

WCE



WE ENGINEER YOUR SUCCESS

General information



Company Name:

(English) West Coast Engineering Company Limited (WCE)

(Thai) บริษัท เวสต์โคสต์ เอ็นจิเนียริง จำกัด

Headquarter Bangkok:

28/1 Prapawit Building, 6th Floor, Surasak Road, Silom, Bangrak, Bangkok 10500

Plant Area:

9/1 Moo 4 Banklangna - Yaiploy Road, T.Maerumphueng, A.Bangsaphan, Prachuapkhirikhan 77140, Thailand

Only 3 km. from Prachuap deep sea Port

Contact:

Tel.

+66 (0) 2376746-9, (0) 32548450-2

Fax.

+66 (0) 26300516, (0) 32692111

Website:

www.wce.co.th

Registration:

Registration Nr:

0105542000061

VAT Registered Nr :

3011981252

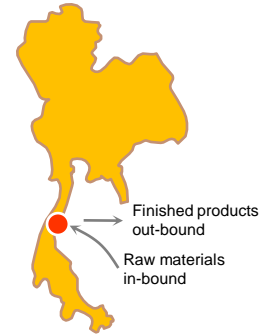
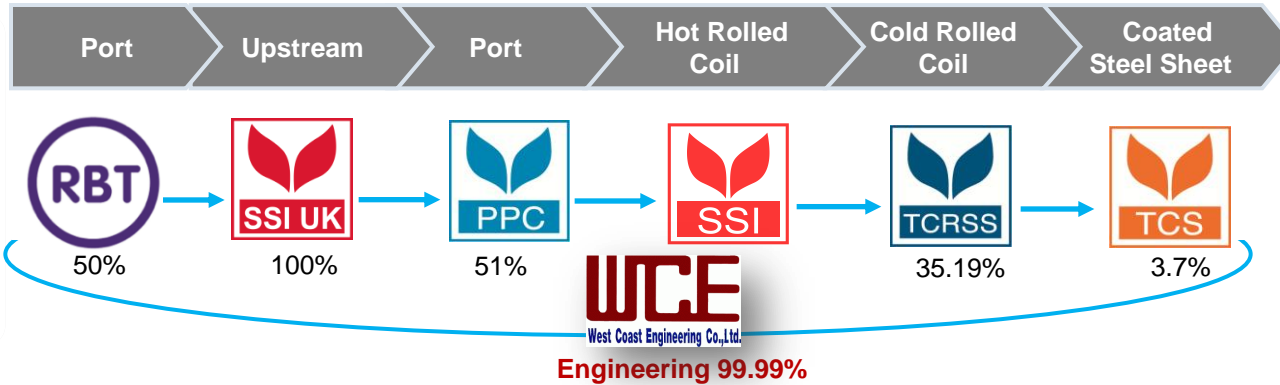


ASEAN's Largest Flat Steel Producer



**Long-term
Strategies**

- Innovate Premium Value Products
- Integrate World Class Steel Business



UK

Thailand

| Legal Entity | Redcar Bulk Terminal Limited | Sahaviriya Steel Industries UK Ltd. | Prachuap Port Co., Ltd. | Sahaviriya Steel Industries Plc. | Thai Cold Rolled Steel Sheet Plc. | Thai Coated Steel Sheet Co., Ltd. |
|--------------------------------------|--|-------------------------------------|--|--|-----------------------------------|-----------------------------------|
| Product Range | Support: port | Slab | Support: port | Hot-rolled coils (pickled and oiled) | Cold-rolled steel | Electro-galvanized |
| Capacity | 170,000 dwt ¹⁾ , 12 mmt throughput | 3.6 mtpa ²⁾ | 100,000 dwt ¹⁾ , 14 mmt throughput | HotCoil 4 mtpa ²⁾ CleanStrip® 1 mtpa ²⁾ | 1.2 mtpa ²⁾ | 0.24 mtpa ²⁾ |
| Domestic Capacity Share | N/A | N/A | N/A | 55% 63% | 43% | 100% |
| SSI Ownership | 50% ³⁾ | 100% | 51% | Parent company | 35% | 4% |
| Total Revenues in 2013 ⁴⁾ | 27 MUSD | 1,473 MUSD | 13 MUSD | 2,165 MUSD | 385 MUSD | 78 MUSD |

