



# **ETEK AUTOMATION SOLUTIONS JSC**

## **FABRICATION SOLUTION**

# Về chúng tôi

**CÔNG TY CỔ PHẦN GIẢI PHÁP TỰ ĐỘNG HÓA ETEK** là thành viên của **TÂN PHÁT ETEK**. ETEK hiện là đơn vị tiên phong cung cấp Giải pháp Tự động hóa tổng thể tại Việt Nam

Tên công ty

Công ty Cổ phần giải pháp Tự động hóa ETEK

Năm thành lập

2006

CEO

Nguyễn Trọng Thường

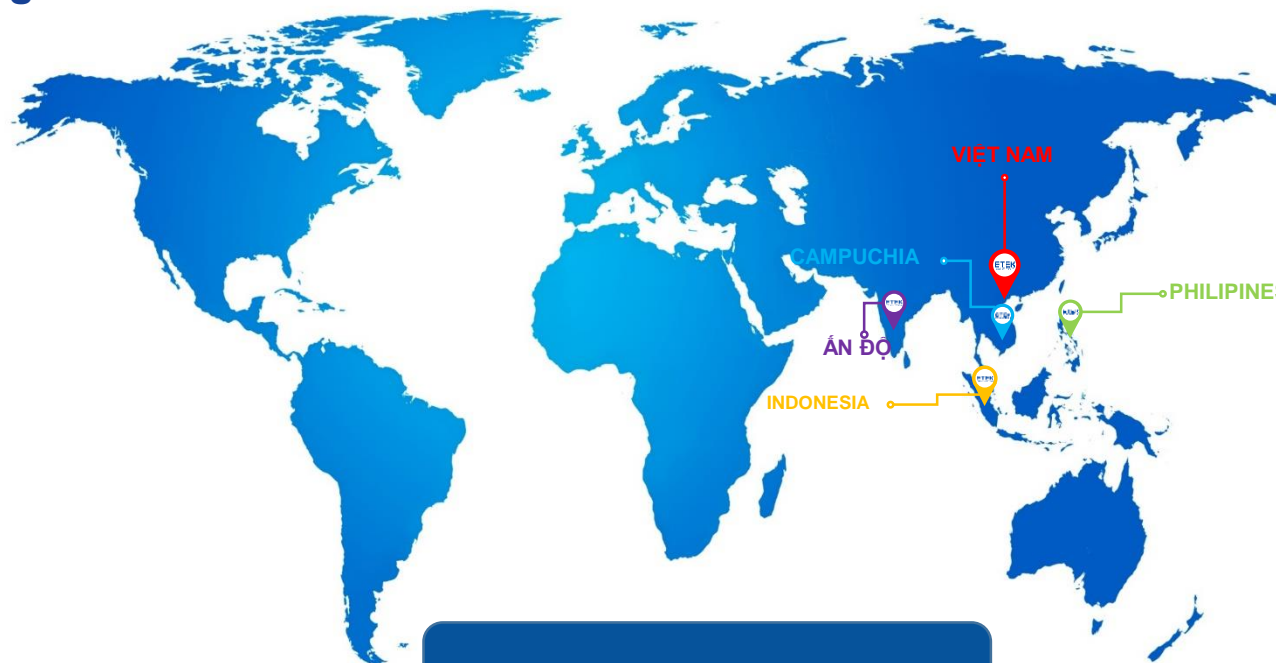
Chủ tịch HĐQT & Founder

Nguyễn Quốc Đạt

Công ty mẹ

Tân Phát ETEK

**ETEK**  
TOTAL AUTOMATION SOLUTIONS



**ETEK – GO GLOBAL**

# Hệ sinh thái Tân Phát ETEK





# Lịch sử hình thành phát triển

Công ty thành lập với 6 thành viên

Thiết bị đào tạo

Mở rộng quy mô kinh doanh

Tham gia vào lĩnh vực kinh doanh giải pháp Tự động hóa công nghiệp. Canon, Denso, Toyota là những khách hàng Nhật Bản đầu tiên của chúng tôi

Định hướng cung cấp giải pháp tự động hóa tổng thể, là đối tác chiến lược của nhiều đơn vị lớn, thể hiện năng lực tổng thầu trong việc triển khai hàng loạt dự án quy mô với độ khó cao

Công nghiệp  
Thiết bị đào tạo

Dân sinh  
Công nghiệp  
Thiết bị đào tạo

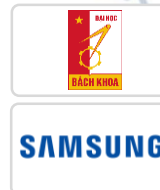
2022



• Tập trung vào hoạt động đào tạo, phát triển các ứng dụng chuyên sâu theo từng ngành nghề

• Diện tích: 3000 m2  
• Nhân sự : 200+ người  
• 2 chi nhánh: Hà Nội, Tp Hồ Chí Minh

