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THACO

DEVELOPING SUSTAINABLY WITH VIETNAM



CORPORATE PROFILE

COMPREHENSIVE CAPABILITIES IN RAILWAY INDUSTRY & TRANSPORT INFRASTRUCTURE

THACO

TRUONG HAI GROUP CORPORATION



ESTABLISHMENT	29/04/1997
FOUNDER	**MR. TRAN BA DUONG** - CHAIRMAN
CHARTER CAPITAL	**1,540** Billion USD
HEADQUARTERS	10 MAI CHI THO STREET, AN KHANH WARD, HO CHI MINH CITY
WORKFORCE	THACO GROUP: **62,000** EMPLOYEES

VISION

THE LEADING MULTI-INDUSTRY GROUP IN ASEAN,
DEVELOPING SUSTAINABLY IN THE CONTEXT OF REGIONAL & GLOBAL INTEGRATION

MISSION

DELIVER VALUE TO CUSTOMERS, PARTNERS, SOCIETY
AND DEVELOP THE NATIONAL ECONOMY WITH A DEDICATED, SERVING SPIRIT

STRATEGY

THACO IS A MULTI-INDUSTRY GROUP WHICH OWNS SUB-HOLDINGS OPERATING IN:
**AUTOMOTIVE; AGRICULTURE; MECHANICS & SUPPORTING INDUSTRIES;
INVESTMENT & CONSTRUCTION; COMMERCE & SERVICE AND LOGISTICS**

HIGHLY COMPLEMENTARY AND INTEGRATED IN EACH SUB-HOLDING,
BETWEEN SUB-HOLDINGS AND THACO; ORGANIZE BUSINESS ACTIVITIES
THROUGHOUT THE VALUE CHAIN AND MANAGE BY INDUSTRIAL METHODS;
PARTICIPATE IN THE GLOBAL VALUE CHAIN
AND ADOPT DIGITAL TRANSFORMATION WITH AN APPROPRIATE ROADMAP.








THACO INDUSTRIES

MECHANICAL ENGINEERING & SUPPORTING INDUSTRIES

Establishment: 2021

VISION

VIETNAM'S LEADING INDUSTRIAL CORPORATION IN MECHANICAL ENGINEERING & SUPPORTING INDUSTRIES INTEGRATED INTO THE REGIONAL & GLOBAL MARKET

MISSION

HAVE SIGNIFICANT CONTRIBUTION TO VIETNAM'S INDUSTRIAL DEVELOPMENT STRATEGY

STRATEGY

A CORPORATION MANUFACTURING AND PROVIDING INDUSTRIAL SOLUTIONS AND MECHANICAL & SUPPORTING INDUSTRIES PRODUCTS PARTICIPATING IN NATIONAL KEY PROJECTS AND FOCUSING ON EXPORT MARKETS.

DEVELOPING ON THE FOUNDATION OF INDUSTRY AND DIGITALIZATION, WITH A CENTRALIZED, LARGE-SCALE MANUFACTURING MODEL INTEGRATED AND COMPLEMENTARY WITH OTHER SUB-HOLDINGS THROUGH THE PROVISION OF INDUSTRIAL SOLUTIONS AT CHU LAI - DA NANG CITY, BINH CO - HO CHI MINH CITY AND MECHANICAL & ELECTRICAL REFRIGERATION COMPANY THROUGHOUT THE VALUE CHAIN: BUSINESS AND R&D - MANUFACTURING - CONSTRUCTION & INSTALLATION - WARRANTY & MAINTENANCE.

THROUGH SELF-DEVELOPMENT, COOPERATION, ASSOCIATION & JOINT VENTURES ACCORDING TO INDUSTRY AND INTERNATIONAL PRACTICES.

PRODUCTS MEET INTERNATIONAL STANDARDS, OFFER COMPETITIVE PRICING, PROGRESSIVELY INCORPORATE HIGH TECHNOLOGY, ALIGNED WITH AUTOMATION & INTELLIGENT CONTROL TRENDS, MEETING SPECIFIC REQUIREMENTS OF CUSTOMERS.



CHU LAI MANUFACTURING COMPLEX (IN DA NANG CITY)



- R&D CENTER
- MECHANICAL CENTER
- AUTOMOTIVE COMPONENTS MANUFACTURING CENTER

BINH CO MANUFACTURING COMPLEX (IN HO CHI MINH CITY)



1. RAILWAY AND MULTI-PURPOSE MECHANICAL INDUSTRIAL COMPLEX
2. JOINT VENTURE AND ASSOCIATION COOPERATION CENTER
3. NEW GENERATION SUPPORTING INDUSTRIES CENTER
4. LOGISTICS CENTER

PRODUCT SEGMENTS

- AUTOMOTIVE PARTS & COMPONENTS
- MULTI-PURPOSE MECHANICAL ENGINEERING
- RAILWAY INDUSTRY
- HEAVY INDUSTRY
- HIGH-TECH INDUSTRY



- **VIETNAMESE MARKET:**
  THACO INDUSTRIES has become a strategic partner of car manufacturers such as Kia, Mazda, Peugeot, Toyota, Hyundai, Isuzu, and major corporations like Makitech, and General Electric...
- **EXPORT MARKETS:**
  THACO INDUSTRIES has exported automotive parts, semi-trailers, specialized equipments and mechanical components to markets such as the United States, Canada, Mexico, Europe, Australia, South Korea, Japan, and ASEAN.













THACO AUTO

AUTOMOTIVE MANUFACTURING & BUSINESS

Establishment: 1997

BRANDS

PASSENGER CAR

KIA · MAZDA · PEUGEOT · Jeep · RAM · BMW · MINI · BMW MOTORRAD

TRUCK

THACO TRUCK · KIA · FUSO · SINOTRUK

BUS

THACO BUS · IVECO · Mercedes-Benz The standard for buses.

SPECIALIZED PASSENGER CAR

Thacoroyal

PRODUCTS





- Diverse range of products and services at various price points.
- Technical and service employees are trained according to the standards of each brand.
- Genuine parts offer outstanding quality.

VISION

TO BE AN AUTOMOTIVE MANUFACTURING AND DISTRIBUTION COMPANY SUSTAINABLY DEVELOPING WITH REGIONAL AND GLOBAL INTEGRATION

MISSION

DELIVER VALUE TO CUSTOMERS THROUGH EXCEPTIONAL PRODUCTS AND SERVICES WITH A DEDICATED SERVING SPIRIT

STRATEGY

THACO AUTO MANUFACTURES, DISTRIBUTES AND RETAILS A DIVERSE RANGE OF AUTOMOTIVE PRODUCTS (PASSENGER CARS, TRUCKS, BUSES) WITHIN ALL SEGMENTS (MAINSTREAM, PREMIUM) CARRYING INTERNATIONAL BRANDS & THACO BRANDS THAT MEET USAGE REQUIREMENTS IN VIETNAM AND SPECIFIC CUSTOMER NEEDS.

THACO AUTO ORGANIZES AND MANAGES PRODUCTION - BUSINESS ACTIVITIES ON INDUSTRIAL AND DIGITAL PLATFORMS, THROUGHOUT THE VALUE CHAIN: FROM PRODUCT RESEARCH & DEVELOPMENT; MANUFACTURING & DISTRIBUTION; RETAIL & EXPORT, AFTER-SALES SERVICES, SUPPLYING SPARE PARTS AND COMPONENTS.