¹⁾ dwt = Deadweight ton

²⁾ mtpa = million tons per annum

³⁾ 50% ownership via SSI UK

⁴⁾ Exchange rate used for translation = 30.7 THB/USD and 1.6 USD/GBP

Certifications and Awards



2003 - ISO14001 , SMEs Award

2002 - TIS18001 / OHSAS18001

2001 - ISO9001:2008

2000 - Occupational Skill Standard

2011 - IEC 17025 / TIS17025

- ASME U, S, R & PP Stamp

- Green System Industrial Level 3

2009 - Industrial Award for Quality Management

2005 - Safety Award for Zero - Accident

- Business for Labor Relations



2014 - Labor Standard Improvement Award

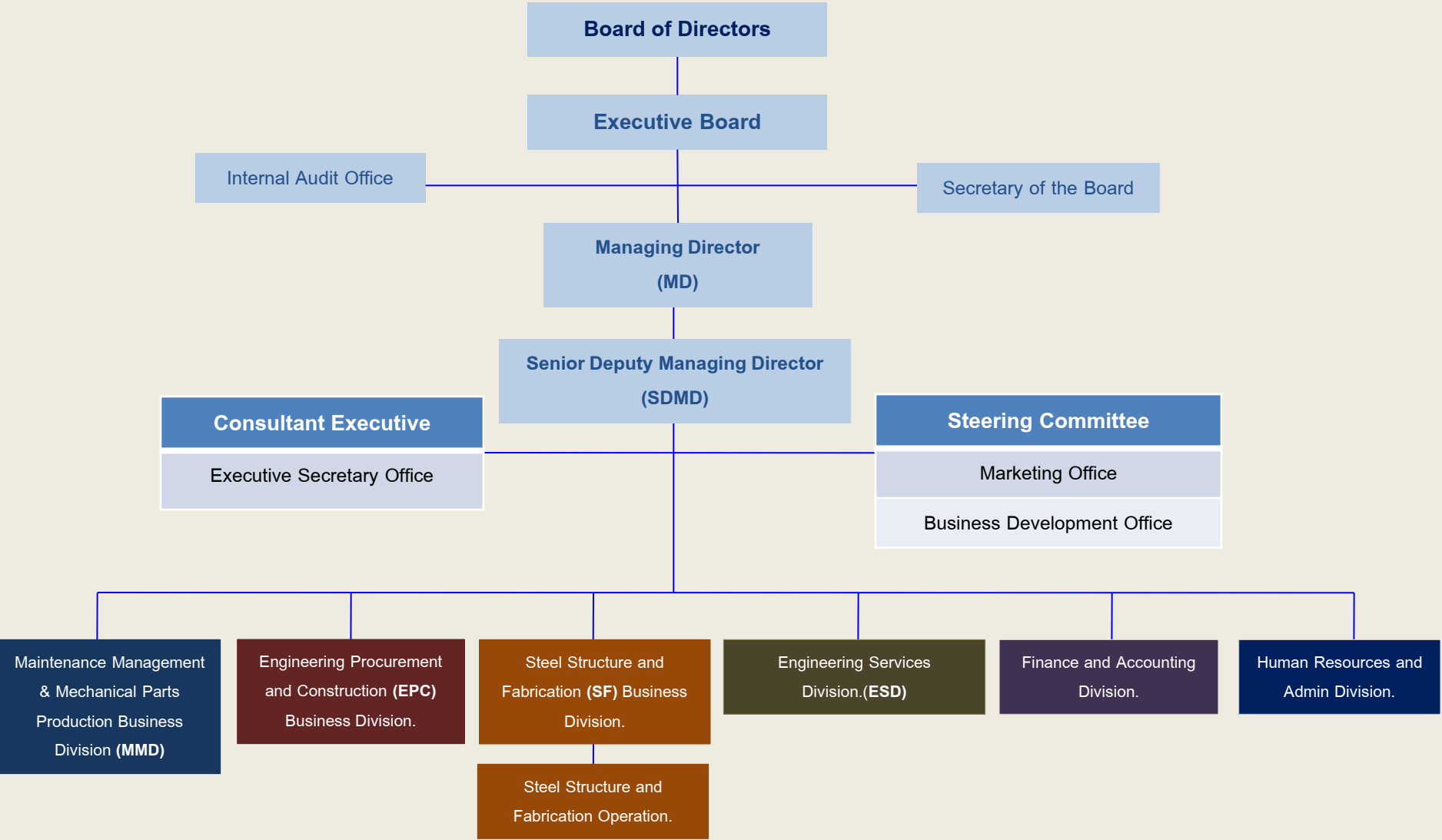
- Thailand Research Award

2006-2013 - Award for Welfare Relations
(8 years continued)



2012 - NRCT Invention Award in
“Engraving Machine & Design”
- NRCT Invention Award in
"Turntable and Loading Arm"

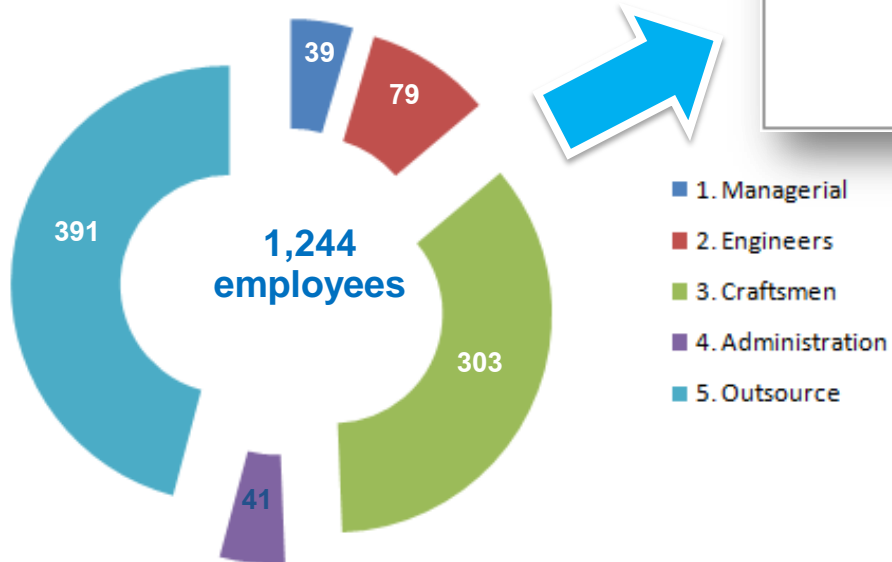
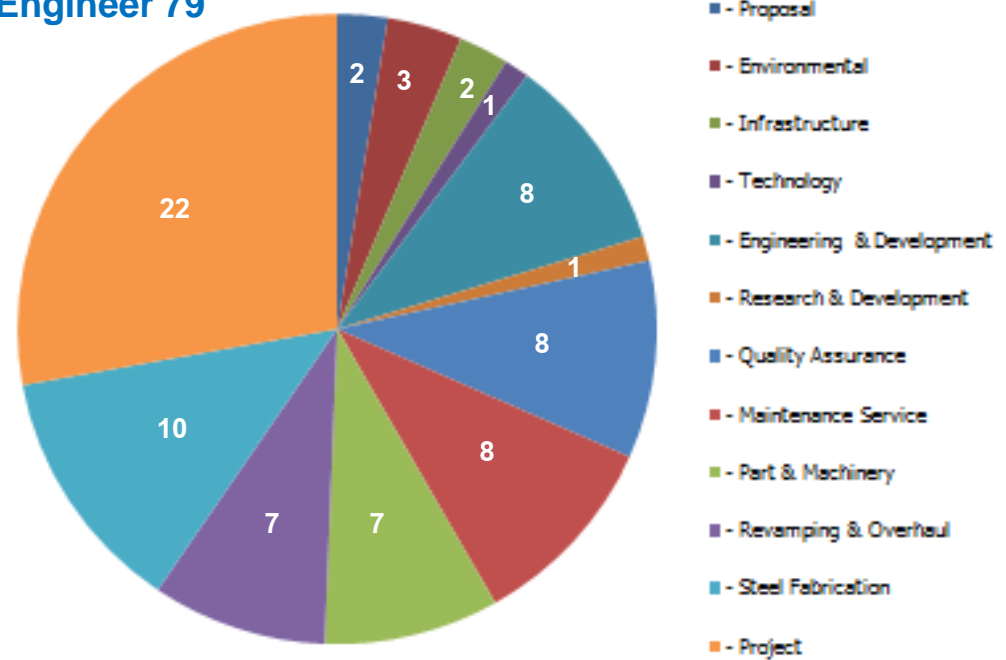
Organization



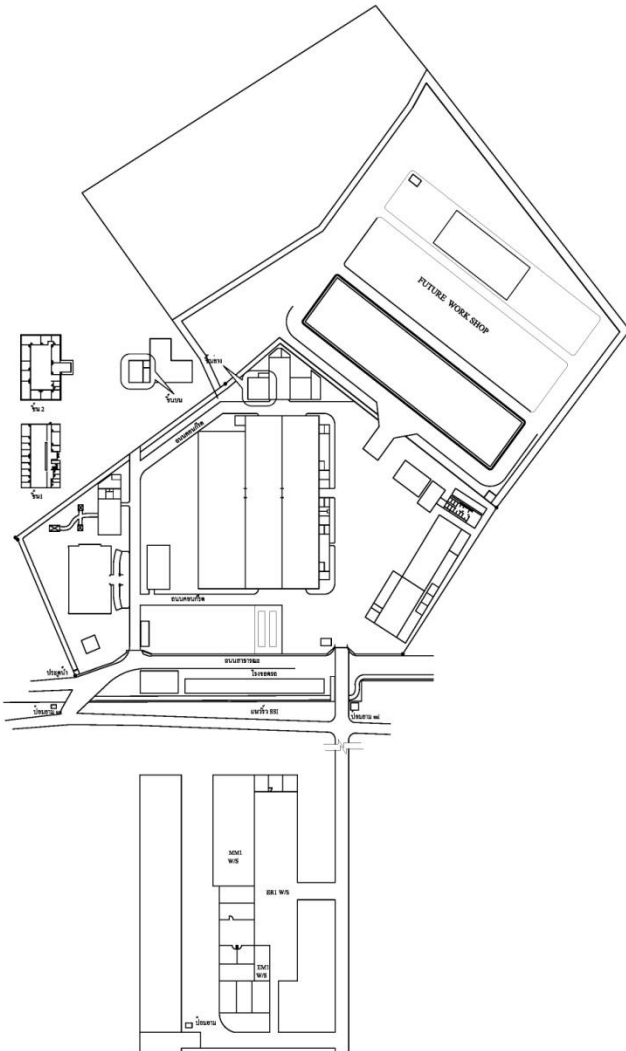
Employees



Engineer 79



Workshop infrastructure



AREA : BSP Work Shop

- Work Shop 1 Repair and Overhaul: 2,000 m²
- Work Shop 2 Steel Structure and Fabrication: 2,000 m²
- Work shop 3 Machinery: 4,000 m²
- Work shop 4 Outdoor: 1,650 m²
- W/S others Vehicle and Electrical: 2,850 m²