2016



2012



Tiếp tục hợp tác cùng các Partner lớn về giải pháp đóng gói và Vision

• Diện tích: 250m2  
• Nhân sự : 48 người

2010



ABB đã hợp tác với ETEK từ 2010 và hiện nay ETEK đang là Provider Value của ABB

2006

• Diện tích: 25m2  
• Nhân sự : 6 People



# Sản phẩm và giải pháp

## FAS – GIẢI PHÁP TỰ ĐỘNG HÓA CÔNG NGHIỆP

1. Lắp ráp
2. Đóng gói
3. Chế tạo
4. Ứng dụng Robot
5. Nhà máy thông minh
6. Intralogistic
7. Thiết bị phụ trợ



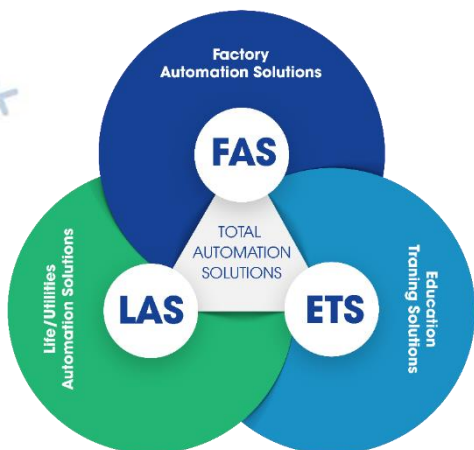
## ETS – GIẢI PHÁP THIẾT BỊ ĐÀO TẠO

1. Thiết bị đào tạo cho Trường Đại học, Cao đẳng và Trường nghề
2. Đào tạo và phát triển ứng dụng



## LAS – GIẢI PHÁP TỰ ĐỘNG HÓA DÂN SINH

1. Giải pháp Đỗ xe tự động (Ô tô, xe máy)
2. Sạc Pin ô tô
3. Thiết bị nâng hạ
4. Máy bán hàng tự động



Ô tô, xe máy  
và linh kiện



Nhựa  
/Kim loại  
/Vật liệu xây  
dựng



**FMCG** /  
Tiêu dùng  
/Hóa chất  
/Dược  
/Y tế



Dệt may  
/Da giày



**3C**  
Máy tính  
Truyền thông  
Tiêu dùng điện tử



Công  
nghiệp  
chung



Thương  
mại điện tử



Trường kỹ  
thuật

- Đại học, cao đẳng
- Trường nghề
- Trường phổ thông



Tòa nhà



Khu công  
cộng



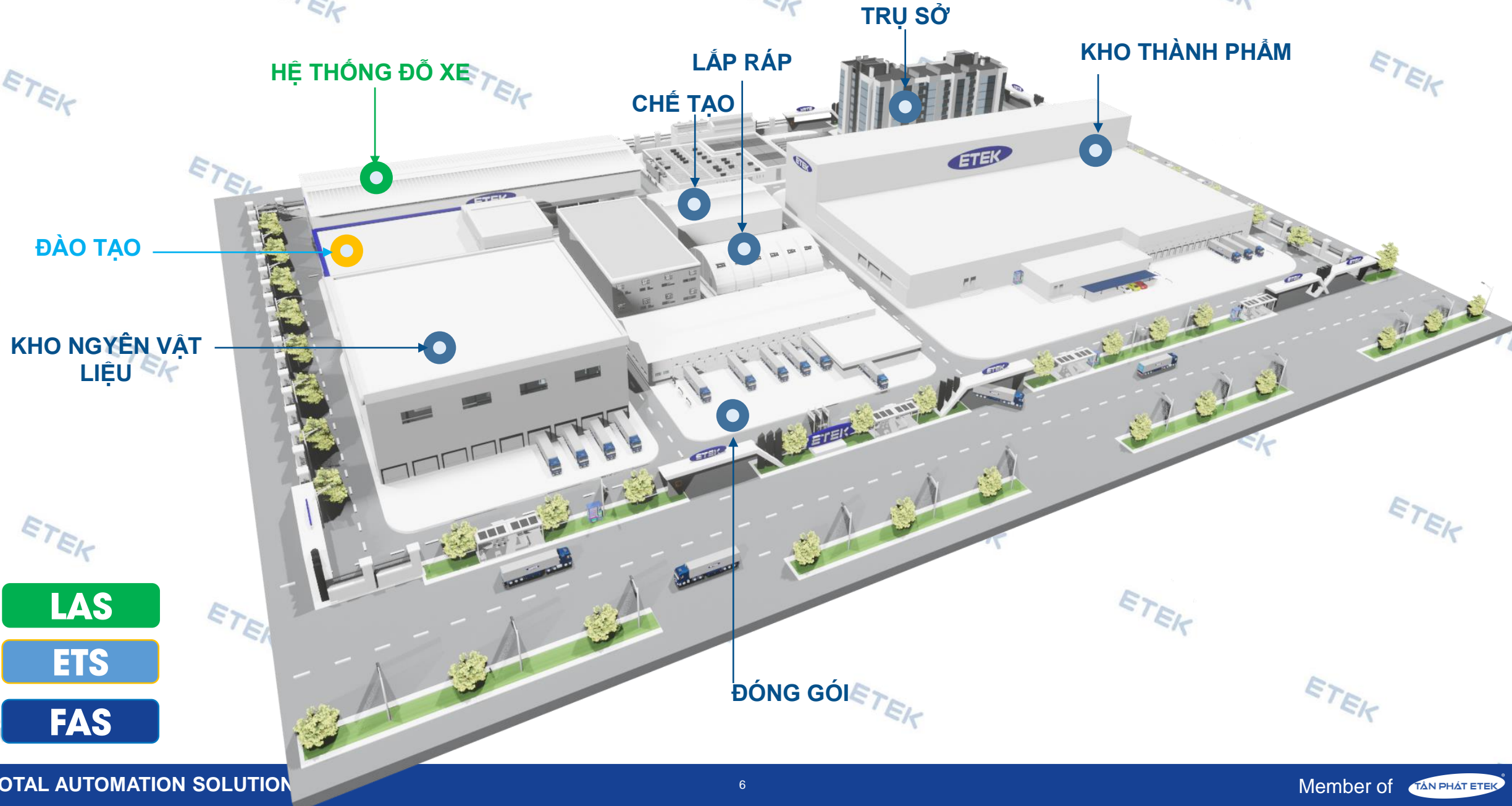
Hộ gia  
đình



Bệnh viện

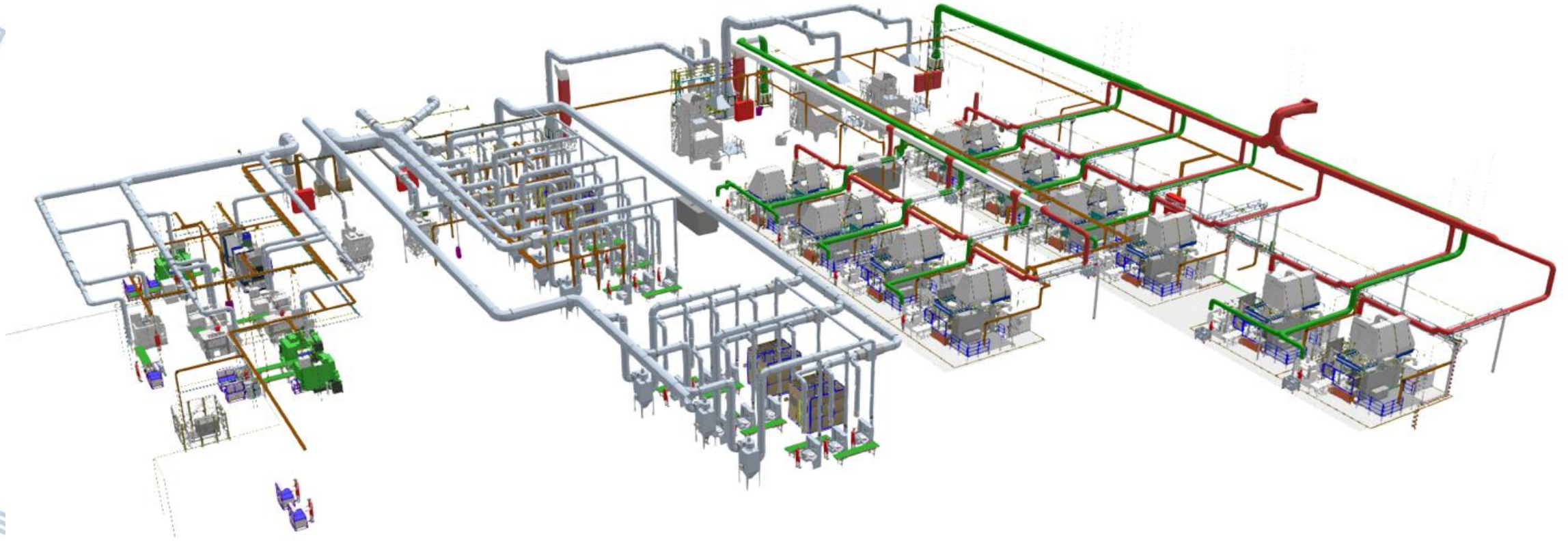
# ETEK – GIẢI PHÁP TỰ ĐỘNG HÓA TỔNG THỂ

**ETEK**  
TOTAL AUTOMATION SOLUTIONS





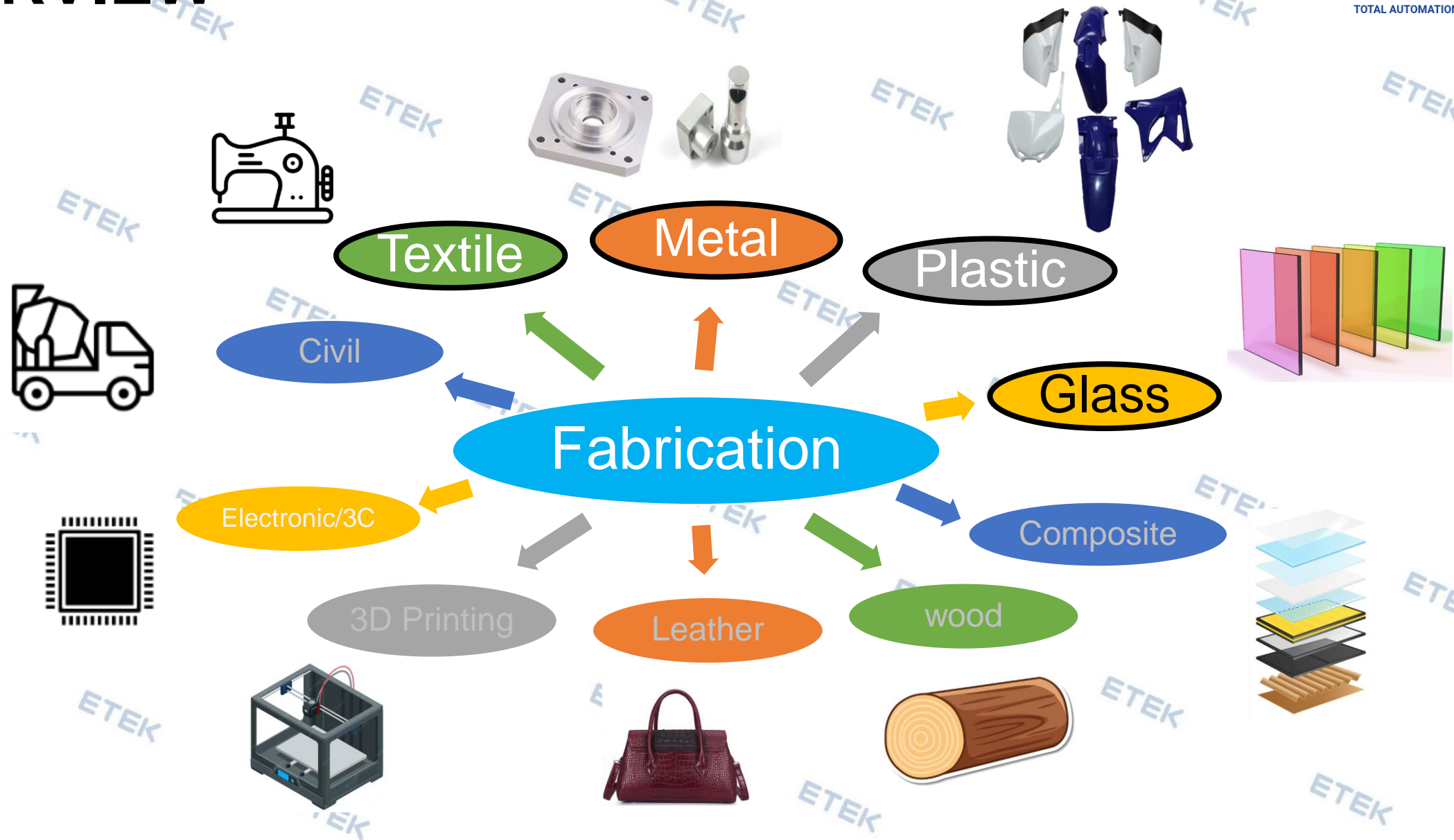
# FABRICATION SOLUTION OVERVIEW



## FABRICATION

















































# OVERVIEW

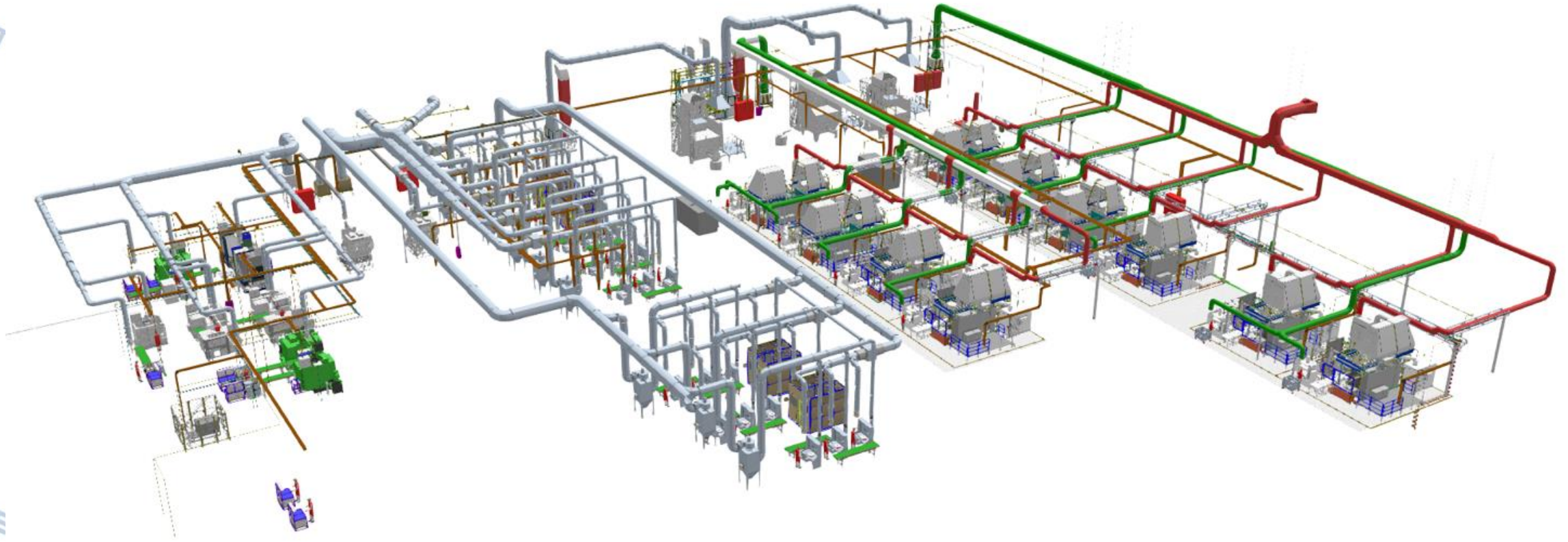


# OVERVIEW

## Target industrial

Industrial	Partner	Technology	Solution	Main Customer
Metal	         	Melting, Casting, Machining, Surface preparation, surface protection	Total Production factory, Auto Station, Fabrication Machine	      
Plastic	    	Injection molding, Extrusion, Foaming, machining, panting	Total production factory Automation station, Fabrication Machine	     
Glass	     	Vision check, Cleaning, polishing, machine handling,	Auto vision check Fully auto enclose cleaning hard dick	 
Textile	     	Laser sewing and cutting machine, sewing machine, three thread sewing machine	Auto sewing machine, automatically puts the fixture into the sewing area	   

# METAL FABRICATION SOLUTION



## METAL FABRICATION



# METAL FABRICATE PROCESS

Forming

Machining & processing

Surface preparation

Surface protection

Casting

Extrusion

Rolling

Drag

Forging

Stamping

Machining

Milling, Sharpening,  
Stripping, Drilling,  
Grinding, Lathe

Cold-work

Folding, bending,  
stamping, Curling

Assembly

Welding  
Fastening  
Adhesive Bonding  
Gluing  
Soldering and Brazing  
Interlocking or Snap-Fit  
Connections

Cleaning

Sandblasting,  
blasting

Grinding, polishing

Plasma, burn

Phosphating,  
Chromate Coating

Erase, carve

Chemical  
roughness

Surface hardening

Paint

Metal Plating

PVD,DLC

Ceramic coating

Anodizing

Quality control

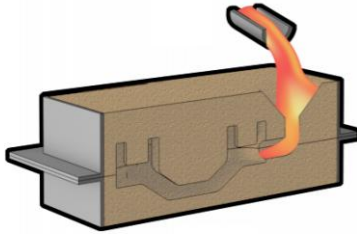
# METAL FABRICATE PROCESS

Forming

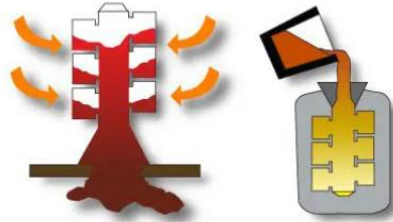
Machining & processing

Surface preparation

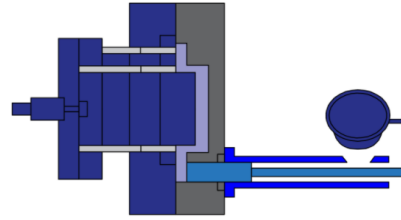
Surface protection



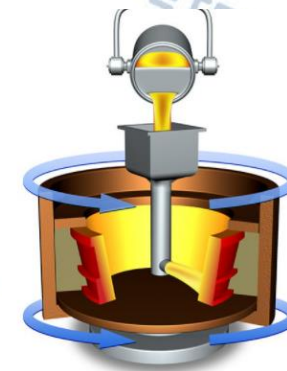
Sand casting



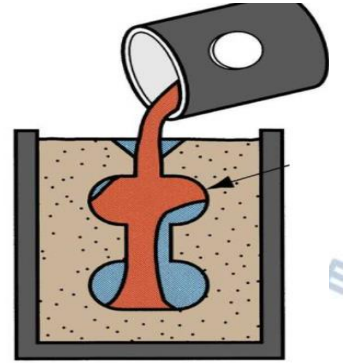
Investment casting



Die casting



Centrifugal casting



Lost foam casting

Casting



Extrusion

Billet Heating

Extrusion process

Quenching

Cutting

Aging

# METAL FABRICATE PROCESS

Forming

Machining & processing

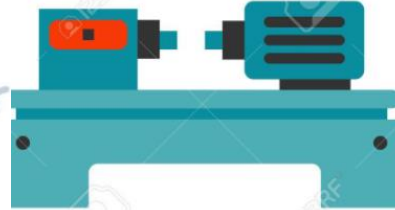
Surface preparation

Surface protection

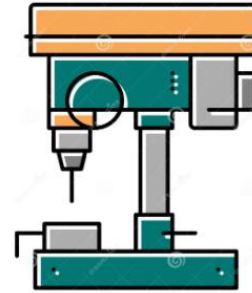


**Machining**

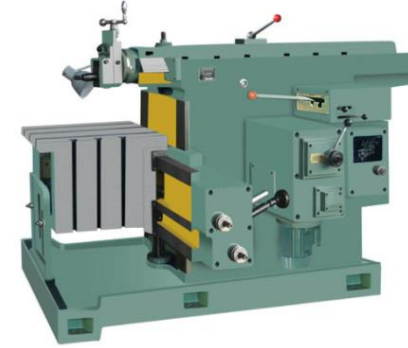
Milling



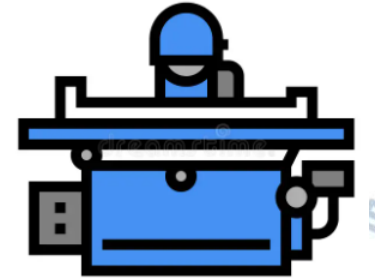
Lathe



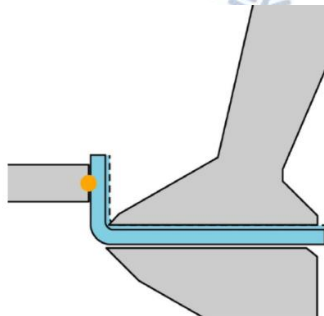
Drilling



Planer



Grinding

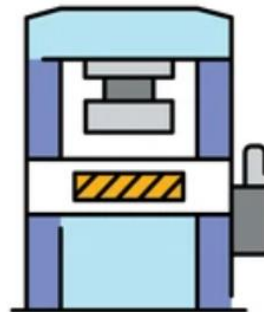


**Cold work**

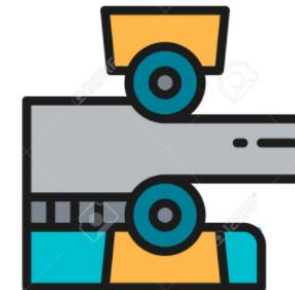
Folding



Bending



Stamping



Rolling

**OTHER**

Other



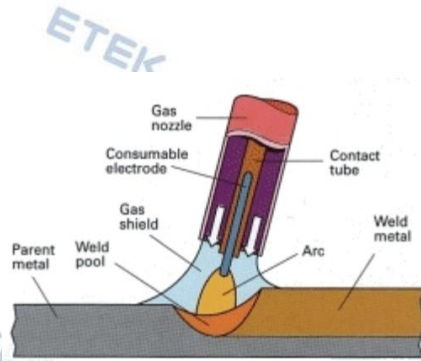
# METAL FABRICATE PROCESS

Forming

Machining & processing

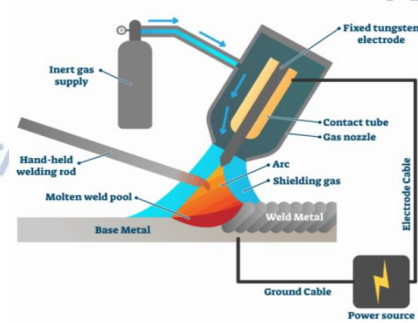
Surface preparation

Surface protection

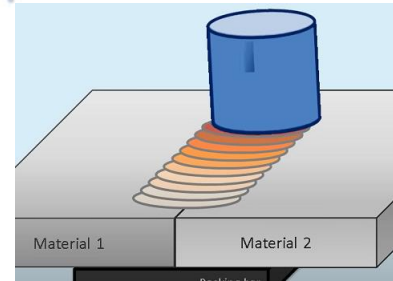


Assembly

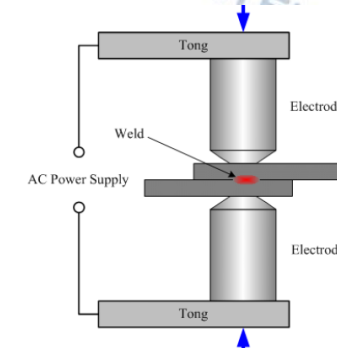
MIG Welding



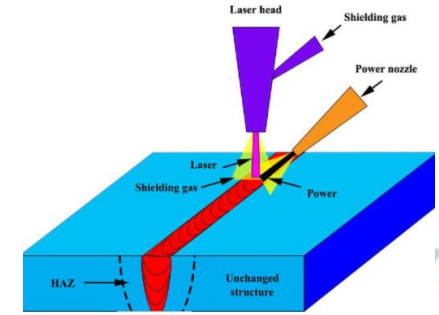
TIG Welding



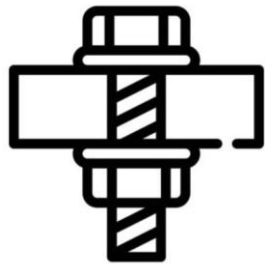
Friction Welding



Spot welding



Laser welding



Assembly

Fastening



Interlocking



Gluing



Soldering

**OTHER**

Other

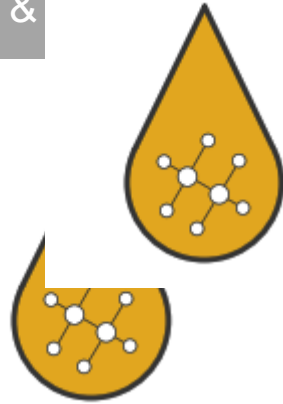
# METAL FABRICATE PROCESS

Forming

Machining &

Surface preparation

Surface protection



Cleaning

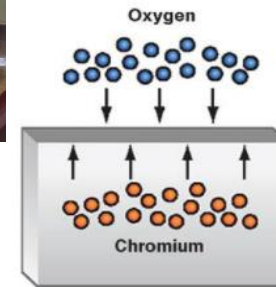
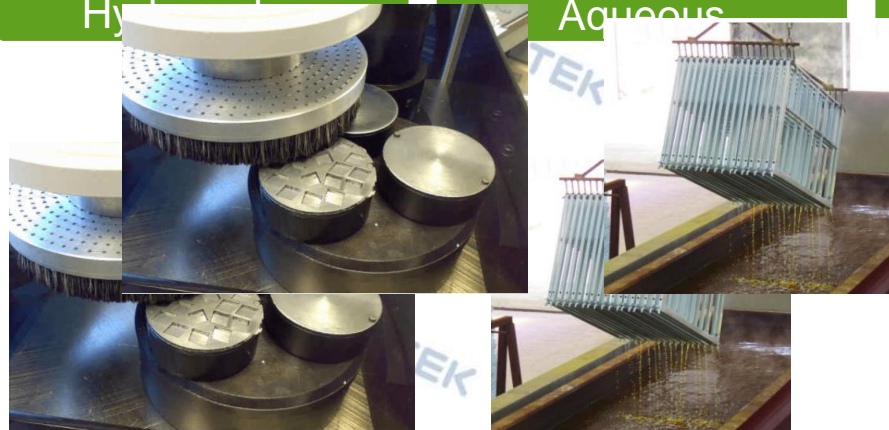
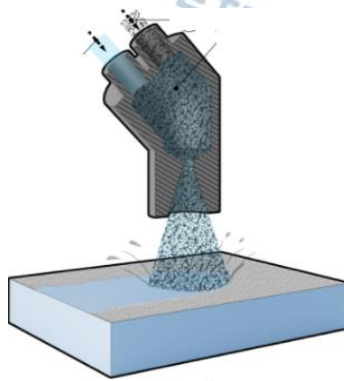
Solvent Cleaning

