### THACO INDUSTRIES









THACO CHU LAI IZ, NUI THANH DIST., QUANG NAM PROVINCE, VIETNAM

**SUPPORTING INDUSTRIES** 

**MECHANICS CORPORATION - THACO INDUSTRIES** 



	GENERAL INFORMATION	. 04
	MECHANICAL MANUFACTURING AND PROCESSING COMPLEX	. 06
	PLANTS/ PRODUCTS	.08
•	MECHANICAL PROCESSING & MOLD BASE	
•	INDUSTRIAL EQUIPMENT	
•	AGRO-FORESTRY MECHANICS	
•	CONSTRUCTION MECHANICS	
•	AUTOMOBILE MECHANICS	
	SUPPORTING INDUSTRIAL ZONE	. 24
	PLANTS/ PRODUCTS	26
•	PLASTIC COMPONENTS PLANT	
•	GLASS PLANT	
•	SEAT PLANT	
•	ELECTRIC COMPONENTS PLANT	
•	AIR CONDITIONER PLANT	
•	INTERIOR COMPONENTS PLANT	
•	AUTOMOTIVE SPRINGS PLANT	
•	BODY PARTS PLANT	
•	COMPOSITE PLANT	

RESEARCH & DEVELOPMENT ACTIVITY

QUALITY CONTROL SYSTEM 46

CERTIFICATES 48

**EXPORT MARKET & CUSTOMERS** 50

**NỘI DUNG/** CONTENTS

• SPECIALIZED SEALANT AND FLUID PLANT

GLOVE PLANT

PACKAGING PLANT

### **GENERAL INFORMATION**

**Supporting Industries & Mechanics Corporation - THACO Industries** has the area of 120 ha, investment capital of USD 200 million with 4,200 employees. THACO Industries includes mechanical manufacturing & processing complex, supporting industry complex and R&D center with the pupose of researching and developing products to meet the unique needs of customers. As a pioneer enterprise in investing in the development of mechanical engineering and supporting industries with the largest scale in Vietnam, THACO Industries set the goal for joining the global value chain with the strategic vision and thinking.

### **VISION**

BECOME THE LEADING CORPORATION IN MECHANICAL AND SUPPORTING INDUSTRY OF VIETNAM, REACH OUT TO THE ASEAN REGION

### **MISSION**

BRING THE HIGHEST VALUE TO CUSTOMERS, CONTRIBUTE TO THE MECHANICAL INDUSTRY DEVELOPMENT STRATEGY OF VIETNAM

THACO INDUSTRIES PROVIDES 4 MAIN CATEGORIES:

**Mechanic products:** Supplying steel material, mechanical processing, mold base, construction mechanics, industrial equipment, agro-forestry mechanics, semi-trailers and specialized equipment.

**Automotive and motorcycle products:** glass, leaf springs, condenser, air-conditioner, wire harness, interior- exterior, accessories.

**Other products:** engineering plastic, civil glass, sealant and specialized fluid, electricity - electronics - refrigeration wire harness, composite product used for construction - civil - industry - agriculture, packing, glove.

**Services:** designing, testing material, surface treatment (plating, shot peening, heat treating, plating, powder coating).

In domestic market, THACO Industries became strategic partner of automotive brands as Kia, Mazda, Peugeot, Toyota, Hyundai, Isuzu and some enterprises as Doosan Vina, Makitech, Agata, Three Star, OGS, GE, Amann, Wanek...Many products have been especially exporting to USA, Germany, Italy, Russia, Australia, Poland, Korea, Japan, India, Portugal, Malaysia, Cambodia, Turkey, Kazakhstan... and ASEAN countries.