Total Area: 12,500 m²



Business units

1. Machinery Engineering Business

1.1 Mechanical Part Production

1.2 Engineering Design and Technology

1.3 Engineering Solution On Site

2. Maintenance Management Business

2.1 Maintenance Service Contract

2.2 Industrial Maintenance & Service

2.3 Machinery Repair & Overhaul

3. Steel Structure and Fabrication Business

3.1 Steel Structure

3.2 Pressure Vessel and Pressure Part

4. Engineering Procurement and Construction Business (EPC)

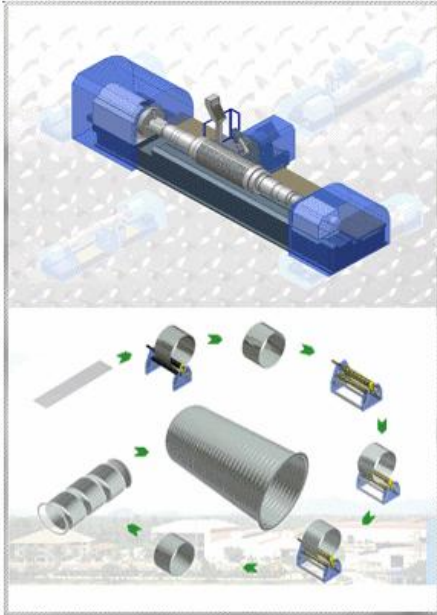
4.1 Steel Industries

4.2 Warehouse & Handling System

4.3 Environmental

4.4 Energy

Business units



1. Machinery Engineering Business

1.1 Mechanical Part Production

1.2 Engineering Design and Technology

1.3 Engineering Solution On Site



1. Machinery Engineering Business

Mechanical Parts Production

| Machine | Q'ty |
|---------------------|-----------|
| ▪ CNC Boring | 2 |
| ▪ CNC Lathe | 2 |
| ▪ CNC Milling | 4 |
| ▪ Boring Floor Type | 1 |
| ▪ Boring | 2 |
| ▪ Grinding | 3 |
| ▪ Lathe | 10 |
| ▪ Milling | 5 |
| ▪ Mobile Milling | 2 |
| ▪ Support Machine | 9 |
| Total | 40 |

Spare part manufacturing to Steel Mill Industry

Customer : Sahaviriya Group

Location : Bangsaphan, Prachuapkhirikhan

Quantity : 40 Machines with 3 work shop

Size Area 4,000 m²

- Overhead Crane 30 Tons

- Overhead Crane 10 Tons

- Overhead Crane 5 Tons

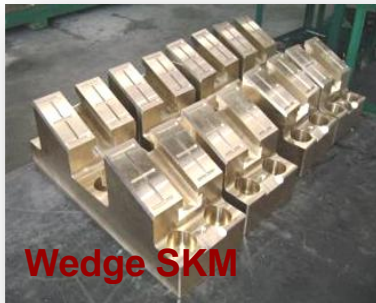


1. Machinery Solution Business

Mechanical Parts Production

Production:

- Special spare parts of steel mill
- Spare parts of cement plant
- Spare parts of sugar & paper plant



Wedge SKM



Housing Bearing



Housing
Gear Box



Inner Cover



Stripper



Slide Basement



Top flat roll



Entry Segment PO-Line



1. Machinery Solution Business

Mechanical Parts Production

SMS Project : Side Guide Machine Product

Location: Slovenia

Scope: Machinery Production

Weight : 400 Tons Period:



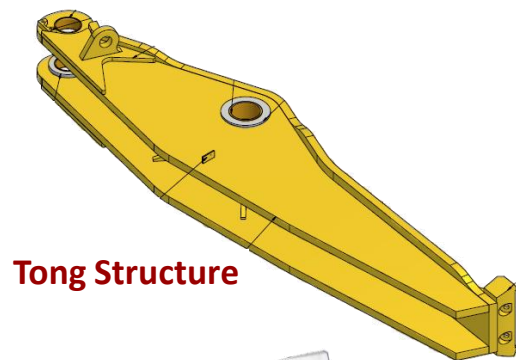
1. Machinery Engineering Business

WCE

Mechanical Parts Production

R&D Project SSI and WCE 2004 - 2013

10 Year Save
49.73 MB



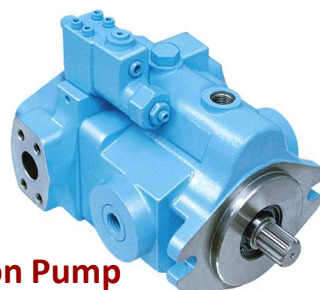
Tong Structure



Entry Segment PO-Line



Slipper Pads



Piston Pump



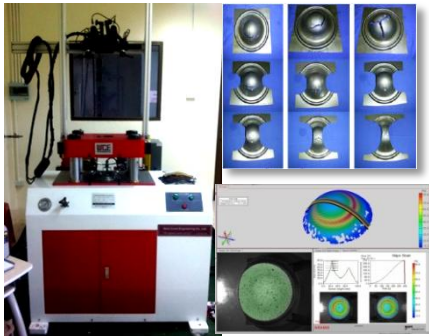
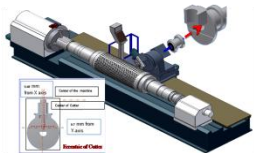
Improve Spindle Finishing Mill