Hydrophobic

Aqueous

Laser cleaning

Plasma cleaning



OTHER

Other

Abrasive Blasting

Brushing

Pickling

Passivation

Other

# METAL FABRICATE PROCESS

Forming

Machining & processing

Surface preparation

Surface protection



Painting

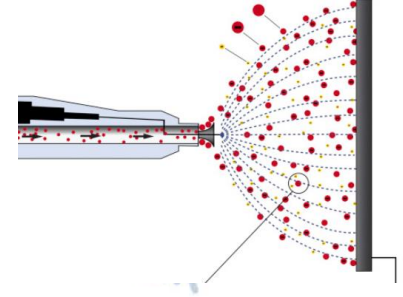
Brushing, Rolling



Spray



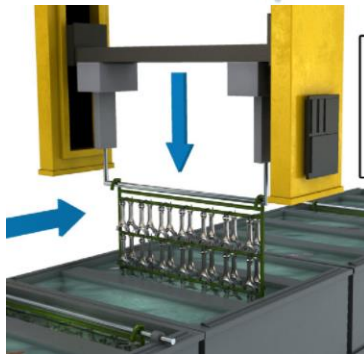
Powder coating



Electrostatic

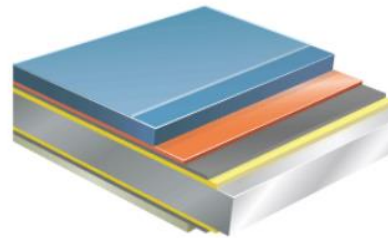


Dipping

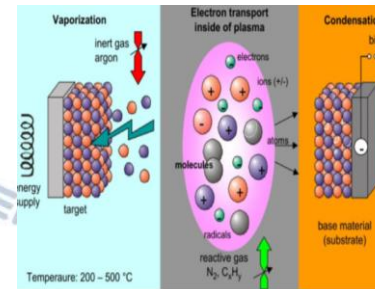


Other

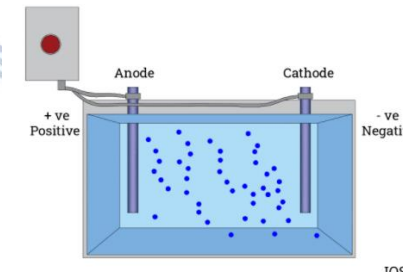
Planting



Coating



PVD coating



Anodizing

**OTHER**

Other



# QUALITY CONTROL IN METAL FABRICATION



Inspection

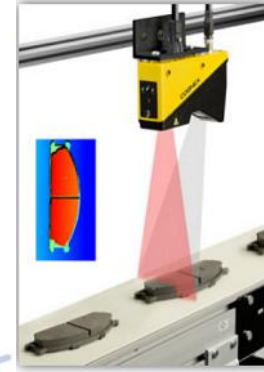
Dimension



Roughness

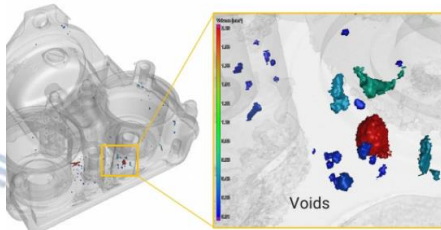


Gloss



Other

OTHER

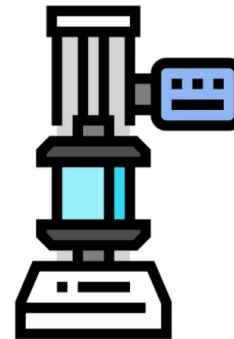


Internal check

X-ray



Tensile test



Compression



hardness



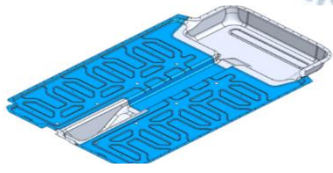

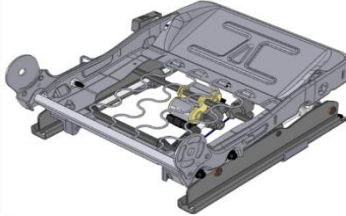
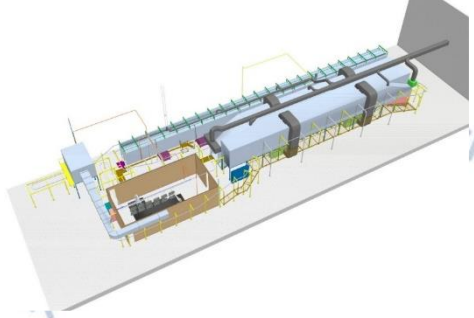
OTHER

# FABRICATION PRODUCTION LINE

## Overview

Etek has implemented hundreds of projects related to manufacturing in metal and plastic details, including some typical projects like:

- Automotive Aluminum Parts Fabrication Factory,
- EV Battery Top Cover Fabrication Line,
- EV Battery Housing Fabrication Line,
- Powder Coating Automotive part,
- Automotive Plastic Parts Injection Molding Factory,
- Aluminum Extrusion Factory

Product	Key Technology	Layout	Key Process
 Metal	<ul style="list-style-type: none"> <li>• Die casting</li> <li>• CNC Machining</li> <li>• Rim spray cleaning</li> <li>• Powder coating</li> <li>• Wet panting</li> </ul>		<ol style="list-style-type: none"> <li>1. Melting &amp; Furnaces</li> <li>2. Die casting</li> <li>3. X-ray</li> <li>4. Shot Blasting</li> <li>5. CNC Machining</li> <li>6. Cleaning</li> <li>7. Panting</li> </ol>
 Aluminum sheet	<ul style="list-style-type: none"> <li>• Spot welding</li> <li>• CNC</li> <li>• Gluing</li> <li>• Leak test</li> </ul>		<ol style="list-style-type: none"> <li>1. Gluing 1st</li> <li>2. Spot welding</li> <li>3. Gluing 2rd</li> <li>4. Glue curing</li> <li>5. Leak test</li> <li>6. Dimension check</li> </ol>
 Metal panting	<ul style="list-style-type: none"> <li>• Spay surface preparation</li> <li>• Powder coating</li> <li>• Wet painting</li> </ul>		<ol style="list-style-type: none"> <li>1. Loading</li> <li>2. Pretreatment</li> <li>3. Dry off Oven</li> <li>4. Powder Booth</li> <li>5. Curing oven</li> <li>6. Cooling</li> <li>7. Inspection</li> <li>8. Unloading</li> </ol>

# MAJOR PROJECTS REFERENCES

Sr. No	Project Name	Industry	Application	Scope	Capacity	Year
1	Automotive Aluminum Parts Fabrication Factory	Automotive & Accessories	Casting, blasting machining, Powder coating	Provide fabricate production line for aluminum automotive parts	105.000 – 4.500.000 pcs/year	2018- 2019
2	EV Battery Housing Fabrication Line	Automotive & Accessories	Welding, reviewing, clearing, leak test, Polishing, Cleaning machining	Provide fabricate production line for battery housing from parts to hold battery housing	25.000 pcs/year	2021-2022
3	EV Battery Top Cover Fabrication Line	Automotive & Accessories	Welding, Gluing, leak test. Grinding, cutting	Provide fabricate production line for battery housing from parts to hold housing	25.000 pcs/year	2021-2022
4	EV Battery Housing Fabrication Line	Automotive & Accessories	Welding, reviewing, clearing, leak test, Polishing, Clearing machining	Provide fabricate production line for battery housing from parts to hold battery housing	100.000 pcs/year	2022-2023
5	Aluminum Extrusion Factory	Automotive & Accessories	Extrusion	Provide Extrusion line for automotive forming parts	9 Ton/Hours	2022-2024
6	Powder Coating Car Seat Frame Line	Automotive & Accessories	Panting, Powder coating, Cleaning	Provide Painting line for car seat frame	750.000 pcs/year	2023
7	BIW panting line	Automotive & Accessories	Pretreatment, Panting, Sealing, drying	Provide Painting line for BIW	10 pcs/hour	2024 - Ongoing
8	Other hundred Related project					2012-2023



# AUTOMOTIVE ALUMINUM PARTS FABRICATION FACTORY



## Overview

- Application: Die casting, CNC, Surface Preparation & Protection
- Capacity: 100.000 – 4.500.000 parts/year
- Part material: Aluminum & aluminum alloys.
- Layout Area: 150x85 meter square
- Automatic rate 75%

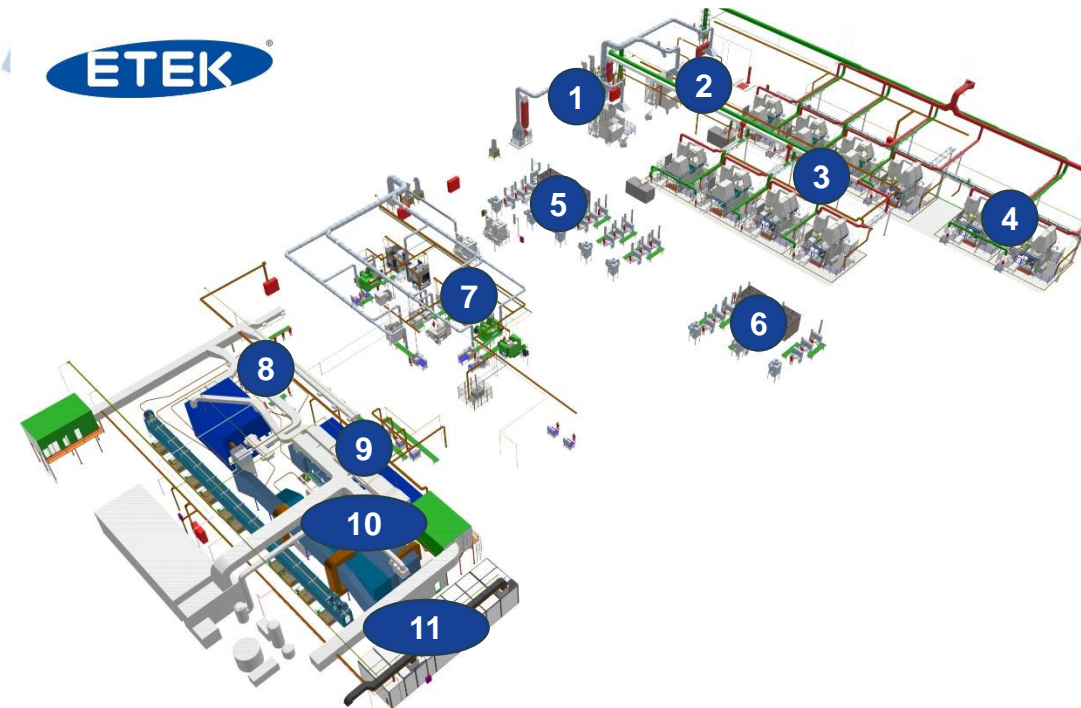


## Product



## Industry

- Automotive, Metal, Supporting



## Process

1. Melting
2. Furnaces
3. Die casting
4. X-ray
5. Shot Blasting
6. Deburring
7. CNC Machining
8. Cleaning
9. Powder coating
10. Color painting
11. Drying

WATCH VIDEO



# EV BATTERY TOP COVER FABRICATION LINE

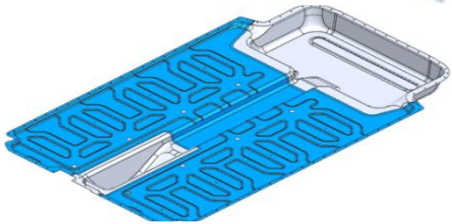


## Overview

- Application: Sport Welding laser Cutting, Gluing, Leak test...
- Capacity: 25.000 Products/year
- Part material: Aluminum & aluminum alloys.
- Layout Area: 40x15 meter square
- Automatic rate 85%



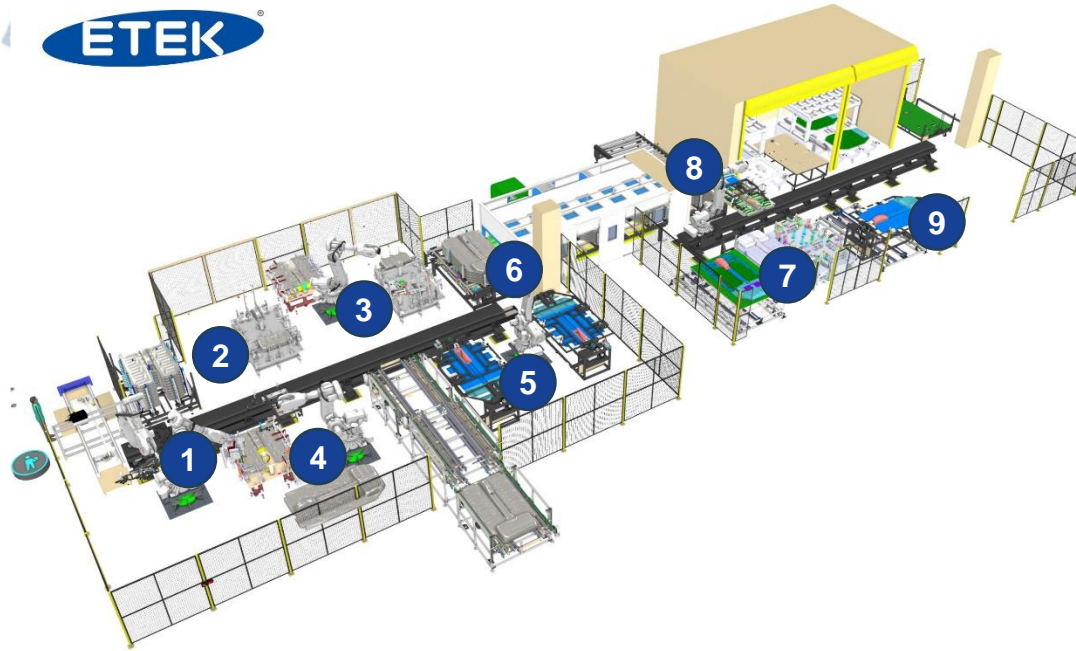
## Product – EV Battery Housing



## Industry

- Automotive, Metal, Fabrication, Battery

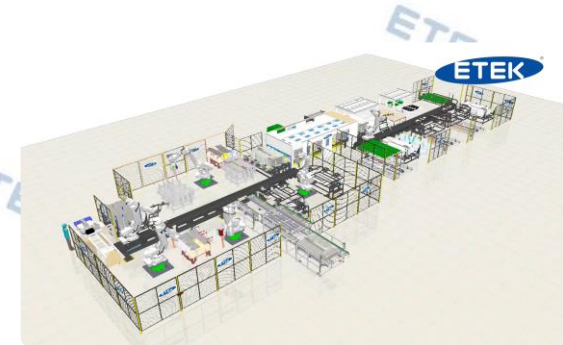
**ETEK**



## Process

1. Gluing 1st
2. Glue freezing
3. Spot welding
4. Gluing 2nd
5. Glue curing
6. Leak test
7. Dimension check
8. Manual check
9. Package

