



ALITER
MANUFACTURING



About us

Aliter Manufacturing, was founded to serve the needs of equipment manufacturing for the Cd Juárez and El Paso, TX area.

We are mainly engaged in the design and improvement of the assembly, inspection, test to a wide range of industries. As well as precision machining parts and tools for industry, they also offer different industrial welding services.



What do we do

At Aliter MFG, we are mainly engaged in equipment design and improvement, as well as precision machining parts and tools for industry, at the same time offering different industrial welding services.

Mission

Provide solutions to the needs and interests of your organization in an ethical and objective manner, where the customer comes first.

View

To be the best option as a reliable partner, offering solutions that respond to the real needs of our clients.

Quality politics

In Aliter MFG. we are committed to the satisfaction of our customers through compliance with your requirements, applying continuous improvement through our system of quality management.



Services

- Mechanical and Electrical Design
- Automatic Assembly Machines
 - Welding, Pneumatic Presses, Servo Presses, Robot Integration. Etc.
- Test Fixtures
- Precision Machining
- Equipment Upgrade (Refurbish, Retrfit)
- Work stations

Fixtures



To



Automatic
Assembly
lines



Engineering Process

1

- Project analysis

2

- Design

3

- Manufacturing

4

- Assemble

5

- Installation and implementation

6

- Finalización del Proyecto



Área de Diseño





Área de Diseño



Sala de Juntas



Recepción



Área de Maquinado



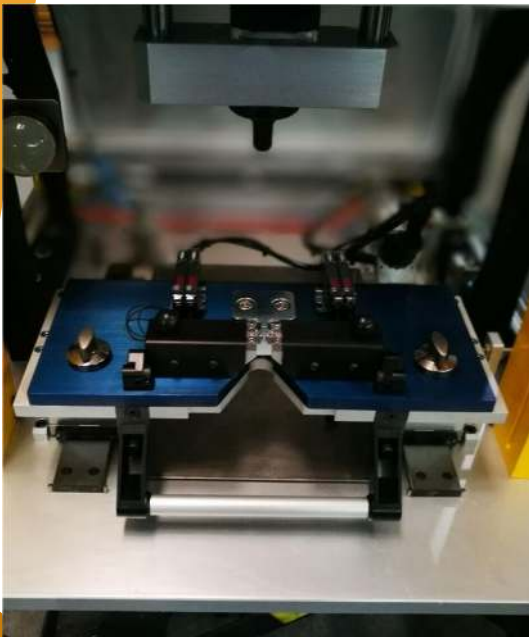


Área de Maquinado





Gallery



Terminal Inserter



Gallery



TECHNICAL SPECIFICATIONS

Weight / Part Size : Steel / Piston Rings

Models : 3

Equipment Dimensions: 2500 x 1250 mm

Production Information:

Cycle Time : 2.5 sec

Shifts: 3

Process Information

- Electronic gage to measure all the tolerances
- Gap
- Width
- Thickness
- Diameter

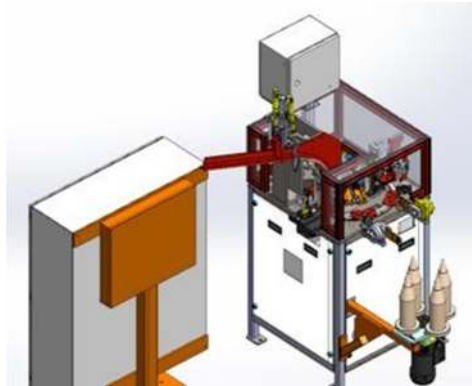
Main integrated Equipment

- LVDT Probes
- Rotary table for load station
- Part transportation by Fanuc Robot
- Vision System Keyence
- Dimensions recollected in customer Quality System

Electronic Gage for MAHLE Piston Rings



Gallery



TECHNICAL SPECIFICATIONS

Weight / Part Size : Steel / Piston Rings

Models : 3

Equipment Dimensions: 1000 x 1250 mm

Production Information:

Cycle Time : 1.5 sec

Shifts: 3

Process Information

- Electronic gage to measure all the tolerances
- Gap
- Width
- Thickness
- Diameter
- Color
- Automatic Scrap container by defect.

