

General Presentation



PHB Weserhütte History

Albrecht Emil Kuntze
and Christian Friedrich
Pottharst established
Ironworks
Weserhütte AG in
Bad Oeynhausen

WESERHÜTTE 

1844



Julius Pohl
Pohl AG
in Siegen



Adolf Bleichert
Bleichert AG
in Leipzig



1874



Ernest Heckel
Heckel GmbH
in Saarbrücken



1905

In 1962 Pohl,
Heckel and Bleichert
merged and
established in West
Germany a company
called PHB AG

PHB
FORDERTECHNIK

1962

In 1968 PHB and
the Spanish
company Belcar
established in
Gijón a subsidiary
called PHB Belcar
S.A.

1968

In 1975 Weserhütte
AG established in
Madrid a subsidiary
called Weserhütte
S.A.

1975

In 1980 PHB and
Weserhütte AG
merged and
established in
Cologne, Germany a
company called PHB
Weserhütte AG

PWH
PHB Weserhütte
AG

1980

In Spain the
subsidiaries of PHB
and Weserhütte AG
also merged
establishing PHB
Weserhütte S.A. in
Gijón

1987

On the same year
the Owners of the
Spanish subsidiary
PHB Weserhütte
S.A., purchased the
shares of the
German company,
keeping the name,
the "know How"
and the trade mark

In 1987 the PHB
Weserhütte AG
filed for
bankruptcy, being
acquired by O&K,
and two years later
by Krupp

1996

In 1996 TSK Group
purchased PHB
Weserhütte, S.A.

PHB
WESERHÜTTE

TSK Group Structure



Material
Handling Installations



Power
and Industrial Plants

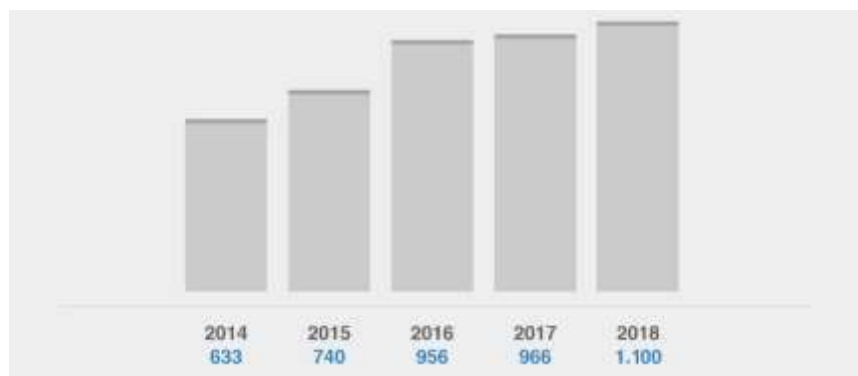


TSK FLAGSOL

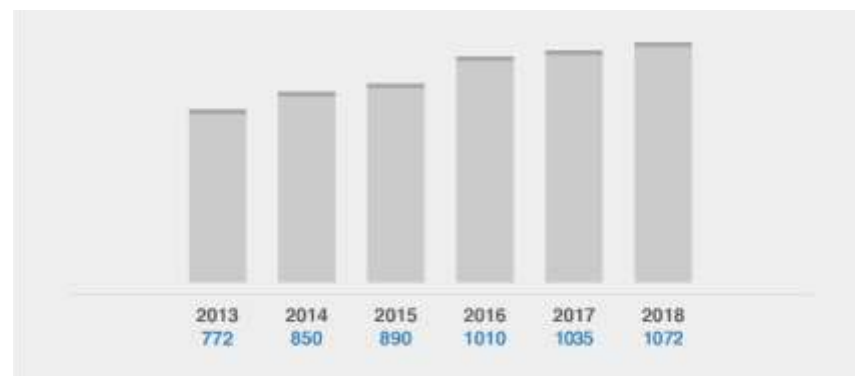
Electrical
Infrastructures



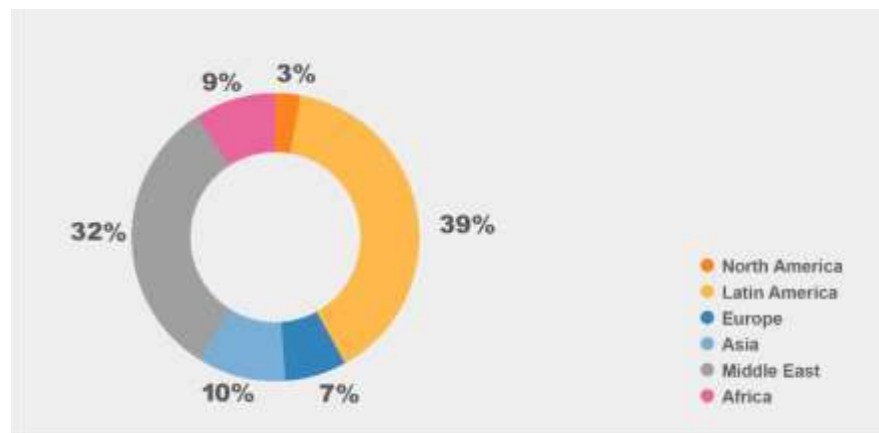
Turnover (million euros)



Number of Employees



Sales by Markets



Main List 2010 - 2020

CLIENT	PROJECT NAME	COUNTRY	EPC SUPPLIER	YEAR
ERSHIP	Cartagena Port Terminal	Spain	PHB	2020
FUJAIRAH PORT	Dibba Bulk Handling Terminal	UAE	PHB	2020
CRUZ AZUL	Scraper Reclaimer	MEXICO	CRUZ AZUL	2020
JACOBS	Jorf Lasfar DAP Handling system	MOROCCO	EPC	2019
GE POWER	Complete Coal, Slag and Gypsum Handling System for new Thermal Power plant	POLAND	PHB	2019
GALIGRAIN, Grupo Nogar	Agri-food Materials Handling Terminal	SPAIN	PHB	2019
TERMINALGRAINS.AG SEC	Agri-food Materials Ecological Hopper	CANADA	FWS	2019
EIFFAGE	Solid Bulk Terminal at Alicante Port Dock 17	SPAIN	EIFFAGE	2019
DUQM REFINERY	Coke and Sulfur Handling System	OMAN	PETROFAC	2018
CRUZ AZUL	Circular Stockyard	MEXICO	CRUZ AZUL	2018
P&H	Fraser Grain Terminal	CANADA	FWS	2018
TATA STEEL	Morfa Coke Ovens Bucket Wheel Stacker Reclaimers	UK	PHB	2018
ARAMCO	Sulphur Pellets Handling System	Saudi Arabia	KHUSHEIM	2018
ARCELOR MITTAL	Blending-Bed-Reclaimer	Germany	PHB	2017

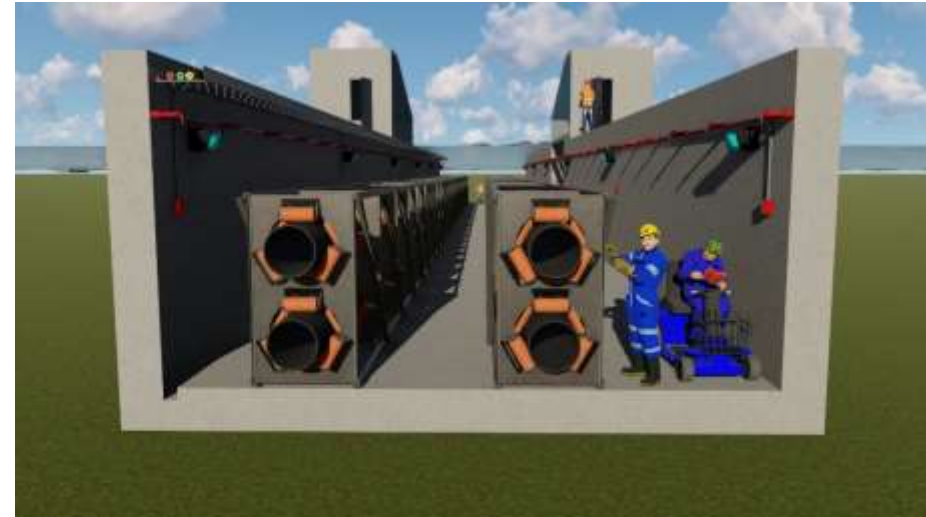
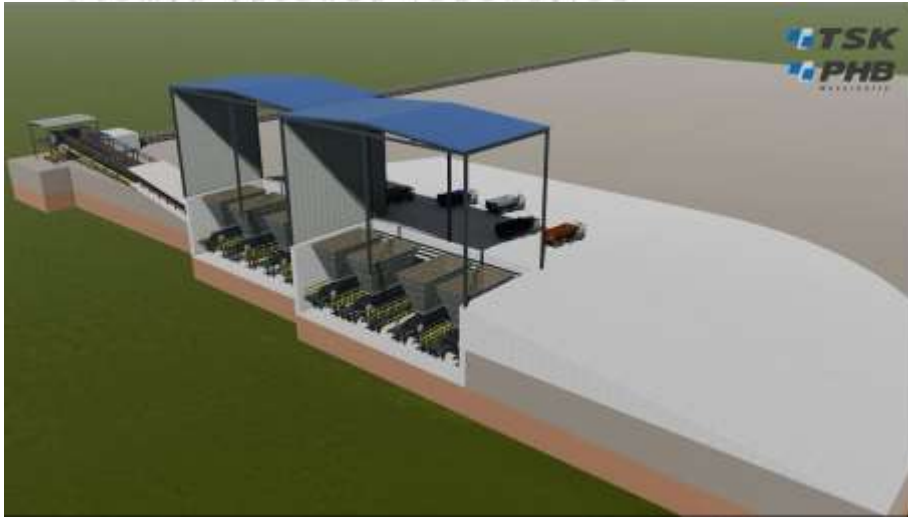
Main List 2010 - 2020

CLIENT	PROJECT NAME	COUNTRY	EPC SUPPLIER	YEAR
NIS	Pancevo Refinery Coke Handling System	Serbia	CB&I	2017
Durrah Advanced Development Co.	Durrah Sugar Refinery Yanbu	Saudi Arabia	PHB	2017
MGT Power	Teesside Power Plant - Biomass	U.K.	Técnicas Reunidas – Samsung C&T	2016
Kilpilahti Power Plant Ltd.	Kilpilahti TPP Solids Fuel Handling System	Finland	Técnicas Reunidas	2016
O.C.P.	Sulphur Handling system - Rehabilitation of Installations - Soufre JPH (EPC)	Morocco	PHB	2016
GRUPA LOTOS	Semiportal Scraper Reclaimer for Coke Gdansk Refinery	Poland	KT (MAIRE TECNIMONT)	2016
ARCELOR MITTAL	Parque de Aboño Coal Handling System	Spain	PHB	2015
PEMEX	Miguel Hidalgo Refinery Coke Handling System	Mexico	ICA-FLUOR	2015
EXXON MOBIL	Antwerp Refinery Coke Handling system	Belgium	FLUOR EUROPE	2015
JIPCO & ARAB POTASH	Aqaba Port Terminal Sulphur and Fertilizer	Jordan	JV PHB/Tecnicas Reunidas	2015
MATSA - TRAFIGURA	Huelva Port Copper Concentrate	Spain	PHB	2014
JGCS Consortium	Nghi Son Refinery & Petrochemical Complex	Vietnam	GS E&C (Korea)	2014

Main List 2010 - 2020

CLIENT	PROJECT NAME	COUNTRY	EPC SUPPLIER	YEAR
DP WORLP	Sokhna Port Eco-Hoppers for Iron Ore	Egypt	PHB	2014
VOESTALPINE	Corpus Christi HBI Facility	USA	CH2M-HILL (USA)	2014
ARAMCO	Jizan Refinery Sulphur Handling System	Saudi Arabia	HANWHA (Korea)	2013
TAKREER	Takreer Refinery Coke Handling System	Abu Dhabi	SAMSUNG (Korea)	2013
SAFCO	Safco V Urea Handling System	Saudi Arabia	SAIPEM	2012
ONE	Jorf Lasfar Power Plant Coal Handling system	Morocco	PHB	2012
O.C.P.	El Halassa Phosphate Handling system	Morocco	SNC Lavalin (Canada)	2012
ENDESA	Litoral Power Plant Coal Handling System	Spain	PHB	2012
MA'ADEN	Bauxite Mine	Saudi Arabia	Intecsa (Spain)	2012
ENERJISA	Tufanbeyli Power Plant Coal Handling system	Turkey	SK Engineering (Korea)	2011
GASCO	Ruwais Port Sulphur Handling system	Abu Dhabi	TECHINT (Italy)	2011
MAROC PHOSPHORE	Phosphate Handling system	Morocco	PHB	2011