WATCH VIDEO





# EV BATTERY HOUSING FABRICATION LINE



## Overview

- Application: Laser welding, Riveting, Drilling Grinding, Machining, Leak test, Cleaning...
- Capacity: 100.000 Products/year
- Part material: Aluminum & aluminum alloys.
- Layout Area: 90x55 meter square
- Automatic rate 85%



## Product – EV Battery Housing



## Industry

- Automotive, Metal, Fabrication, Battery



## Main Process

1. Cleaning
2. Laser cutting
3. TIG welding
4. Machining
5. Friction welding
6. Welded vision check
7. Polishing
8. Riveting
9. Dimension check
10. Cleaning
11. Leak test

WATCH VIDEO





# Aluminum Extrusion Factory

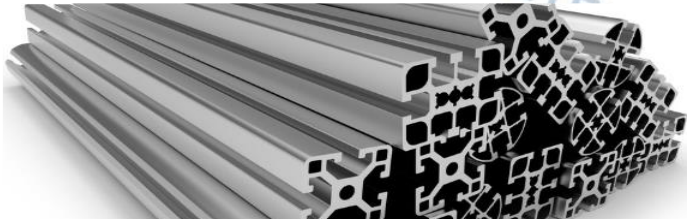


## Overview

- Application: Extrusion, CNC machining, cutting, debugging, packaging
- Capacity: 100.000 Products/year
- Part material: Aluminum & aluminum alloys.
- Layout Area: 90x55 meter square
- Automatic rate 85%

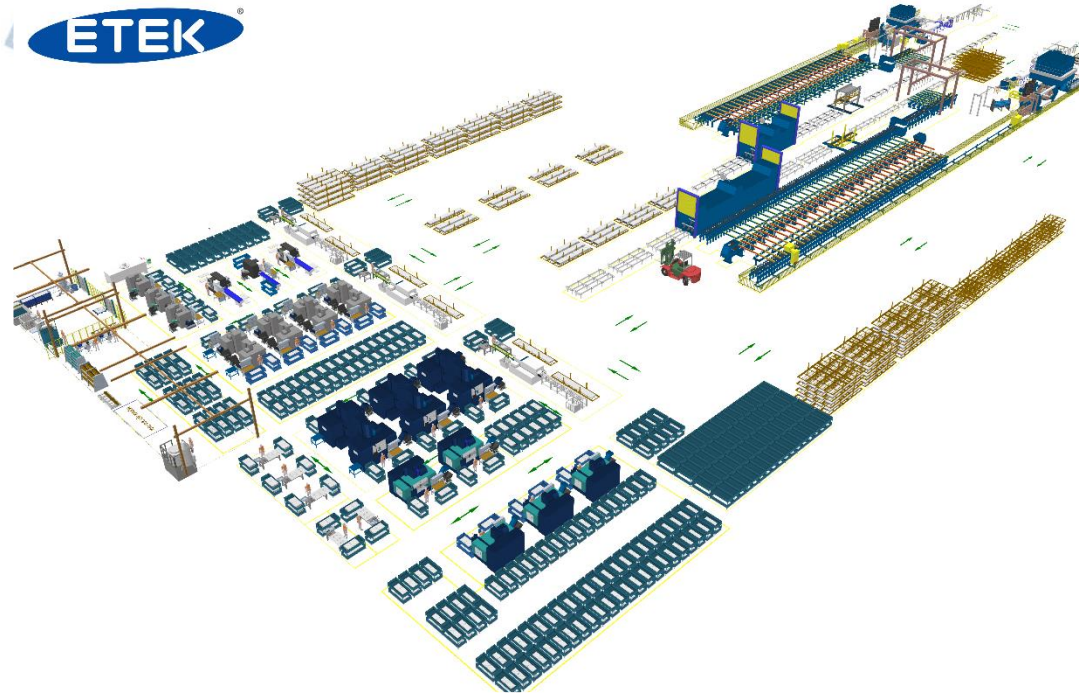


## Product – EV Battery Housing



## Industry

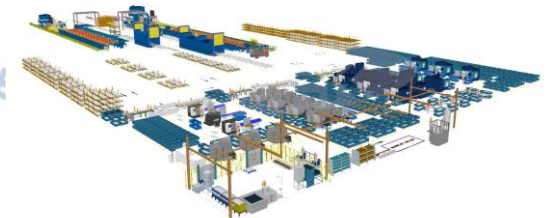
- Automotive, Metal, Fabrication, Aluminum



## Process

1. Log Loading
2. Log Furnace
3. Hot Sawing
4. Extrusion
5. Quenching
6. Sawing 1st
7. Cooling
8. Stretcher
9. Sawing 2nd
10. Stacker
11. Ageing
12. Cooling
13. CNC
14. Check
15. Packaging

WATCH VIDEO



# Powder Coating Car Seat Frame Line



## Overview

- Application: Surface protection (Painting)
- Production Details : >750.000 sets/ year
- Layout Area: 25x120 meter square
- Product: Steel & Aluminum Part
- Automatic Rate: 95%



## Products



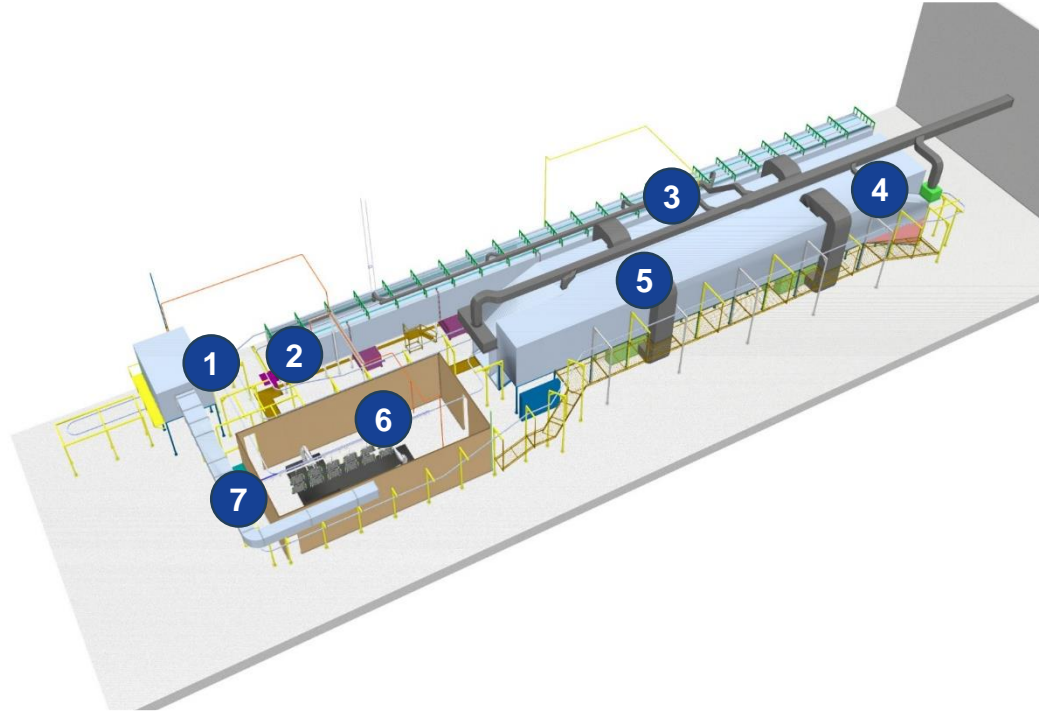
## Industry

- Automotive
- Metal
- Supporting



## Main Process

1. Loading
2. Pretreatment
3. Dry off Oven
4. Powder Booth
5. Curing oven
6. Cooling
7. Inspection
8. Unloading



WATCH VIDEO





# Aluminum Extrusion Factory



## Overview

- Application: Extrusion, CNC machining, cutting, debugging, packaging
- Capacity: 100.000 Products/year
- Part material: Aluminum & aluminum alloys.
- Layout Area: 90x55 meter square
- Automatic rate 85%

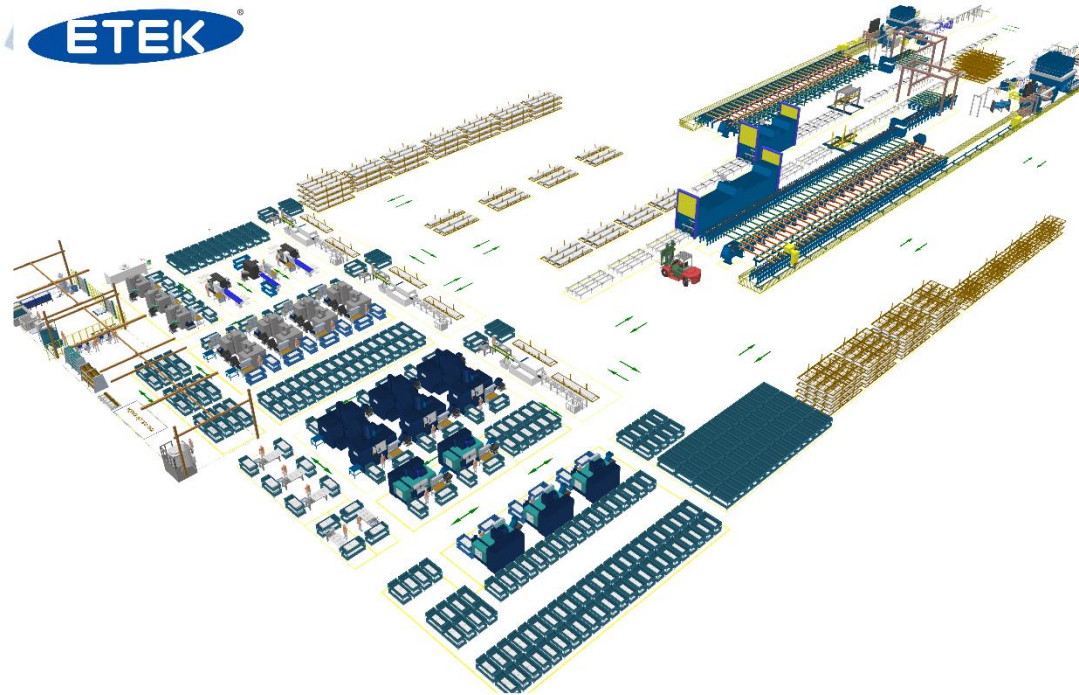


## EV Battery Housing Frame



## Industry

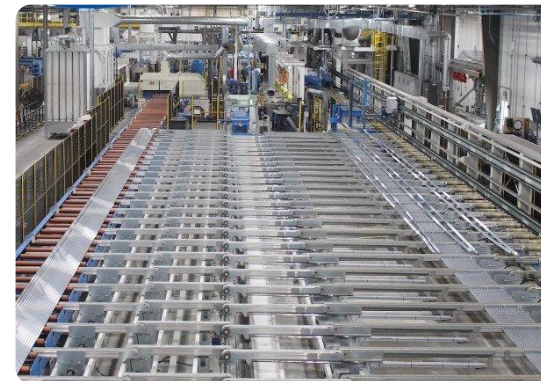
- Automotive, Metal, Fabrication, Aluminum



## Main Process

1. Log Loading
2. Log Furnace
3. Hot Sawing
4. Extrusion
5. Quenching
6. Sawing 1st
7. Cooling
8. Stretcher
9. Sawing 2nd
10. Stacker
11. Ageing
12. Cooling
13. CNC
14. Check
15. Packaging

WATCH VIDEO





# Automotive Metal Parts Surface Preparing System



## Overview

- Application: Surface preparation before powder coating, painting
- Production Details : 750.000 – 2.000.000 pcs/ year
- Layout Area: 51,7x2,7 meter square
- Product: Automotive metal parts

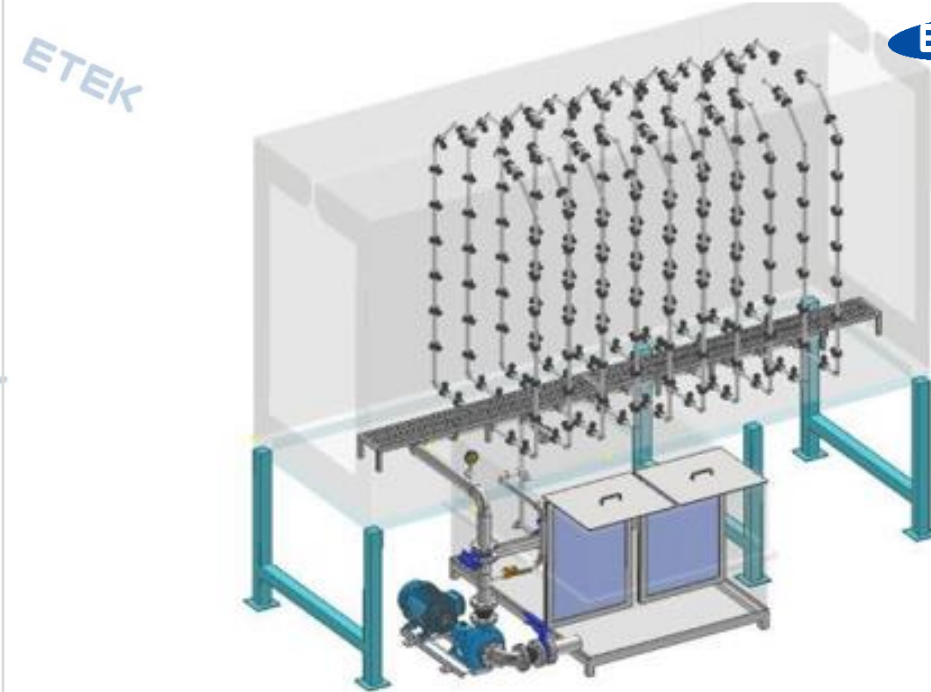


## Products



## Industry

- Automotive
- Metal
- Supporting



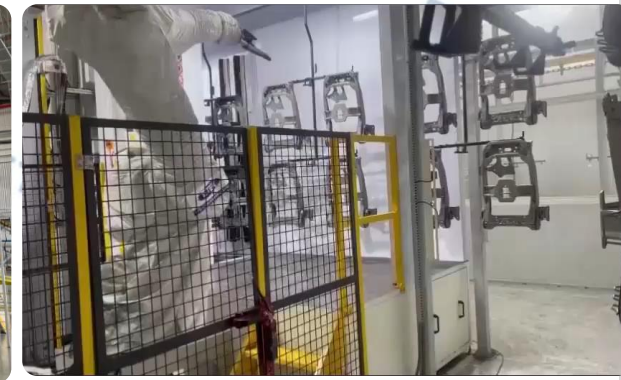
ETEK



## Process

1. Pre-Degrease
2. Degrease
3. Water Rinse 1<sup>st</sup>
4. Acid Rinse
5. Water Rinse 2<sup>nd</sup>
6. Non-Chrome
7. Water Rinse 3<sup>rd</sup>
8. Water Rinse 4<sup>th</sup>
9. SAM Rinse
10. DI water Rinse
11. Tunnel