# **MECHANICAL MANUFACTURING**& PROCESSING COMPLEX

- STEEL PROCESSING PLANT
- MOLDS PLANT
  - MECHANICAL COMPLEX
- SPECIAL VEHICLES PLANT







### **SLITTING LINE**

Quantity: 03 lines Thinkness: 0.3 - 6 mm Width: 50 - 1,200 mm



**FIBER LASER CUTTING MACHINE**Quantity: 04 machines Thinkness: 25 mm Cutting size: 12,300 x 2,000 mm



### SQUARE STEEL, TUBE STEEL LASER **CUTTING MACHINE**

Thinkness: 8mm (Steel); 4mm (Inox) Cutting size: Ø20 – 220 mm; Ø15 - 155 mm



### **HYDRAULIC PRESS MACHINE 1,000T**

Press force: 1,000 ton

Working table size: 3,500 x 2,200 mm





### **VERTICAL MILLING MACHINE**

Quantity: 02 machines Max load on table: 30,000 kg Axis travel: 4,200 x 3,000 x 1,100 mm



### **CNC GUN DRILLING MACHINE**

Max load on table: 20,000 kg Axis travel: 2,500 x 1,250 x 1,700 mm Drill diameter: Ø3 - 32 mm



### **EDM MACHINE**

Max load table: 16,000 kg Axis travel: 2,700 x 1,100 x 600 mm



### **HEAT TREATMENT FURNACE**

Weight: 450 kg Size: 1,000 x 1,150 x 800 mm Hardness: 58 - 62 HRC





# WELDING ROBOT LINE Quantity: 63 machines Gas metal arc welding Flux cored arc welding



SHOT BLASTING BOOTH Load: 10,000 kg Max material size: 14,000 x 2,500 x 3,500 mm



**ZINC-ELECTROPLATING LINE** Load: 150kg Axis travel: 1,800 x 1,400 x 400 mm



**POWDER COATING LINE**Load: 140 kg
Max material size: 5,500m x 2,000 x 600 mm





### **CNC GAS & PLASMA CUTTING MACHINE**

Thickness: 150 mm Cutting size: 3,200 x 15,000 mm



### **CNC PRESSING MACHINE (12M)**

Thickness: 0.6 - 12 mm Workable length: 12,000 mm



### **CNC PLATE ROLLING MACHINE**

Maximum length: 2,550 mm Diameter axes: 300 mm Maximum thickness: 13 mm

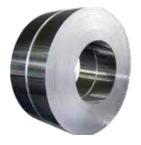


### **SEMI-TRAILER CHAIN TURNING EQUIPMENT**

Max load on table: 10 tons

Dimension: 6,000 x 4,100 x 5,000 mm

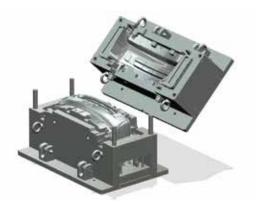
### **MECHANICAL PROCESSING & MOLD BASE**











Steel coil slitting

Steel sheets, non-ferrous metal

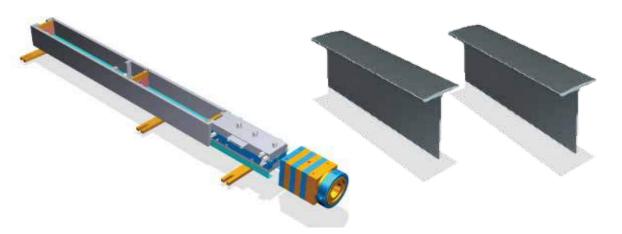
Square steel, tube steel

Stamping dies

Plastic injection mold







Punching & pressing parts

**Bending parts** 

Plastic extrusion mold









**Stamping parts** 

Laser cutting items

**Precision mechanical processing** 

**Heat treatment** 

### **INDUSTRIAL EQUIPMENT**







**Electric monorail system** 



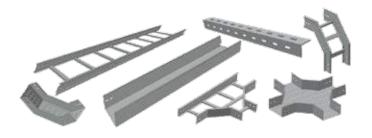
**Industrial control cabinet** 



**Tool cabinet** 



Automatic guided vehicle (AGV)