THACO AUTO'S RETAIL NETWORK WITH DIVERSE MODELS ARE INTEGRATED AND COMPLEMENTED BY THACO AUTO'S MULTI-BRAND BUSINESS STRATEGY, FOR THACO AND SUB-HOLDINGS, (PASSENGER CAR SHOWROOMS INTEGRATED WITH THISO COMMERCIAL CENTERS; TRUCK & BUS CENTERS WITH REPAIR WORKSHOPS AND THILOGI WAREHOUSES; A LOCAL SHOWROOM NETWORK FOR LIGHT TRUCKS AND MASS-MARKET CARS, SERVING CUSTOMERS WITHIN THE THACO ECOSYSTEM), TO BRING OPTIMAL VALUE TO CUSTOMERS AND THE ECONOMY.

FROM 2005 TO 2025: 1,308,824 UNITS



Since investing and starting production in Chu Lai in 2004 till the end of 2025, total sales volume have reached more than **1.3 million** units.

THACO AUTO has consistently maintained its leading position in the Vietnamese automotive market with an average market share of approximately **30%** (Source: VAMA).








Dai Quang Minh

INVESTMENT & CONSTRUCTION

Establishment: 2011

VISION

VIETNAM'S LEADING INVESTMENT – CONSTRUCTION CORPORATION OF TRANSPORT INFRASTRUCTURE (RAILWAYS, ROADS), INDUSTRIAL PARKS, URBAN AREAS AND REAL ESTATE PROJECTS

MISSION

CONSTRUCT LANDMARKS OF ARCHITECTURAL EXCELLENCE AND EXCEPTIONAL QUALITY, DELIVER SUSTAINABLE VALUE TO CUSTOMERS AND SOCIETY WHILE CONTRIBUTING TO THE LOCAL AND NATIONAL ECONOMIES

STRATEGY

COMPREHENSIVE GOVERNANCE OF INVESTMENT - CONSTRUCTION ACTIVITIES FOR PROJECTS OF THACO AND ITS SUB-HOLDINGS ACROSS THE VALUE CHAIN FROM: INVESTMENT - DESIGN - CONSTRUCTION – BUSINESS & OPERATIONS MANAGEMENT ON THE INDUSTRIAL AND DIGITAL PLATFORM - ENGINEERING AND TECHNOLOGY.

PROJECTS ARE PLANNED AND IMPLEMENTED SYNCHRONOUSLY, WITH INTEGRATEDAND COMPLEMENTARY FEATURES, DELIVERING SYNERGISTIC, SUPERIOR AND SUSTAINABLE VALUE, ACROSS THE FOLLOWING TYPES:

- RAILWAYS (URBAN RAILWAY - METRO).
- ROADS (EXPRESSWAYS, BRIDGES - TUNNELS) AND PORT - LOGISTICS INFRASTRUCTURE, NAVIGATION CHANNELS.
- URBAN AREAS (NEW/UPGRADED) AND REAL ESTATE (RESIDENTIAL, COMMERCIAL).
- SPECIALIZED INDUSTRIAL PARKS (AUTOMOTIVE, RAILWAY, MULTI-PURPOSE MECHANICAL, AGRICULTURE).
- SATELLITE URBAN AREAS ALONG PUBLIC TRANSIT LINES (TOD) AND INTEGRATED PROJECT COMPLEXES OF MULTIPLE TYPES.

RAILWAYS

RAILWAYS (METRO, HIGH-SPEED)

- Railway infrastructure investment and construction, project management;
- EPC contractor.

TRANSPORTATION INFRASTRUCTURE

TRANSPORTATION INFRASTRUCTURE

- Highways;
- Urban infrastructure;
- Seaport system.

INDUSTRIAL PARKS

SPECIALIZED INDUSTRIAL PARKS

- Specialized industrial parks *(automotive, mechanical);*
- Agriculture – Forestry industrial park;
- Agricultural specialized industrial park;
- Alumina processing complex- aluminum smelting.

REAL ESTATE & URBAN DEVELOPMENT

URBAN AREA

- New urban area;
- Refurbished urban area.

RESIDENTIAL REAL ESTATE

- Villa;
- Shophouse;
- Apartment, shop apartment
- Serviced apartments (Condotels).

COMMERCIAL REAL ESTATE

- Commercial centers (car displays, hypermarkets);
- Commercial center combining hotels, offices, apartments...



SALA URBAN AREA








THILOGI

LOGISTICS

Establishment: 2005

VISION

A LEADING ASEAN PROVIDER OF INTEGRATED LOGISTICS SOLUTIONS FOR FRESH FRUIT COLD CHAIN

MISSION

DELIVER VALUE TO CUSTOMERS AND PARTNERS BY OPTIMIZING COSTS AND ENHANCING THE COMPETITIVENESS OF VIETNAM AND THE REGIONAL FRESH FRUIT SECTOR

STRATEGY

EXPANDING THE NETWORK AND DEVELOPING INTEGRATED, END-TO-END LOGISTICS SERVICES (ROAD TRANSPORT, WAREHOUSING, PORTS, MARITIME TRANSPORT AND FORWARDING) FOR FRUIT, AGRICULTURAL PRODUCTS AND GENERAL CARGO BY SHIP AND SPECIALIZED REEFER CONTAINERS, WITH CENTRALIZED GOVERNANCE ON THE DIGITAL PLATFORM:

- DEVELOPING INTEGRATED TWO-WAY LOGISTICS SOLUTIONS, SEAMLESSLY CONNECTING CARGO SOURCES FROM NORTHERN CAMBODIA, SOUTHERN LAOS, THE CENTRAL HIGHLANDS AND ALL THREE REGIONS - NORTH, CENTRAL, SOUTH THROUGH THE SEAPORT SYSTEM OF HCMC, CHU LAI, HAI PHONG AND INTERNATIONAL PORTS IN NORTHEAST ASIA (CHINA, SOUTH KOREA, JAPAN), OPTIMIZING THE SUPPLY CHAIN AND IMPROVING OPERATIONAL EFFICIENCY.
- INVESTING IN SPECIALIZED VEHICLES AND EQUIPMENT, DEPOTS, SEAPORTS AND WAREHOUSE SYSTEMS ACROSS REGIONS TO SYNCHRONOUSLY DEVELOP LOGISTICS SERVICES, OPTIMIZING COSTS AND ENHANCING COMPETITIVENESS.
- REFINING THE OPERATING MODEL TOWARDS LEAN, INTEGRATED OPERATIONS, APPLYING DIGITALIZATION IN LOGISTICS BUSINESS AND SERVICE GOVERNANCE.

TRUCKING

- **DOMESTIC TRUCKING:** NORTH- CENTRAL - SOUTH
- **CROSS-BORDER TRUCKING:** VIETNAM - LAOS - CAMBODIA

SEAPORT

- **PORT SERVICES:** terminals, tugboats, loading/unloading, container repair
- **ICD SERVICES:** loading/unloading, transportation, customs clearance, container repair
- **WAREHOUSES YARDS**
- **SHIP AGENTS, CUSTOMS DECLARATION**
- **PACKING, UNPACKING**

SHIPPING & FORWARDING

- **DOMESTIC SHIPPING:** HCMC - CHU LAI - HAI PHONG
- **INTERNATIONAL SHIPPING:** CHU LAI – CHINA, INDIA, SOUTH KOREA, JAPAN, USA, EU
- **FORWARDING:** SEA & AIR CARGO

SHIPPING & FORWARDING



SEA FREIGHT FORWARDING

- Global agency network with direct partnerships with major shipping lines.
- Flexible services with stable schedules and optimized costs.
- Close monitoring from origin to destination.

AIR FREIGHT FORWARDING

- International partner and agent network.
- Fast solutions for urgent, high-value, and special cargo.
- Integrated services from booking and documentation to customs clearance and final deliver.