WATCH VIDEO



# Drying Booth



## DRYING BOOTH

- Application: Drying



## Specification

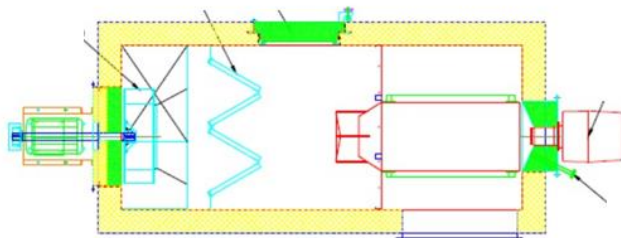
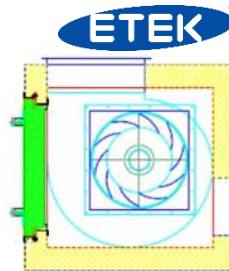
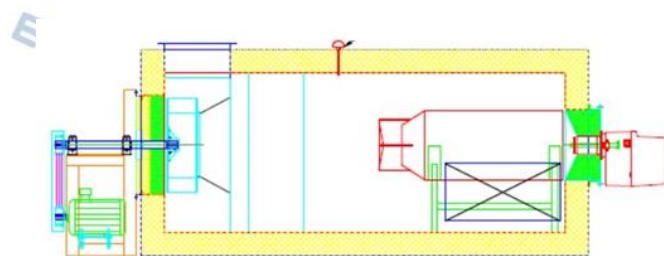
- Layout area: 36,000 (L) x 1,000 (W) x 2,800 (H) mm
- Oven Panel Material: Panted Steel
- Insulation: 150 mm thickness rock wool, 100 kg/m<sup>3</sup>
- Process Temperature: 120°C - 140°C
- Circulation Fan: 1 x high efficiency centrifugal fan
- Motor: 15Hp x 4P (ABB)
- Heating Source: 1 x Gas direct fired heat exchanger
- Burner Capacity: 350 KW
- Warm up 25 minutes



## Product & Industrial



- Automotive
- Metal
- Supporting



## Detail Equipment

1. Drying booth
2. Burner system
3. Regulation fan
4. Mesh Filter
5. Thermal control system
6. Heat exchanger

WATCH VIDEO





# HANGING CONVEYOR



## Hanging conveyor

- Model name: Hanging conveyor
- Application: Powder coating, Intralogistics



## Specification

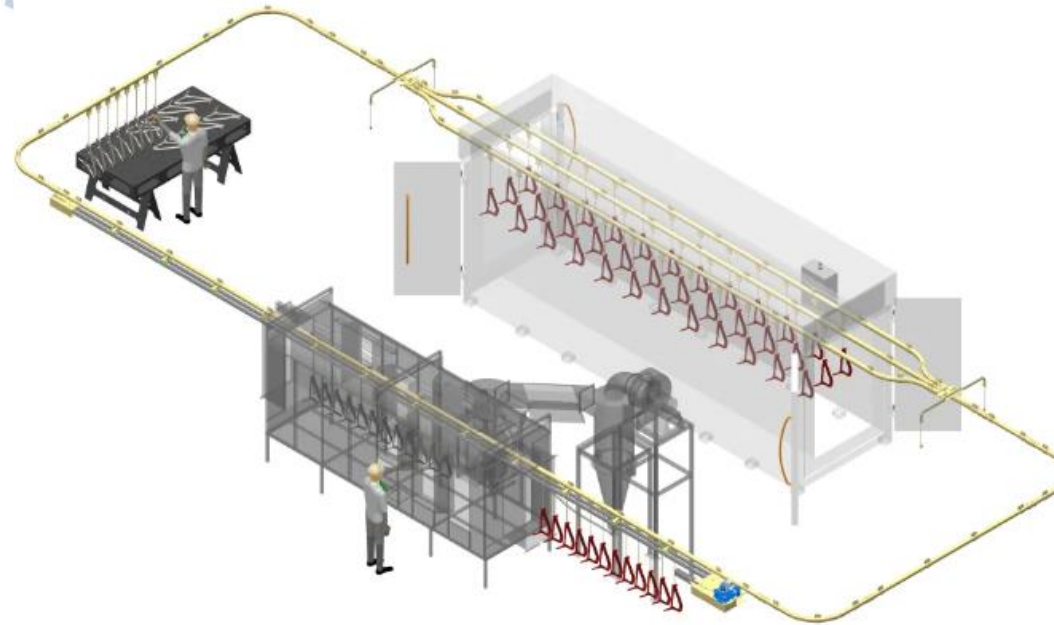
- Hanging distance: 1.225 m
- Conveyor speed: 4m/min
- Capacity: pcs / day
- Type: I-beam Overhead Conveyor System X348
- Single Trolley Load Capacity: max 90kg



## Product & Industrial



- Automotive
- Metal
- Supporting



## Detail Equipment

1. Conveyor Frame
2. Motor
3. Chain
4. Roller
5. Hanging hook

WATCH VIDEO





# EV Battery Housing Fabrication Line



## Overview

- Application: Laser welding, Riveting, Drilling Grinding, Machining, Leak test, Cleaning...
- Capacity: 100.000 Products/year
- Part material: Aluminum & aluminum alloys.
- Layout Area: 90x55 meter square
- Automatic rate 85%

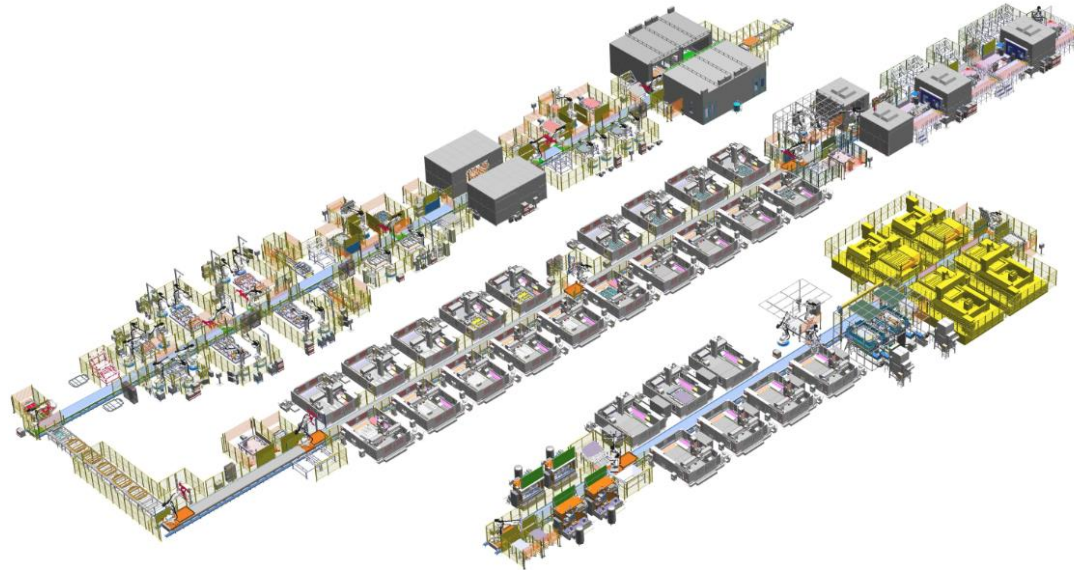


## Product – EV Battery Housing



## Industry

- Automotive, Metal, Fabrication, Battery



1. Chill part cleaning
2. Laser cutting
3. Machining
4. Friction welding
5. TIG welding
6. Riveting
7. Dimension check
8. Polishing
9. Cleaning
10. Leak test

WATCH VIDEO



# Laser Marking



## Laser Marking station

- Model: ETEKL.M0402
- Application: Laser marking, Metal works

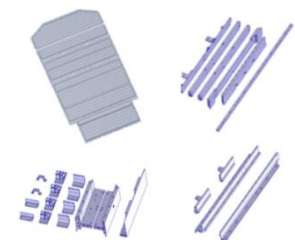


## Specification

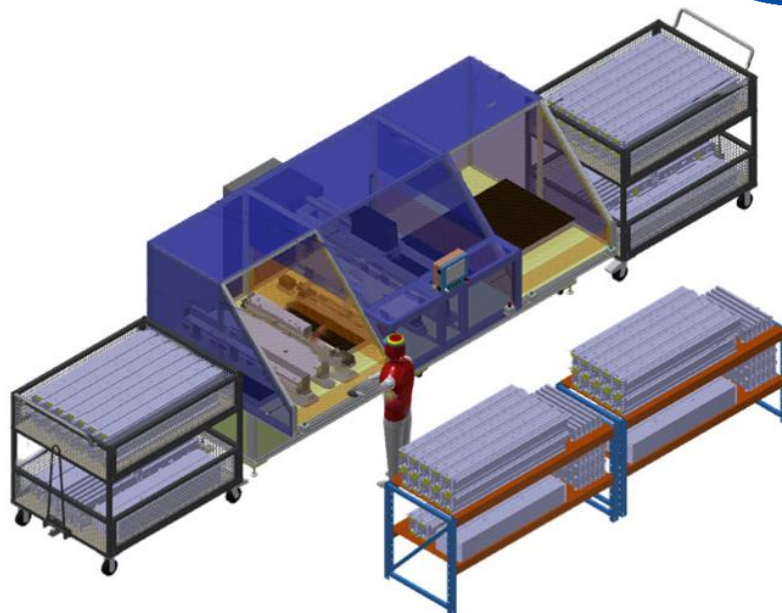
- Weight: 1000kg
- Layout size:
- Machine power: 220V, 5KW
- Laser power: 5W
- Capacity: 40-80 Letter/minute



## Products & Industry



- Fabrication
- Metal works
- Laser



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## Detail Equipment

1. Laser source
2. Laser head
3. Frame
4. Safety cover & Door
5. Fixture

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# Washing Aluminum Parts



## Washing Aluminum Parts

- Model: ETKTF.W01
- Application: Metal surface preparation

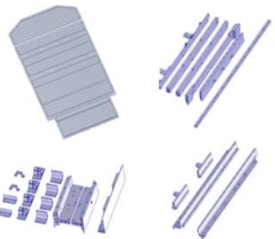


## Specification

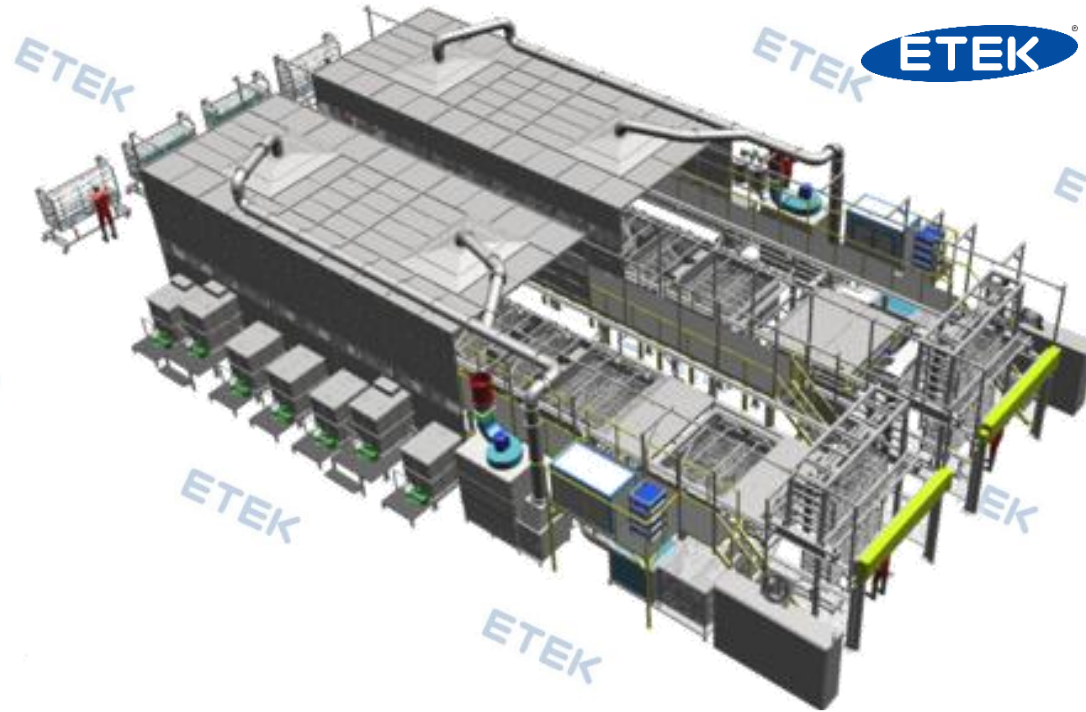
- Dimension (LxWxH): 20x4.5x4m
- Weight: 30000kg
- Machine power: 200KW
- Number of step: 11
- Capacity: 21Jph
- Task time: 165s



## Products & Industry



- Aluminum
- Metal
- Surface preparation



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## Process

1. Loading
2. Water Washing
3. Degreasing
4. Water washing 2<sup>nd</sup>
5. Water Washi 3<sup>rd</sup>
6. Drying
7. RO water washing
8. Passive
9. Water washing 4<sup>th</sup>
10. Cooling
11. Unloading

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# 2 Robots Rotated Table Auto MIG Welding



