

### About us

We are the right choice, a one stop source with 10+ years of process production engineering with the most competitive prices and quality solutions for every single one of our clients.



# Our Services

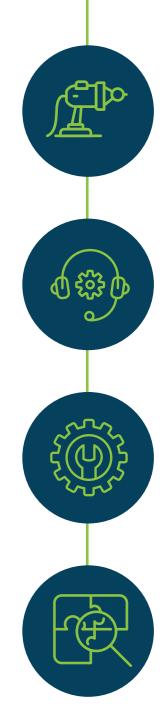
## Our Services

### **Equipment Installation**

### Specialist Support by Area

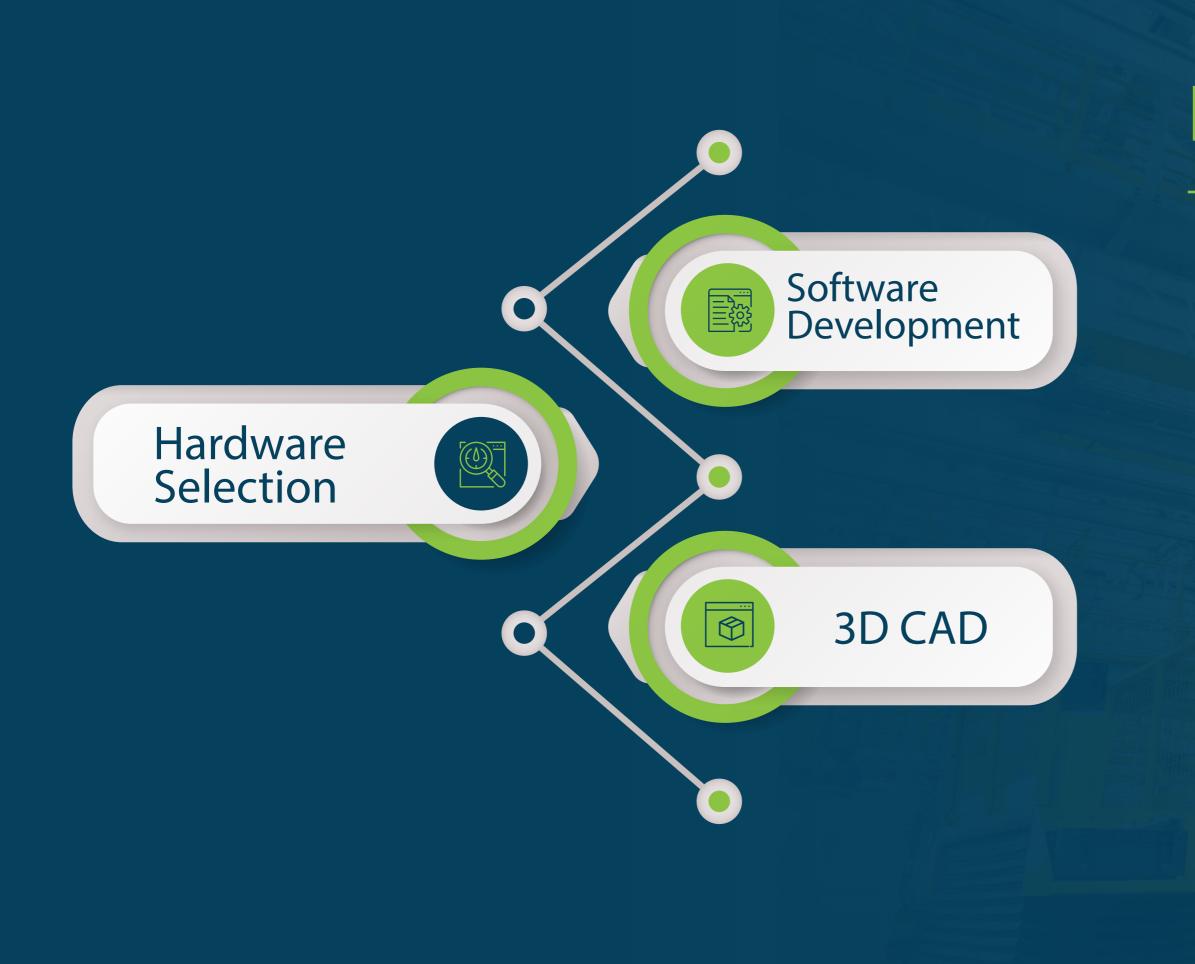
**Special Equipment** 

**Turnkey Projects** 





## Specialized Services



# Mechanical & Electrical Design

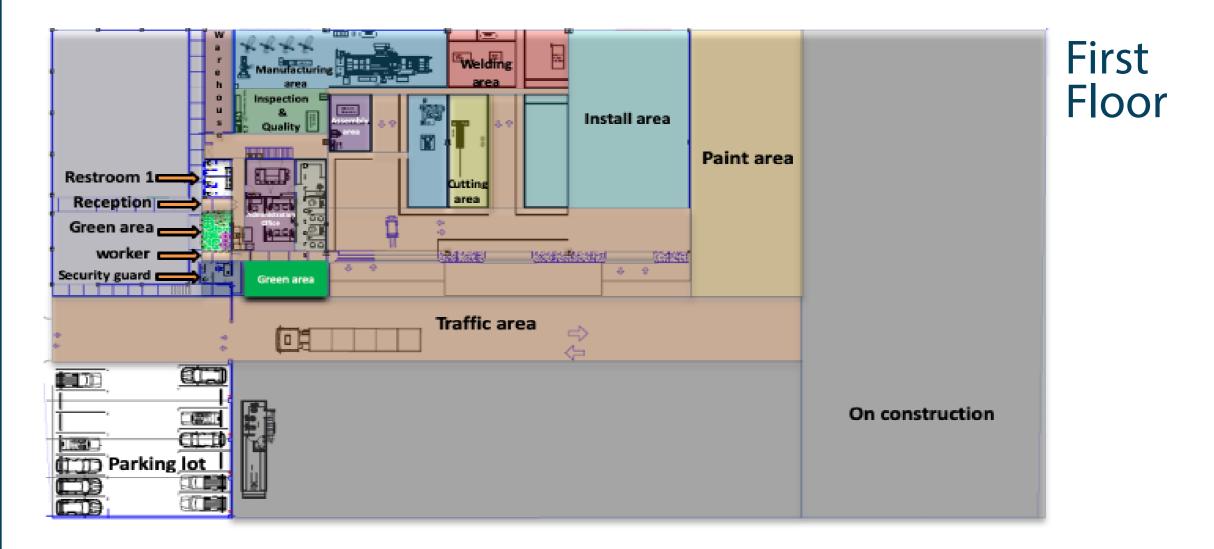