THISO

COMMERCE - SERVICE

Establishment: 2021

VISION

TO BECOME VIETNAM'S LEADING COMMERCIAL & SERVICE CORPORATION,
CREATING ALL-IN-ONE DESTINATIONS
(BUILDINGS, COMPLEXES, URBAN AREAS, MULTIFUNCTIONAL COMPLEXES):
GREEN, INTELLIGENT, AND DISTINCTIVE

MISSION

TO SET INTERNATIONAL STANDARDS IN COMMERCE & SERVICES,
DELIVERING VALUE TO CUSTOMERS, PARTNERS, COMMUNITIES, AND SOCIETY
WHILE CONTRIBUTING TO THE DEVELOPMENT OF THE NATIONAL ECONOMY

STRATEGY

DEVELOPING A COMMERCE & SERVICES ECOSYSTEM, HIGHLY INTEGRATED AND COMPLEMENTARY WITH BUSINESS SECTORS WITHIN THACO, GOVERNED ON THE INDUSTRIAL AND DIGITAL PLATFORM OPTIMIZING EFFICIENCY & MAXIMIZING VALUE FOR CUSTOMERS, COMMUNITIES, SOCIETY AND THE ECONOMY WITH MODEL:

ASSET UTILIZATION & PARTNERSHIPS, JOINT VENTURES AND SELF-OPERATION
OF COMMERCE - SERVICES FORMATS.

CONNECTING PRODUCTS, SERVICES AND BRANDS WITHIN THACO AND PARTNERS TO CUSTOMERS.

REAL ESTATE BUSINESS & OPERATIONS MANAGEMENT

- COMMERCIAL CENTERS
- HOTELS
- OFFICES
- RESIDENTIAL REAL ESTATES
- SCHOOLS
- UTILITY FACILITIES

COMMERCIAL - SERVICES BUSINESS

- AUTO SHOWROOMS
- HYPERMARKETS
- CONVENTION & WEDDING CENTERS
- F&B
- ENTERTAINMENT & RECREATION










THACO AGRI

AGRICULTURE

Establishment: 2019

VISION

A SUSTAINABLE AGRICULTURAL CORPORATION BUILT ON INDUSTRIAL-SCALE AND ORGANIC FARMING, CONTRIBUTING POSITIVELY TO THE DEVELOPMENT OF GLOBAL AGRICULTURE

MISSION

ELEVATING AGRICULTURE ACROSS VIETNAM, LAOS AND CAMBODIA

STRATEGY

LARGE-SCALE AGRICULTURAL PRODUCTION WITH INTEGRATED & CIRCULAR CHARACTERISTICS
ON AN ORGANIC, INDUSTRIAL & DIGITAL PLATFORM,
FROM R&D – CROP PRODUCTION – LIVESTOCK PRODUCTION
– TRADING OF FRESH AND PROCESSED PRODUCTS;
SUSTAINABLE DEVELOPMENT WITH RESPONSIBILITY TO THE ENVIRONMENT AND THE COMMUNITY.

AGRICULTURAL MECHANIZATION

- INFRASTRUCTURE
- MECHANISATION AUTOMATION
- RENEWABLE ENERGY

PRODUCTION AND BUSINESS OF AGRICULTURAL PRODUCTS

- BANANA – PINEAPPLE (SPECIALIZED FARMING)
- FRUIT TREES INTEGRATED INTO LIVESTOCK FARMS (POMELO, DURIAN, MANGO)
- GINSENG - HERBAL
- RICE

PRODUCTION AND BUSINESS OF PROCESSED PRODUCTS

- ANIMAL FEED
- FERTILIZER, PESTICIDES
- PROCESSED FRUITS

PRODUCTION AND BUSINESS OF LIVESTOCK PRODUCTS

- CATTLE
- SWINE
- FISH
- INTEGRATED CIRCULAR LIVESTOCK FARMING PROJECT (SWIFTLETS CROCODILE)

Area **95,000** ha In: **Vietnam, Laos and Cambodia**



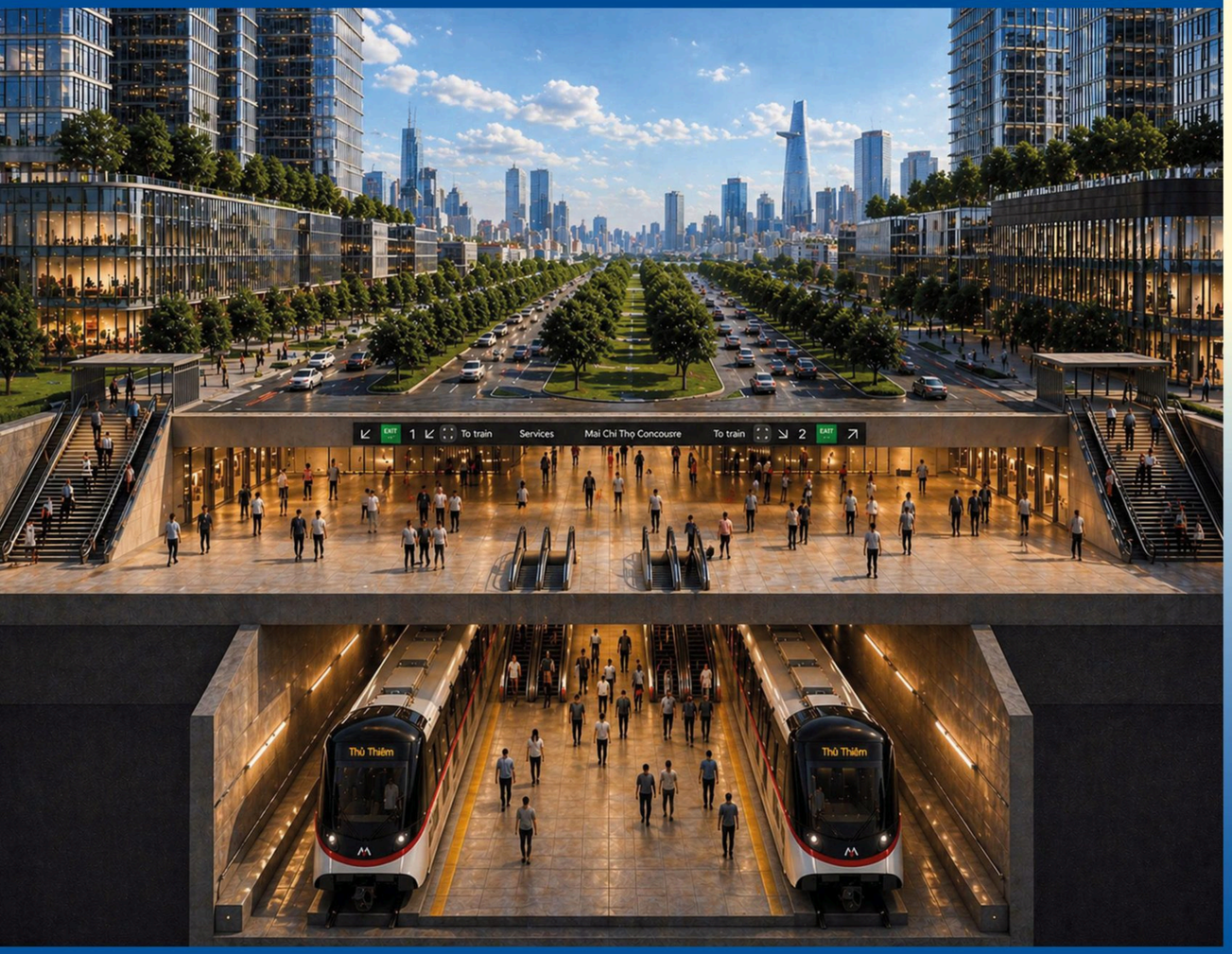
EXPORT MARKETS:

THACO AGRI exports organic-based agricultural products (fresh and processed) with high productivity and quality to different markets, including: China, Japan, Korea, Singapore, Middle East, Europe, Australia...