## Auto MIG welding

- Model: ETEKF.M205
- Application: MIG welding, Welding, Aluminum Welding

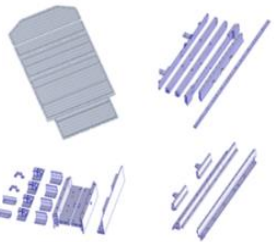


## Specification

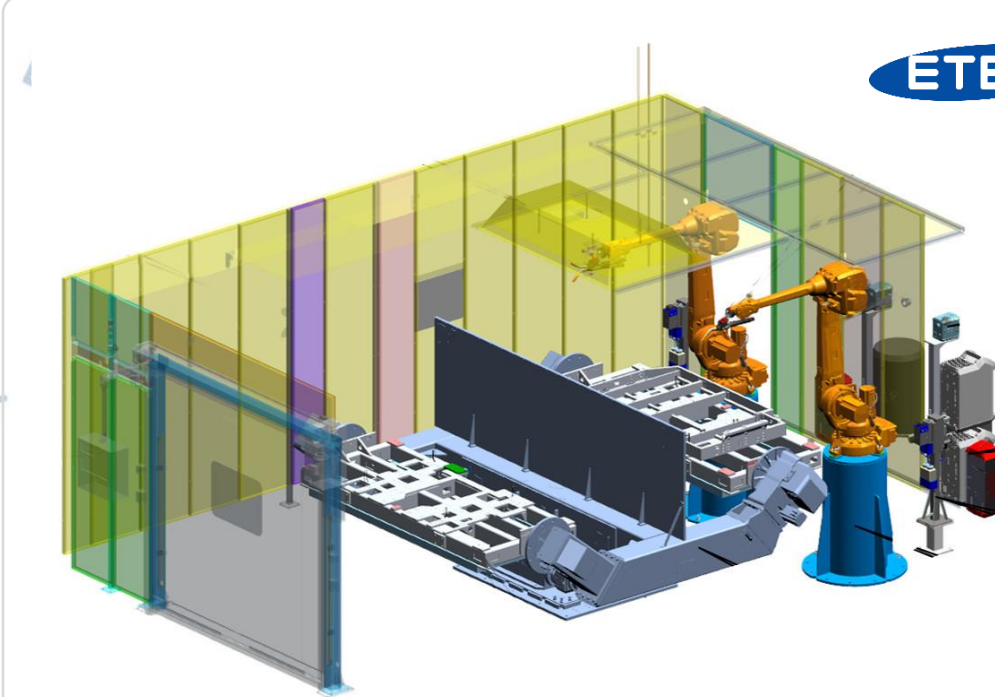
- Dimension (LxWxH): 8x6x3.7m
- Weight: 10000kg
- Station power: 3 Phase, 380V, 50KW
- Compressed air consumption: 7m<sup>3</sup>/h
- Argon consumption: 1.5m<sup>3</sup>/h
- Capacity: 22 JPH



## Products & Industry



- Fabrication
- Welding
- Aluminum
- Metal works
- Battery



## Detail Equipment

1. Robot ABB
2. Fixture
3. MIG welding source
4. MIG welding head
5. Frame
6. Fixture
7. Control Cabinet

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# 4 Robots Continues Auto MIG Welding



## Auto MIG welding

- Model: ETEKF.M206
- Application: MIG welding, Welding, Aluminum Welding

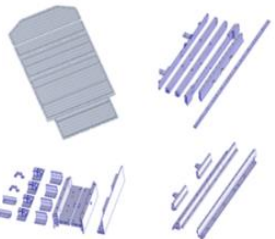


## Specification

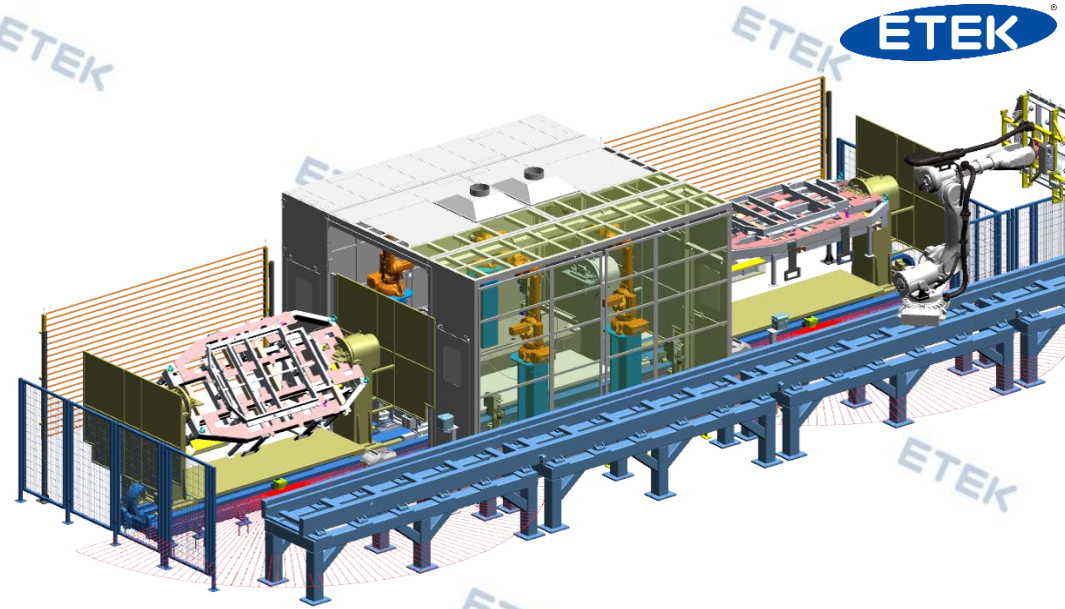
- Dimension (LxWxH): 16x6x3.7m
- Weight: 20000kg
- Station power: 3 Phase, 380V, 100KW
- Compressed air consumption: 14m<sup>3</sup>/h
- Argon consumption: 3m<sup>3</sup>/h
- Capacity: 22 JPH



## Products & Industry



- Fabrication
- Welding
- Aluminum
- Metal works
- Battery



## Detail Equipment

1. Robot ABB
2. Fixture
3. MIG welding source
4. MIG welding head
5. Frame
6. Fixture
7. Control Cabinet

WATCH VIDEO





# FSW – Friction Welding Machine



## Fiction Welding machine

- Model: CFSW-75-4.5
- Application: Welding, Aluminum Fiction welding

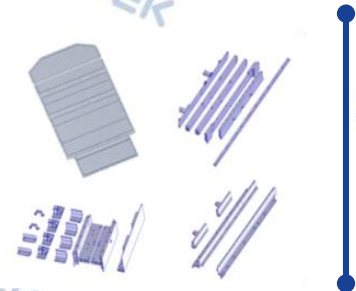


## Specification

- Dimension: 7.5x4.5x3.8m
- Weight: 30000kg
- Machine power: 3 phase, 380V, 75KW
- Rotation speed: 2600 rpm
- Welding speed: 30mm/s
- Capacity: 30 (JpH)



## Products & Industry



- Welding
- Fiction welding
- Aluminum
- Fabrication



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## Detail Equipment

1. ABB check motion robot tending & Gripper
2. FSW welding machine
3. Fixture
4. Control box
5. Safety Fence & light curtain

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# Auto Polishing



## Polishing station

- Model: ETEKA.P8-5.5
- Application: Auto Polishing, Surface preparation

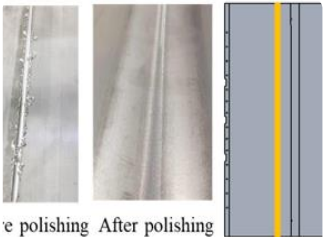


## Specification

- Dimension: 8x5.5x4m
- Weight: 12 000kg
- Power supply: 3 phase, 380V, 50KW
- Compressed air consumption: 6 bar, 4.5m<sup>3</sup>/min
- Capacity: 21 JPH



## Products & Industry



Before polishing After polishing

- Metal works
- Aluminum
- Battery housing

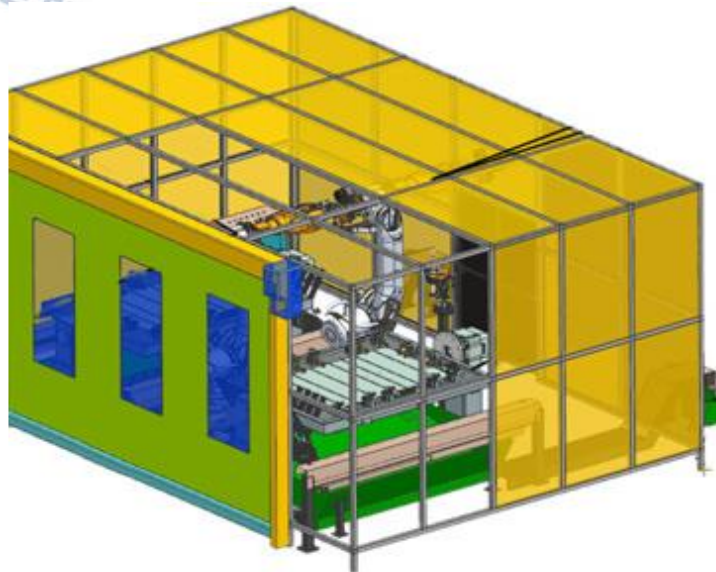
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## Detail Equipment

1. Polishing robot: ABBIRB6700
2. Polishing tool
3. Chip, particle collecting system
4. Station Booth
5. Fixture

WATCH VIDEO



# CNC PHA-CNC3000S Machine



## CNC Machine

- Application: CNC milling



## Specification

- Dimension (LxWxH): 6.7x 6.4x4.5m
- Weight: 20000kg
- Machine power: 380V, 38 KW
- Compressed Air: 7-8 Bar
- Capacity: 20 JPH
- Working Table : 3000×2000mm,  
X/Y/Z: 3000/2000/800mm



## Products & Industry



- Fabrication
- Metal work
- CNC



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## Detail Equipment

1. Single-spindle CNC machine
2. Light curtain
3. Lift door
4. RIP
5. CNC Fixture

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# 2 Robots Auto Riveting



## Auto Riveting station

- Application: Auto Riveting



## Specification

- Dimension (LxWxH): 8x8x4m
- Weight: 10000kg
- Machine power: 380V, 35KW
- Capacity: 21 JPH



## Products & Industry



- Aluminum
- Fabrication
- Metal works



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## Detail Equipment

1. Auto Riveting Robot: ABB IBR6700
2. Auto Riveting tool
3. 2D visual camera
4. Safety fence and light curtain
5. Turntable
6. Transfer Table
7. Fixture

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# Auto Gluing



## Auto Gluing Station

- Application: Gluing, Sealing



## Specification

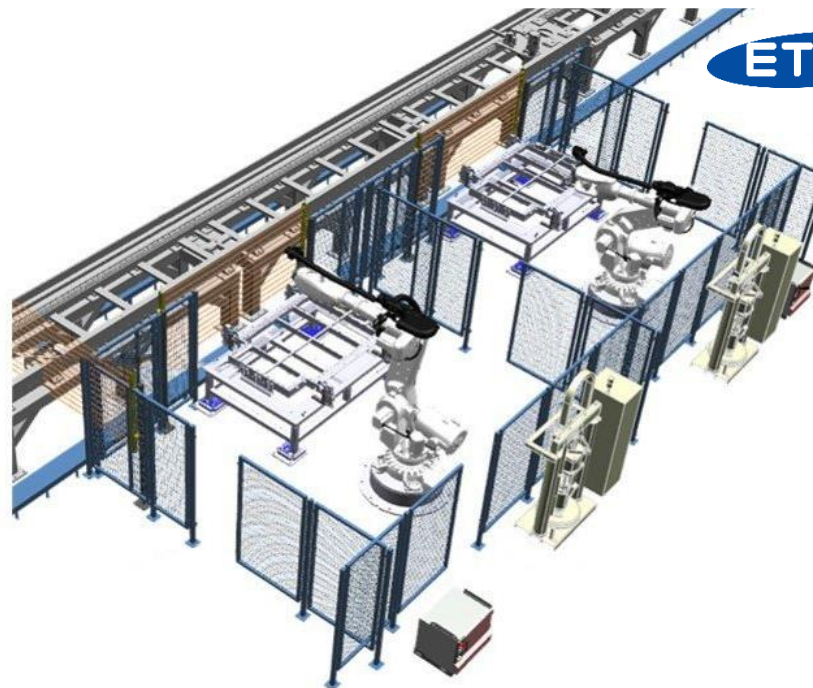
- Dimension (LxWxH): 5x4.5x5m
- Weight: 4000kg
- Machine power: 380V, 20KW
- Capacity: 21 JPH



## Products & Industry



- Gluing
- Fabrication



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## Detail Equipment

1. Gluing Robot: ABB IRB6700
2. 3D Visual check
3. Gluing systems
4. Safety Fence & Light Curtain
5. Gluing Fixture
6. Robot Base
7. Trolley

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# Auto FDS insert



## Auto FDS insert

- Application FDS insert



## Specification

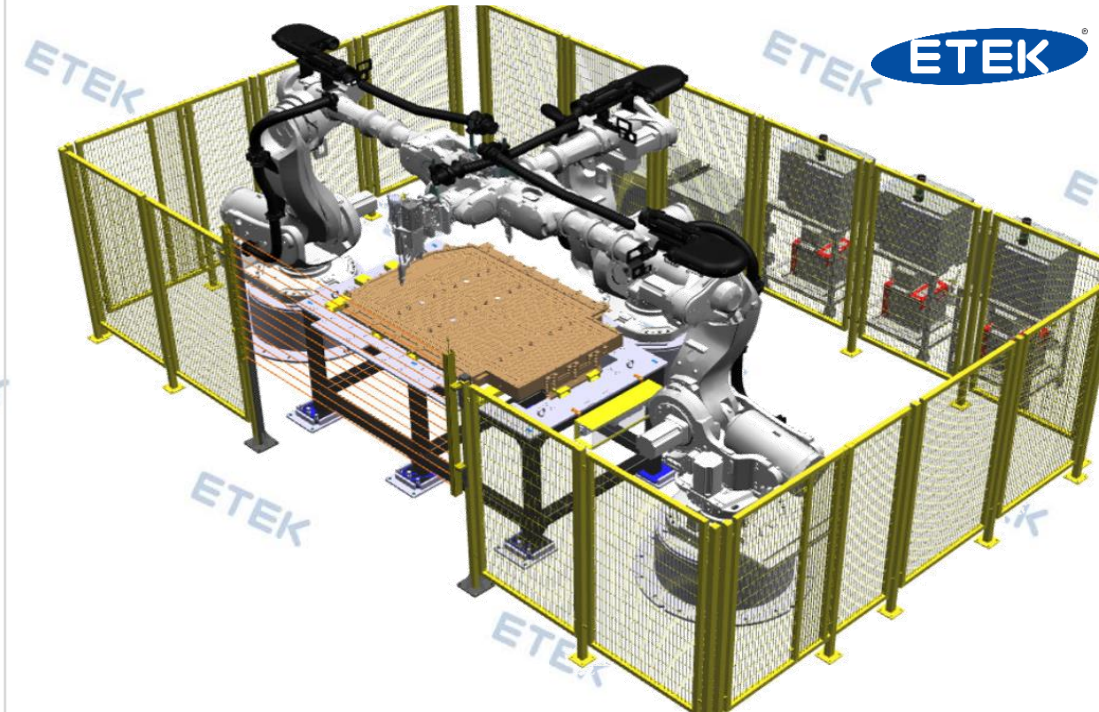
- Dimension (LxWxH): 8x8x4m
- Weight: 15000kg
- Machine power: 380V, 50KW
- Capacity: 20 JPH



## Products & Industry



- Fabrication
- Alumium



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## Detail Equipment

1. FDS Robot: ABB IRB6700
2. FDS Equipment
3. FDS Fixture
4. Safety Fence & light curtain
5. Transfer Table
6. In/Out trolley
7. Lift door

WATCH VIDEO



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# EV Battery Top Cover Fabrication Line

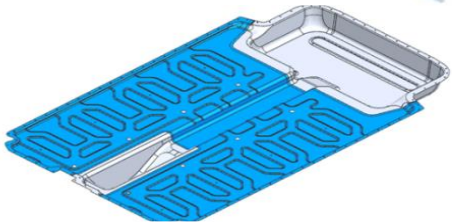


## Overview

- Application: Sport Welding laser Cutting, Gluing, Leak test...
- Capacity: 25.000 Products/year
- Part material: Aluminum & aluminum alloys.
- Layout Area: 40x15 meter square
- Automatic rate 85%