Main integrated Equipment

- LVDT Probes
- Automatic loader
- Part transportation by rotary table
- Vision System Keyence
- Dimensions recolected in customer Quality System

Electronic Gage for MAHLE Piston Rings



Gallery



TECHNICAL SPECIFICATIONS

Weight / Part Size : Steel / Piston Rings

Models : 3

Equipment Dimensions: 1250 x 1250 mm

Production Information: Bearing for camshaft

Cycle Time : 2 sec.

Shifts: 3

Process Information

- Electronic gage to measure all the tolerances
- Thickness
- Automatic Scrap container by thickness defect.

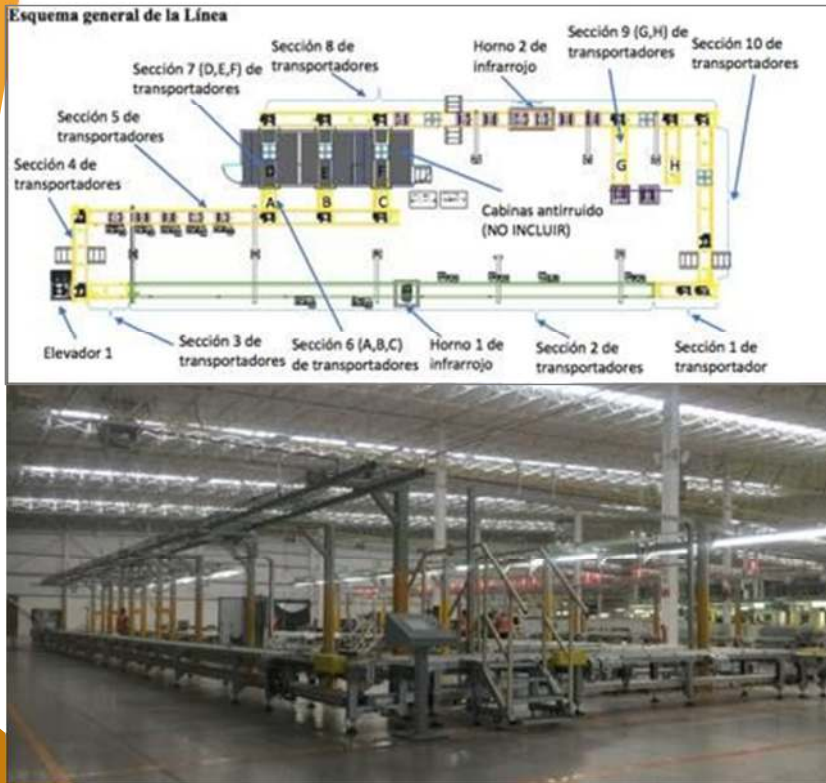
Main integrated Equipment

- LVDT Probes and Marposs system
- Automatic unloader
- Part transportation by rotary table
- Dimensions recollected in customer Quality System

Electronic Gage for MAHLE Piston 'Bearings'



Gallery



TECHNICAL SPECIFICATIONS

Weight / Part Size : 100 Kg / Car seats

Models : 4

Equipment Dimensions: mm

Production Information:

Car seats has to assembled in a full production assy line.

Cycle Time : 120 seg

Shifts: 2

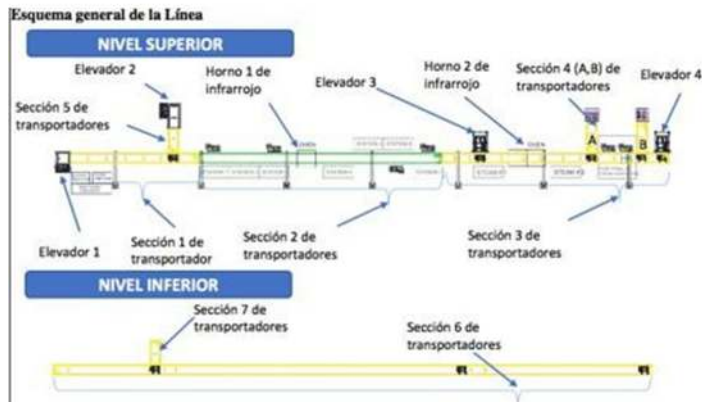
Process Information:

- Automatic mode
- Manual mode
- Lean flow

Main integrated Equipment:

- Lifter pallet station
- Transfer Station
- Slat conveyor
- Motorized conveyors

Assembly line for TACHI-S Car Seats



TECHNICAL SPECIFICATIONS

Weight / Part Size : 100 Kg / Car seats

Models : 4

Equipment Dimensions: mm

Production Information:

Car seats has to assembled in a full production assy line.

Cycle Time : 120 seg

Shifts: 2

Process Information:

- Automatic mode
- Manual mode
- Lean flow

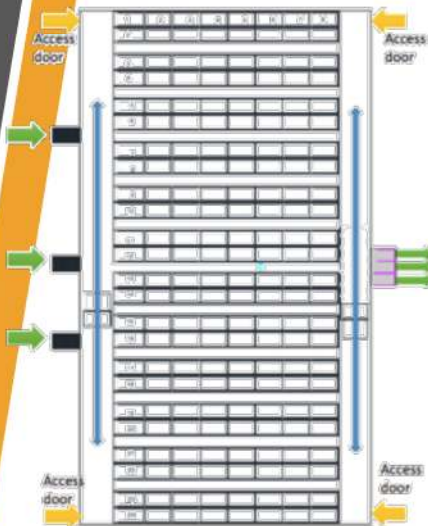
Main integrated Equipment:

- Lifter pallet station
- Transfer Station
- Slat conveyor
- Motorized conveyors

Assembly line for TACHI-S Car Seats



Gallery



TECHNICAL SPECIFICATIONS

Weight / Part Size : 100 Kg / Car seats

Models : 12

Equipment Dimensions: mm

Production Information:

Car seats has to be in a buffer before shipping

Cycle Time : 45 seg

Shifts: 2

Process Information:

- Load / un load in automatic cycle.

Main integrated Equipment:

- Crane, work as intelligent rack.
- Automatic mode
- Infeed and outfeed in two axis

Automatic Storage Retrieval System for TACHI-S car seats



Gallery



TECHNICAL SPECIFICATIONS

Weight / Part Size : 2 Kg / 400 X 150 mm Car Air Bag

Models : 1

Equipment Dimensions: (7) Stations

Production Information:

Cycle Time : 48 seconds

Shifts: 2

Process Information:

- Bag Assembly.
- Weight Station
- Torque Station.
- Harness Assy.
- Height torque station
- Electrical / Pull / Push Test Station
- Final Test

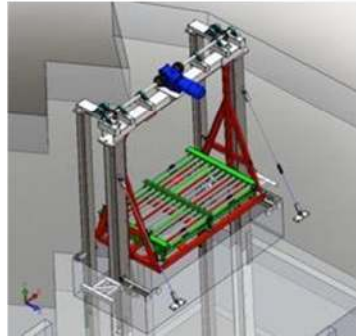
Main integrated Equipment:

- Vision System
- LVDT measurement.
- Traceability
- Electrical Torque

Assembly Line for TAKATA Car Air Bag



Gallery



TECHNICAL SPECIFICATIONS

Weight Capacity: 6000 lbs

Models : 2 (Bin / pallets) 4 VRC's for Pallet / 2 VRC's for Bin.

