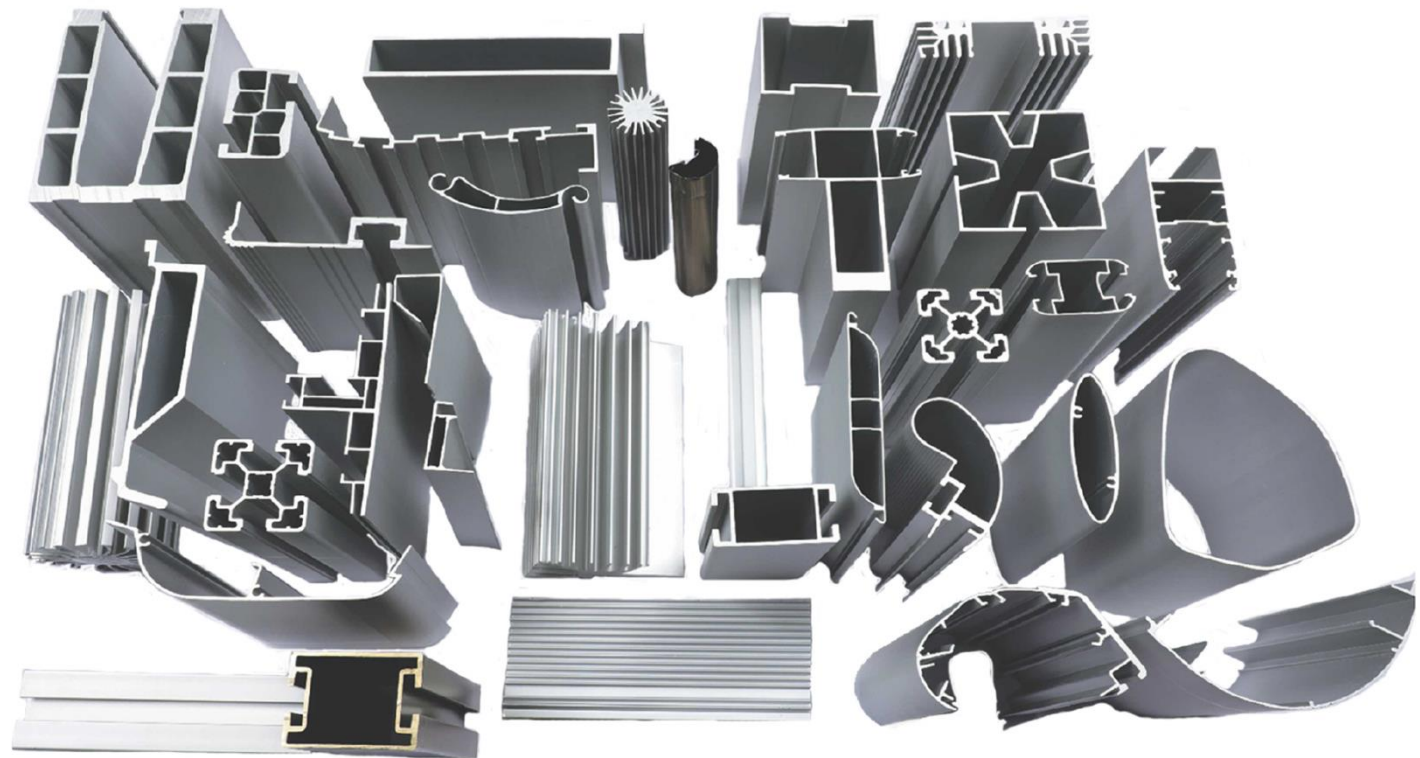
Inspection equipment

- UTM, crack detection using conductivity and ultrasonic tests, Ascona and Keyence machines for profile measurement, hardness testers

Alloys range

1xxx, 2xxx, 3xxx, 5xxx, 6xxx, and 7xxx series, covering both commercial and hard alloys

Example extruded profiles



Supplier Portfolio

II. EPC procurement

- *MettleWorx acts as a single point of contact for large number of items required for an EPC project across different categories such as mechanical, electrical, software, etc.*
- *MettleWorx helps EPC contractors identify preferred and approved equivalent manufacturers, delivering optimized solutions that balance technical compliance, quality, availability, and cost.*



Structural and Piping

Structural steel

- Beams, Channels, Angles, Plates

Piping

- CS/SS/GI pipes, HDPE/UPVC pipes

Pipe fittings

- Elbows, Tees, Reducers, Couplers, Flanges, Gaskets

Fasteners

- Various types of fasteners based on the application

Value added requirements such as coatings, heat treatment, painting, etc. are supported through the extended vendor network.

Example products





Electromechanical Equipment

Valves

Gate, Ball, Globe, Check, Butterfly, Control, Solenoid, Thermal Relief, actuated valves

Pumps

Centrifugal, self-priming, gear pumps, contactless food grade pumps

Compressors, gearboxes and agitators

Strainers and filters

Couplings and bearings

Belts, pulleys and chains

Example products





Instrumentation Equipment

- Flow meters, Pressure gauges, Temperature sensors
- Control panels, Field instruments, Junction boxes, Alarm systems
- Transformers, Switchgear, Motors, Cables, Lighting
- UPS systems, Batteries
- Electrical panels - MCC, PCC

Example products





Fabricated Assemblies

- **Pressure vessels, process and storage tanks**
- **Storage tanks**
- **Hoppers**
- **Process tanks**
- **Support structure**

Example products



Thank you!

Contact us today...



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