THACO'S POSITION IN THE RAILWAY INDUSTRY

The Government of Vietnam aims to master the railway industry by 2045. THACO identifies the railway industry as a breakthrough sector, built on international cooperation and technology transfer, developing end-to-end capability from design, manufacturing and fabrication to construction and operation.

- Roles in Ho Chi Minh City urban railway projects: EPC General Contractor of Metro Line 2 (Ben Thanh - Tham Luong); investment participant in the Ben Thanh - Thu Thiem line; Investor of the Thu Thiem - Long Thanh railway
- Integrated ecosystem: Dai Quang Minh (investment - design - construction), THACO ID-TECH & AUTO (equipment, locomotives and railway cars, E&M), THILOGI (ultra-large and ultra-heavy equipment)
- Receiving technology transfer from Hyundai Rotem, a leading rolling stock manufacturer; supplying railway cars for 03 Ho Chi Minh City Metro lines, progressively mastering the technology and increasing the localization rate.





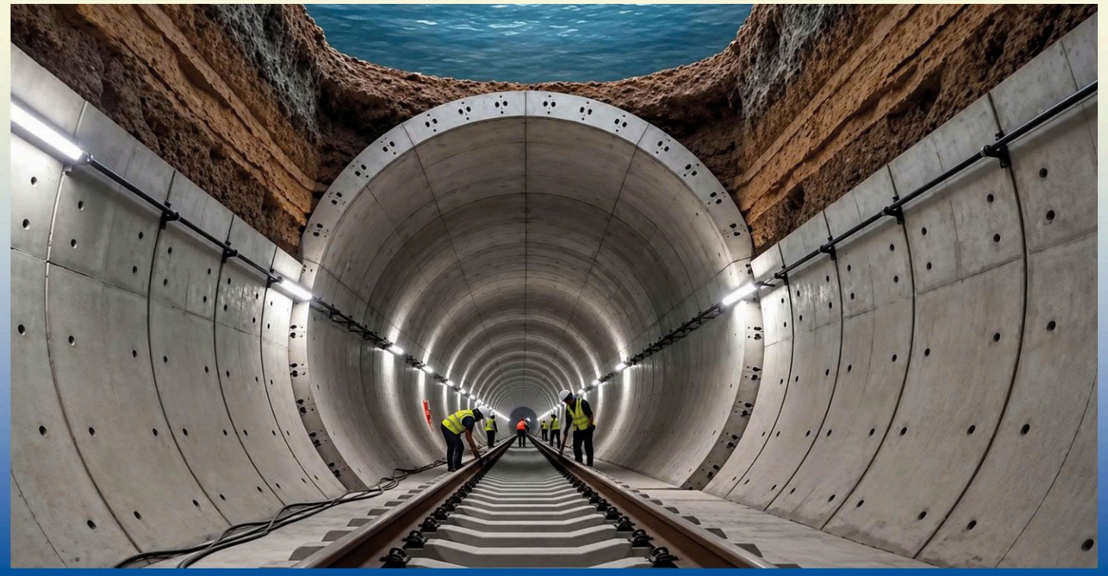
THACO'S FOUNDATION AS A GENERAL CONTRACTOR

Industrial infrastructure: Chu Lai Mechanical - Automotive & Logistics Industrial Center (Da Nang City), 358 ha, the largest specialized mechanical and supporting industries park in Vietnam, total investment approx. USD 4.3 billion; Binh Co specialized mechanical industrial park (Ho Chi Minh City), 786 ha, total investment approx. USD 3 billion

Workforce: over 2,600 investment - construction staff (1,000 engineers, architects and project managers); over 9,500 mechanical & supporting industries staff (2,700 engineers, incl. 700 R&D engineers); over 14,800 automotive manufacturing and assembly staff (over 2,000 engineers)

Technology transfer track record: from leading partners in Germany, France, Japan and Korea; automotive localization rates of up to 50% (passenger cars), over 70% (trucks) and up to 75% (buses)

Research and training: R&D Center; mechanical products and ultra-large and ultra-heavy structures exported to nearly 30 countries; THACO College in Chu Lai and training partnerships with technical universities such as Ho Chi Minh City University of Technology





INTEGRATED CONSTRUCTION CAPABILITY

Underground works: TBM tunneling, installation of precast concrete tunnel segments, underground station construction; 06 TBMs operating in parallel on the Ben Thanh - Tham Luong line

Elevated works: viaducts, girder launching, installation of precast bridge girders and box girders; long-span railway bridges over roads and rivers

E&M systems: the Mechanical & Electrical Corporation installs, operates and maintains E&M systems for Metro projects

Structures and building services: steel structures for stations and depots; MEP systems; equipment line installation

Construction logistics: THILOGI transports ultra-large and ultra-heavy equipment; Binh Co Industrial Park fabricates, assembles and maintains equipment right in Ho Chi Minh City



EQUIPMENT & MACHINERY SUPPLY FOR RAILWAY PROJECTS

EPB tunnel boring machines (TBM): 04 machines invested for Metro Line 2 in cooperation with CREG (a world-leading TBM manufacturer); steel structure fabrication, final assembly and trial run at Binh Co Industrial Park; reusable for subsequent lines

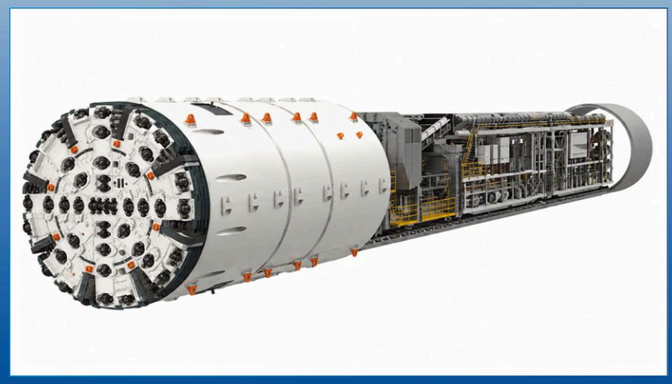
Precast concrete tunnel segments: segment plant at Binh Co Industrial Park producing concrete tunnel segments for 03 Metro lines

Elevated construction equipment: girder launchers, component erection equipment; precast bridge girders, box girders and concrete sleepers

Rolling stock: 162 railway cars for 03 Ho Chi Minh City Metro lines, manufactured and localized with Hyundai Rotem

E&M systems: signaling, power supply, communications, SCADA/OCC, platform screen doors (PSD), automatic fare collection (AFC), depot equipment - integrated with international partners







THACO BINH CO INDUSTRIAL PARK - HO CHI MINH CITY

In Ho Chi Minh City, THACO invest in THACO Binh Co Industrial Park with a total investment capital of VND 75 trillion, comprising:

- RAILWAY AND MULTI-PURPOSE MECHANICAL INDUSTRIAL COMPLEX
- NEW GENERATION SUPPORTING INDUSTRIES CENTER
- R&D CENTER
- JOIN VENTURE AND ASSOCIATION COOPERATION CENTER
- LOGISTICS CENTER

INDUSTRIAL RAILWAY MANUFACTURING CAPABILITIES AT THACO BINH CO INDUSTRIAL PARK

At THACO Binh Co Industrial Park, THACO is investing in the development of the railway industry with production capabilities for locomotive, rolling stock products and components; specialized infrastructure construction equipment; high-technology & quality precast concrete components; and E&M equipment. These capabilities enable THACO to progressively master core technologies, increase localization rates, and strengthen its participation across the railway industry's value chain.