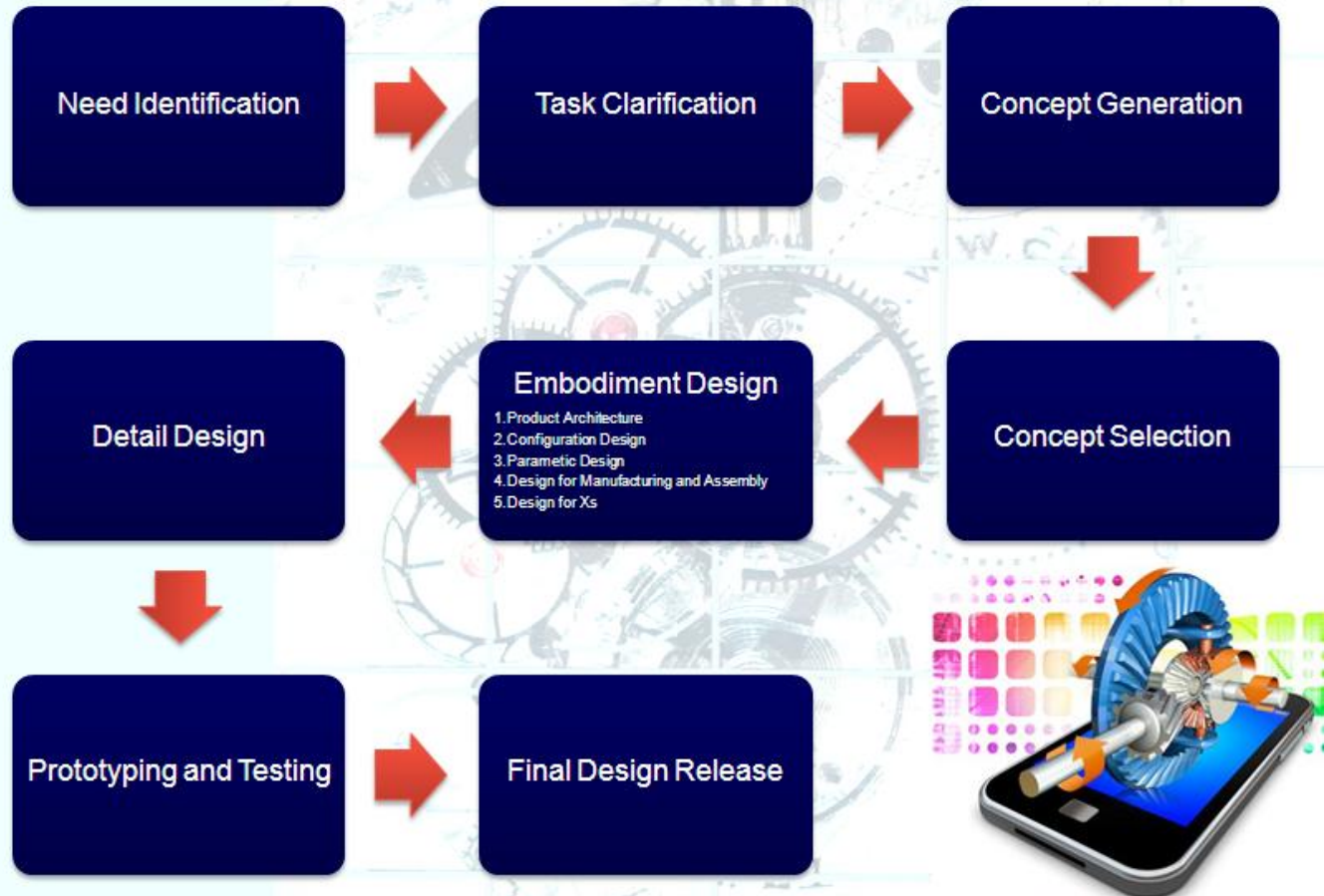
Mandrel Pay-Off Reel #SKM2

1. Machinery Engineering Business

Engineering Design and Technology



➤ Engineering Design Process



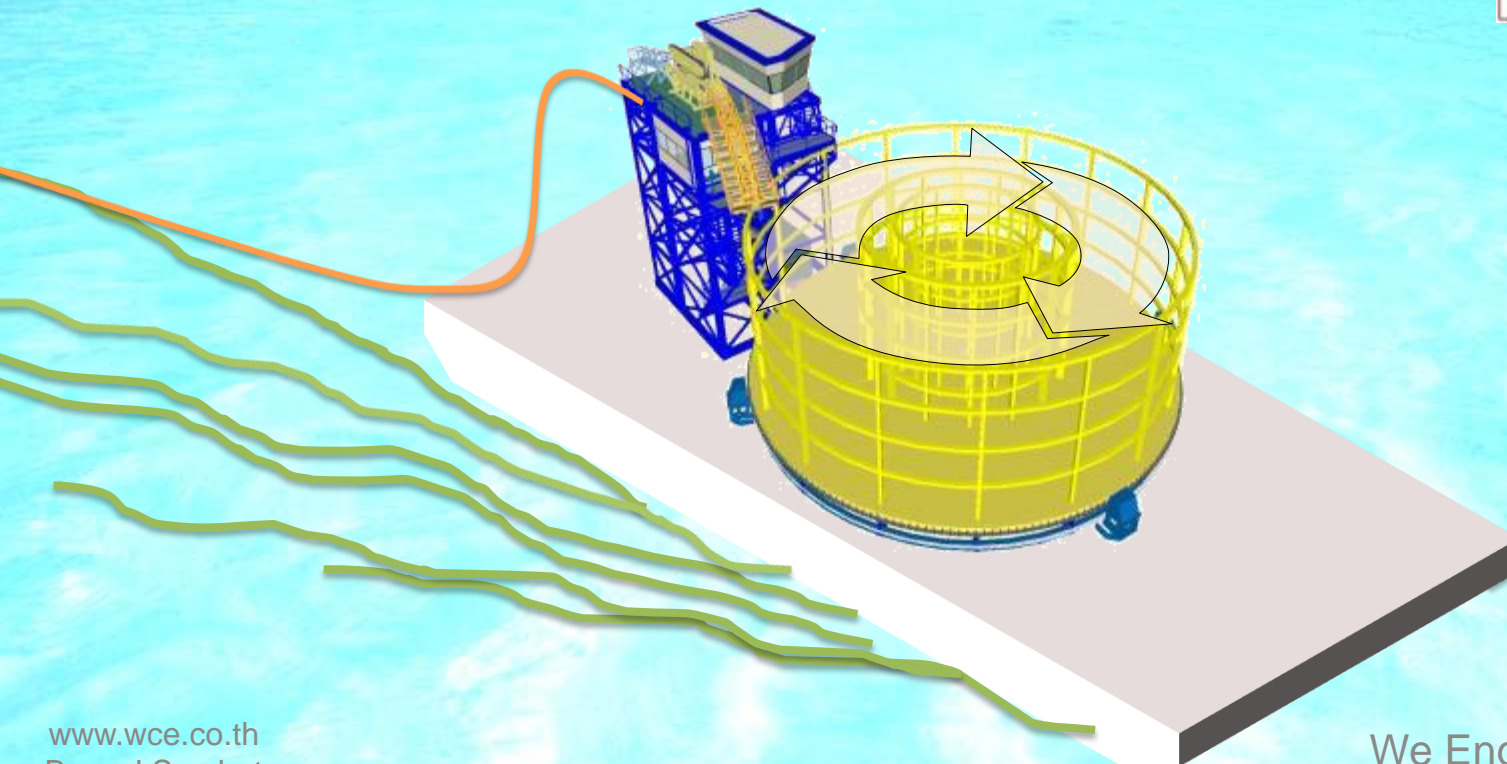
- Turntable and Loading Arm Operation

- Client : Italian Thai Development PCL.

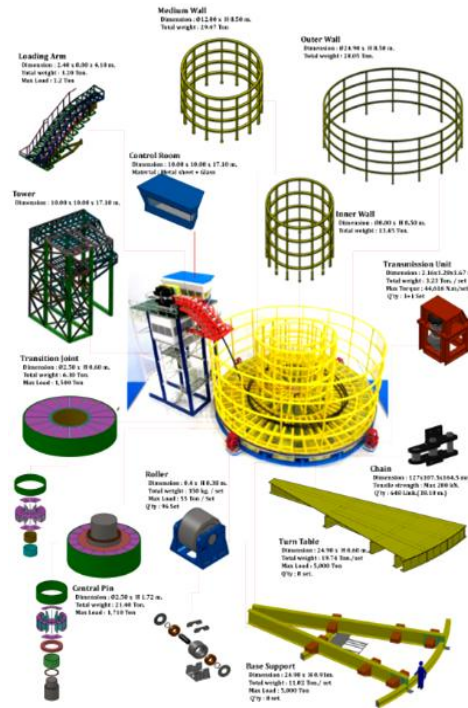
Working Period : 9 Months

Contract Amount : 84 MB.