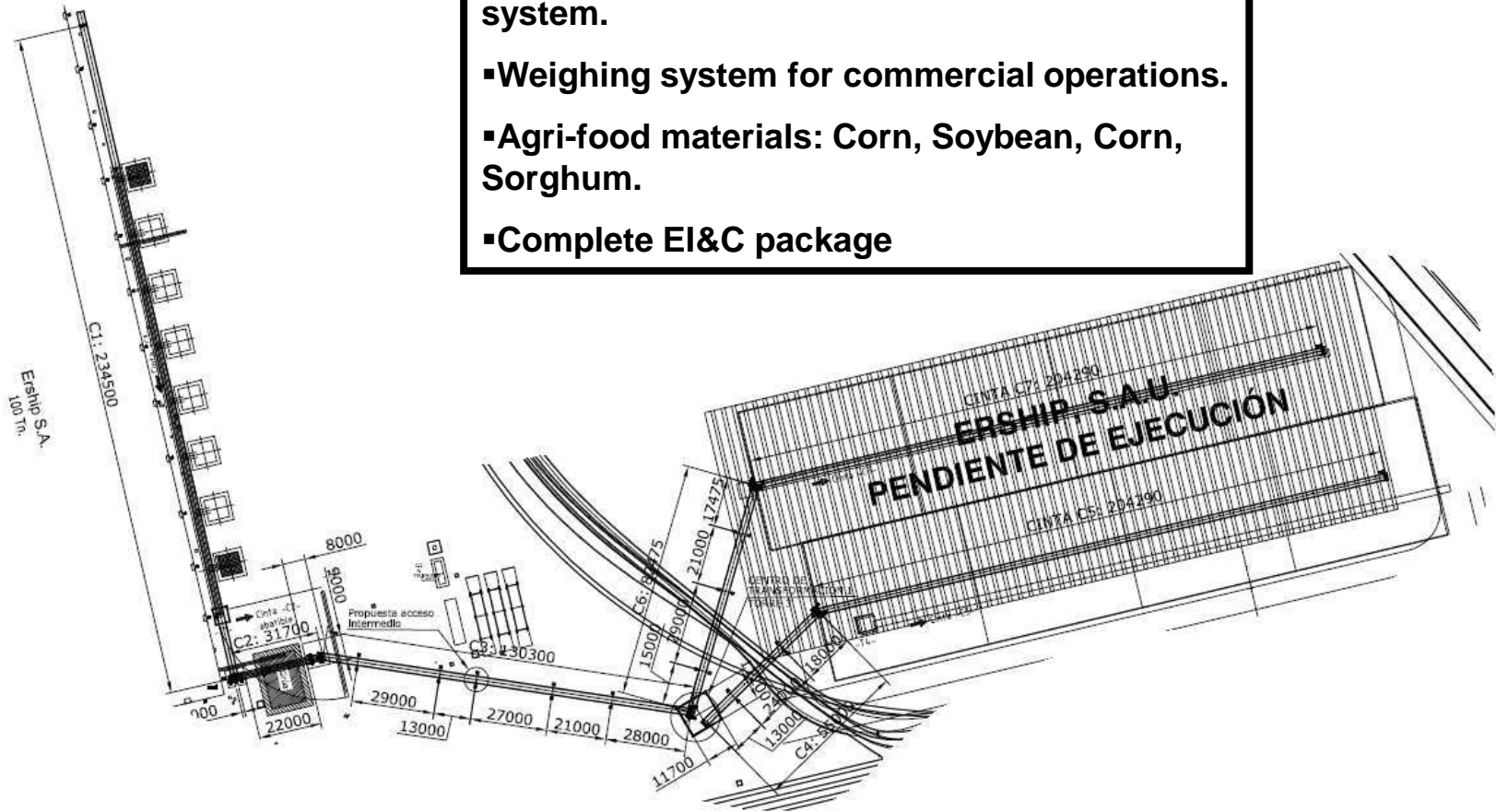




Dibba Port- UAE

Complete EPC: Truckunloading, Pipe conveyor, Shiploader – 4,400 tph

- Capacity up to 2.000 tph
- Ecological Hoppers and transport system to 3 bulk warehouses including stacking system.
- Weighing system for commercial operations.
- Agri-food materials: Corn, Soybean, Corn, Sorghum.
- Complete EI&C package

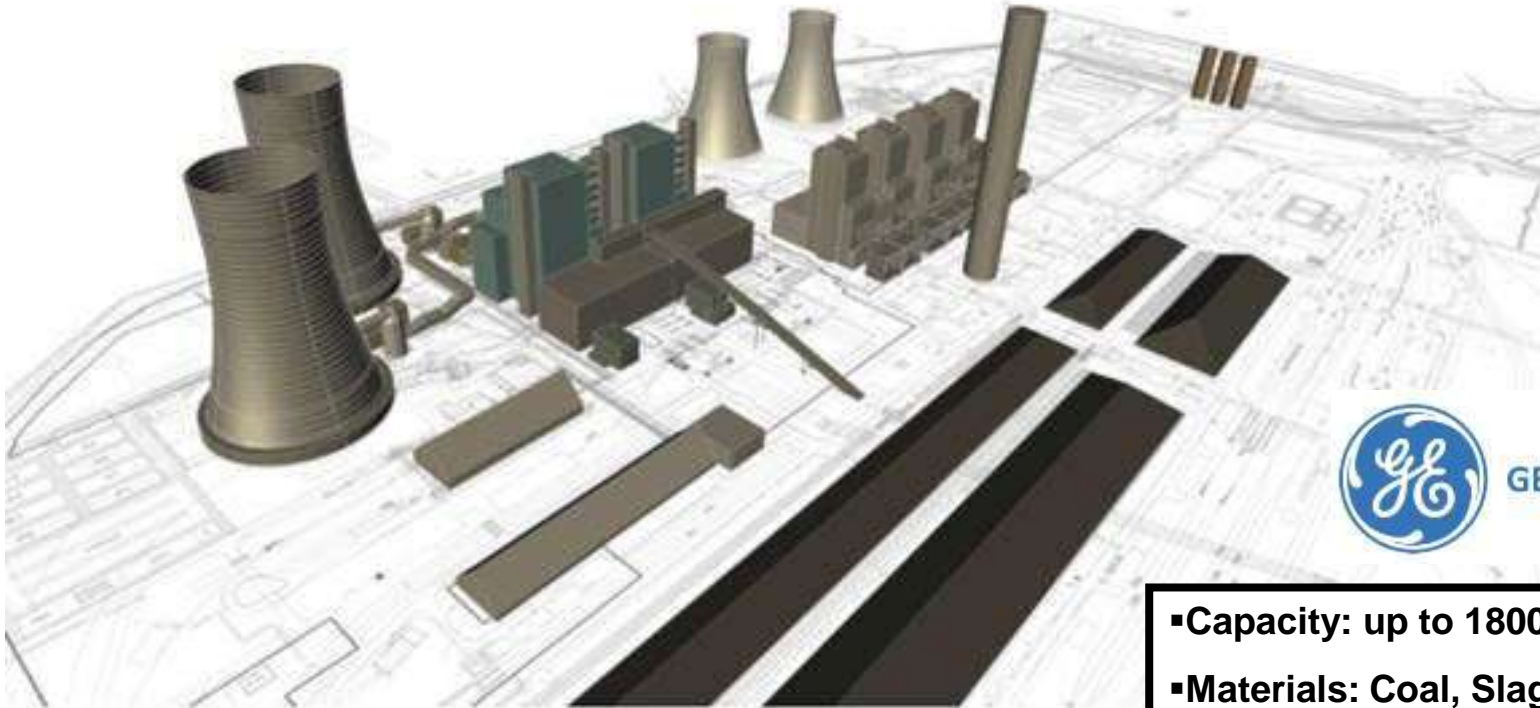


ERSHIP- Cartagena, Spain
Agri-food Materials Handling Terminal, EPC



- Capacity up to 1500 tph
- Ecological Hopper and transport system to bulk warehouse including stacking system.
- Weighing system for commercial operations.
- Agri-food materials: Corn, Wheat, Barley, Soybean, Wheat bran, Flour, etc.
- Complete EI&C package

GALIGRAIN, Grupo Nogar - Spain
Agri-food Materials Handling Terminal, EPC



- Capacity: up to 1800 tph
- Materials: Coal, Slag and Gypsum.
- Location: Ostroleka, Poland

Ostroleka Power Plant - Poland
Complete Coal, Slag & Gypsum Handling system for new Thermal Power Plant

Latest Projects



- Capacity up to 1200 tph
- Fixed Ecological Hopper for self unloader vessel
- Agri-food materials: Soy meal, Corn, Wheat, Barley, Soybean, Wheat bran, Flour, etc.

FWS Group- Quebec - Canada
Agri-food Materials Ecological Hopper - Design, Supply and Supervision of Erection and Start-up



- Capacity: up to 2000 tph
- Materials: Gypsum, Clinker, Limestone and Dolomie.
- Location: Alicante Port, Spain



ALICANTE – Eiffage
Truckunloading, Conveyors, Stackers, Reclaimer and Shiploader
Design, Supply, Erection and Start-up

Latest Projects

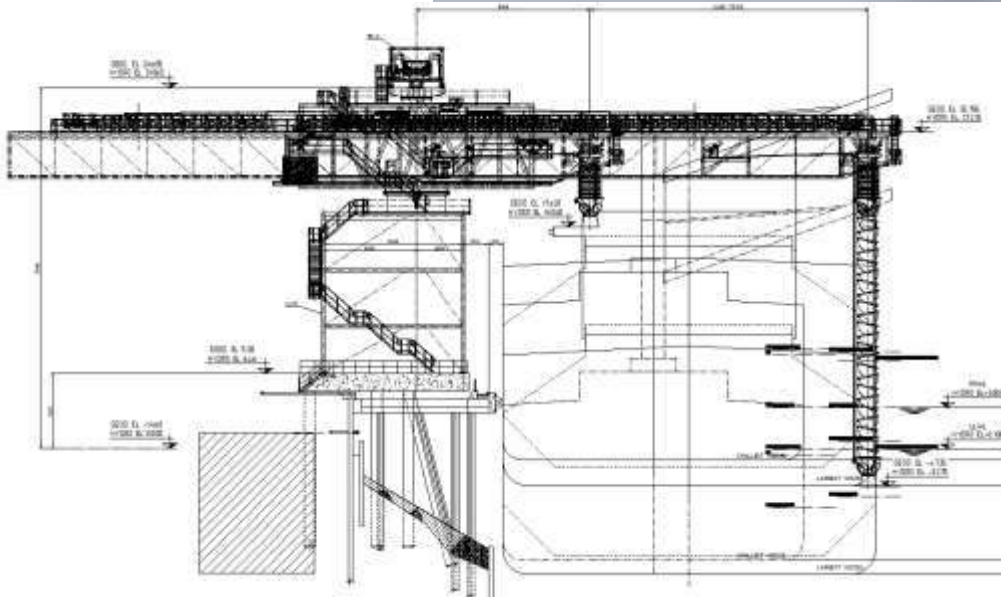
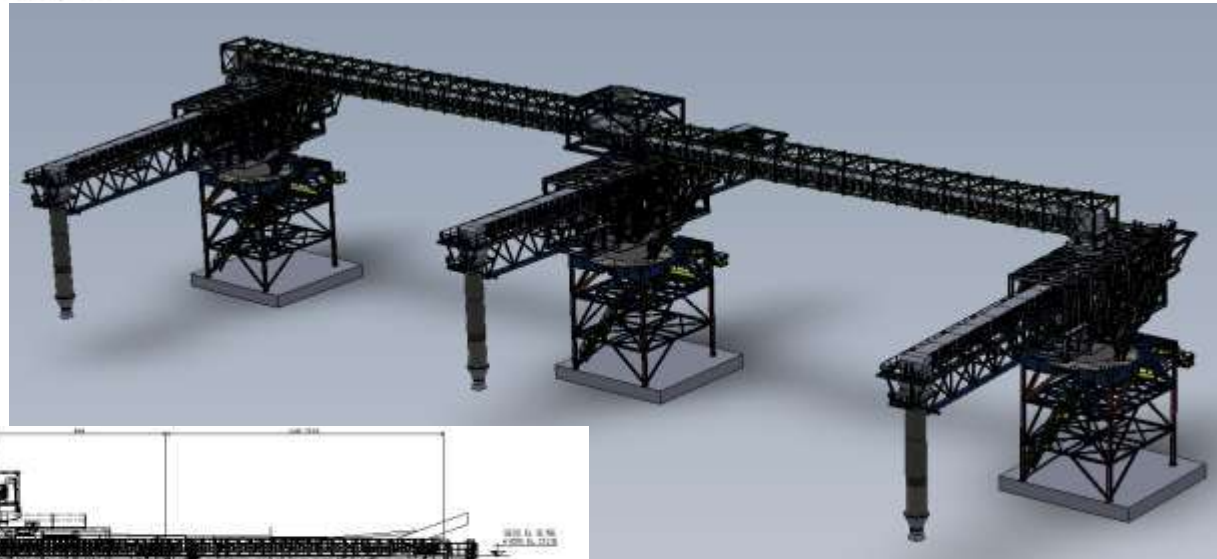


Petrofac 



- Capacity: up to 525 tph
- Materials: Coke and sulfur
- Location: Duqm Refinery, Oman

Materials Handling System – Petrofac – Oman
Design, Supply and Supervision of Erection and Start-up



- Capacity: up to 2000 tph
- Boom length: 39 m
- Materials: Wheat, canola, barley, malt, peas, soya beans, lentils, soya pellets, canola meal pellets.
- Location: Fraser Surrey Docks, Vancouver, Canada

FRASER GRAIN TERMINAL – P&H – Canada

Design, supply, preassembly, transportation, supervision of erection and commissioning of a three tower type shuttling shiploader.