At the same time, THACO is researching and applying advanced technologies and materials, including aluminum alloys and carbon fiber, to develop high-tech, high-value-added mechanical products for the railway industry, while expanding their applications into other industrial sectors.

This is an important foundation for forming Vietnam's railway industry while serving THACO's multi-sector projects.



ALUMINUM CASTING & EXTRUSION





10,000-TON ALUMINUM EXTRUSION PRESS

Extrusion force: 10,000 tons
Billet diameter: Ø432/Ø533 mm
Capacity: 33,000 - 62,000 tons/year



5,500-TON ALUMINUM EXTRUSION PRESS

Extrusion force: 5,500 tons
Billet diameter: Ø330 mm
Capacity: 17,000 - 30,000 tons/year



2,000-TON ALUMINUM EXTRUSION PRESS

Extrusion force: 2,000 tons
Billet diameter: Ø152/Ø203 mm
Capacity: 8,000 - 13,000 tons/year



ALUMINUM BILLET HEATING FURNACE

Maximum heating temperature: 560°C
Production capacity: 6 tons/hour



COOLING SYSTEM

Tank dimensions: 45,000 × 600 mm
Maximum load: 30 kg/m²



PULLING & FLYING SAW CUTTING SYSTEM

Overall length: 23,000 mm
Cutting width: 500 mm



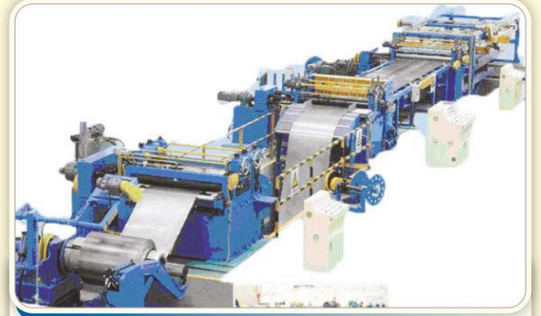
AGING FURNACE

Maximum temperature: 200°C
Capacity: 30 tons/batch

MANUFACTURING TECHNOLOGY

MECHANICAL FABRICATION

WORKPIECE PROCESSING



DECOILING, SHEET CUTTING & SLITTING LINE

Blank thickness: 4 - 14 mm
Coil width: 1,000 - 14,050 mm



COIL LASER CUTTING LINE

Laser head power: 12 kW
Cutting dimensions: 12,000 × 2,000 mm



PIPE FORMING LINE

Pipe diameter: Ø63 - Ø273 mm
Blank thickness: 4 - 12 mm



SHEET METAL LASER CUTTING MACHINE

Laser power: 60 kW
Working table dimensions: 3.5 × 40 m
Workpiece load capacity: 60 tons



2,500-TON STAMPING PRESS

Press capacity: 2,500 tons
Table size: 5,000 × 2,500 mm



150-TON PLATE ROLLING MACHINE

Rolling width: 4,200 mm
Maximum rolling thickness: 150 mm

PRECISION MACHINING



LARGE-SIZE CNC MILLING MACHINE

Spindle speed: 6,000 rpm
Table size: 8 × 3.5 m



LARGE DOUBLE COLUMN - 5 FACE CNC MILLING MACHINE

Max load on table: 60,000 kg
Max workpiece size: 25,000 x 3,500 x 2,000 mm



VERTICAL TURNING LATHE

Spindle speed: 3,000 rpm
Machining envelope: Ø5 × 3 m



TWO-HEAD EDM MACHINE

Electrode materials: Graphite, copper
Table size: 3.1 × 1.1 m



WIRE EDM MACHINE

Wire diameter: Ø0.15 - Ø0.33 mm
Table size: 1.6 × 1.2 m



14M PRESS BRAKE

Maximum bending length: 14,000 mm
Pressing force: 1,600 tons

MANUFACTURING TECHNOLOGY

MECHANICAL FABRICATION

WELDING



ROBOTIC WELDING AND SLIDE SYSTEM

Rail length: 16,500 mm (including auxiliary section)
Lifting capacity: ≥12 kg



STRUCTURAL WELDING LINE

Welding length: 26,000 × 5,000 mm
Welding technologies: TIG/MIG



ROBOTIC GANTRY WELDING SYSTEM WITH 1-AXIS ROTATOR

Gantry dimensions: 20 × 3.5 × 3.5 m
Workpiece capacity: 10,000 kg



ROBOTIC GANTRY WELDING SYSTEM WITH 2-AXIS ROTATOR

Gantry dimensions: 10 × 2 × 3.5 m
Workpiece capacity: 5,000 kg



FRICTION STIR WELDING (FSW) MACHINE

FSW head force: 30 - 90 kN
Welding speed: 100 - 1,500 mm/min
(depending on profile and material thickness)



ROBOTIC GANTRY WELDING SYSTEM

Welding system dimensions: 20,000 × 4,000 × 4,500 mm
6-axis welding robot - arm reach: 2 m
Welding power source: 500 A

HEAT TREATMENT



VACUUM HEAT-TREATMENT FURNACE

Maximum temperature: 1,350°C
Workpiece dimensions: 1,000 × 1,150 × 800 mm



TEMPERING FURNACE

Maximum temperature: 850°C
Maximum workpiece dimensions: 1,000 × 800 × 1,200 mm



ROBOTIC LASER HEAT TREATMENT SYSTEM

Heat source: Fiber laser
Heat treatment zone dimensions: 5,000 × 2,000 × 2,000 mm



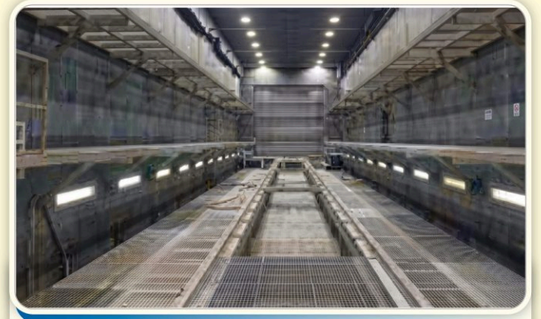
STRESS-RELIEF FURNACE

Working chamber dimensions: 15 × 3.8 × 3 m
Operating temperature: 750 - 850°C

MANUFACTURING TECHNOLOGY

MECHANICAL FABRICATION

SURFACE TREATMENT & PAINTING



SHOT BLASTING LINE

Maximum dimensions: 27,000 × 3,500 × 3,700 mm



ELECTRODEPOSITION (ED) COATING LINE

Maximum dimensions: 13,700 × 2,500 × 3,700 mm



HOT-DIP GALVANIZING LINE

Maximum dimensions: 12,000 × 1,700 × 2,400 mm
Maximum product weight per rack: 2,700 kg