● **Laying Cable Direction**



Engineering Design and Technology



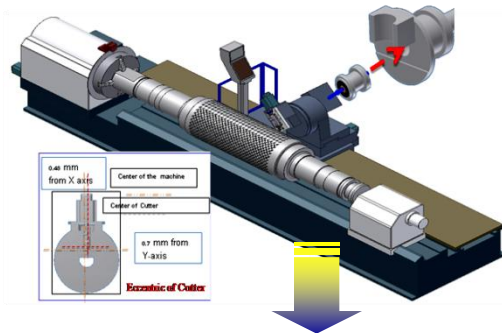
| | |
|---------------------|-----------------------------|
| Turntable Capacity | : 5,000 Tons |
| Turntable Dimension | : Ø 25.0 m. , High 10.2 m. |
| Rotation Speed | : Max. 0.4 RPM |
| Hydraulic Motors | : 4 (3+1) Unit |
| Maximum torque | : 49,000 Nm./Motor |
| Maximum pressure | : 350 bar |
| Power | : 75 KW. |
| Hydraulic Pumps | : 2 Unit |
| Flow per motor | : 330 LPM |
| Working Pressure | : 310 bar |
| Shaft Power | : 93 Kw. |
| Electric Motor | : 160 Kw. 380 V. 4 Pole x 2 |
| Mechanical Drive | : Chain and Sprocket |
| Total Weight | : 520 Tons. |



1. Machinery Engineering Business

Engineering Design and Technology

• Engraving Machine & Design



1. Machinery Engineering Business

Engineering Design and Technology

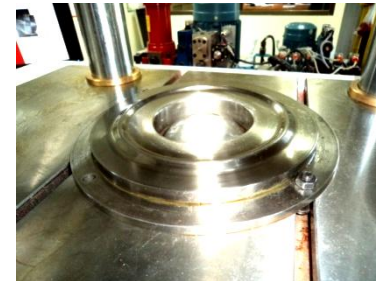
- Testing Machine & Design

Forming-Limit Curves Test M/C

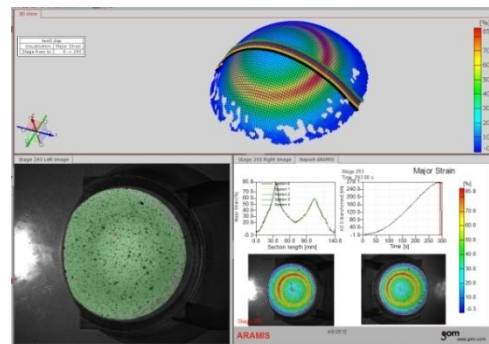
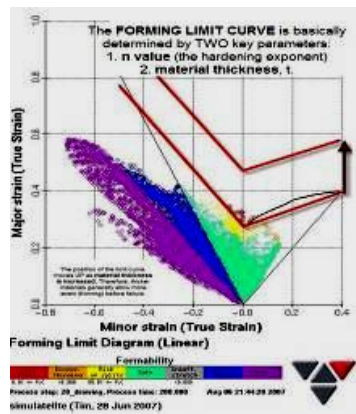
Machine Design



Sample Holding Design



Sampling Forming Test

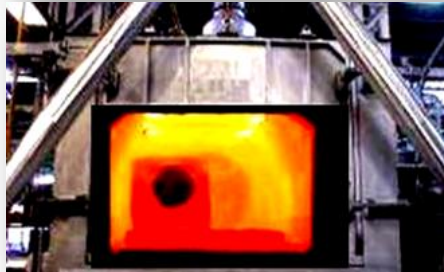
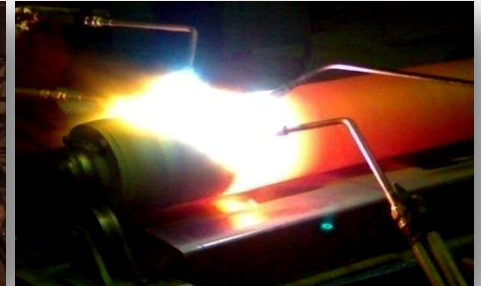


1. Machinery Engineering Business

Engineering Solution On Site

❖ Surface Engineering Service

- * Thermal Spray
- * Wire Arc Spray
- * Spray & Fusion
- * Powder Frame Spray
- * Heat Treatment
- * Brush Electro Plating
- * Ceramic Coating
- * Hard Chrome
- * PTA Technology
- * Hard face Welding



1. Machinery Engineering Business

Engineering Solution On Site

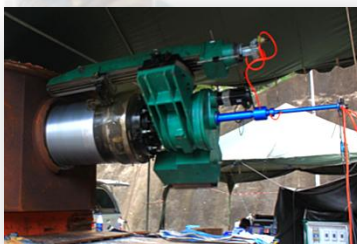
❖ Machine Mobile

- * Boring Machine
- * Lathe Machine
- * Milling Machine
- * Circular Milling Machine
- * Flange Facing Machine



Portable Line Milling Machine

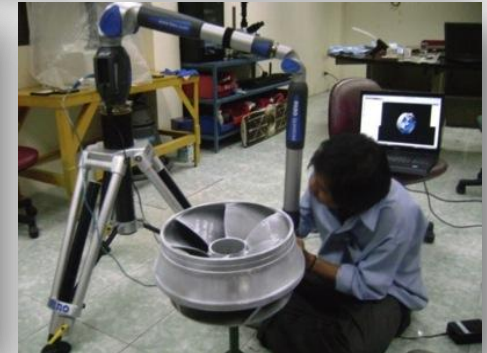
Substation run power equipment



1. Machinery Engineering Business

Engineering Solution On Site

❖ CMM Mobile



1. Machinery Engineering Business

Engineering Solution On Site

Reference: Revamping the roughing & finishing mill stand - SSI



Install Mobile Milling Machine



Set Up Machine



Milling Surface



Surface spray Metal



Milling Surface



Milling Surface Finishing

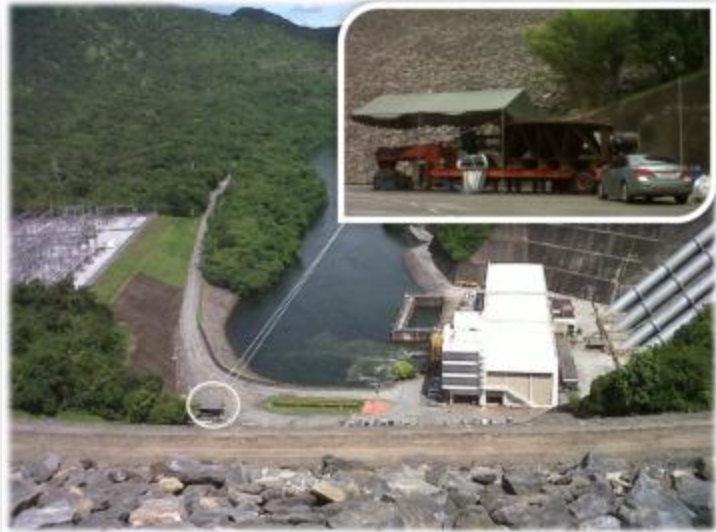
Engineering Solution On Site

Machine & Assembly Inlet Valve SNR-H4 (EGAT)

Job name :
Machine & Assembly Inlet Valve SNR-H4



Schedule :
July' 2011



Engineering Solution On Site

Customer:

David Brown

Location:

Phubia, Laos

Scope of work:

CMM inspection and milling mobile machine by supply manpower, machines and tools

Period:

July – Sep 2013

Repairing Slewing Bearing EX2.
Surface & Line Boring Mobile Machining Onsite.