**Cable trunking** 



Two-post/ four-post lift



**Lifting table** 



Conveyor



Storage shelves



**Processing line for fodder** 



**Processing line for fruits, vegetables** 

### **AGRO-FORESTRY MECHANICS**



Rotavator



Tree planting equipment

### **CONSTRUCTION MECHANICS**







Construction and civil steel assy



**Chemical sprayer system** 



Mixer machine



Pre-engineered building construction



Feed storage farm silo



Farm equipment



**Ventilation and Air-Conditioning System** 



**Construction building installation** 

### **AUTOMOBILE MECHANICS**



**Dump box** 



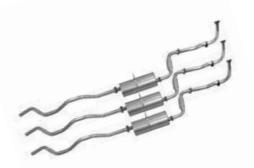
**Refrigeration box** 



**Seat frames** 



**Hydraulic cylinders** 



**Exhaust systems** 



Specialized medical truck body for X-ray and ultrasound



Specialized truck body for mobile vaccination



Skeleton semi trailer
3 Axle - 45 eet - 12 twist tock



Flatbed semi trailer
3 Axle - 40feet - 8 twist tock



**Fuel tank** 



Safety loader deck



Dump semi trailer 3 Axle - 23m³ - FC202



Special semi trailer Semi trailer (18.6m)



- PLASTIC COMPONENTS PLANT
- © GLASS PLANT
- SEAT PLANT
- ELECTRIC COMPONENT PLANT
- AIR-CONDITIONER PLANT

- **Q** AUTOMOTIVE SPRINGS PLANT
- **Q** AUTOMOTIVE BODY PARTS PLANT
- © COMPOSITE PLANT
- SPECIALIZED SEALANT & FLUID PLANT
- GLOVES PLANT



### PLASTIC COMPONENTS PLANT



**Area:** 3.5 ha

Capacity: 32,000,000 products/ year

**Product:** Plastic components for truck- bus- passenger car, civil & industrial plastic,...



### **3,200 TONS INJECTION MACHINE**

Injection pressure: 200 Kgf/cm²
Productivity: 120,000 products/year



### **ROBOT PAINTING**

Quantity: 5 robots Capacity: 160,000 sets/year

### **PLASTIC COMPONENTS FOR CAR**



Luggage compartment



Car bumper



**Seating cover** 



Wheel rim cover

### **CIVIL & INDUSTRIAL PLASTIC**



**Plastic sink** 



**Industrial trolleys pallet** 



Plastic core spun thread industry



**HDPE** pipe



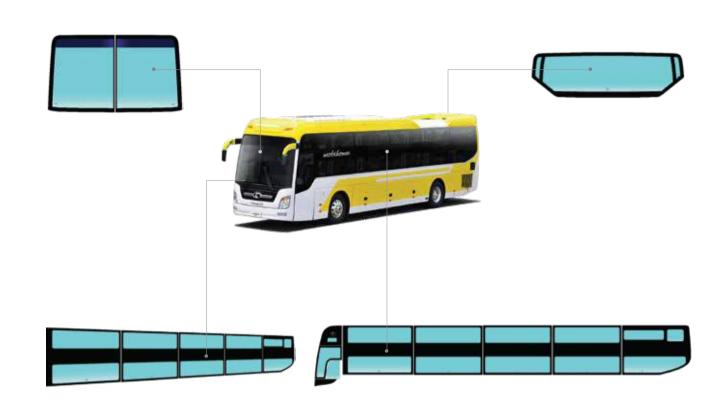
Hydroponic plastic pipe



**Plastic bottle** 







Door glass, side-fixed glass & bus, truck windshield

Area: 6 ha

Capacity: 50,000 sets/ year

**Product:** Truck - bus glass, passenger car windshield, truck barrel glass, electric vehicle glass, excavator

glass, construction and civil glass,...