Latest Projects

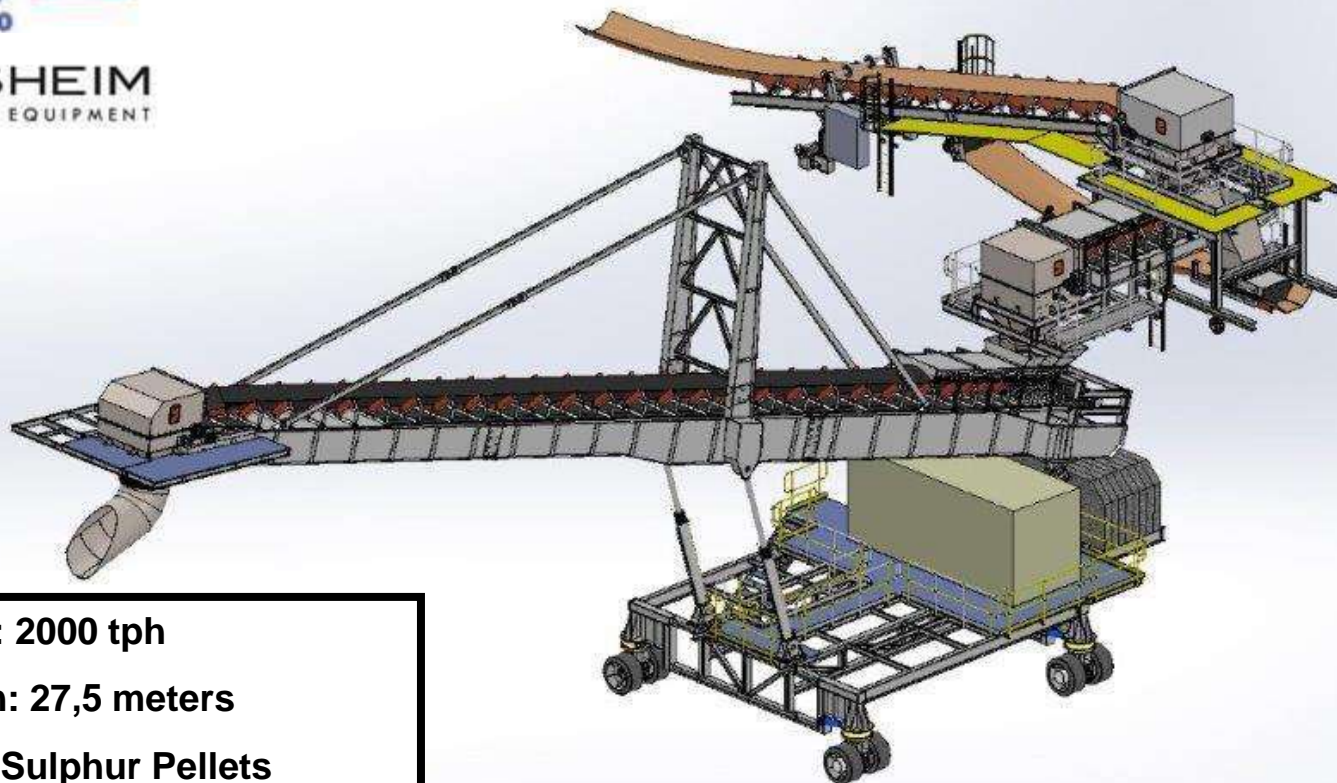


- Capacity: up to 3200 tph
- Materials: Coal and coke
- Location: Port Talbot, Wales



TATA STEEL

PORT TALBOT STEEL MAKING PLANT – TATA – UK
Design, supply and erection of 2 Bucket Wheel Stacker Reclaimers



- Capacity: 2000 tph
- Rail Span: 27,5 meters
- Material: Sulphur Pellets
- Ships up to 45.000 DWT

BERRI GAS PLANT – SAUDI ARABIA Sulphur Pellets Handling System

Latest Projects



**TEESSIDE POWER PLANT – U.K.
BIOMASS HANDLING SYSTEM**

voestalpine
ONE STEP AHEAD.

CH2MHILL

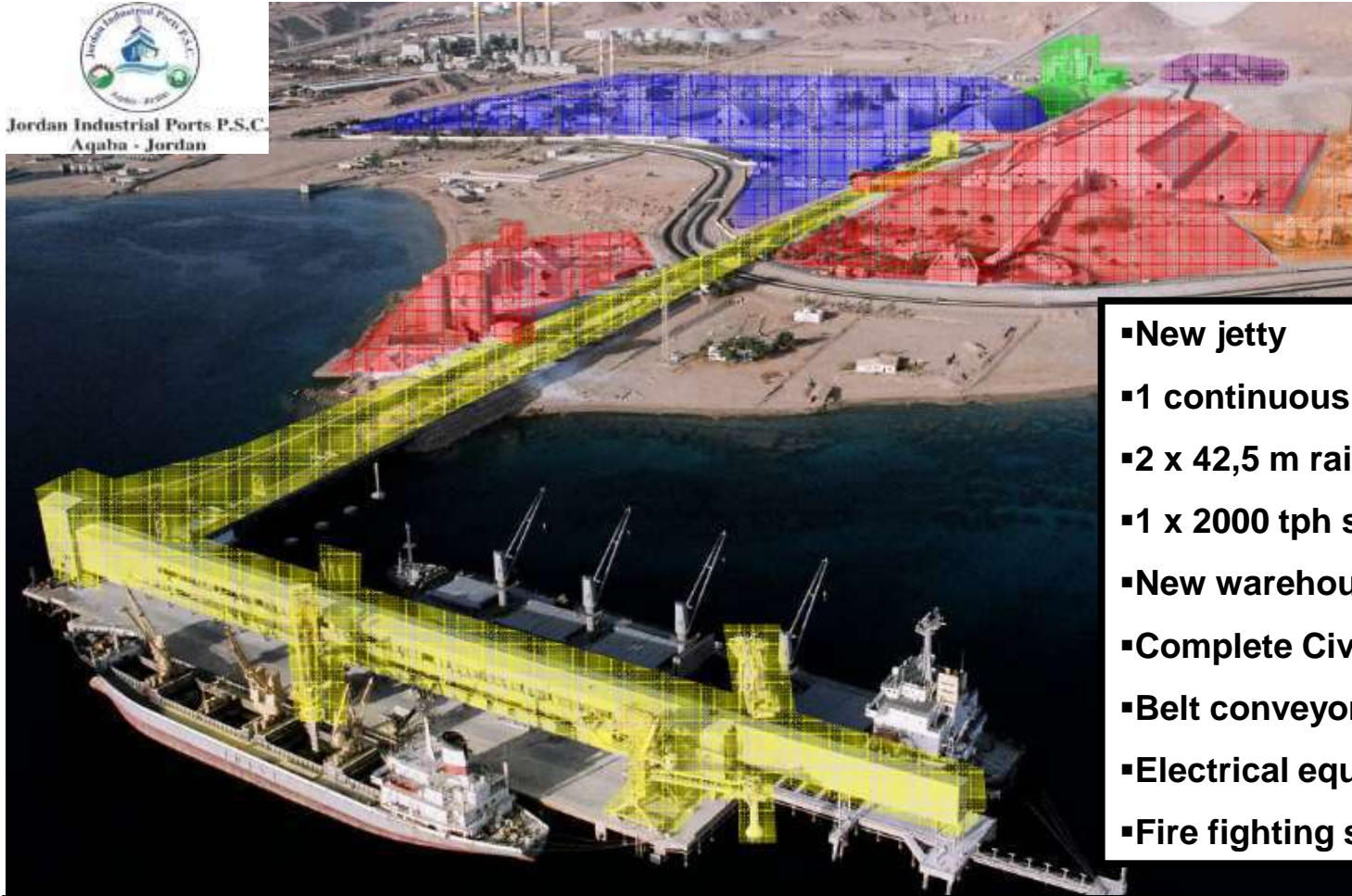


Voest Alpine Texas LLC – HBI Facility

Complete Iron Ore & HBI handling facilities for Direct Reduction Plant



Jordan Industrial Ports P.S.C.
Aqaba - Jordan



- New jetty
- 1 continuous shipunloader
- 2 x 42,5 m rail span shiploaders
- 1 x 2000 tph slewing shiploader
- New warehouse
- Complete Civil Works
- Belt conveyor refurbishment
- Electrical equipment
- Fire fighting system

Aqaba Industrial Terminal

Complete EPC - Sulphur, DAP/MAP, Potash

Latest Projects

- New jetty
- 1 continuous shipunloader
- 2 x 42,5 m rail span shiploaders
- 1 x 2000 tph slewing shiploader
- New warehouse
- Complete Civil Works
- Belt conveyor refurbishment
- Electrical equipment
- Fire fighting system

PHOTO HAGOP



Jordan Industrial Ports P.S.C.
Aqaba - Jordan

Aqaba Industrial Terminal
Complete EPC - Sulphur, DAP/MAP, Potash

Potash References

- New jetty
- 1 continuous shipunloader
- 2 x 42,5 m rail span shiploaders
- 1 x 2000 tph slewing shiploader
- New warehouse
- Complete Civil Works
- Belt conveyor refurbishment
- Electrical equipment
- Fire fighting system



Jordan Industrial Ports P.S.C.
Aqaba - Jordan

Aqaba Industrial Terminal

Complete EPC - Sulphur, DAP/MAP, Potash



Jordan Industrial Ports P.S.C.
Aqaba - Jordan



AQABA - JORDAN

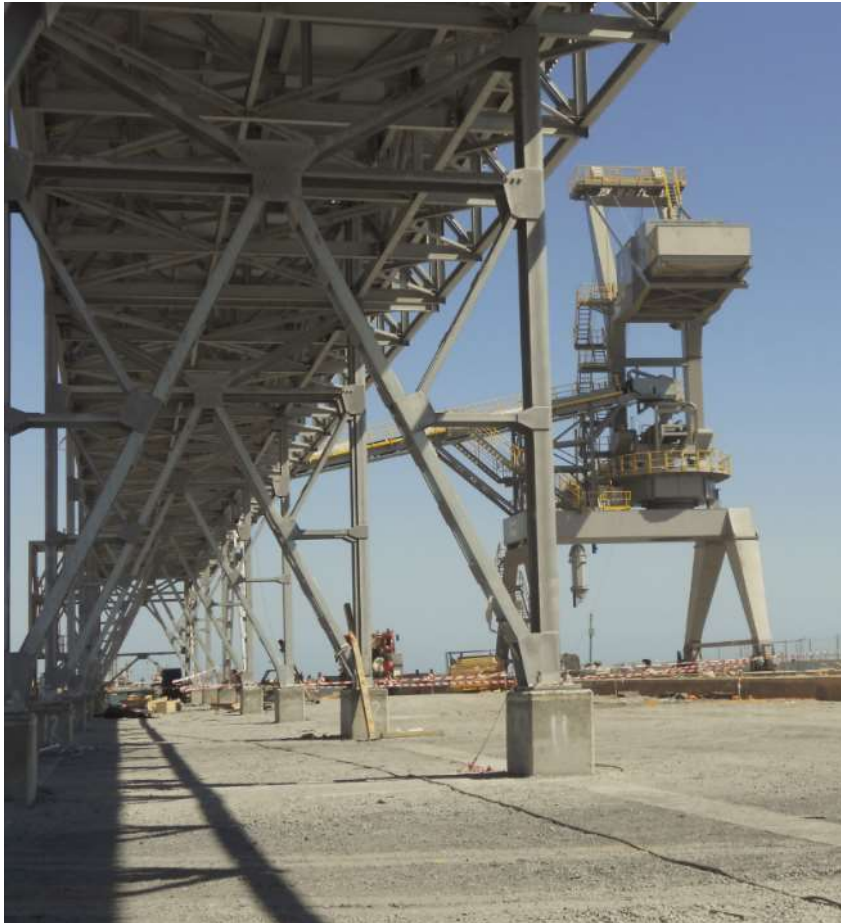
- New Fertilizer Shiploaders 2000 tph, 42,5 m rail span

FLUOR **ExxonMobil**



- Coke Crushing Station
- Barge Loader
- Conveying System
- Full Electrical & Control Package

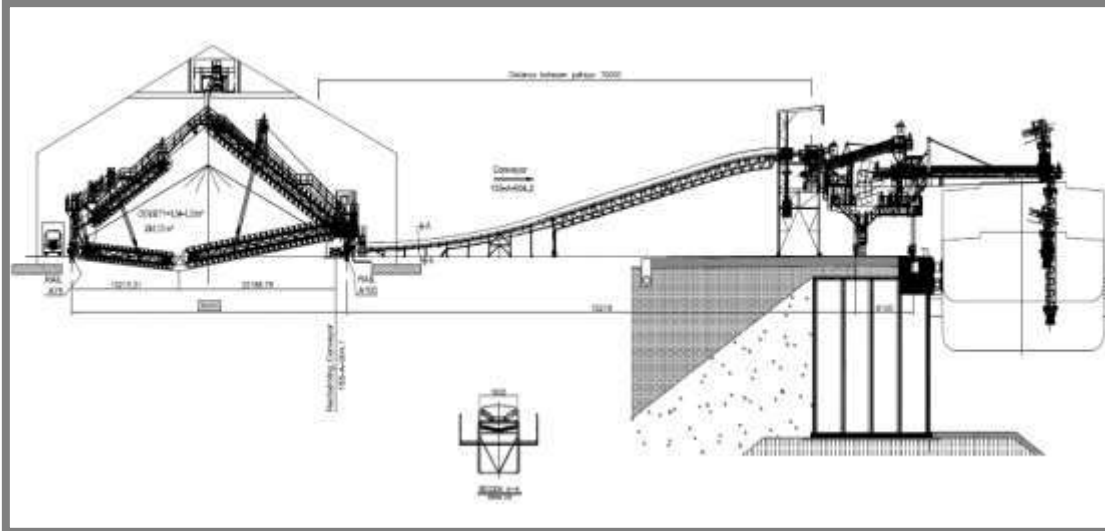
**ANTWERP NORTHWEST EUROPE - RESID UPGRADE PROJECT
COKE HANDLING SYSTEM**



MATSA – TRAFIGURA / MINING GROUP (HUELVA PORT - SPAIN)

- **Concentrate Port Facilities – Cu,Pb,Zn**
- **(Shiploader – Jetty Gallery – Hopper – Connection Belt Conveyors,....)**

Latest Projects



JGCS - NSRP - NGHI SON REFINERY & PETROCHEMICAL COMPLEX (VIETNAM)