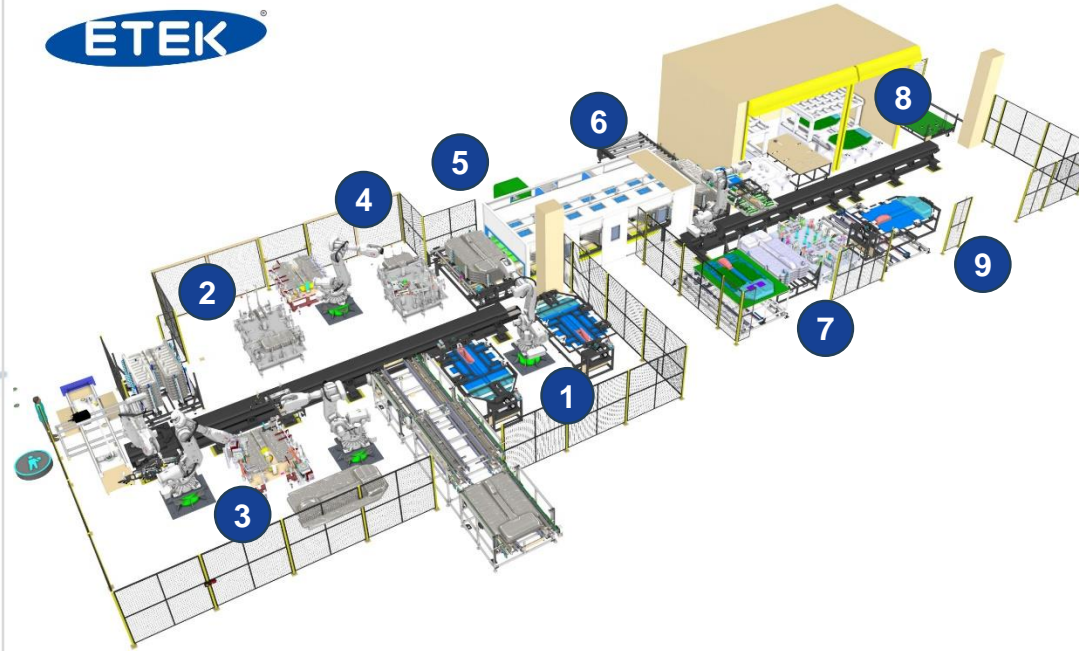


## Product – EV Battery Housing



## Industry

- Automotive, Metal, Fabrication, Battery



## Process

1. Gluing 1st
2. Spot welding
3. Gluing 2nd
4. Leak test
5. Dimension check
6. Leak test

WATCH VIDEO





# GLUING



## Auto - Glue Robot

- Model: ETEKAG-00301
- Applications: Gluing, Fabrication, Assembly



## Specification

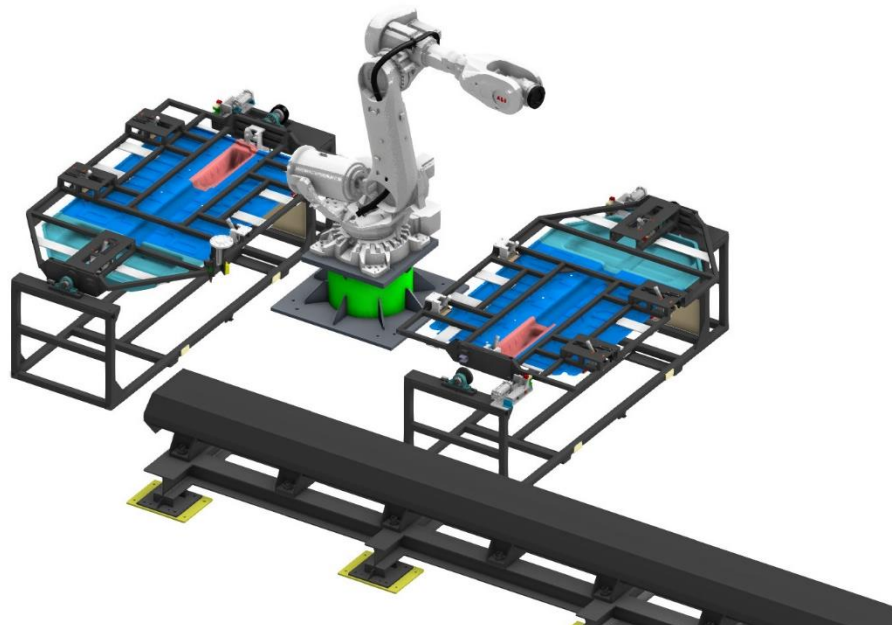
- Reach (m) : 2.65
- Capacity (Products per hour): 18.8
- Robot Payload(kg) : 220 – 235kg
- Layout area (mm): 6000 x 4000
- Power supply:



## Products & Industry



- Automotive
- Metal
- Fabrication
- Battery



## Detail Equipment

1. Robot ABB
2. Double gripper Tool
3. Robot 7 axis
4. Auto gluing gun
5. Manual gluing gun
6. Camera
7. Dedust/cleaning system

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# ALUMINUM SPOT WELDING



## AluminumSpot Welding Robot

- Model: ETEKAW-00303
- Applications: Welding, Fabrication



- Reach (m) : 2.65
- Capacity (Products per hour): 9.5
- Robot payload (kg) : 220 – 235kg
- Number of axes : 6
- Layout area (mm): 6000 x 3000



## Products & Industry



- Automotive
- Metal
- Fabrication
- Battery



## Detail Equipment

1. Robot ABB
2. Spot welding machine
3. Spot welding gun
4. Tip – dresser
5. Welding fixture
6. Machinery accessories
7. Dedust/Cleaning systems

WATCH VIDEO





# LEAKAGE TEST – WATER TEST



## Leakage Test Station

- Model: ETEK TR-30010
- Applications: Leak test



## Specification

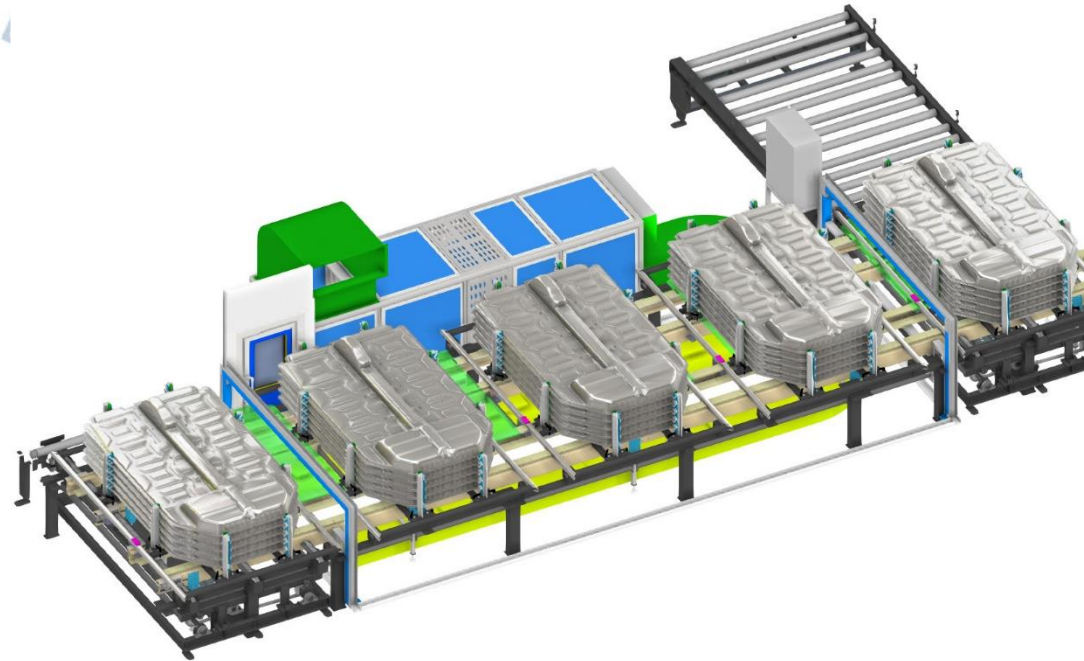
- Layout area (mm): 8800 x 6200
- Leakage test capacity (Products per hour): 13
- Water test capacity (Products per hour): 6



## Products & Industry



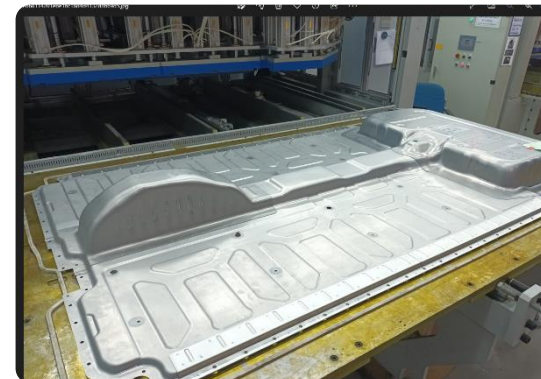
- Automotive
- Metal
- Fabrication
- Battery



## Detail Equipment

1. Robot ABB
2. Robot tool gripper
3. Robot 7 axis
4. Buffed conveyor
5. Measure table
6. Water tank

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# DIMENSION MEASURING – MANUAL CHECK



- Model: ETEK TR-30010
- Applications: Quality control



## Specification

- Layout area (mm): 7000 x 4200
- Dimension measuring capacity (Products per hour): 124
- Manual check capacity (Products per hour): 27.9



## Products & Industry



- Automotive
- Metal
- Fabrication
- Battery

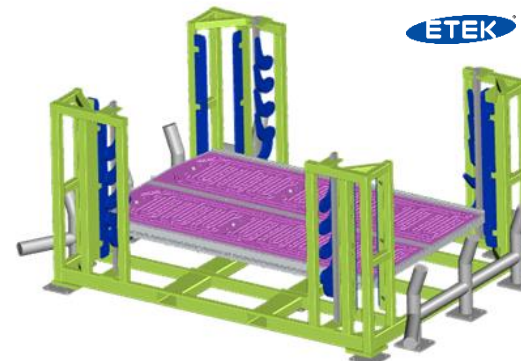


## Detail Equipment

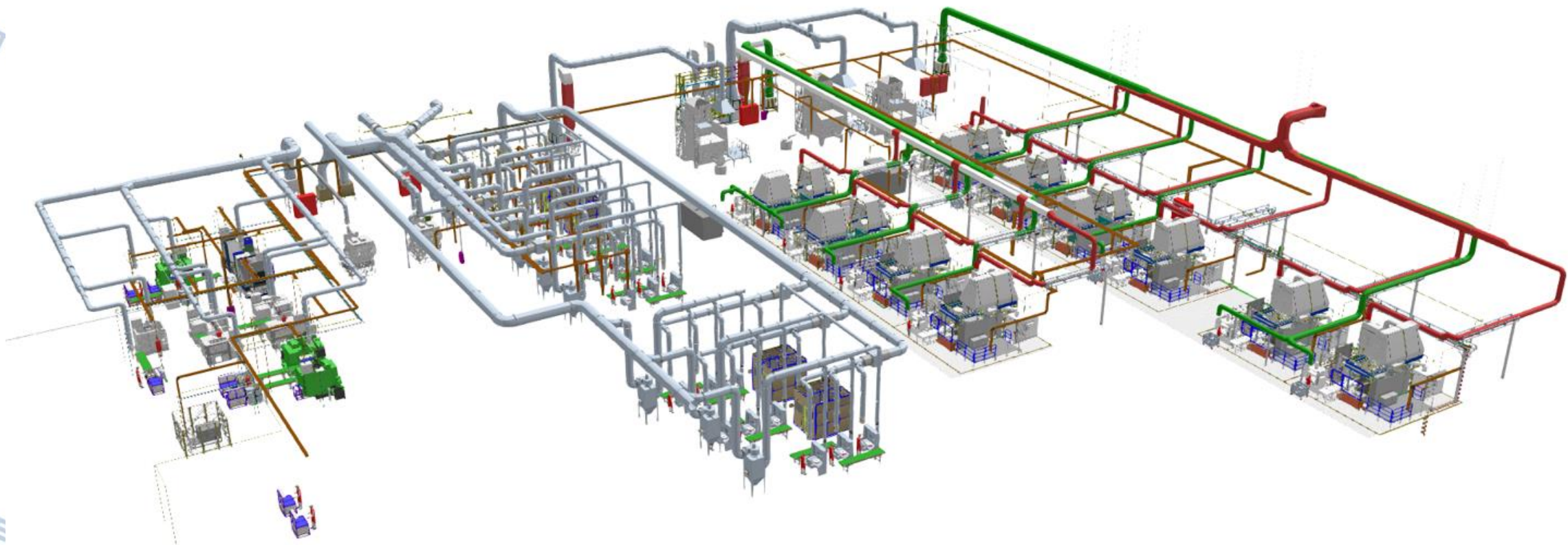
1. Robot ABB
2. Robot tool gripper
3. Robot 7 axis
4. Re-work table



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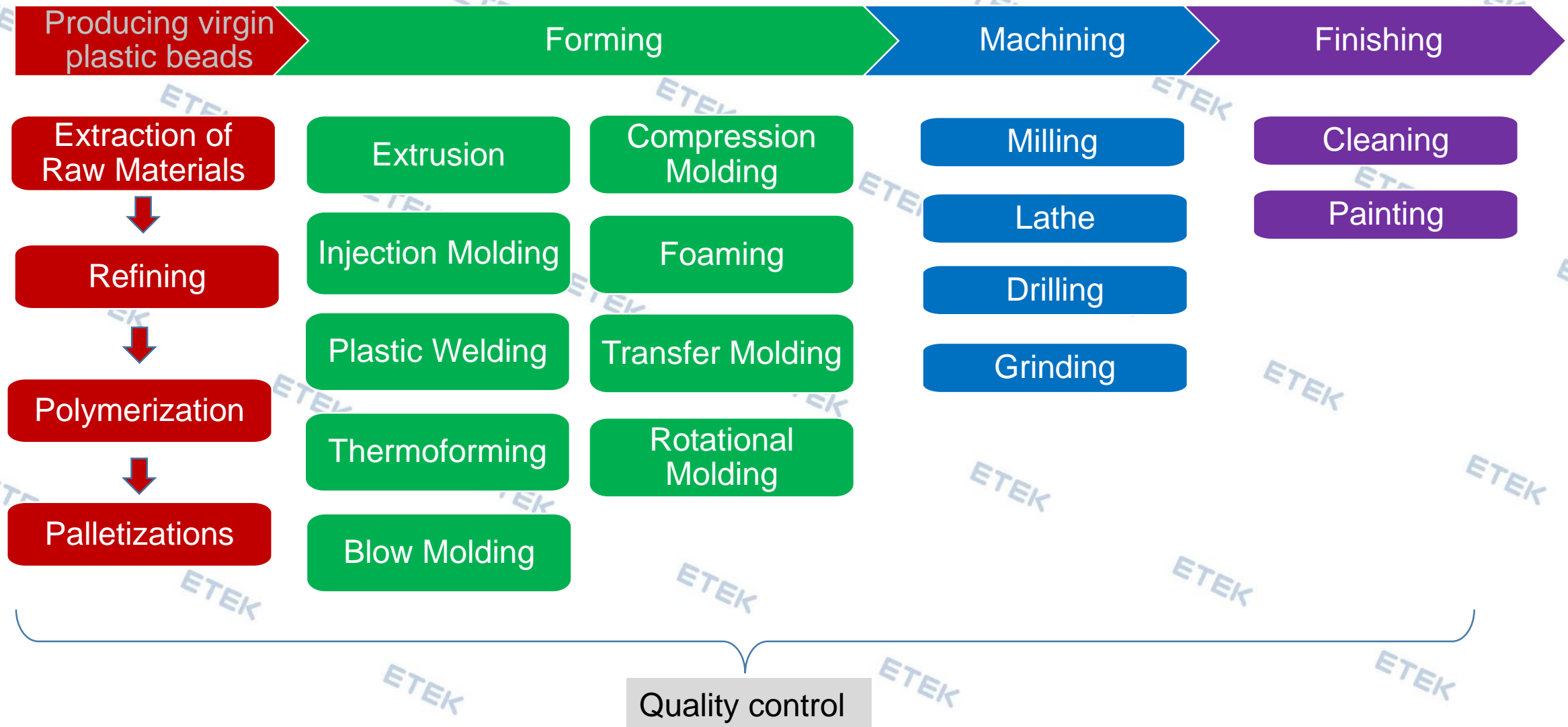






