

# **EISEN**

# Plants & Processes

## Lansing, Michigan, US

3340 Pinetree Rd Lansing, Michigan, US

#### **Products**

Bolts, Screws, Compression Limiters, Switchgear, Reusable Automotive Racks

#### Processes

Design Engineering Prototyping Cold forming Thread Rolling Fabrication Welding Assembly Sewing





# Cold Forming & CNC

Precision and critical screws and bolts for transportation and electrical industry. Sensor housings for multinational corporations.

## Punjab, India









### Rack Fabrication

Steel Racks for IP, Doors. Bag Racks for Class A plastic.

## Lansing, Michigan, US





# Cold formed parts and extrusions

## Steel parts

Ideal for bushings, flanges, and gear profiles

#### Problem

Reduce cost and weight of high volume machined production parts

#### Solution

Cold formed parts up to 32mm in diameter Upto 4" in length High volume steel parts Heat treated Meet tensile strength of grades 4.8, 8.8, 10.9, 12.9 All automotive coatings to 1000 Hours Salt Spray







# **Automotive Bolts and Studs**

#### Metal Threaded Fasteners

Bolts Weld studs, Dual ended studs Bolt and Washer assemblies Captive bolts

#### **Problem**

Anti-vibration
Thin materials
High corrosion resistance

#### Solution

- Thread patch, nylon inserts
- · Large bearing area and washer assemblies
- · Coatings upwards of 1000 Hrs Salt Spray
- GM, Ford, FCA, Toyota, Nissan, Caterpillar
- Finishes in e-coat, paint, and zinc nickel plating
- ROHS complaint reporting through IMD System
- Full lot traceability to mill heat certs





# **Compression Limiters**

#### Problem

Glass filled plastics need to be protected from cracking under load when fastened with bolts M6 or greater in diameter

#### Solution

Compression limiters in steel, aluminum, and brass are readily available from tooled parts
Our high production runs lead to economical prices
Eliminate any cracking under load or in service

Studserts and bolts with captive compression limiters are used in oil pans and brake booster covers where bolts need to stay in place





# Eisen LockInsert<sup>™</sup>

#### Problem

Bolts come loose over time due to vibration, heat cycling, and loss of clamp load. No reliable means of providing prevailing torque in joints where compression limiters are needed for plastic and aluminum fastening. Have to use more bolts to alleviate the problem.

#### Solution

Introducing the Eisen LockInsert<sup>™</sup>. Patent Pending. Now available in Steel, Brass, and Aluminum.

Stop bolts from creeping loose. Eisen LockInsert<sup>TM</sup> is a compression limiter that can be insert molded into plastic or press-fit into plastic and aluminum. It offers un-matched prevailing torque for critical attachments that experience varying dynamic loads, heat cycling, and vibration. It also reduces the number of bolts used, and assembly cycle time.





# Pins and Shafts

#### Cold formed and machined

Hinge pins for glove box and center console Pins for seat belt mechanisms License plate latch Handles and other latches

#### Problem

Produce high volume pins while keeping cost low, meeting corrosion, shear, and squeak requirements of vehicle exterior and interior parts

#### Solution

Cold formed pins with and without heads Available in knurls for one sided install Many sizes already tooled Shear pins for seatbelt mechanisms Steel and stainless steel pins Epoxy and Teflon coatings eliminate squeak





# Screws for plastic



#### Problem

Low profile heads
Boss stripping
Need positive bit engagement
Need high run rate

### Solution

Thread forming screws
High-Low thread screws
Screws with washer
M4.5 screw replaces M4 & M4.2
Automotive finishes 200-1000 Hours Salt Spray





# **Tolerance Compensators**

## Insert and Rivet types

Tolerance compensator is a two or three piece assembly that allows for ½" tolerance compensation when assembling large assemblies in tight spaces such as Instrument Panel in white body, or oil pan under-hood



A single fastener assembly that will expand by  $\frac{1}{2}$ " to fit same length bolt.

#### Solution

Introducing our M6 & M8 tolerance compensators
Offered as molded inserts, clips, and rivets







# Valves and Pumps Parts

Ideal for upstream, midstream and downstream oil & gas operations, petrochemical operations, and any high flow application in a harsh environment

### SS316 Machined Parts and Pipe plugs



# PED Fittings and Accessories

Pressure equipment directive compliant fully traceable studs, nuts, and fittings, each part coded with heat numbers

#### B7, B8 Studs and Nuts



## **Electricals Screws**

Made to the industry's highest standards, UL 486A and 486B, Termilock™ Terminal Screws are made to withstand Underwriters Laboratories' torque, secureness, and pullout tests under the provisions of both UL 486 and IEC 60999.

#### Termilock™ Screws - Steel & Stainless



# **Current Carrying Devices**

Disconnects for machinery and military. Terminal blocks with wiring pigtails. Our design team will reduce your cost by sourcing from the best global suppliers and stocking locally near your manufacturing facility.

#### Disconnects and Terminal Blocks





### Mechanical Assemblies

Mechanical assemblies are made at Lansing plant and off-shore locations. Prototypes, low volume runs, or high volume labor intensive parts.

### Welded or assemblied parts





### **Electrical Assemblies**

Eisen offers electrical sub-assemblies locally. These are produced at our off-shore plant in India to help reduce cost.

#### Electric blocks, switches, terminals





# **Vendor Managed Inventory**

C-Class hardware and assemblies

#### Problem

Purchasing and managing the exact amount of inventory needed for a flexible and ever changing production schedule is complicated and labor intensive.

### Kanban System

The kanban bin is one of at least two identical bins for a particular part. The pull process begins when one empty bin is returned to the supplier, while the second bin is being consumed.



Service level agreement (SLA)



Install racks and bins directly into production area



Initial stock is supplied







# Company

#### **Location and Product Lines**

**NORTH AMERICA** 

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### **Product Specialization**

Design, manufacture, supply of engineered fasteners, mechanical assemblies, switchgear components, and fabricated racks. Offering both in-house manufacturing and from off-shore plants with local warehousing.

### Company Information

Established: 1994 Total Sq Ft: 20,000

Global presence: Yes

In-house design and prototyping

ISO 9001:2015

• UI 508