- Longitudinal Stockyard, Conveying System and Shiploading facilities



eazzsteel
حديد عز



- 3 ECOLOGICAL HOPPERS – SOKHNA PORT (EGYPT) / DP WORLD**
- **BULK UNLOADING TERMINAL (Iron Ore/ Pellets/Fines/Concentrates)**

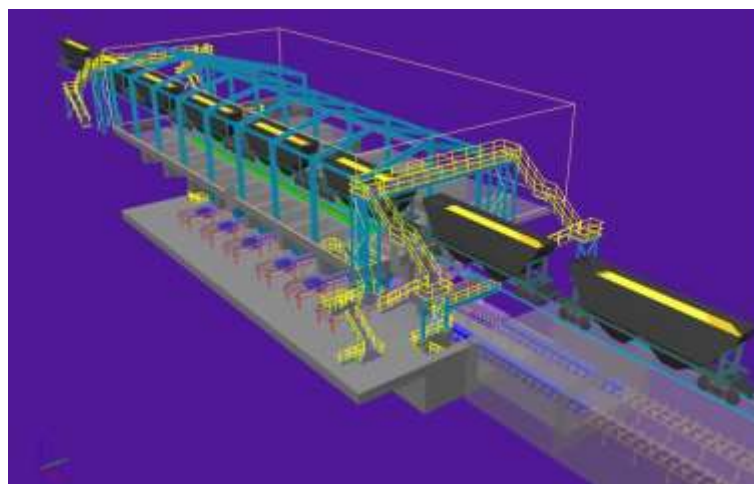
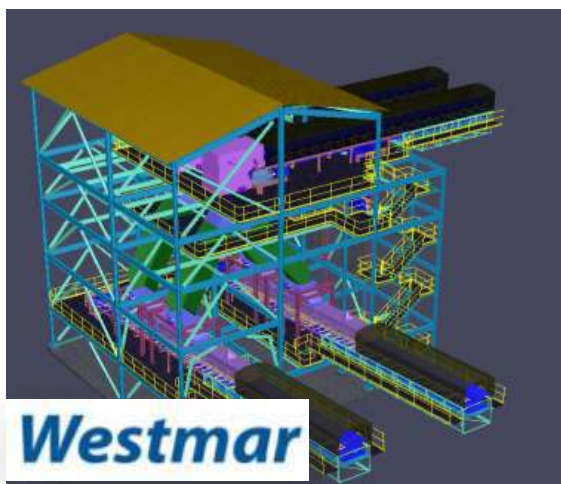
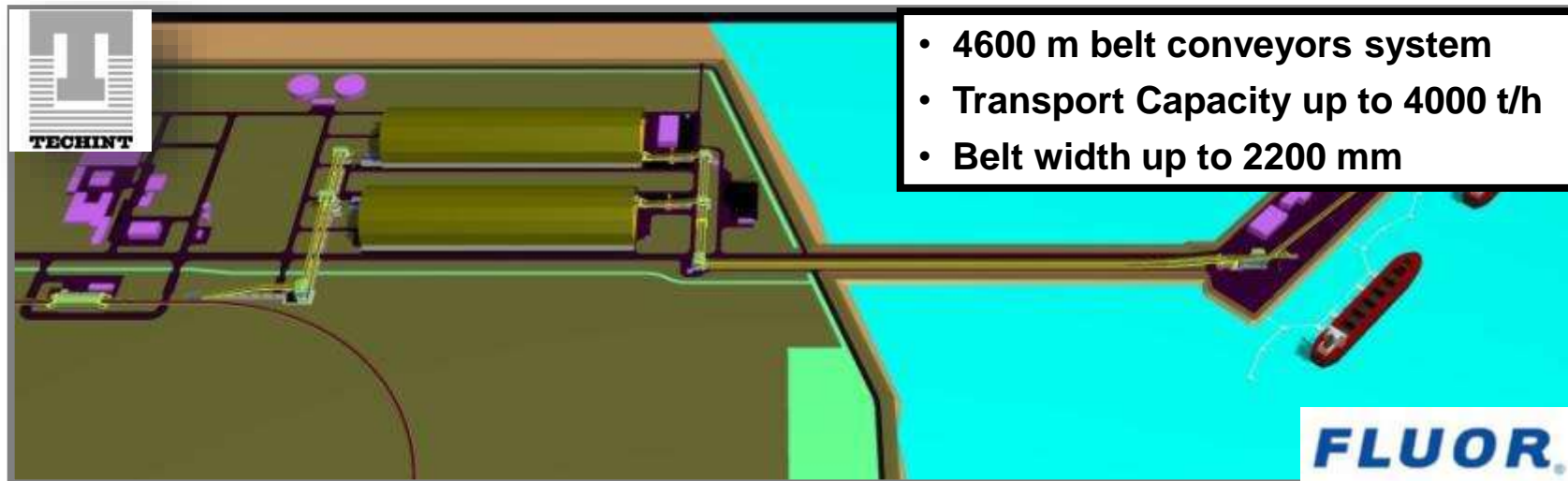
**Westmar
FLUOR**



Continuous Train Unloading Installation 4000 t/h

RUWAIS TERMINAL – Abu Dhabi

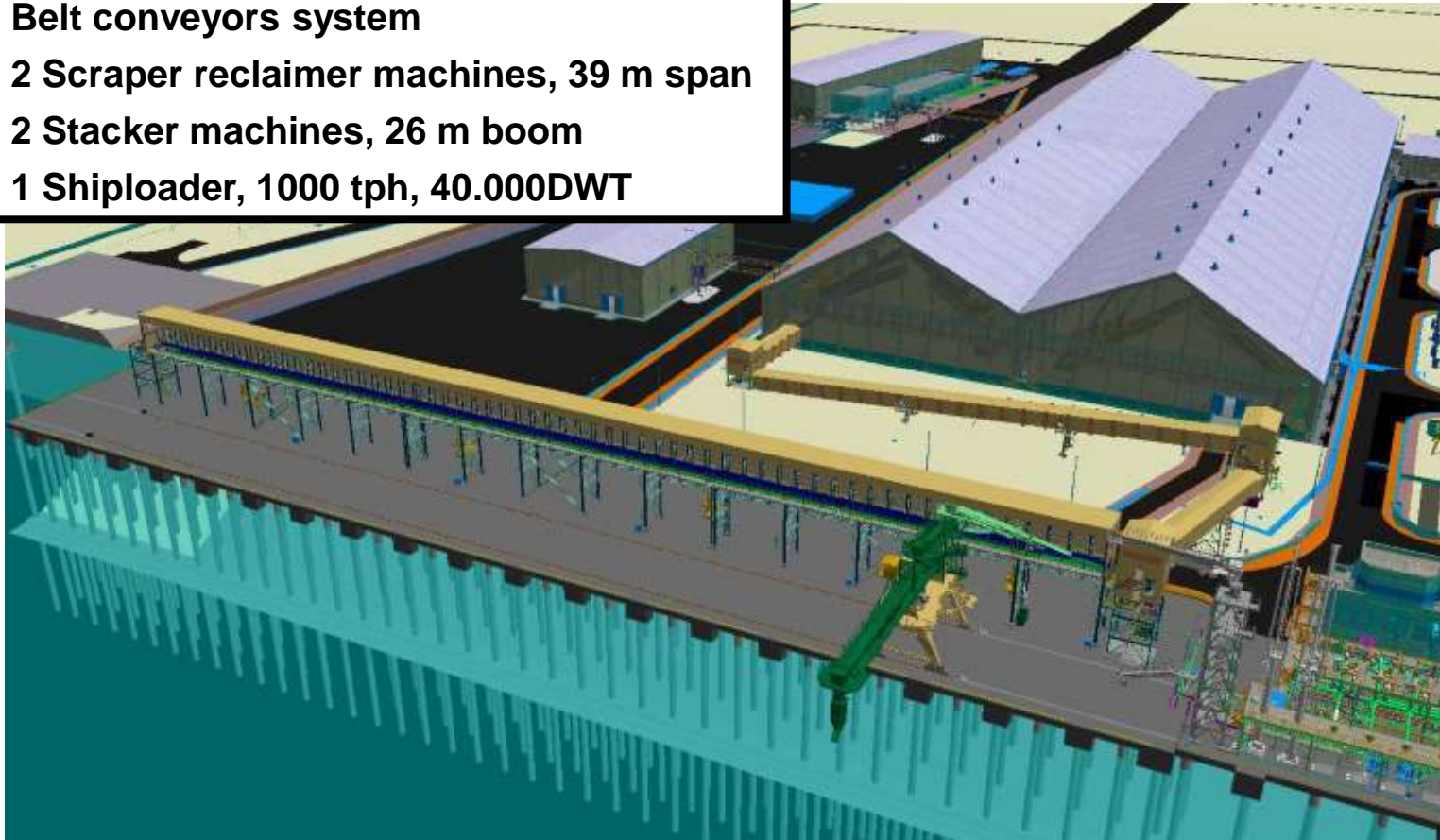
• Techint E&C - Gasco



RUWAIS TERMINAL – Abu Dhabi

- Techint E&C - Gasco

- Belt conveyors system
- 2 Scraper reclaimer machines, 39 m span
- 2 Stacker machines, 26 m boom
- 1 Shiploader, 1000 tph, 40.000DWT



JAZAN REFINERY – Saudi Arabia - ARAMCO HANWHA E&C

- New Sulphur Handling System, 1000 t/h

endesa



- 2500 m belt conveyors
- VP1 Reclaimer 50 m rail span
- Port Facility (Shiploader)
- EPC Contract

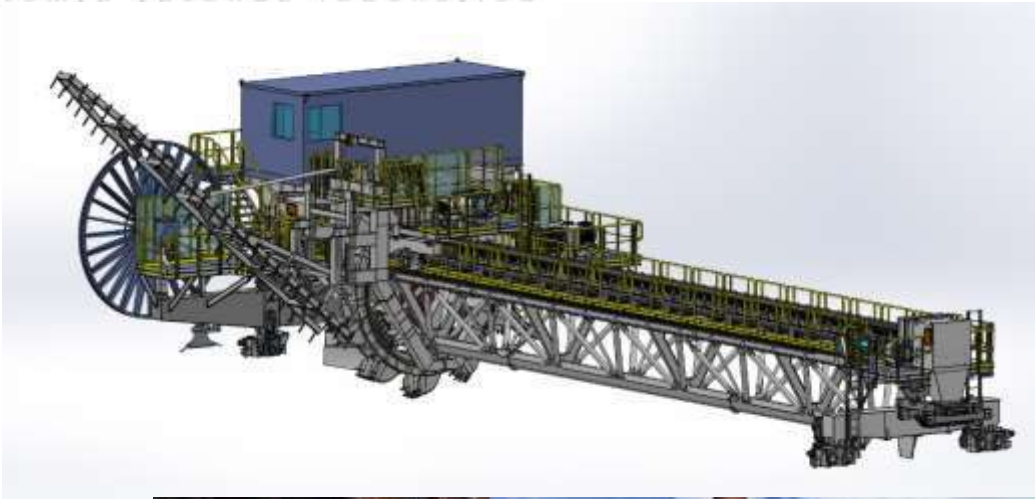
ENDESA LITORAL– Spain

- New Coal Yard and Shiploading facility



Antofagasta - Chile

- New Copper Concentrate belt conveyors system, **1600 t/h**



- Capacity = 800 tph
- Rail Span = 27,5 meters
- Transfer Car
- Iron Ore Handling



ARCELOR MITTAL BREMEN - GERMANY
BRIDGE TYPE BUCKET WHEEL RECLAIMER

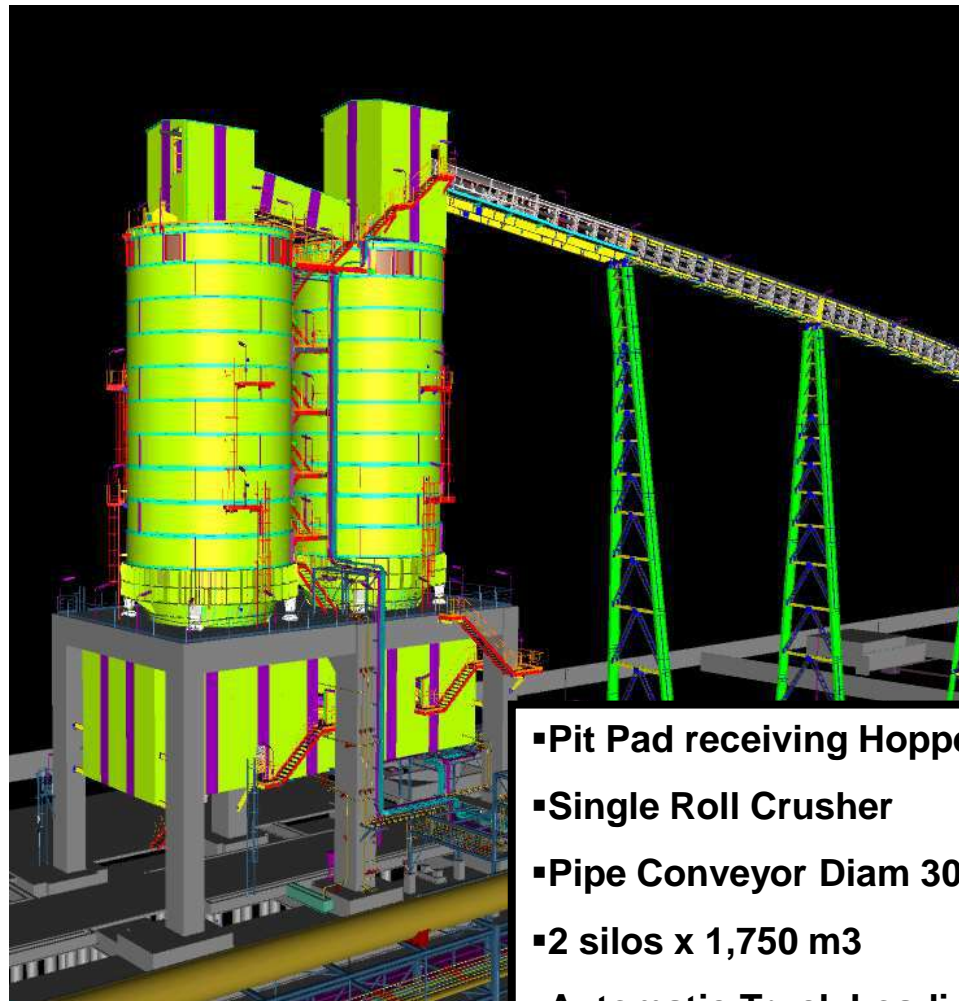


- Two independent circuits of sulphur and coke
- 3 Trucks discharge stations
- Sulphur Stockyard – 15.000 m³ capacity
- Coke Circular Stockyard – 80.000 m³ capacity D105 m
- Shiploading facilities
- Civil Works & Buildings
- Complete electrical power and control installation
- Complete fire detection and protection installation
- Electrical and Mechanical Erection.
- CCTV and communication system