Business units

2. Maintenance Management Business

2.1 Maintenance Service Contract

2.2 Industrial Maintenance & Service

2.3 Machinery Repair & Overhaul

2. Maintenance Management Business

Maintenance Service Contract

WCE's competencies

Services:

- Site multiproduct maintenance service (corrective and/or preventive)
- Task based maintenance service
- Mechanical and electrical systems
- Measurements and tests
- Skill Labor Service (Millwright, Steel & Pipe Fitter, Welder, Elec.)

Applications:

- Hot strip mill
- Cold strip mill
- Water treatment plant
- Electrical substation
- Steel Industry
- Energy and power plant
- Pulp & Paper



2. Maintenance Management Business

Maintenance Service Contract

WCE's competencies

Fantuzzi



Hot Strip Mill



Water Treatment Plant



2. Maintenance Management Business

Maintenance Service Contract



WCE's competencies

Customer: Sahaviriya Steel Industries
Location: Bangsaphan, Prachuapkhirikhan
Scope of work: Furnace
Milling line
Electrical distribution
Water treatment
Heavy vehicles
Capacity: Up to 1,500 M-D manpower



2. Maintenance Management Business

Maintenance Service Contract



WCE's competencies

Customer : TCRSS
Location : Bangsaphan, Prachuapkhirikhan
Scope of work : Pickling
Coupled Pickle and Tandem Cold Mill
Electrolytic Cleaning Line
Batch-type Annealing Furnances
Temper Mill
Recoiling Line

Capacity : 300 M-D Manpower



2. Maintenance Management Business

Maintenance Service Contract

| | |
|---------------|--|
| Customer | : SKIC |
| Location | : Banpong, Ratchaburi and Wangsala, Karnjanaburi |
| Scope of work | : Mechanical and Welder Maintenance |
| Capacity | : 200 M-D Manpower |



2. Maintenance Management Business

Industrial Maintenance & Service

Customer : Sahaviriya Steel Industries

Location : Bangsaphan

Plant : Hot Strip Mill

Furnace revamping, Piping work, Modification Hydraulic Down Coiler

Water treatment expansion, 6.6 KV Main Power Supply, Stand Mill

Scope: Plant Maintenance & Service



- Insulating panel furnace
- Steel mill
- Station Electrical power
- Water distribution & Treatment



2. Maintenance Management Business

Industrial Maintenance & Service

Customer: Cristalla Engineering Co.Ltd. : Nakornpathom
Project Name: Retrofit power plant : Steam turbine & generator installation / Total 9.9 MW.
Scope of Work: Installation Steam Turbine and Generator



Industrial Maintenance & Service

NDT Service PT – MT – UT



2. Maintenance Management Business

Machinery Repair & Overhaul

WCE's competencies

Capability:

☐ Mechanical Repair

- Hydraulic equipment
- Pump & valve
- Journal bearing
- Roll
- Mandrel
- Rotating balancing

☐ Electrical Repair

- Rewinding AC and DC Motor
- Dynamic balancing
- Repair electrical equipment
- Repair of electronic card



2. Maintenance Management Business

Machinery Repair & Overhaul

Mandrel, Gear Box, Spindle, Hydraulic Repair

Customer : SSI
Location : Bangsaphan, Prachuapkhirikhan



2. Maintenance Management Business

Machinery Repair & Overhaul

| | | |
|---------------|--|--|
| Customer | : David Brown | Mandrel, Gear Box, Spindle, Hydraulic Repair |
| Project Name | : Mill Drive Gear PHUBIA. | |
| Location | : Bangsaphan, Prachuapkhirikhan | |
| Scope of Work | : Pre disassembly, Gear Checks, Input and output shaft check, Gear box housing Bearing and seal retaining plates check, Sandblast and undercoat all external surfaces Reassembly, Testing by no load test, Painting blue color | |



Machinery Repair & Overhaul

Mandrel, Gear Box, Spindle, Hydraulic Repair

Customer : Blue Scope
Project Name : Repair wedge Shaft & Segment Mandrel
Location : Bangsaphan, Prachuapkhirkhan



2. Maintenance Management Business

Machinery Repair & Overhaul

Mandrel, Gear Box, Spindle, Hydraulic Repair

Customer : POSCO-Thainox
Project Name : MANDREL COMPLETE SET
Location : Onsite Service at POSCO-Thainox
Scope of Work : Overhaul Mandrel Comp. Set



Machinery Repair & Overhaul

Repair Driving Gear by Joint Welding

Customer : Pranburi Sugar Industry Co., Ltd.
Location : Pranburi , Prachuapkhirikhan



Customer : SCG Cement Thung Song Co., Ltd.
Location : Thung Song, Nakorn Sri Thammarat



Machinery Repair & Overhaul

Bolt Coupling Rotor Main Drive RM

Location: On site plant Hot Strip Mill SSI

Scope of Work : Overhaul Rotor Main Drive
Change New Coupling for Rotor

- Revamping main motor for steel mill up to 5,200 KW
- Rewinding motor up to 400 KW
- Dynamic balancing
- Repair of electronic card
- Calibration of temperature and pressure device



2. Maintenance Management Business

Machinery Repair & Overhaul

Customer: Siam Fibre-Cement (SCG.'s subsidiary)

Location: Thungsong, Nakhonsrithammarat

Scope of work: Welding & spray drive shaft

Repair rotary valve

Customer: Vanachai Panel Industry

Location: Wangsa, Suratthani

Scope of work: Rewind AC motor 37 KW 6 pole 380V 70A

Rewind AC motor 15 KW 4 pole 380V 31A

Repair impeller / Air blower pump /

Rotary valve (busch (bnm. Stenstrup))



2. Maintenance Management Business

Machinery Repair & Overhaul

WCE

Calibration & Lab.

■ Dimension : Vernier Caliper 0-300 mm*

Vernier Caliper 0 - 1,000 mm

Outside Micrometer 0 - 1,000 mm

Inside Micrometer 50 - 1,000 mm

Dial Gauge/Indicator 0 - 10 mm

■ Pressure : Pressure Transmitter 0-250 bar*

Pressure Gauge 0 - 400 bar

Pressure Switch 0- 400 bar

Pressure Transmitter 0 - 400 bar

■ Temperature : Thermocouple Type J 35 to 250c*

Resistance Temperature Detector (RTD)

Temperature Gauge

Temperature Switch

Optical Pyrometer

Range : 35 to 1300 °C

■ Hardness

■ Electrical : Temperature (23±2c) & Humidity (50±10%RH)

Digital Multi meter / Digital Clamp meter / Transmitter

Amp / Voltmeter / Decade Resistor / Decade Capacitor



3. Steel Structure and Fabrication Business

3.1 Steel Structure

3.2 Pressure Vessel and Pressure Part

WCE's competencies

Capability:

- Steel structure fabrication up to 100 tons
- Monthly capacity of 300 tons
- Experience with many materials
- Marine transport from deep sea port (3 km)

Applications:

- Stacks (up to 4 M. diameter)
- Ventilators fans
- Axial fans
- Booster fans



3. Steel Structure and Fabrication Business

Steel Structure

Customer: Danieli Far East Co., Ltd.
Location: Installation at Russia
Material: SS400 / SM 490
Size: Each group difference
Scope: Fabrication, machining and assembly
Weight : 218 Tons



3. Steel Structure and Fabrication Business

• Steel Structure

Customer : Toyo – Thai Engineering Co.,Ltd.