## Software Planning & Design

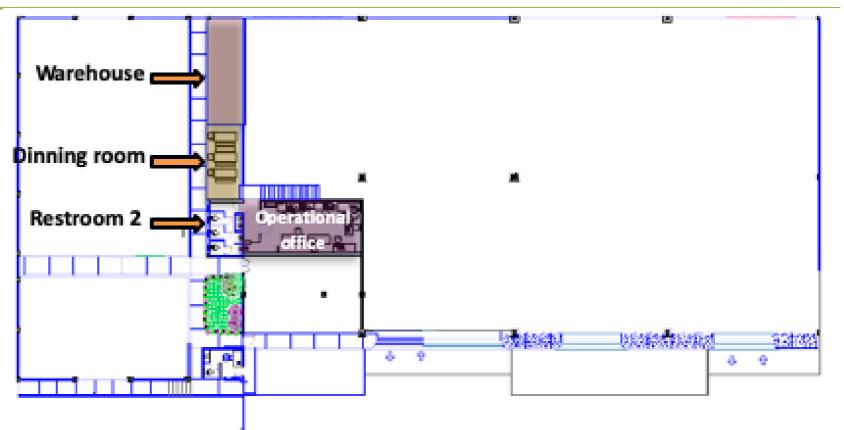
## ESD Space Layout

### Huge project? No problem, we have the needed spaces to fulfill it.

Office Space: 600 m2
Integration Floor Space: 700 m2
Large Machining: 200 m2
Small Machining: 150 m2
Tooling Assembly: 300 m2
Engineering and Controls: 300 m2



Second Floor



Capabilities Design, Mechanical and Electrical engineering, metrology, programing and dimensional tooling adjustment.