GSN Petronor – Bilbao (Spain)
Sulphur & Coke Handling System



GSN Petronor – Bilbao (Spain)
Sulphur & Coke Handling System

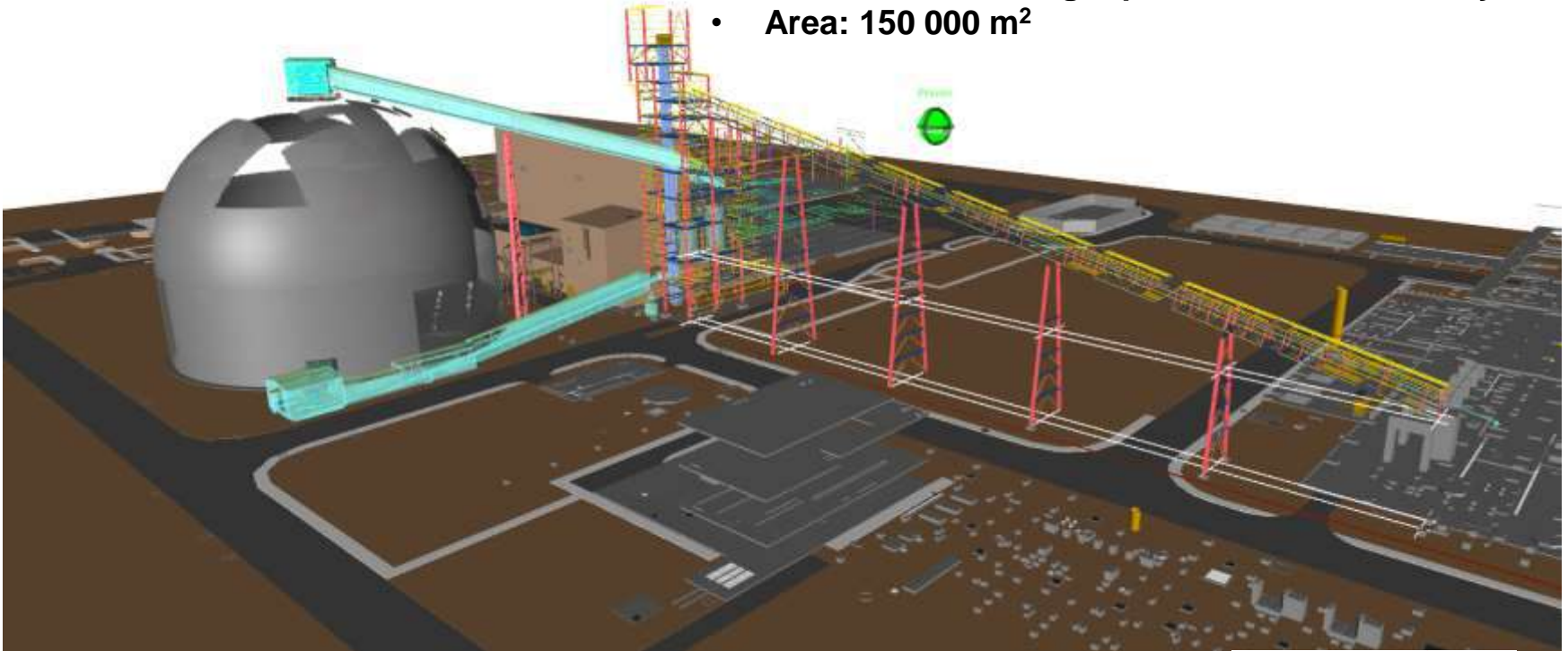


- Pit Pad receiving Hopper
- Single Roll Crusher
- Pipe Conveyor Diam 300
- 2 silos x 1,750 m³
- Automatic Truck Loading



PANCEVO REFINERY - SERBIA COKE HANDLING SYSTEM

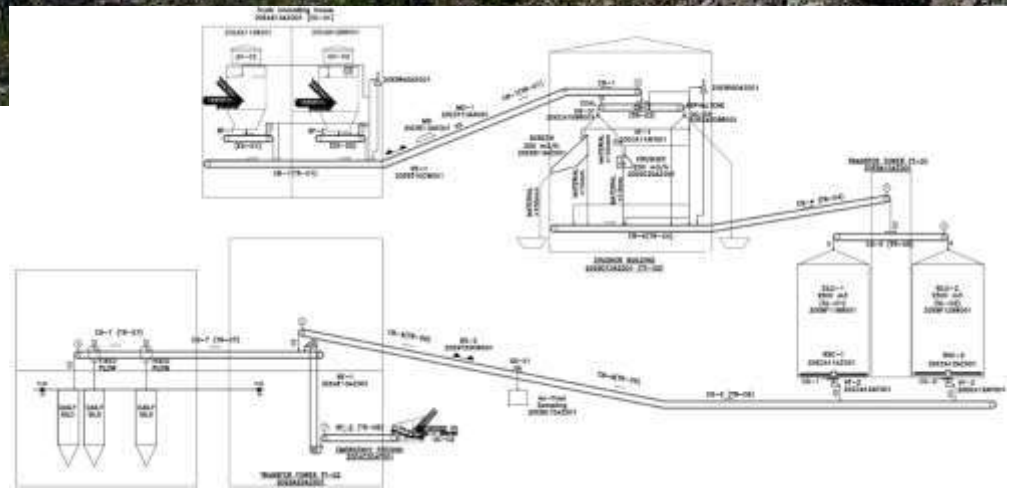
- Client: Durrah Advanced Development Co.
- Location: King Fahad Industrial Port, YANBU
- Contract: EPC
- Completion Period: 22 months
- Technical Data: Sugar production 2500 Tn/day
- Area: 150 000 m²



>> SUGAR REFINERY YANBU, SAUDI ARABIA

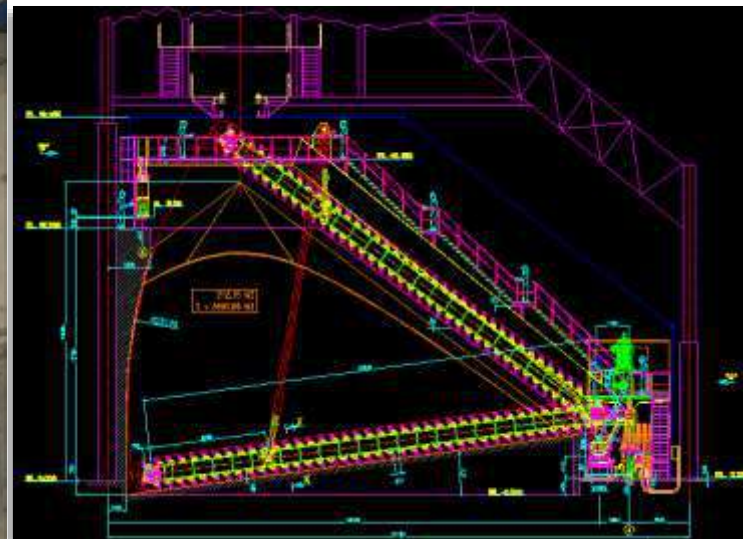


CEMENTOS CRUZ AZUL – Mexico
New Circular Stockyard
Stacking 1300tph / Reclaiming 850 tph
Diameter 90 m



KILPILAHTI TPP – FINLAND

ASPHALTENE AND COAL HANDLING SYSTEM



GDANSK REFINERY – POLAND
SEMIPORTAL SCRAPER RECLAIMER - VP1 150/26
COKE HANDLING SYSTEM





- New Belt Conveyor System
- New Portal Scraper Machine VP2 1200/35,8
- Civil Works
- Full Electrical & Control Package



**OCP – Rehabilitation of Installations Soufre JPH (EPC Contract)
Sulphur Handling System - (Jorf Lasfar Port) – (Morocco)**

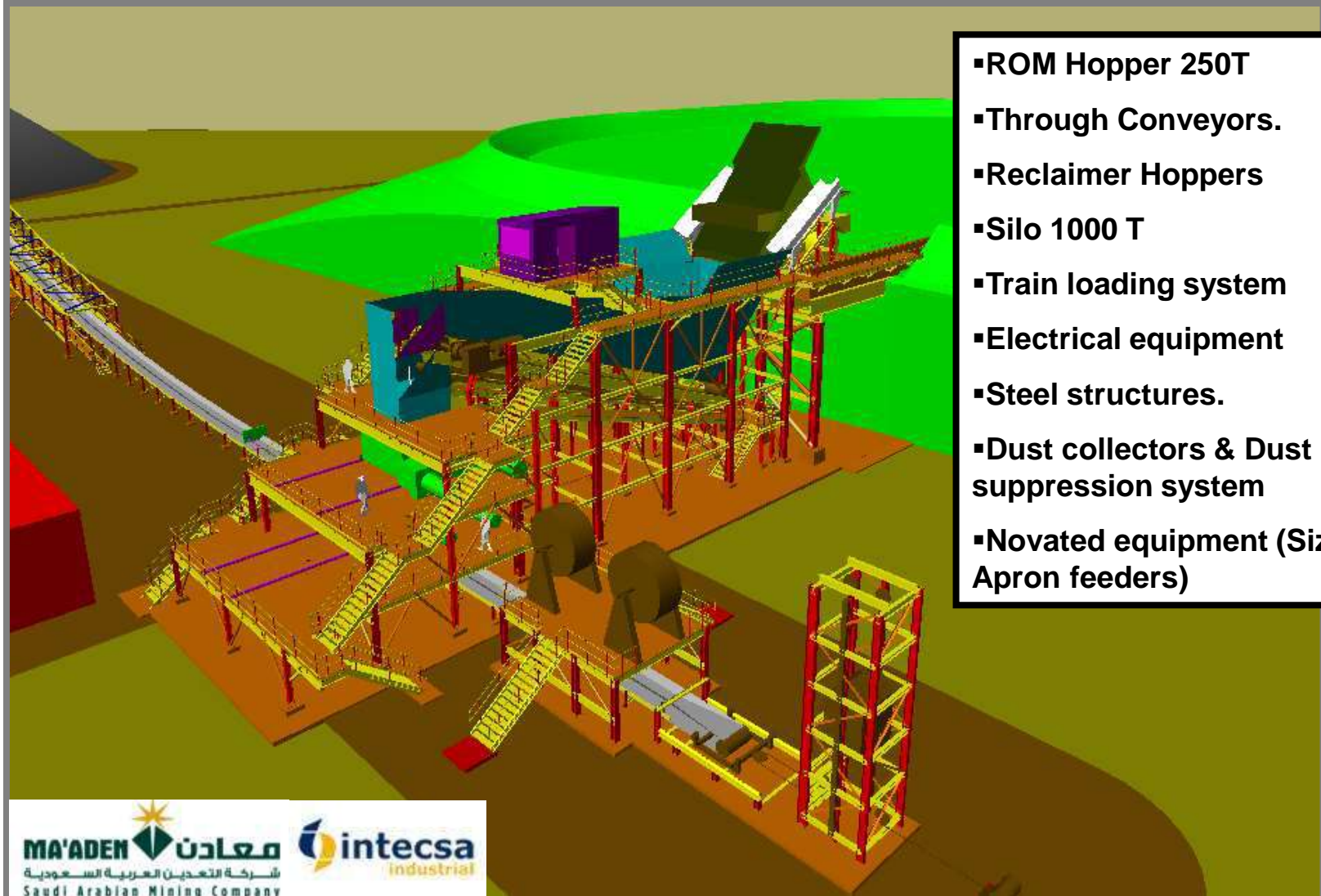
Latest Projects

- 2 Revamped Barrel Reclaimers
(600 t/h - 4.3 m Ø – 39m rail span)




ArcelorMittal

**ABOÑO (SPAIN) – ARCELOR MITTAL STEEL MAKING PLANT –
2 BARREL RECLAIMERS (UPGRADE) PROJECT**



- ROM Hopper 250T
- Through Conveyors.
- Reclaimer Hoppers
- Silo 1000 T
- Train loading system
- Electrical equipment
- Steel structures.
- Dust collectors & Dust suppression system
- Novated equipment (Sizers, Apron feeders)