POWDER COATING LINE

Maximum dimensions: 16,000 × 1,400 × 2,500 mm
Salt spray resistance: 1,000 hours



PAINTING LINE

Painting booth dimensions: 27,000 × 3,500 × 3,700 mm

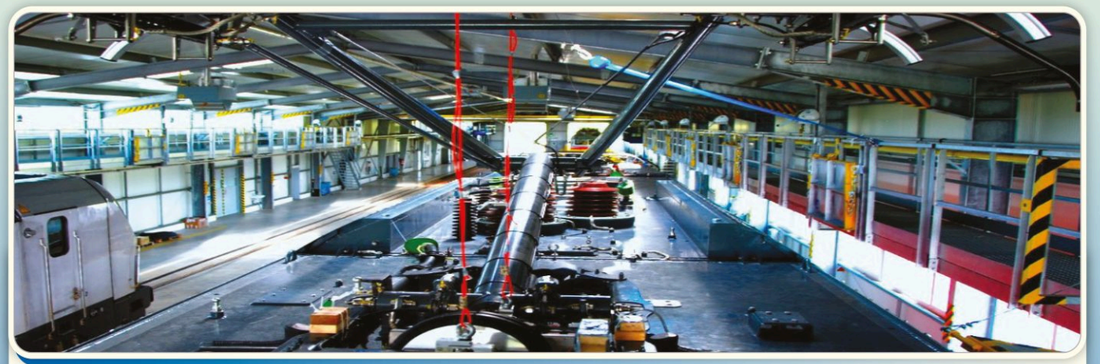
ASSEMBLY



ASSEMBLY LINE

Capacity: 10 cars/month

TESTING

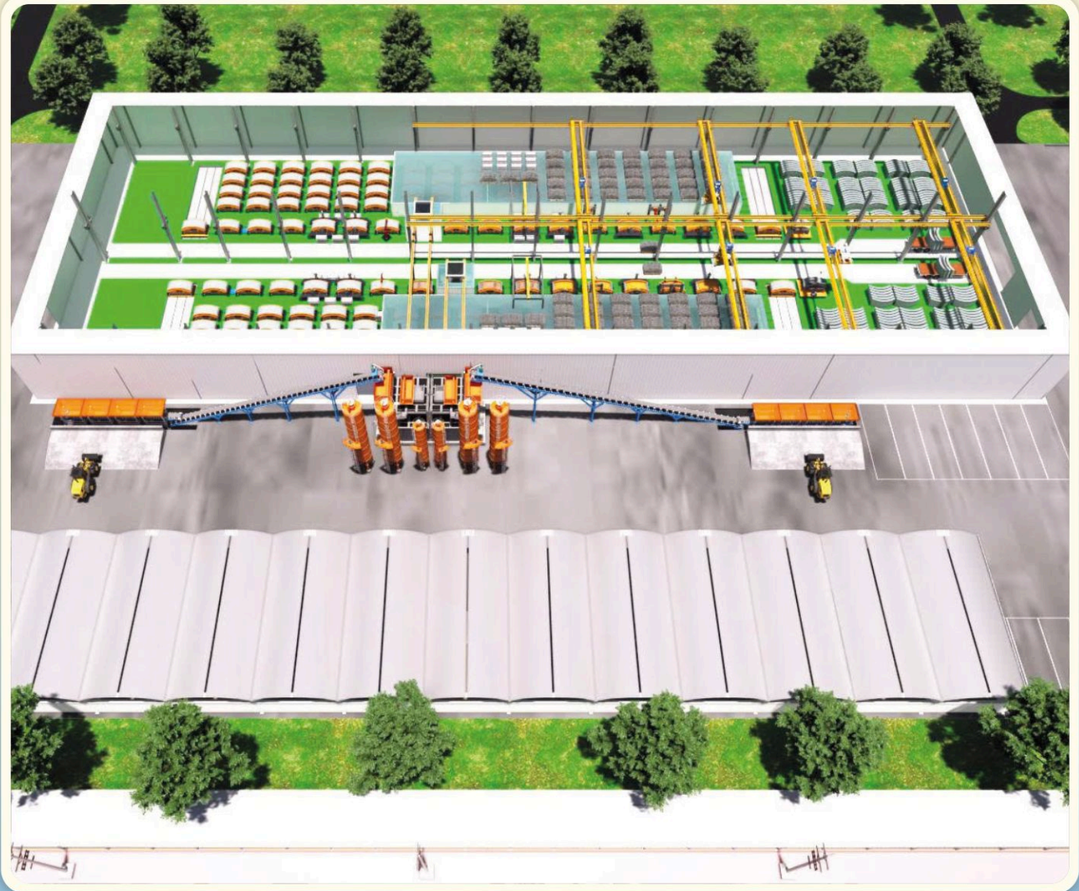


STATIC TESTING



TESTING ON AN OPERATIONAL TEST TRACK

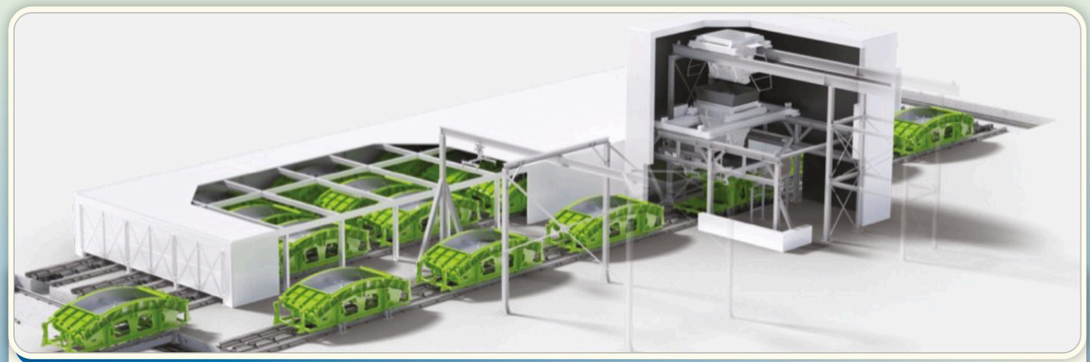
HIGH-TECHNOLOGY & QUALITY PRECAST CONCRETE COMPONENTS





STEEL WIRE MESH PRODUCTION LINE

Capacity: 20 tons of mesh/hour



PRECAST CONCRETE CASTING & CURING LINE

Capacity: 1,100 rings/hour/2 lines



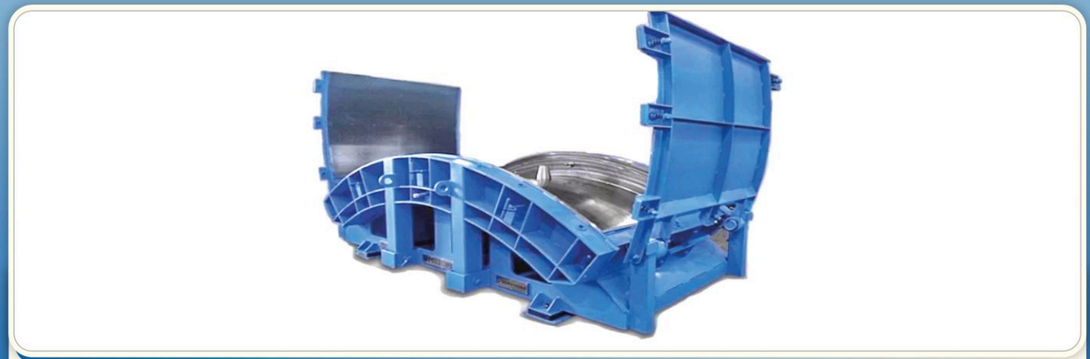
CONCRETE BATCHING STATION

Capacity: 120 m^3/h



STEAM BOILER SYSTEM

Capacity: 27 tons/hour



CONCRETE MOLD

Capacity: 28 mold sets/2 lines

LOCOMOTIVE AND ROLLING STOCK PRODUCTS AND COMPONENTS

FRAME STRUCTURE

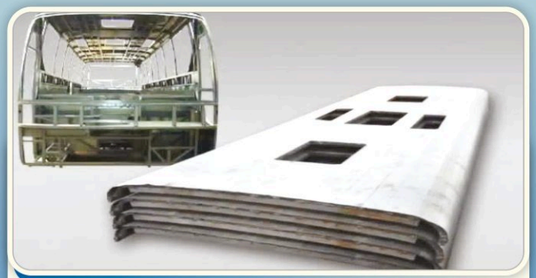




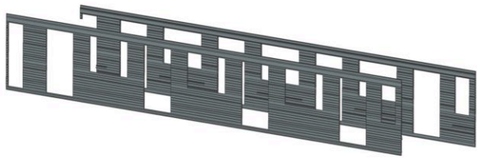
Aluminum alloy carbody structure



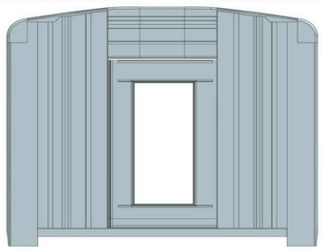
Boarding door, gangway door



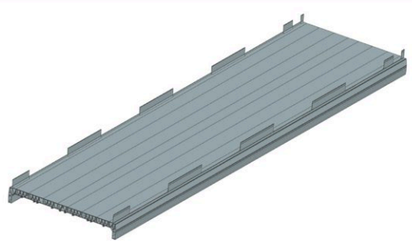
Roof panel



Side panel



Tail panel



Floor panel

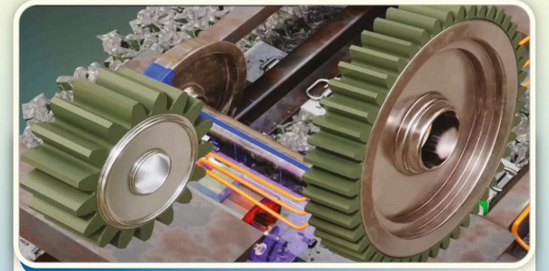
DRIVE SYSTEM



Axle



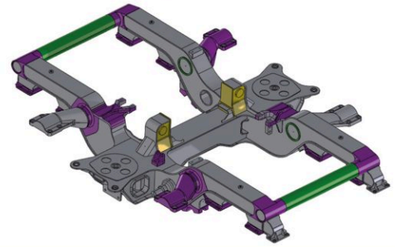
Train wheel



Gearbox