Project : CHP II

Work description : Fabrication and Installation piping of HRSG Block I (A Stamp and PP Stamp Certify)



3. Steel Structure and Fabrication Business

Steel Structure

Customer : Premier Metal [2003] Co., Ltd.

Project : Launching Truss

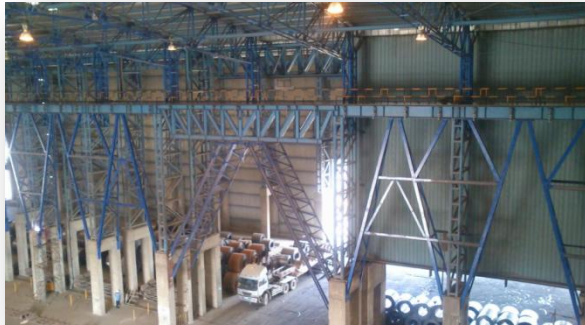


3. Steel Structure and Fabrication Business

Steel Structure

Customer : Sahaviriya Steel Industries PCL

Project : Indoor Coil Yard



3. Steel Structure and Fabrication Business

Steel Structure

Customer :
Project Name :

CBD Development Group Co., Ltd.
Steel Railway Line size 12 M.T.P. and 6.1.5 M.T.P.



3. Steel Structure and Fabrication Business

Steel Structure

Customer : Howden Australia

Project : Telfer Gold Mine Project



3. Steel Structure and Fabrication Business

Steel Structure

Customer: Howden Australia
Project Name: Chelopech Mine Project 1 unit; Total Weight 29 tons



Customer: Howden UK
Project Name: Newton Axial Fan
Scope of Work: Fabrication / Machine / Assembly / Sand Blast and Painting

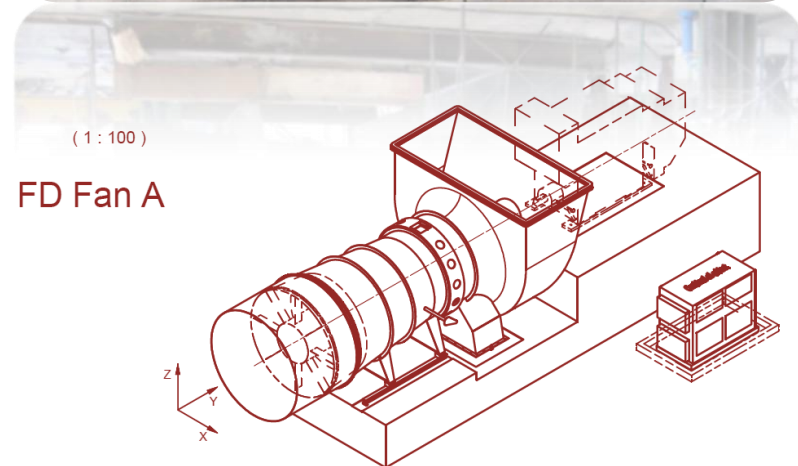


3. Steel Structure and Fabrication Business

Steel Structure

Customer : Howden UK Limited

Project : FD Fan-Axial static Talin Porject

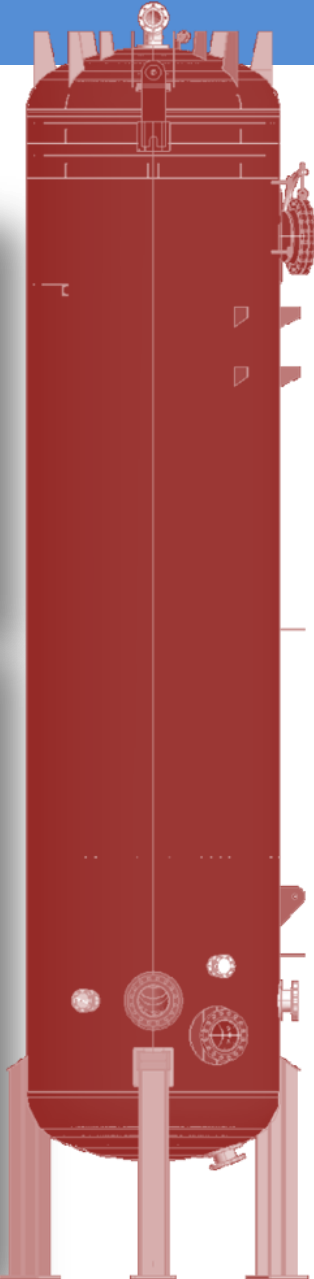


3. Steel Structure and Fabrication Business

Pressure Vessel & Pressure Part

Customer : Chaiyo Tripple A Co., LTD

Project : Tank for Fiberboard Project



3. Steel Structure and Fabrication Business

Pressure Vessel & Pressure Part

Customer: Rayong Engineering & Plant Service Co., Ltd.
Project Name: Silo for TUX-T Factory and Facilities



3. Steel Structure and Fabrication Business

Pressure Vessel & Pressure Part

Customer: Thai Cold Rolled Steel Sheet PLC.
Project Name: Inner Cover (Dia.1910)



3. Steel Structure and Fabrication Business

Pressure Vessel & Pressure Part

Customer : Parker Hannifin (Thailand) Co., LTD

Project : PPGJ gas generation module



3. Steel Structure and Fabrication Business

Pressure Vessel & Pressure Part

Customer: TES MULTIPHASE Co., Ltd.
Project Name: Air and Oil Separator tanks.



3. Steel Structure and Fabrication Business

Pressure Vessel & Pressure Part

Customer: TES MULTIPHASE Co., Ltd.
Project Name: Methanol Storage tank



3. Steel Structure and Fabrication Business

Pressure Vessel & Pressure Part

Customer: SCG Chemicals Co., Ltd.
Project Name: SCG.CHEM SUS304 CHEMICAL STORAGE TANK



Business units

4. Engineering Procurement and Construction Business (EPC)

4.1 Steel Industries

4.2 Warehouse & Handling System

4.3 Environmental

4.4 Energy

4. Engineering Procurement and Construction Business (EPC)



WCE's competencies

Services:

- Project management
- Construction / erection
- Engineering, procurement and construction (EPC)
- Process piping and pipe line fabrication and installation
- Electrical and control system installation
- Civil construction

Applications:

- Steel mill
- Petrochemical factory
- Refinery and gas plant
- Paper mill
- Power plant



4. Engineering Procurement and Construction Business (EPC)



Steel Industries

Customer: Thainox Stainless Plc.

Location: Rayong

Quantity: 1.Piping Fabrication and Installation Work 30,000 Dia-Inch
2.Equipment Erection 650 Ton



4. Engineering Procurement and Construction Business (EPC)



Steel Industries

Customer: Sahaviriya Steel Industries
Location: Bangsaphan
Project: PO. Line and Acid Regeneration Plant
Push-Pull Pickling Line 750,000 Tons/Y
Acid Regeneration Plant 4,300 Lt/h
Scope: Erection work



4. Engineering Procurement and Construction Business (EPC)



Steel Industries

Customer: Sahaviriya Steel Industries

Location: Bangsaphan, Prachuapkhirikhan

Quantity: Mechanical Erection

Total Weight: 750 Tons

Scope : Mech.Part supply and Erection work
Skin Pass Line



4. Engineering Procurement and Construction Business (EPC)

Warehouse & Handling System

Biomass Belt Conveyor TS4

Customer: SCG Cement Co., Ltd.