### Manpower

30 Engineers, 15 Machine Shop, 110 Tooling & Line Integration, 45 Robotics & Controls, 10 Program Managers and 20 Admin Staff

Engineering Mechanical 2d and 3d assembly processing, controls and electrical design, complete 3d assembly line design, complete line simulation with FANUC Robo guide and Siemens Technomatix, roboguide and ePlan.

Equipment •6 medium vertical and horizontal CNC machining centers

- centers
- 2 Water Jet cutting machines
- tems
- •Weld fabrication and paint booth

•1 large vertical and horizontal CNC machining

•Faro arm and white light 3D measurement sys-

# Machining Capabilities



Chevalier FVM-3016DCL Payload: 6,500 kg Capacity: X/Y/Z (mm): 3,100 x 1,600 x 780



Haas Mini Mill 16 x 12 x 10" 406 x 305 x 254 mm 7.5 hp 5.6 kw 6000 rpm

# We have the best tools and equipment on the market for your needs.



Titanium CK7130BP Máx. turning diameter(mm): 350 Slide stroke X-axis (mm): 350 Paso de barra (mm): 36



Mitsubishi Wire EDM

15.7 x 11.8 x 8.7" 400 x 300 x 220 mm Wire Diameter Possible: 0.004-0.012 mm Minimum Start Hole Diameter: 0.02 mm





Haas VF-3 40 x 20 x 25' 116 x 508 x 635 mm 30 hp 22.4 kw 8100 rpm

Haas VF-2 30 x 20 x 25' 762 x 508 x 635 mm 30 hp 22.4 kw 8100 rpm

Main: Hermosillo, Sonora: 64,600 ft<sup>2</sup> (6,000 m<sup>2</sup>) Land Main Office 14,650 ft<sup>2</sup> (1,361 m<sup>2</sup>) Assembly Area Inspection and Quality

### **Controls & Robotics:**

•6460 ft2 Land •Controls •Robotics •PLC Software Planning and Design •Software programming

### Full Machine Shop:

•4,850 ft2 ( 450 m2 ) •Full Machine Shop •Assembly area Inspection & Quality

Saltillo office and special equipment facility.

Sales office:

# Our Facilities



### Automatic Cells Products

\_orem ipsum



# Integration Systems Portafolio



### **Bushing**

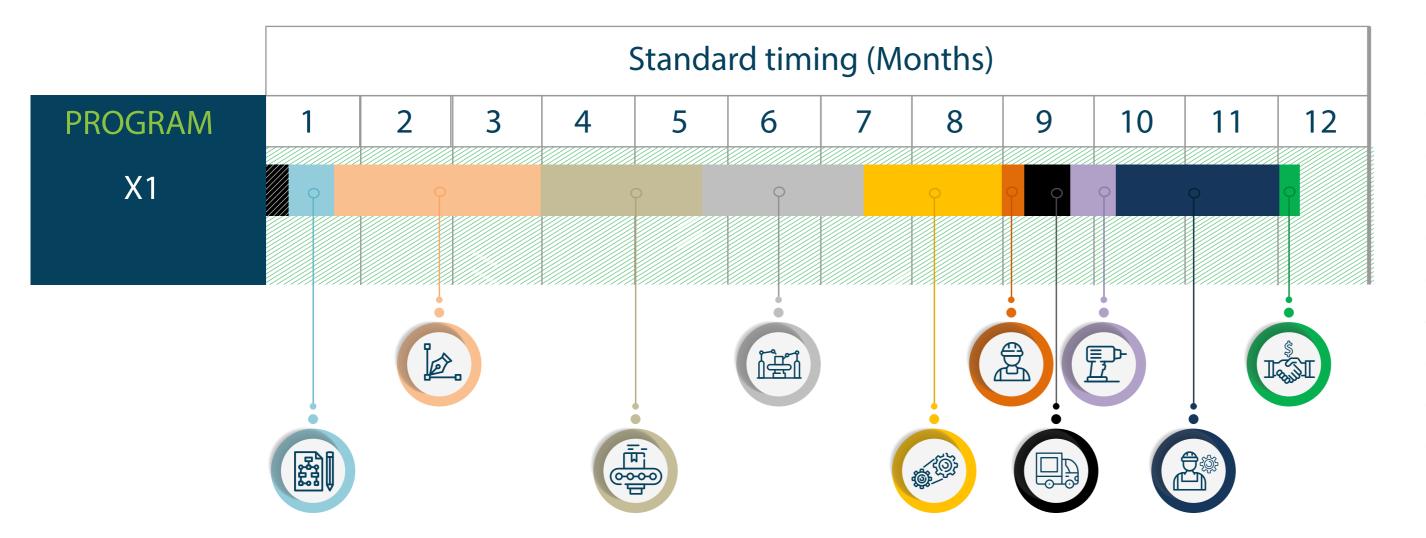






Laser cutting and engraving

# Project Process and Standard Timing



- Process
- Design
- Manufacturing
- Tooling and cell assembly
- Integration
- 🛑 Tear Down
- Shipping
- Installation
- Comissioning
- Buy off

# Main Projects

In the last 2 years we installed more than 500 robots with excellent performance and improving the timing proposal.

Getting customer satisfaction is our principal objective.

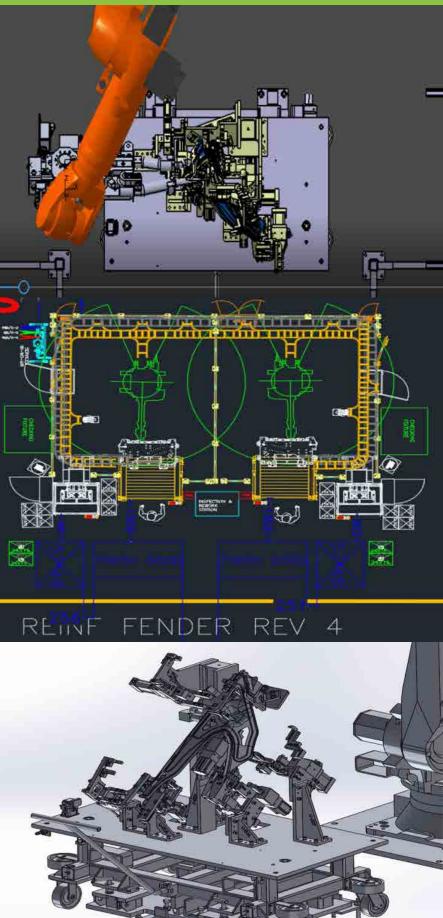


# Turnkey Project

- "EV" Fender assembly cell full integration.

- 2x Robots
- Design & Process simulation
- Build & Install
- PLC
- Robotics
- Facility:
- Magna SFT
- City:
- Hermosillo, Sonora
- Year:
- 2018

### Project Example



### Install of complete Weld (Body) Shop including main feeds

- Full install weld shop at main body (52, 750 sq ft)

- 4x Mezzanine
- 40x Robots
- 18x WPP
- 22x CDP

Facility:

Toyota Manufacturing of Mexico

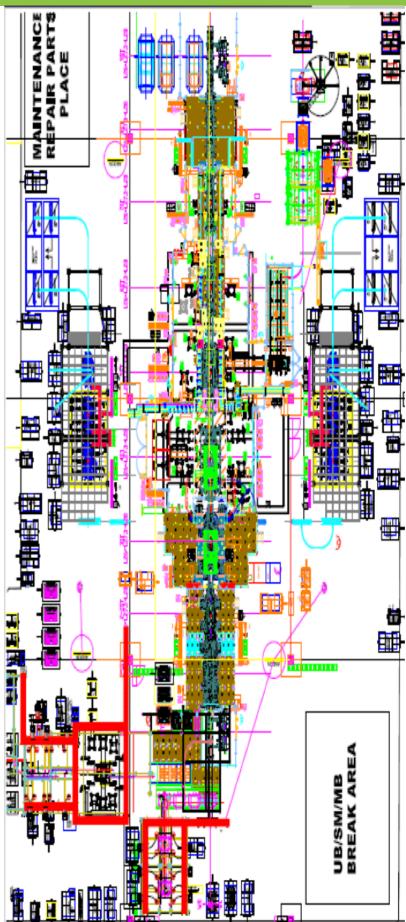
City:

Apaseo el Grande, Guanajuato

Year:

2018 - 2019 - 6 months (current)

### Project Example



### Install of complete Weld (Body) Shop including main feeds

- Full install weld shop at shell body (43,000 sq ft)

- 6x Hem Presses
- 24x Robots
- 12x WPP
- 15x CDP

Facility:

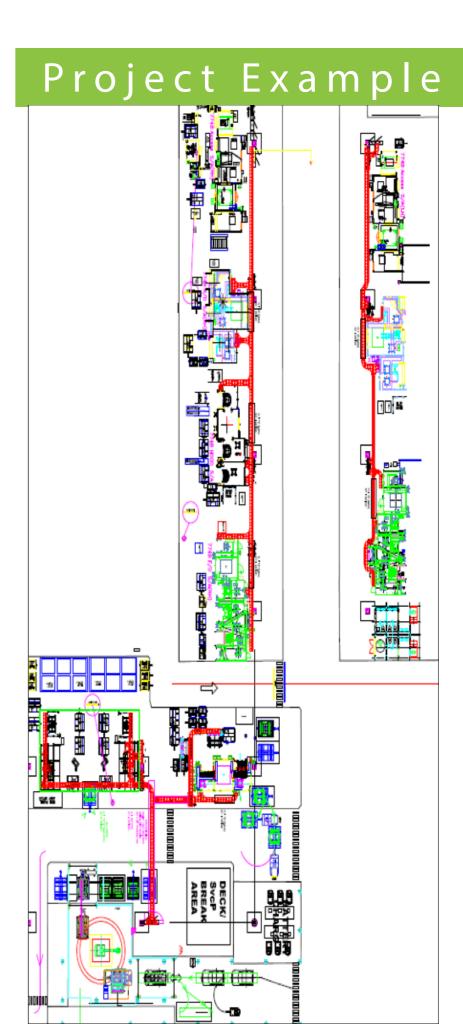
Toyota Manufacturing of Mexico

City:

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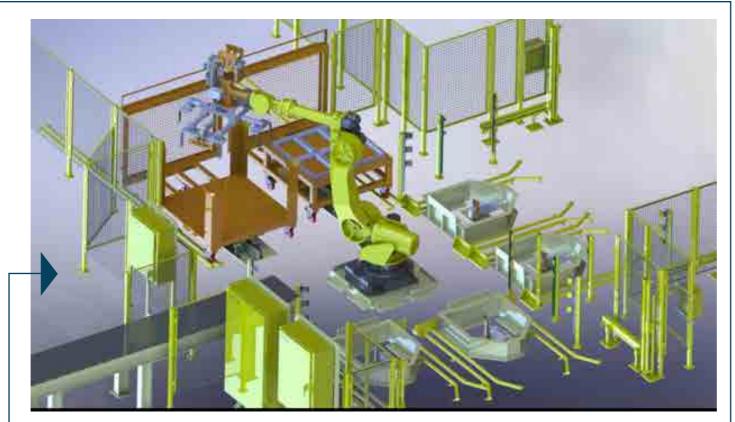
# Ford Motor Company