Brake



Bogie frame

CAR COUPLING SYSTEM



Car coupling equipment



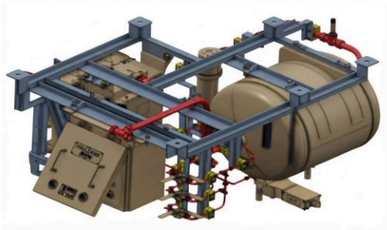
Coupling system



Automatic coupler (head coupling)

LOCOMOTIVE AND ROLLING STOCK PRODUCTS AND COMPONENTS

INTERIOR – EXTERIOR COMPONENTS



Pneumatic system



Pipe/tubing assembly



Lighting system



Pantograph



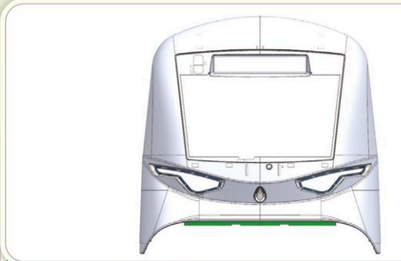
Ceiling trim



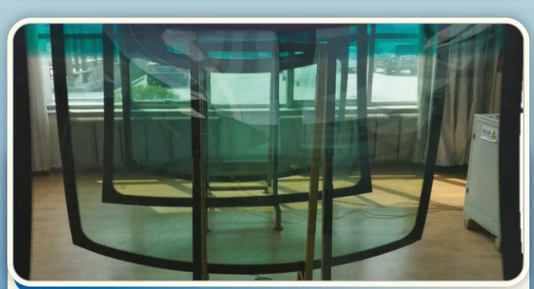
Passenger seat



Air-conditioning system



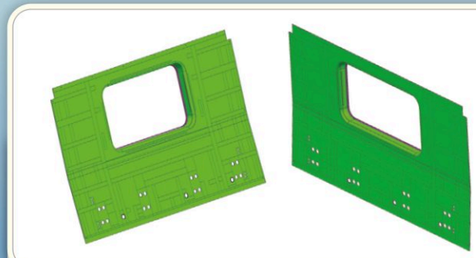
Cab front



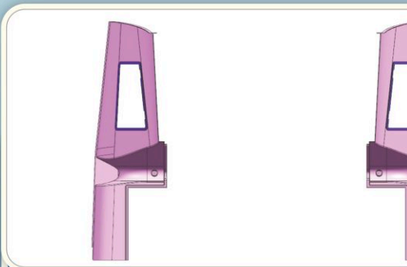
Cab front windshield



Side window glass



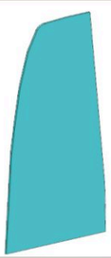
Left & right side trim panel



Driver's cab trim panel



Partition glass frame



Seat partition glass

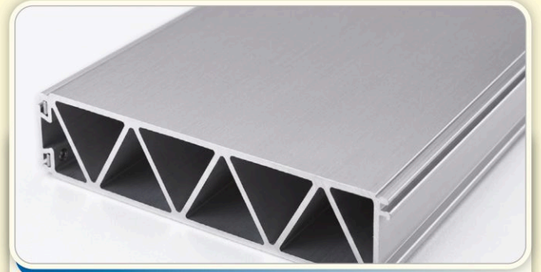


Handrail



Handle assembly

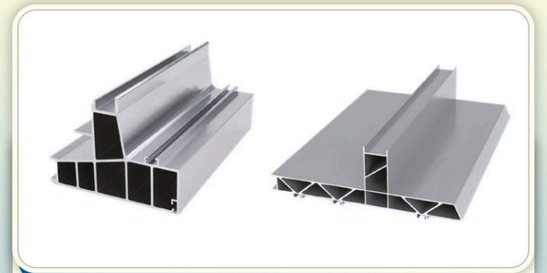
ALUMINIUM ALLOY PRODUCTS



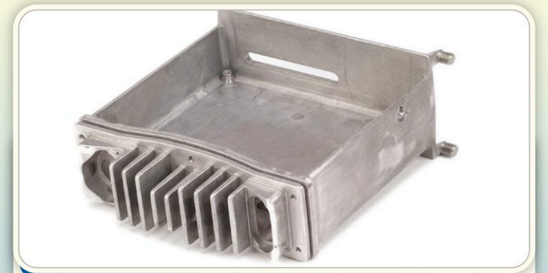
Railcar side panel



Railcar floor panel



Aluminium vertical door frame beam/Railcar aluminium structure



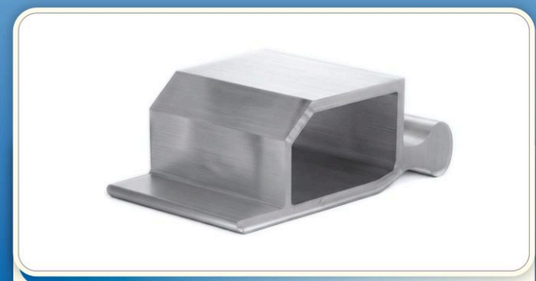
Lamp housing



Railcar aluminium partition



Roof shell structure

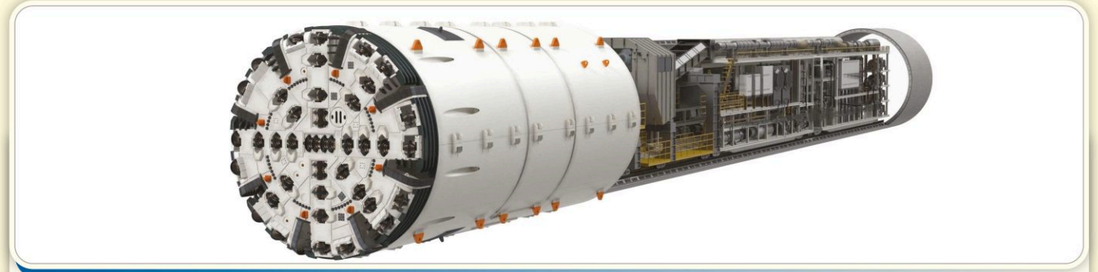


Equipment support bar



Bracket

CONSTRUCTION EQUIPMENT



Tunnel boring machine (TBM)