Latest Projects



Latest Projects

**Continuous Train
Loading Installation
4000 t/h**





**Continuous Train
Loading Installation
4000 t/h**





MA'ADEN – Phase II

2 Shiploaders + 2 quay conveyors

Shiploading Capacity 2500 t/h



SAFCO V– Arabia Saudi

- New Urea Handling System, 1500 t/h

EPC Projects



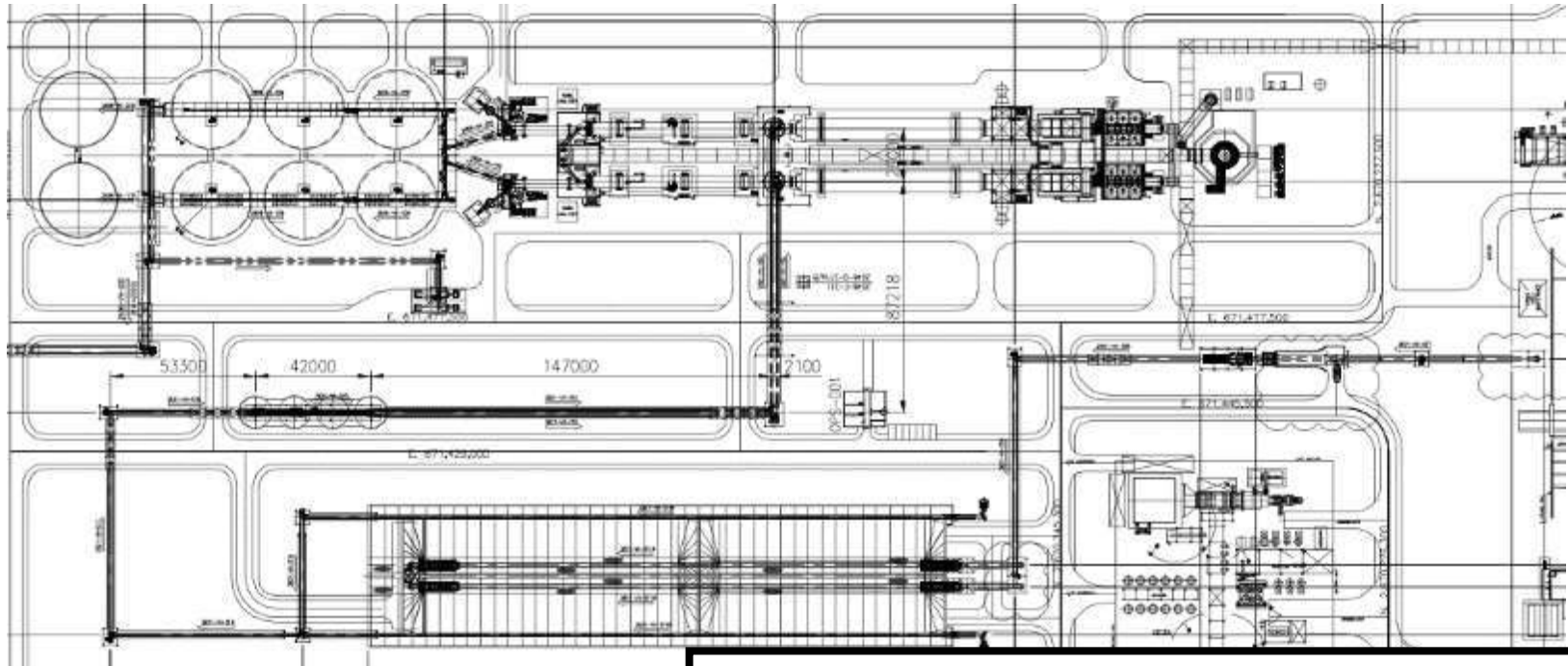
Client: Arabian Sugar Company
Location: Manama, Bahrain
Contract: EPC
Completion Period: 24 months
Technical Data: 600 000 Tn /year



>> SUGAR REFINERY Manama, BAHRAIN



الشركة العربية للسكر ش.م.ب (مفصلة)
ARABIAN SUGAR COMPANY B.S.C.(C)



- Belt conveyors system
- Pipe Conveyor Diam 600 mm, 1,1 Km
- Bucket elevators
- Green Coke Crushing and screening

TAKREER CBDC - Samsung

- Carbon Black Delayed Coker

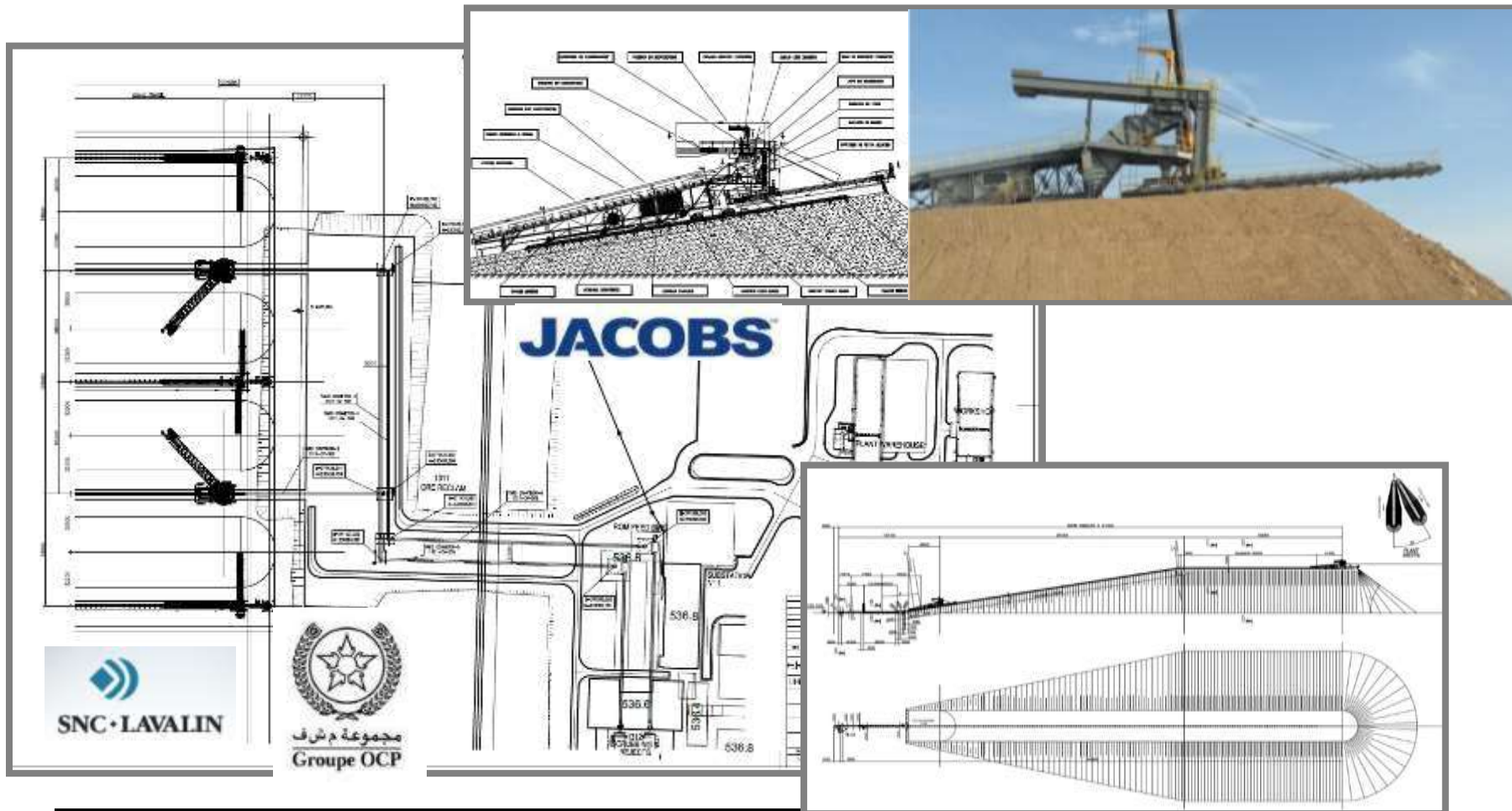


- 4000 m belt conveyors system
- 2000 mm Belt Width
- New Stacker and Reclaimers
- New Train Loading Stations
- EPC Order



JORF LASFAR– Morocco

- New Coal Yard and Wagon Loading stations



El Halassa - Morocco

- Belt feeders 2200 mm
- Belt width 1600 mm, Total length 4 Km

Reference Projects



TUFANBEYLI THERMAL POWER PLANT (3×150MW)

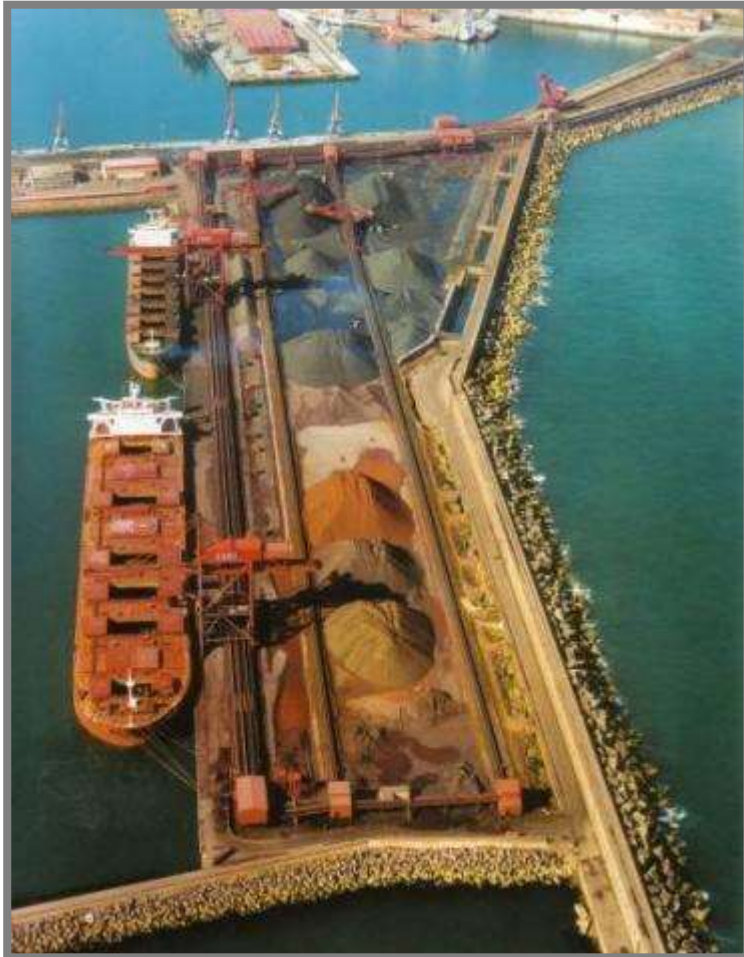




TPP Tufanbeyli, Turkey
Complete handling system

Musel Port Spain

- Shiploading Unloading installation with:
- Grab shipunloaders for 250.000 DWT ships
 - Bucket Wheel stacker reclaimers
 - Shiploaders
 - Coal, coke and Iron ore ; 3200/2800 t/h



Reference Projects



Musel Port Spain

Shiploading Unloading installation with:

- Grab shipunloaders for 250.000 DWT ships
- Bucket Wheel stacker reclaimers
- Shiploaders
- Coal, coke and Iron ore ; 3200/2800 t/h



Reference Projects

Musel Port Spain

Shiploading Unloading installation with:

- Grab shipunloaders for 250.000 DWT ships
- Bucket Wheel Stacker Reclaimers
- Shiploaders
- Coal and Iron ore Handling





BULK TERMINAL – Port of Santander (Spain)

3 Ecological Hoppers 350 m³

2,5 Km Length Conveyor system. Capacity: 2500/1200 t/h

Unloading stations for trucks and rail wagons

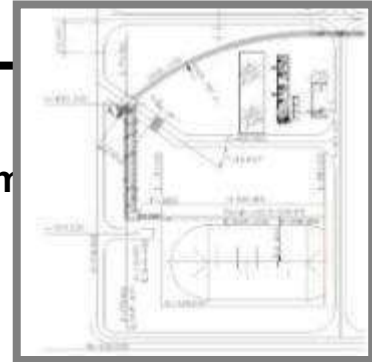
Reference Projects



- Mill station and preparation up to bunkers
- Conventional Conveyors system
- Coal / Coke Stockyard – Capacity 750.000 tons
- Complete electrical power and control
- CCTV and communication system
- Under UBC 4 earthquake classification.
- Biomass material handling stockyard



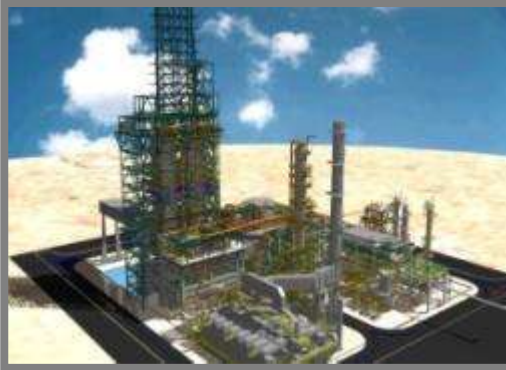
CT Andina – Mejillones (Chile)
Coal - Coke Handling System



- Crushing and dosing station
- Conventional Conveyors system
- Pipe conveyors
- Storage hall (warehouse)
- Portal combined stacker reclaimer
- Truck loading station and truck wheels cleaning system
- Complete electrical power and control installation
- Complete fire detection and protection installation
- Electrical and Mechanical Erection.
- CCTV and communication system
- Access and truck management system