# PLASTIC FABRICATION

# PLASTIC FABRICATE PROCESS





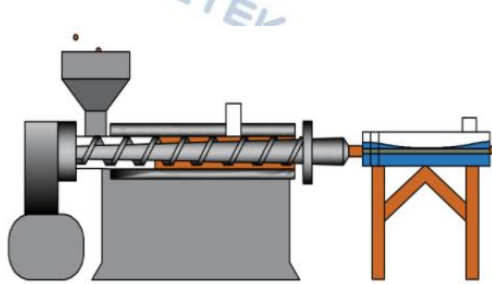
# PLASTIC FABRICATE PROCESS

Producing virgin  
plastic beads

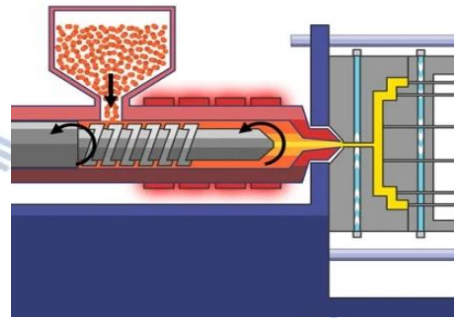
Forming

Machining

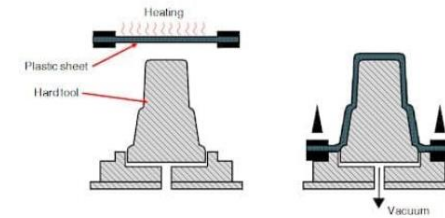
Finishing



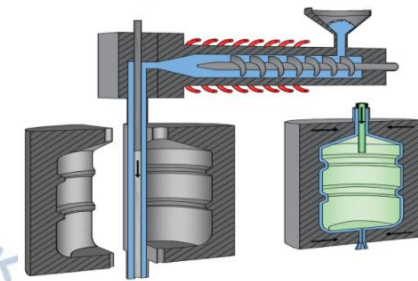
Extrusion



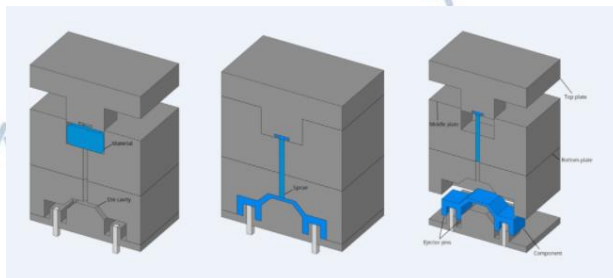
Injection Molding



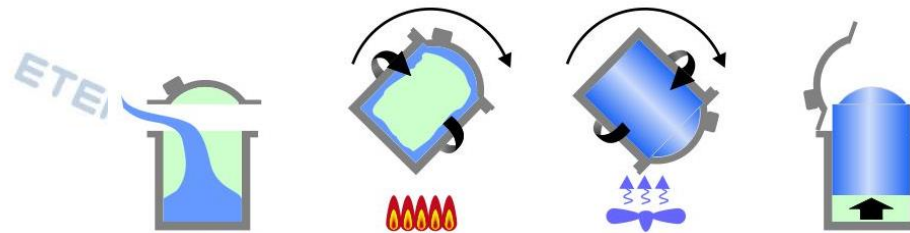
Thermoforming



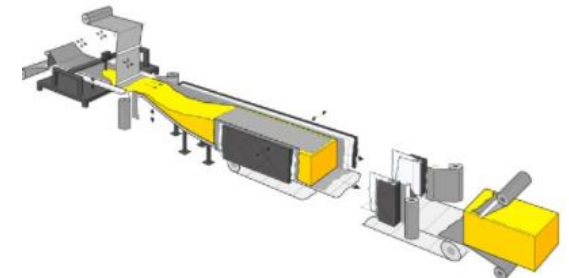
Blow Molding



Transfer Molding



Rotational Molding



Foaming

# PLASTIC FABRICATE PROCESS

Producing virgin  
plastic beads

Forming

Machining

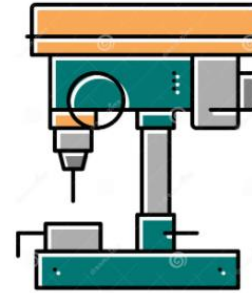
Finishing



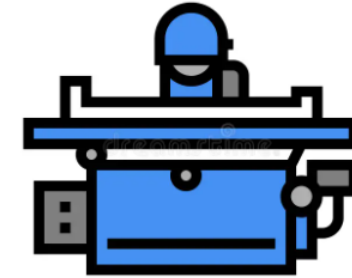
Milling



Lathe



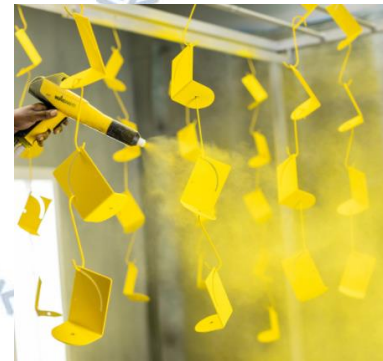
Drilling



Grinding



Cleaning



Painting



# Automotive Plastic Parts Injection Molding



## Overview

- Application: Plastic Die casting
- Production Details : 5.000.000 pcs/ year
- Product: Plastic
- No\* Injection molding machine: 40 machines
- Automatic Rate: 90%

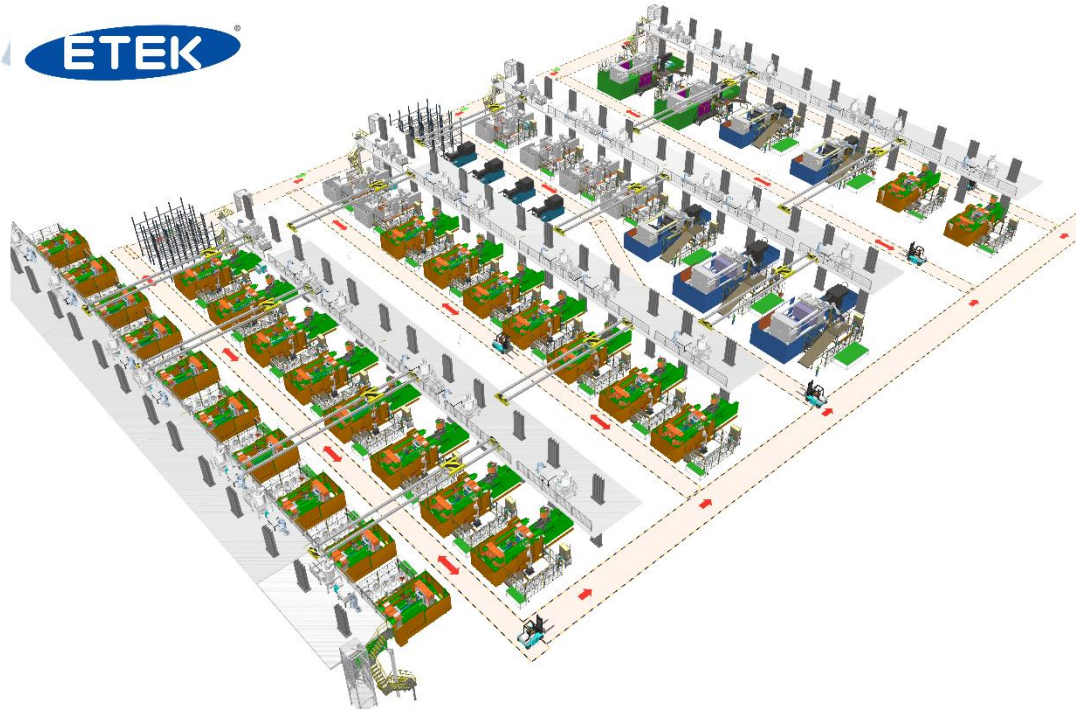


## Products



## Industry

- Automotive
- Plastic
- Supporting



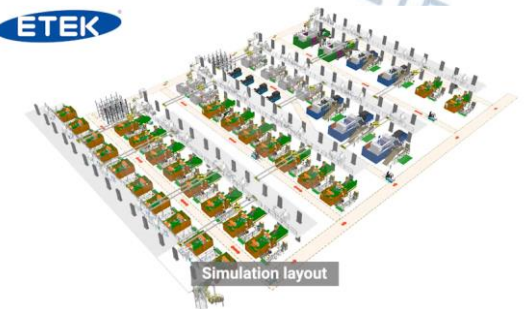
## Process

1. Mix material
2. Loading
3. Insert trill part
4. Injection molding
5. Robot auto unload
6. Checking
7. Packaging

WATCH VIDEO



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# CNC Vertical Lath



## CNC vertical lath

- Model: VT-650R
- Application: CNC



## Specification

- Max Product size: D600 mm
- Max cutting length: 750 mm
- Spindle motor/Spindle speed: 22/1500 Kw/rpm
- Spindle speed: 1500 rpm
- Layout area:



## Product & Industry



- Automotive
- Metal
- Plastic
- Supporting



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## Detail Equipment

1. CNC MACHINE
2. TOOL

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# CNC Milling



## Milling CNC

- Model: VESTA-1000+
- Application: CNC



## Specification

- X/Y/Z Travel: 100/550/500 mm
- Table size: 1100x502 mm
- Max load capacity: 700 kg
- Spindle motor/Spindle speed: 18.5/12,000 Kw/rpm
- Power consumption: 30 KVA



## Product & Industry



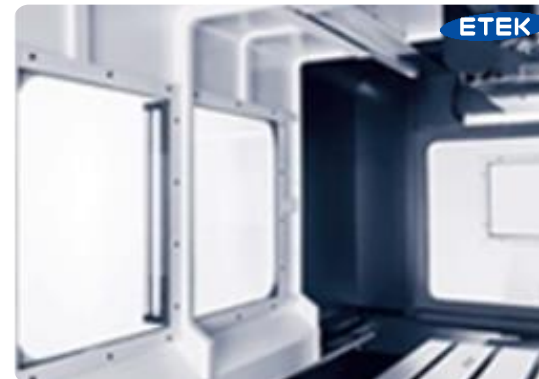
- Automotive
- Metal
- Fabrication
- CNC
- Supporting



## Detail Equipment

1. CNC MACHINE
2. TOOL
3. Working platform

WATCH VIDEO



# Coordinate Measuring Machine CMM



## CMM MACHINE

- Model: CMM ZEISS CONTURA 7/10/6
- Application: Check the dimension after CNC processing



## Specification

- Effective size: X700,Y1000,Z600 mm
- Accuracy: 1.5+L/350
- Machin size: L1481xW1915H2797 mm
- Multi products Operate



## Product & Industry



- Automotive
- Metal
- Plastic
- Fabrication
- Supporting



## Detail Equipment

1. CMM
2. Measuring Head

WATCH VIDEO





# Plastic Powder Spray Booth



## Wagner Spray Booth

- Model name: Plastic Powder re-cycle spray system
- Application: Powder coating, Powder spray



## Specification

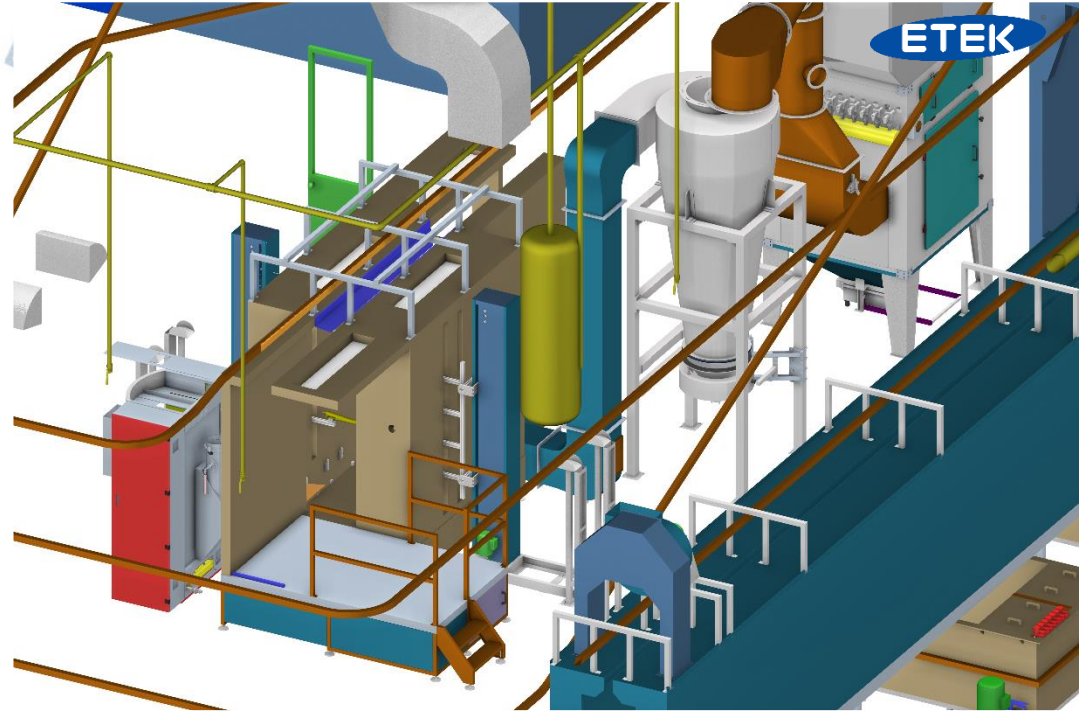
- Layout area: 14,500 (L) x 7,500 (W) x 6,000 (H) mm
- Material: 50mm sandwich panel, Observation window with 5mm tempered glass
- Observation window



## Product & Industrial



- Automotive
- Metal
- Supporting



## Detail Equipment

1. Plastic Booth
2. Powder recycling system
3. Powder center
4. Powder spray robot
5. Spray heads & control box
6. Conveyor system

WATCH VIDEO



*Thank  
you*

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