Equipment Dimensions: 70 feet build height / 3 floors

Production Information:

VRC Speed : 1.2 meters / second

Objective: Move Tesla raw material between floors

Process Information:

- Pallets & bin's automatic movement between floors
- VRC connection with AGV's tesla system
- VRC connection with Tesla production system
- Manual load with forklift

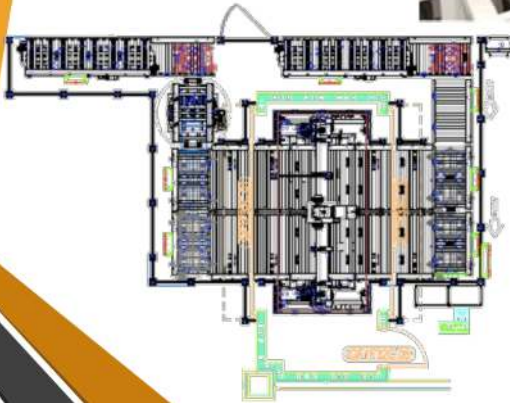
Main integrated Equipment:

- Carriage lifter with motorized roller conveyors
- Counterweight system
- Lift Drive system of 40 HP.
- Safety system with safety fence and infrared curtains.
- Over travel sensor / stoppers /
- Encoder communication

Automatic Storage Retrieval System for TACHI-S car seats



Gallery



TECHNICAL SPECIFICATIONS

Weight capacity: 6000 lbs.

Models : 2 (Bin & Pallet motorized conveyors)

Equipment quantity:

(300) equipment / 6 VRC's / 3 floors

Production Information:

Objective: Pallet & Bins transportation

MOS System: Coordination between production plan and each pallet for identifying the destination of each one at loading.

Process Information

- Tesla Row Materials flow for pallets and bins.
- Automatic product detection with scanners
- VRC connection with AGV's tesla system

Main integrated Equipment:

- Roller conveyors
- Turn tables
- Transfer systems
- Pop up stoppers
- Hokuyo Sensors (AGV sensor for communication)
- RFID
- Part presence sensors/ scanner / Light curtains

Conveyors System for VRC's (TESLA Gigafactory)



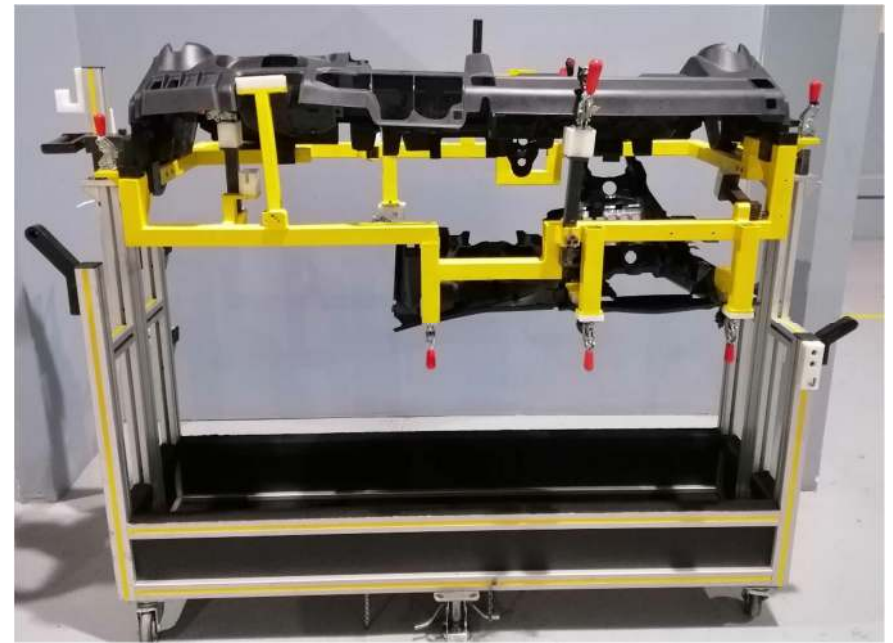
Stud Wrapping Machine



Cart For Assembly



Rack For Tags



Cart For Dash Assembly



Cart for Assembly and Torque



Work Station with Corlan Top



Stainless Steel Bench



Laboratory Table With Phenolic Top



Creeform Rack



Cientes





ALITER
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¡Gracias!

s.elizalde@alitermfg.com

g.rodriguez@alitermfg.com