**SINGLE BENDING FURNANCE** 

Output dimension: 2,000x3,000 mm

Productivity: 380 Kw



### **2D GLASS TEMPERING FURNACE**

Glass dimension (max): 2,200x1,500 mm

Glass thickness: 3.5~6 mm



### **HOUSEHOLD EQUIPMENT GLASS**



**Tempered glass** 



Capacity: 90,000 sets of chairs - beds / year and 300,000 sets of export chairs / year

**Product:** Truck - bus – passenger seat, car seat components, car accessories (gear knob & seat cover,

steering wheel cover, floor mat...)



**AUTOMATIC SEWING MACHINE** 

Quantity: 800 machines Capacity: 1,000 sets/day



**CAR SEAT ASSEMBLY LINE** 

### **CAR SEAT - TRUCK - BUS**





**Bus seat** 

**Car seat** 

### **CAR ACCESSORIES**







Floor mat



**Gear knob** 



**Sun protector cover** 



**Car cover** 



Backrest & neck pillow



Product: Truck - bus- passenger car wire harness, electric bicycle wire harness, booster cable,

### **CAR- BUS- TRUCK WIRE HARNESS**





**Bus wire harness** 

Passenger car wire harness

## ELECTRICAL - ELECTRONIC - REFRIGERATION WIRE HARNESS PRODUCTS





**Electronic equipment's wire harness** 



**TERMINAL CUTTING MACHINE**Quantity: 29 machines
Capacity: 600 products/hour

Capacity: 65,000 sets/ year

electronic – refrigeration wire harness,...



AUTOMATIC CUTTING MACHINE

Quantity: 9 machines

Capacity: 1,200 products/hour





Refrigeration equipment's wire harness



**Area:** 5,000 m<sup>2</sup>

Capacity: 300,000 sets/ year

**Product:** Air conditioner, exhaust gas pipe, condenser for truck - bus - passenger car,...



**FIN MACHINE** 

Strip input speed: Max 300 m/min Fin thickness: 0,08 ~ 0,2 mm



### **NB FURNACE**

Temperature brazing furnace: Max 6500C Capacity: 90 product/ hour

### **AIR-CONDITIONER AND AIR-CONDITIONER PARTS**





**Bus evaporator** 

**Bus air conditioner** 



Passenger car air conditioner





Condenser

Exhaust gas pipe

# **INTERIOR COMPONENTS PLANT**

**Area:** 3,200 m<sup>2</sup>

Capacity: 7,000 sets/year

**Product:** Plastic interior, car - bus - truck PU Foam; extrusion, blowing plastic products,...



**EXTRUSION BLOW MOLDING MACHINE 0.5 ~ 5L** Production volume: 0.5L ~5L Material: HDPE, LDPE...



**EXTRUSION BLOW MOLDING MACHINE 10 ~ 30L**Production volume: 10L ~30L
Material: HDPE, LDPE, ABS...

### **AUTOMOTIVE INTERIOR COMPONENTS**





Front headlining

Rear headlining





Dashboard - assy main

**Luggage compartment mat** 





Spoiler

Luggage compartment mat





Bus bed frame cover (RR)

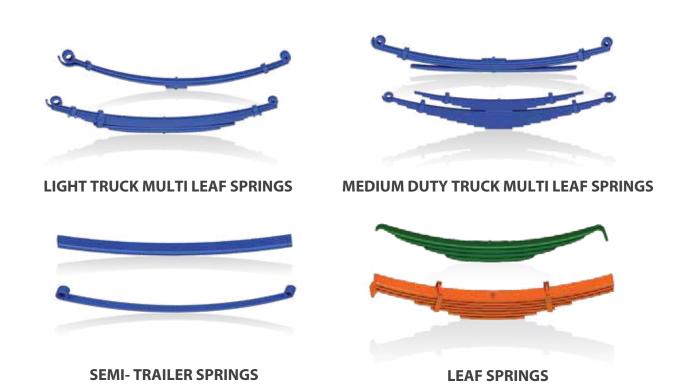
**Bus bed frame cover (FRT)** 

### **AUTOMOTIVE SPRINGS PLANT**



Area: 2 ha

**Capacity:** 12,000 tons springs/ year **Product:** Light truck, medium duty truck, semi- trailer springs, leaf springs products,...