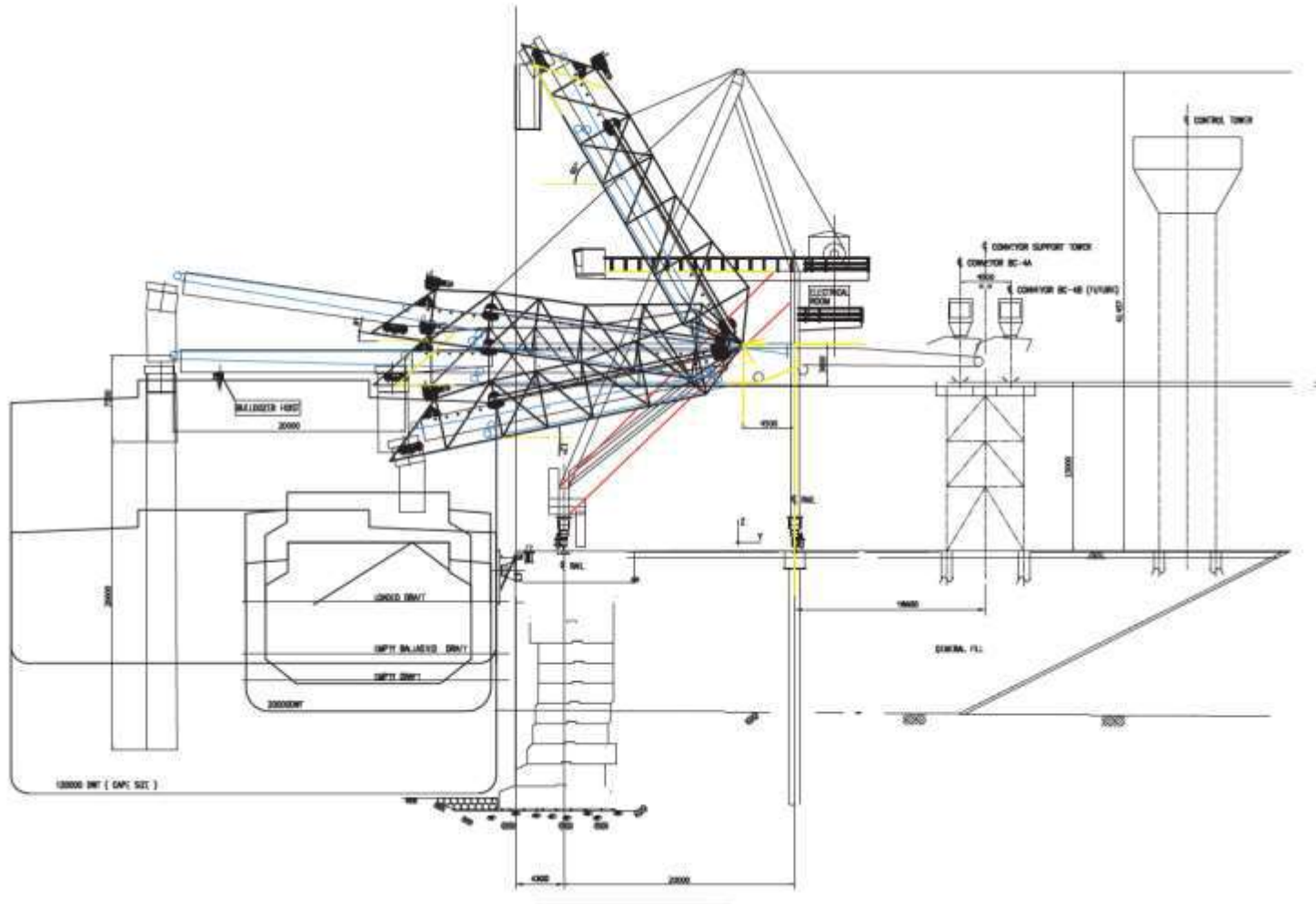
BP (British Petroleum) – Castellon's Refinery (Spain)
Green Coke Handling System

Reference Projects

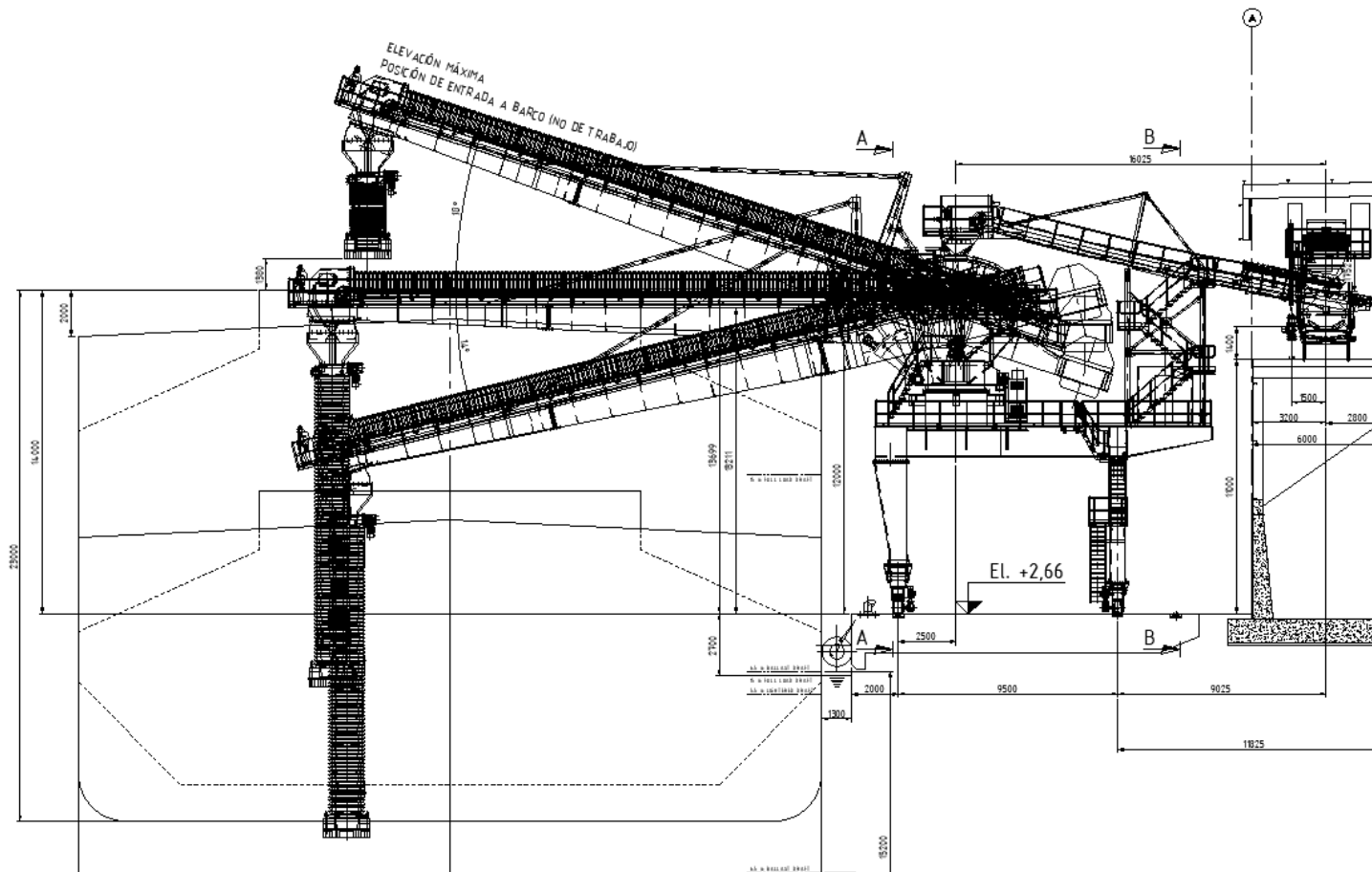


BP (British Petroleum) – Castellón's Refinery (Spain)
Green Coke Handling System – COKE HOPPERS AND CRUSHING UNIT





Dibba Port- UAE
Complete EPC: Truckunloading, Pipe conveyor, Shiploader – 4,400 tph

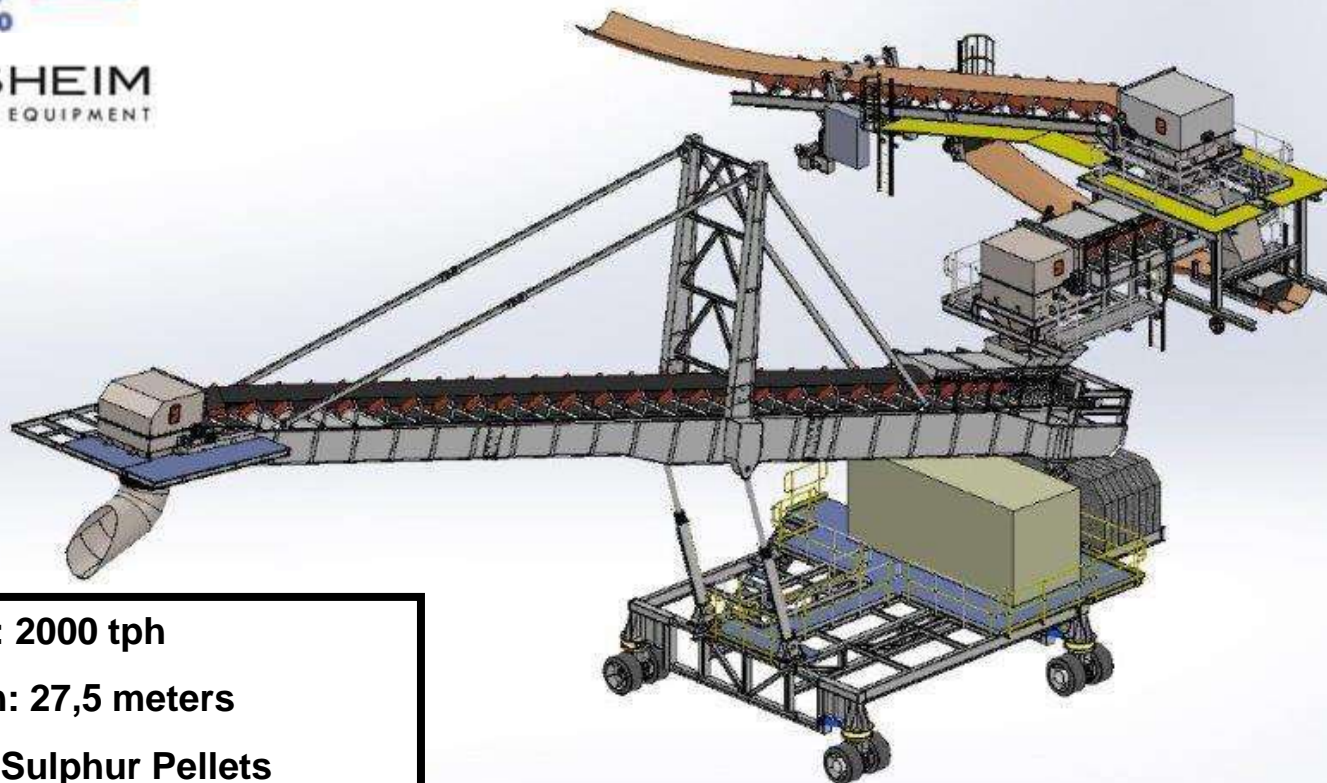


ALICANTE – Eiffage

Shiploader 2000 tph – Luffing, Traveling and Slewing

Design, Supply, Erection and Start-up

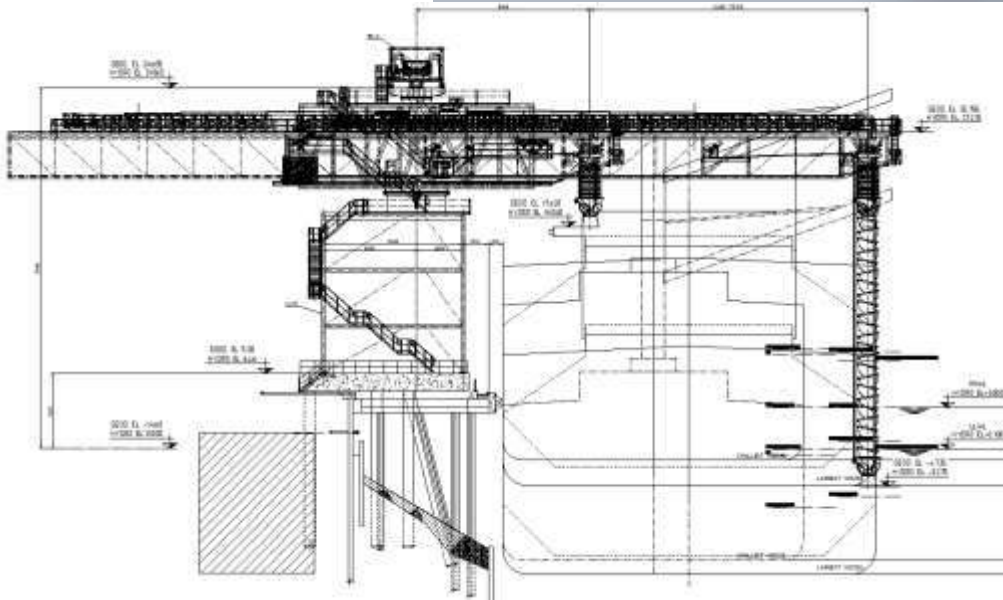
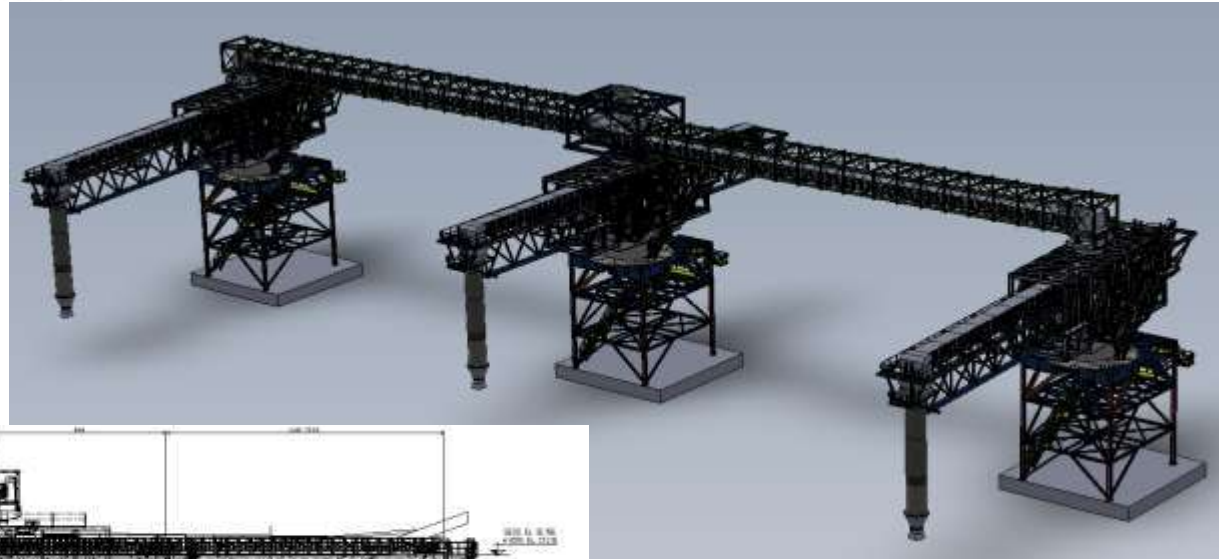