Automatic Fixture to install Rear Suspension

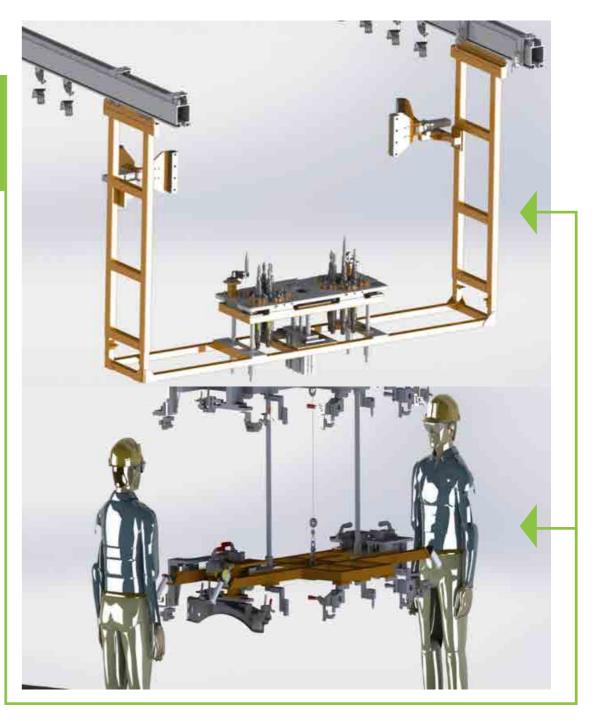
Goal was to change from manual operation to be fully automated.

### Battery load and Unload cell

Goal was to change from manual operation to be fully automated.



# Design & automation



# Why ESD?

Because we're the leaders on offering a complete solution to your project, working with creativity, flexibility, adaptability and skilled people.

# Our Advantage

- Expertise from drawing to integration
- One stop shopping solution with 10+ years of process production engi- $\checkmark$ neering with a very competitive cost
- Extensive background for ergonomics tooling specialized on High Tech  $\checkmark$ and low cost tooling solutions
  - Fast answer at your requirements.
  - Qualify and experience people to warranty the results.
  - Best solutions.