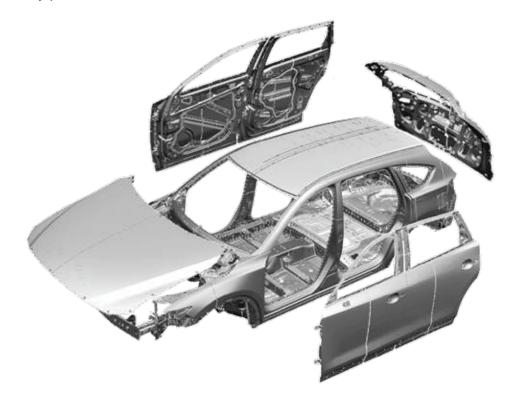


### **BODY PARTS PLANT**



**Area:** 5,000 m<sup>2</sup>

Capacity: 60.000 sets/ year Product: Body parts for car (doors, trunk lid, hood)



### **COMPOSITE PLANT**



**Area:** 1.1 ha

Capacity: 38,000 sets/year

**Product:** Car - bus - truck components and others.



Racing seat frame



**Composite flower pot** 



Canopy



Garbage can



Spoiler



Mounted sprayer tank

### **SPECIALIZED SEALANT AND FLUID PLANT**



**Area:** 2,000 m<sup>2</sup>

**Capacity:** 900 tons sealant/ year, 6,000 m<sup>3</sup> specialized fluid, 1 million tape rolls/ year **Product:** Adhesive tape, painting workshop tape, welding workshop tape, specialized fluid.



**Pre-mixed engine coolant** 



Diesel exhaust fluid



Silicone adhesive



**Butyl tape** 



Windshield washer fluid



**PVC** body sealer

### **GLOVE PLANT**





**Area:** 5,600 m<sup>2</sup>

Capacity: 100 million pairs/ year

**Product:** Latex coated gloves, PVC coated gloves, Polyester gloves, normal safety gloves.



Latex coated glove



**Polyester glove** 



**PVC** coated glove



**Cotton gloves** 



**Area:** 6,000 m<sup>2</sup>

Capacity: 80.000 tons/ year

**Product:** Carton packaging for food, electronic, furniture, fashion, agriculture.



2 layers carton



5 layers carton



3 layers carton



**Waterproofing carton** 



### **RESEARCH & DEVELOPMENT ACTIVITY**

Identifying research and development as an important factor in enhancing the competitive advantage of products and brand positioning, **THACO Industries** always focuses on investing in R&D activities.

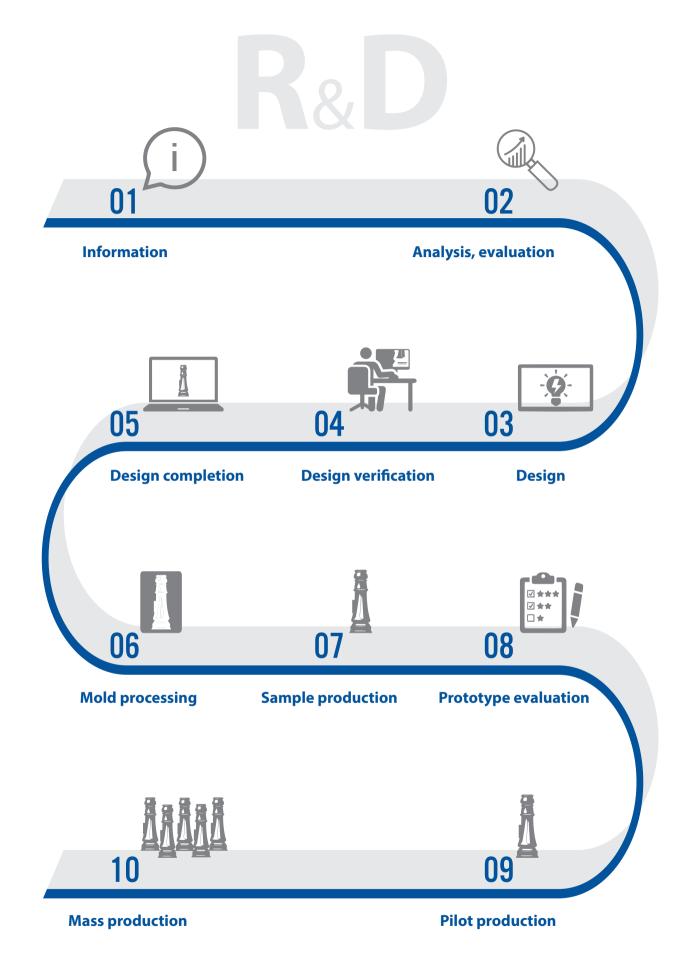
**THACO Industries** has established an R&D Center with more than 350 experienced engineers and professionals with the aim of:

Research and develop a variety of products according to the unique needs of customers.

Application of breakthrough new technology and modern design, calculation and simulation software such as NX, Catia, Moldflow, Autocad, HyperWorks...

Training to improve knowledge and skills for engineers, and recruiting experts from Korea and Japan to train young engineers and develop R&D human resources.





### **QUALITY CONTROL SYSTEMS**

### ISO 17025 STANDARD OF MATERIALS AND MECHANICS EXPERIMENT

# HÂY ĐƯA MẬU VẬT, CHỐNG TOI SẼ CHO BẠN SỰ THẬT GIVE US SAMPLES, WE GIVE YOU THE TRUTH

**Materials - Mechanics laboratory** 



Universal mechanical material testing machine



Ultrasonic welding point machine

### **QUALITY CONTROL SYSTEM**



Hardness testing equipment



**Load testing equipment** 



**Fatigue testing equipment** 



Frammability tester



**Traction and compression test machine** 



PU padding hardness tester

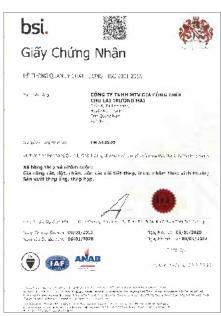
### **CERTIFICATES**





### 1. QUALITY MANAGERMENT SYSTEMS (IATF 16949:2016)

- AUTOMOTIVE SPRINGS PLANT
- SEAT PLANT
- INTERIOR COMPONENTS PLANT
- PLASTIC COMPONENTS PLANT
- COMPOSITE PLANT
- AIR CONDITIONER PLANT
- ELECTRIC COMPONENTS PLANT
- GLASS PLANT
- SPECIALIZED SEALANT AND FLUID PLANT



### 2. QUALITY MANAGERMENT SYSTEMS (ISO 9001:2015)

- STEEL PROCESSING PLANT
- MOLDS PLANT
- MECHANICAL COMPLEX
- SPECIAL VEHICLES PLANT
- BODY PARTS PLANT





### 3. ENVIRONMENT MANAGERMENT SYSTEMS (ISO 14001:2015)

- STEEL PROCESSING PLANT
- MOLDS PLANT
- MECHANICAL COMPLEX
- SPECIAL VEHICLES PLANT
- AUTOMOTIVE SPRINGS PLANT
- SEAT PLANT
- INTERIOR COMPONENTS PLANT
- PLASTIC COMPONENTS PLANT
- AIR CONDITIONER PLANT
- ELECTRIC COMPONENT PLANT



### 4. ECE R43 TECHNICAL SAFETY CERTIFICATE

GLASS PLANT





































Passenger car bumper



**Bus glass** 













TIP COMPOSITE 2018年4月茨木工業(株)と(株)ビーエヌシーが合併し ティーアイビーコンボジットとなります!





Fuel tank 3,000 L

Semi-trailer

**Mechanical component**