Girder erection equipment



Wheel loader/excavator

HIGH-TECHNOLOGY & QUALITY PRECAST CONCRETE COMPONENTS



Tunnel lining segment



Pipe culvert and box culvert



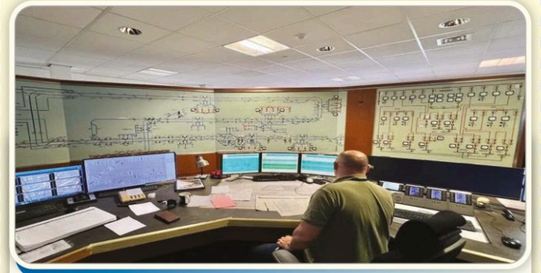
Precast bridge girder



Precast concrete sleeper

E&M EQUIPMENT

• PLATFORM SCREEN DOOR SYSTEM •



Station control system



Automatic door



Monitoring & diagnostic software

• POWER SUPPLY SYSTEM •



Stray current protection & grounding system/equipment



Power distribution cabinet



Software for monitoring, control, and data acquisition (SCADA)

• AUTOMATIC FARE COLLECTION SYSTEM •



Access control system (ACS)

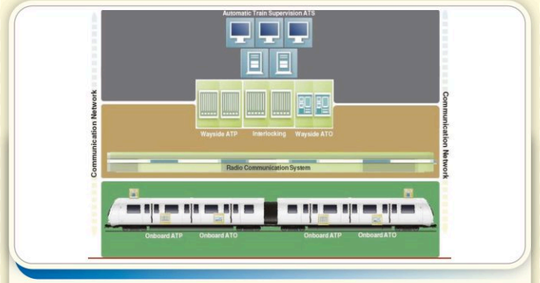


Ticket vending machine (TVM)

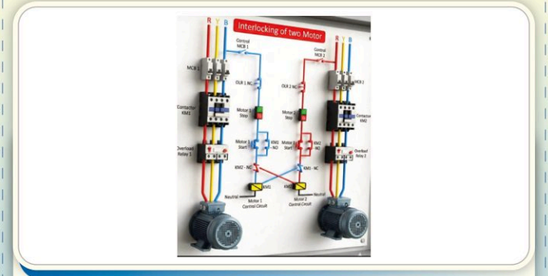


Integrated management software

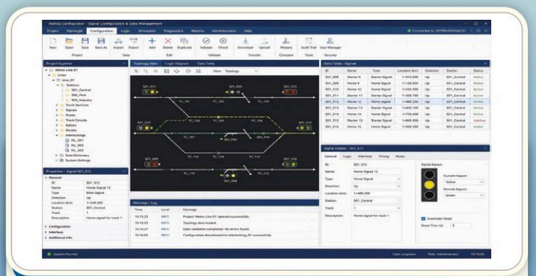
• SIGNALLING SYSTEM •



Automatic train operation (ATO) system



Interlocking controller

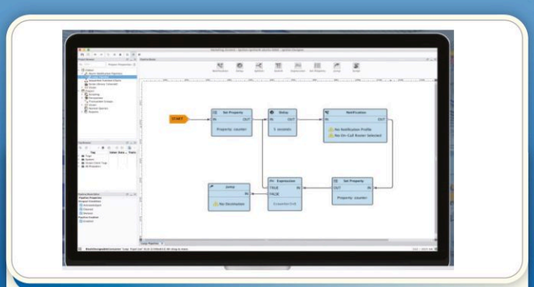


Signaling data configuration and management software

• COMMUNICATION SYSTEM •



Passenger information display system (PIDS)



Alarm management software

• DEPOT EQUIPMENT •



Depot equipment

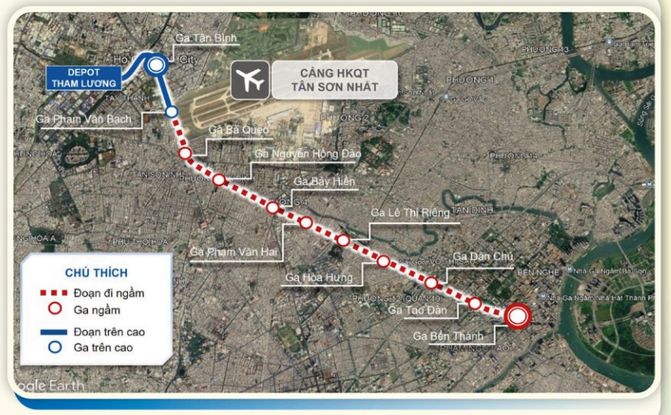


Monitoring, diagnostic & maintenance software

RAILWAY
PROJECTS

METRO BEN THANH - THAM LUONG

- **Name** Ho Chi Minh City Metro Line No. 2, Ben Thanh -Tham Luong Section
- **Length** 11.27 km
- **Location** Ho Chi Minh City
- **Role** EPC General Contractor



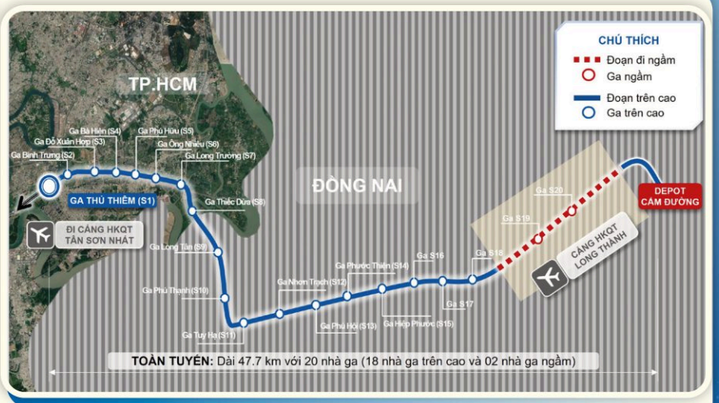
METRO BEN THANH - THU THIEM



- **Name** Ho Chi Minh City Urban Railway Line No. 2 , Ben Thanh - Thu Thiem Section
- **Length** 5.98 km
- **Location** Ho Chi Minh City
- **Role** PPP Investor - Build-Transfer (BT) Contract

METRO BEN THANH - LONG THANH

- **Name** Thu Thiem - Long Thanh Railway
- **Length** 46.44km
- **Location** Ho Chi Minh City to Dong Nai City
- **Role** PPP Investor - Build -Transfer (BT) Contract



TRANSPORT INFRASTRUCTURE
PROJECTS

CUA LO CHANNEL PROJECT



- **Name** Cua Lo Channel Construction Investment Project
- **Location** Da Nang City
- **Role** PPP Investor - Build - Transfer (BT) Contract

MA DA BRIDGE – BA HAO JUNCTION ROAD PROJECT

- **Name** Road Construction Investment Project (section from Ma Da Bridge to Ba Hao Junction)
- **Location** Dong Nai City
- **Role** PPP Investor - Build - Transfer (BT) Contract



FOUR MAIN ROADS PROJECT



- **Name** Investment and Construction Project for Four Main Roads in Thu Thiem New Urban Area
- **Location** Ho Chi Minh City
- **Role** PPP Investor - Build - Transfer (BT) Contract

DAU GIAY – TAN PHU EXPRESSWAY PROJECT

- **Name** Dau Giay - Tan Phu Expressway Investment and Construction Project (Phase 1)
- **Location** Dong Nai City
- **Role** PPP Investor - Build - Transfer (BT) Contract