 $\checkmark$ 

 $\checkmark$ 

# Sales contact

### Representatives



### THANKS FOR YOUR CONFIDENT.



www.grupoesd.com



# **Our Clients**













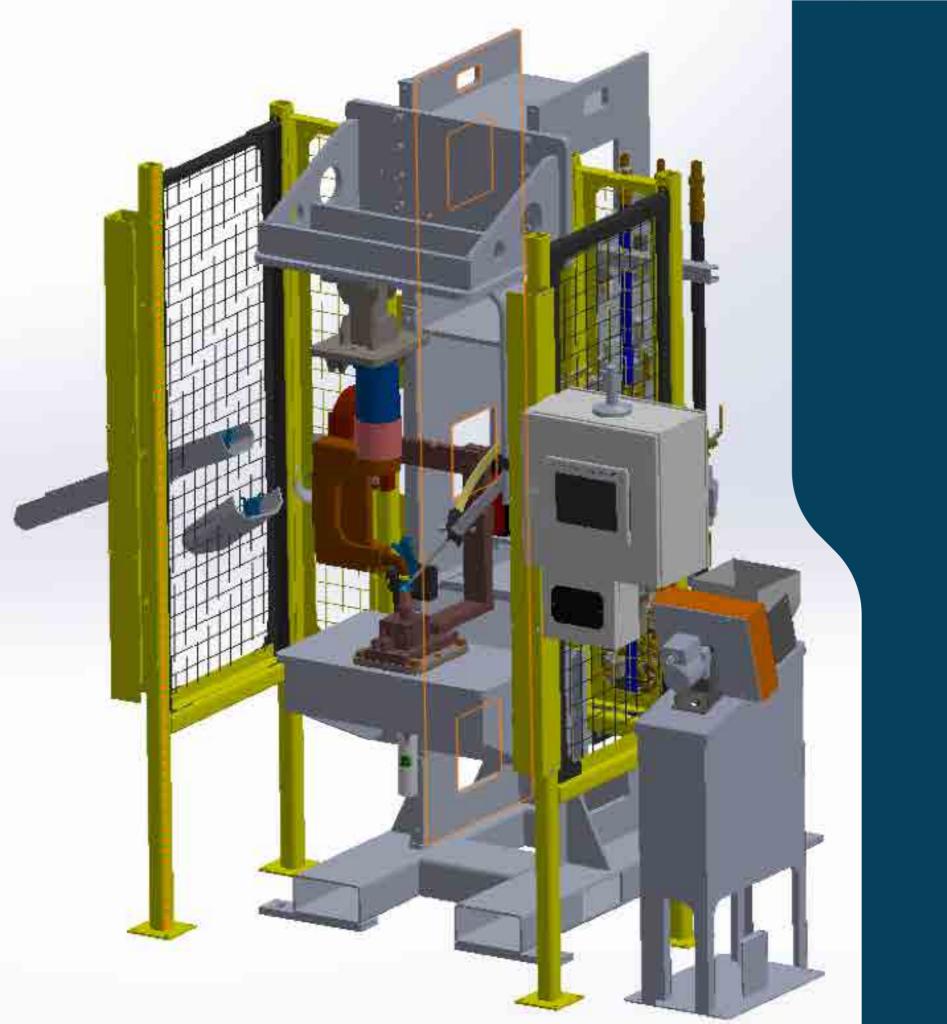




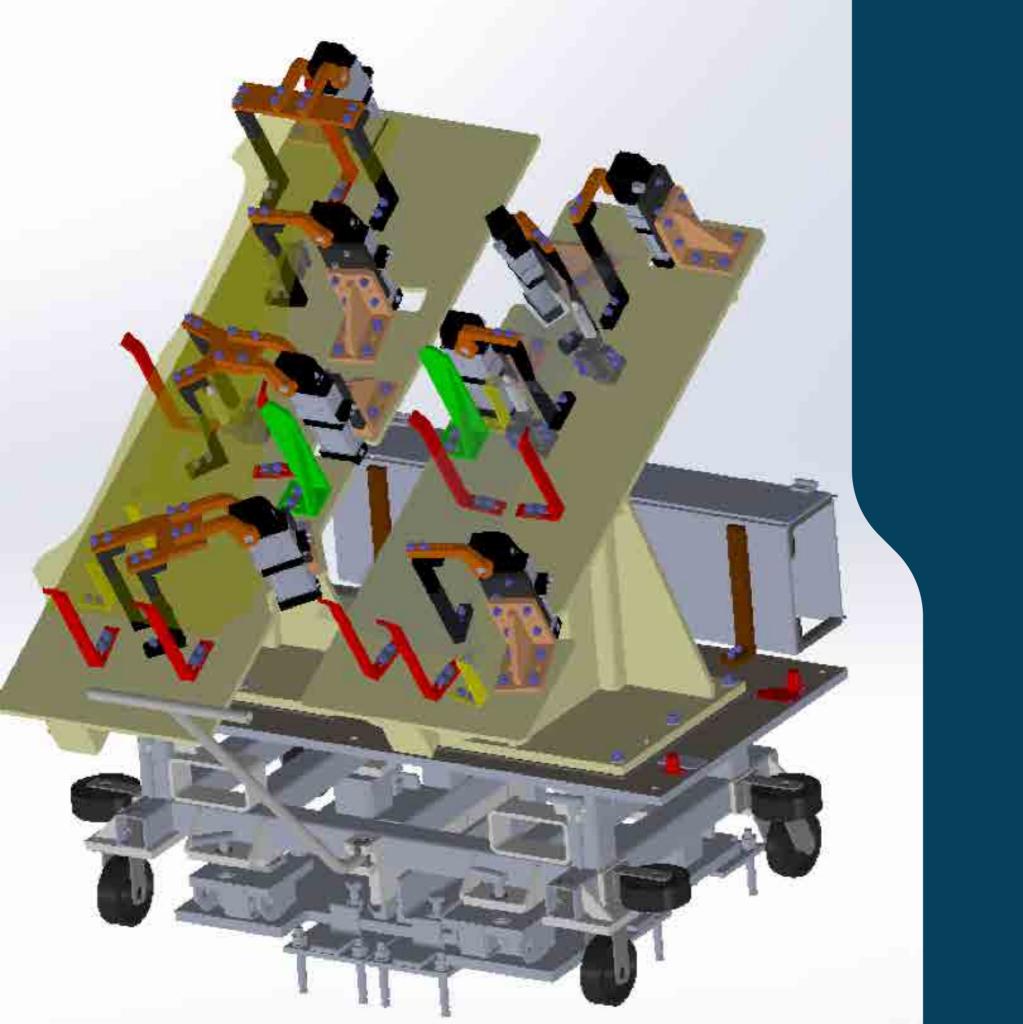








# Design & automation



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