Location: Nakornsritamarach

Project: Design, fabricate and erection
foundation, steel structure for
conveyor, mechanical erection
and commissioning, electrical
and wiring erection

Total Weight: 105 Tons

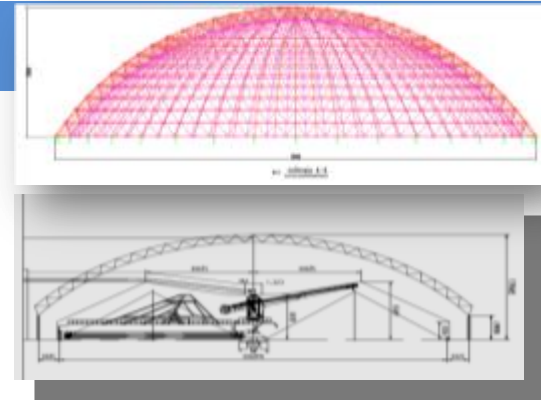


4. Engineering Procurement and Construction Business (EPC)



Warehouse & Handling System

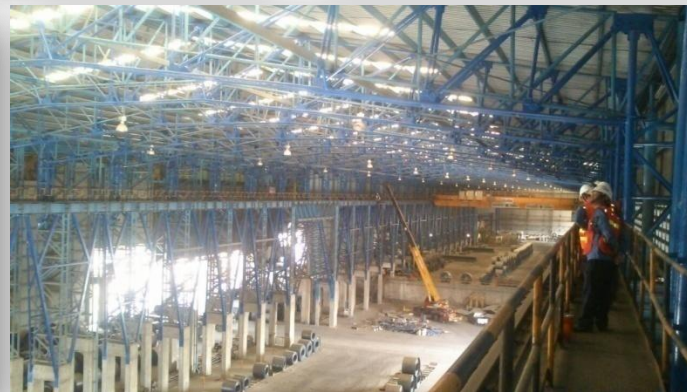
Customer: Siam Kraft Industry Co., Ltd.
Location: Ratchaburi
Project: SKIC Banpong Coal Warehouse and Coal Handling System
Amount: 180MB



4. Engineering Procurement and Construction Business (EPC)

Warehouse & Handling System

Indoor Warehouse - SSI



4. Engineering Procurement and Construction Business (EPC)

Warehouse & Handling System

Distribution Center Building and Installation System

Customer : SCG Logistic Management Co., Ltd.

Location : Konkaen



4. Engineering Procurement and Construction Business (EPC)

Environmental

SKIC ETP1&2

Customer: Siam Kraft Industry Co., Ltd.

Location: Kanchanaburi

Project: Turn key project for clarifier 2 sets



4. Engineering Procurement and Construction Business (EPC)

Environmental

Double A ETP2A Project

Customer: Double A

Location: Prachenburi

Project: Effluent treatment plant 2A

Supply and Install Pump, Piping and Electrical System



4. Engineering Procurement and Construction Business (EPC)

Environmental

Momentive Solvent Base Project

Customer: Momentive Specialty Chemicals

Location: Chonburee and Samutsakorn

Project: Machine Erection and Relocation Solvent Base Unit Project and Electrical Work for Solvent Base Package, Power Distribution



4. Engineering Procurement and Construction Business (EPC)

Energy

Customer : Sime Darby LCP Power Co.Ltd. : Rayong
Project Name: Process steam pipeline project for STB textile
Scope of work: Design ,Fabricate and Erection of Piping
Total Quantity 6,000 in-m.



Customer Reference

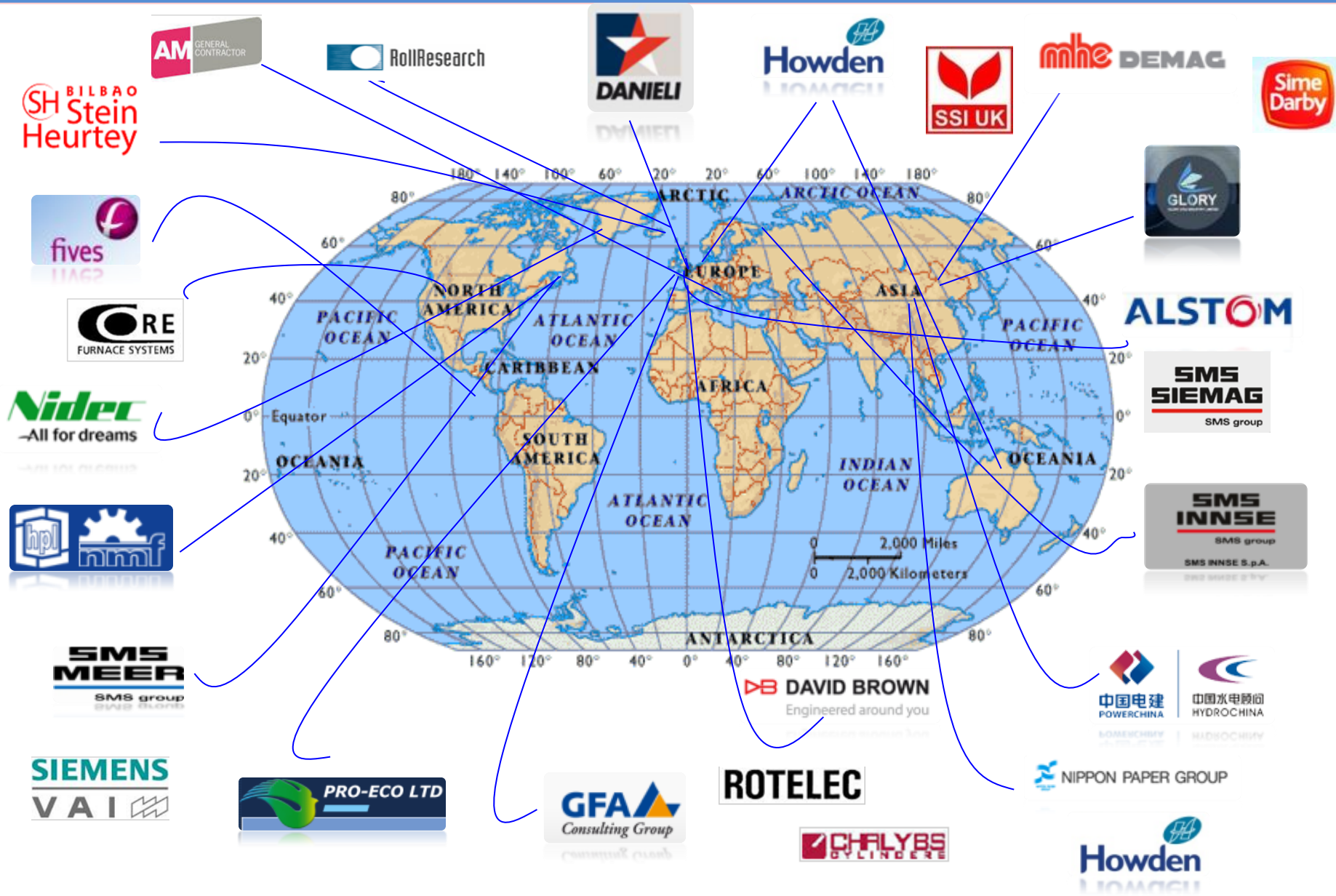
Customer Reference

List of Local customers



Customer Reference

List of Export customers





แผนที่ โรงงานบางสะพาน
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The End