- Capacity: 2000 tph
- Rail Span: 27,5 meters
- Material: Sulphur Pellets
- Ships up to 45.000 DWT

BERRI GAS PLANT – SAUDI ARABIA
Sulphur Pellets Handling System

Shiploaders



- Capacity: up to 2000 tph
- Boom length: 39 m
- Materials: Wheat, canola, barley, malt, peas, soya beans, lentils, soya pellets, canola meal pellets.
- Location: Fraser Surrey Docks, Vancouver, Canada

FRASER GRAIN TERMINAL – P&H – Canada

Design, supply, preassembly, transportation, supervision of erection and commissioning of a three tower type shuttling shiploader.



MA'ADEN – Dap Granulation Plant (Saudi Arabia)

Shiploader 2500 – 30, 2500 t/h

Ships 65.000 DWT



MA'ADEN معادن
شركة التعدين العربية السعودية
Saudi Arabian Mining Company

WorleyParsons
resources & energy

Uhde

**MA'ADEN – Dap Granulation Plant
(Saudi Arabia)**
Shiploader 2500 – 30, 2500 t/h
Ships 65.000 DWT



- MATSA – TRAFIGURA / MINING GROUP (HUELVA PORT - SPAIN)**
- **Concentrate Port Facilities – Cu,Pb,Zn (Shiploader – Jetty Gallery – Hopper – Connection Belt Conveyors,....)**



Jordan Industrial Ports P.S.C.
Aqaba - Jordan



AQABA - JORDAN

- New Fertilizer Shiploader 2000 tph, 10 m rail span

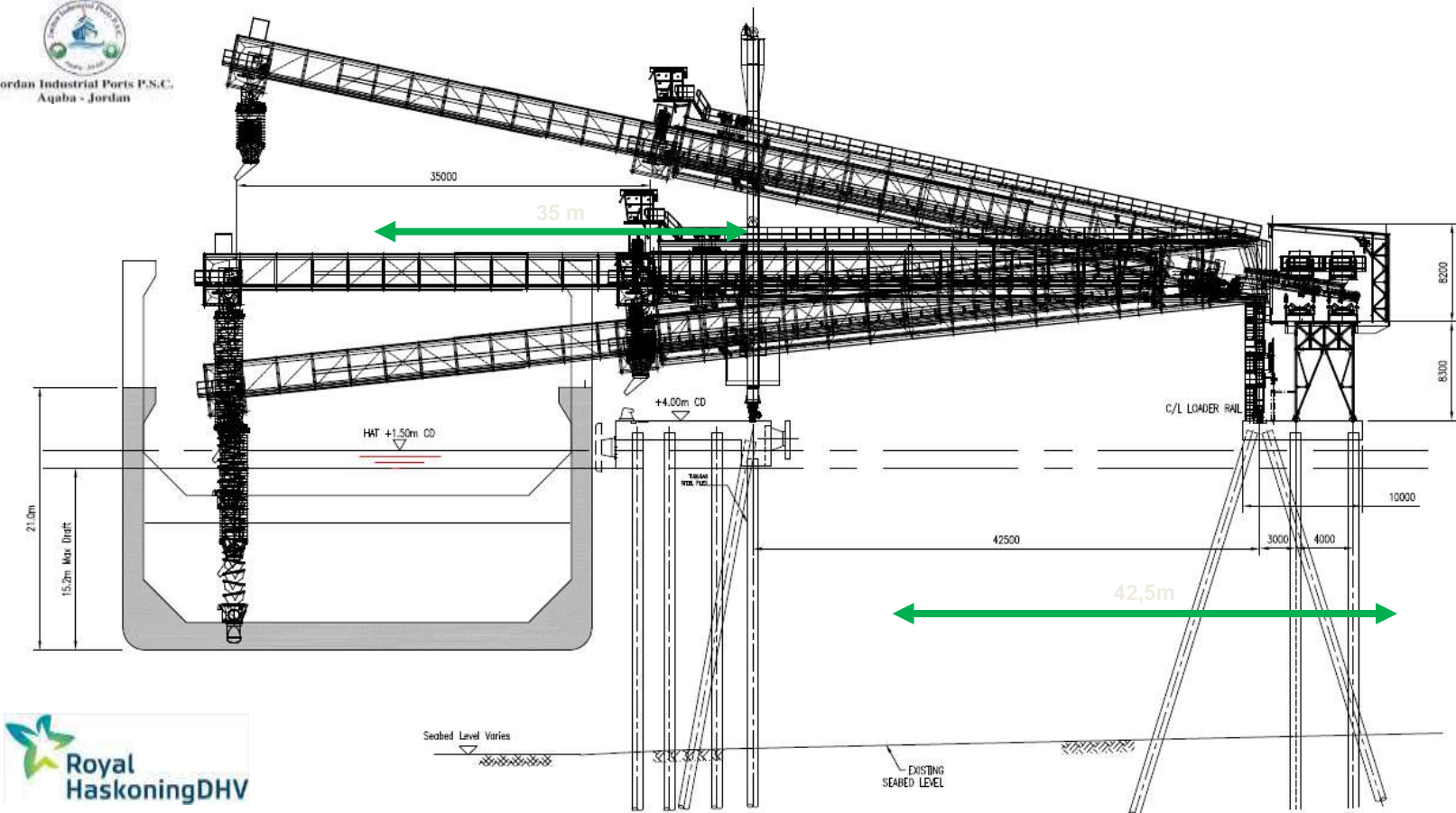


AQABA - JORDAN

- New Fertilizer Shipunloader (Siwertell) 1200 tph, 10 m rail span



Jordan Industrial Ports P.S.C.
Aqaba - Jordan



AQABA - JORDAN

- **New Fertilizer Shiploaders 2000 tph, 42,5 m rail span**

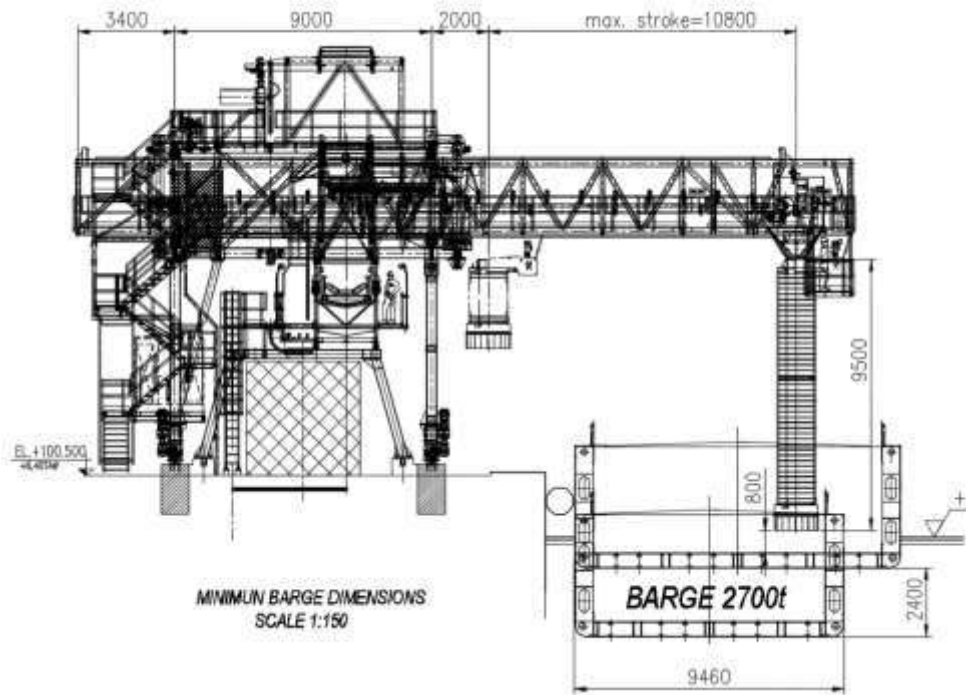


Jordan Industrial Ports P.S.C.
Aqaba - Jordan



AQABA - JORDAN

- New Fertilizer Shiploaders 2000 tph, 42,5 m rail span



- Coke Crushing Station
- Barge Loader
- Conveying System
- Full Electrical & Control Package



**ANTWERP NORTHWEST EUROPE - RESID UPGRADE PROJECT
COKE HANDLING SYSTEM**



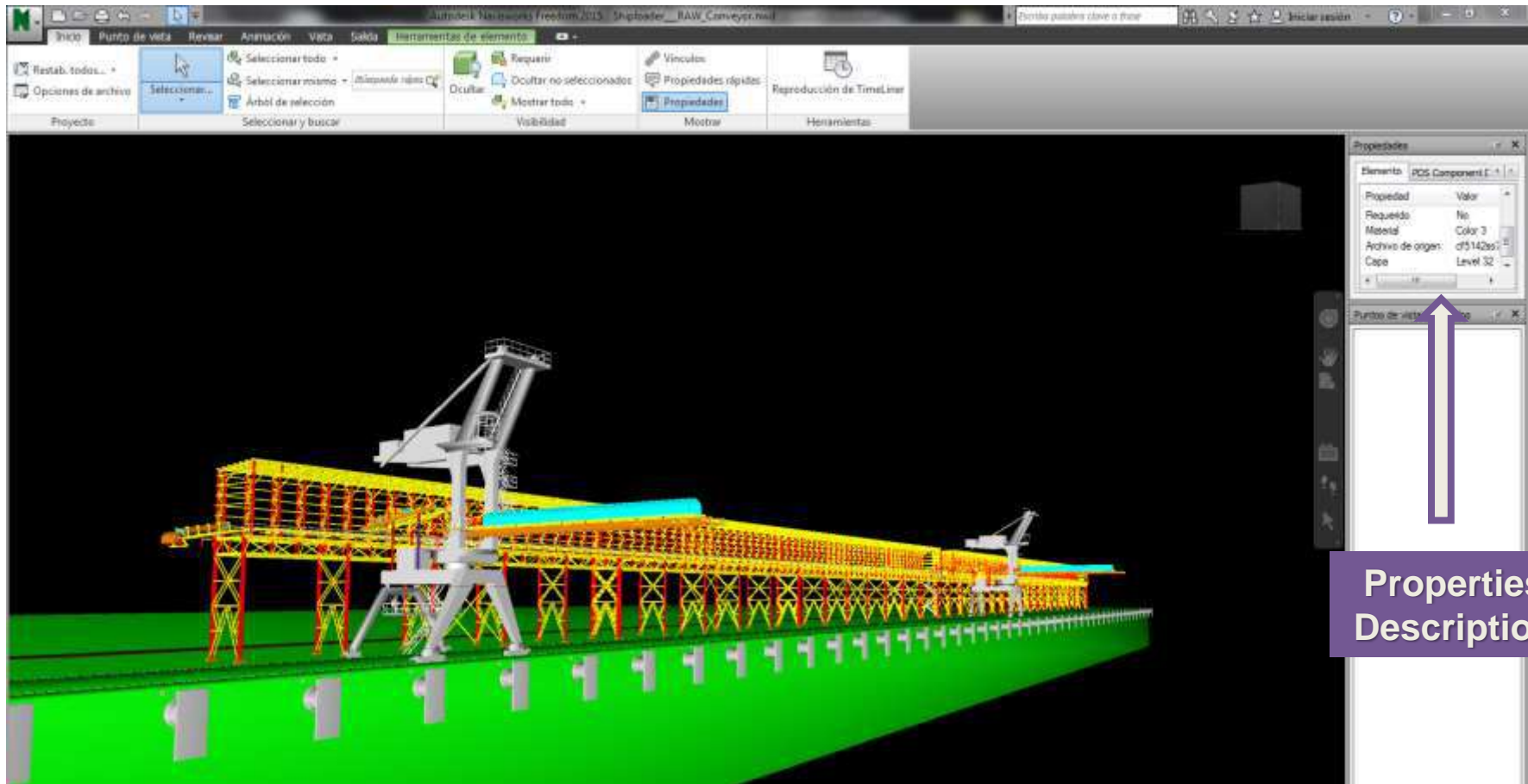
JGCS - NSRP - NGHI SON REFINERY & PETROCHEMICAL COMPLEX (VIETNAM)

- Shiploader 700 tph, 25 m boom length



CT LITORAL – ENDESA (Spain)

- Coal Handling System (1200 t/h)



Properties
Description

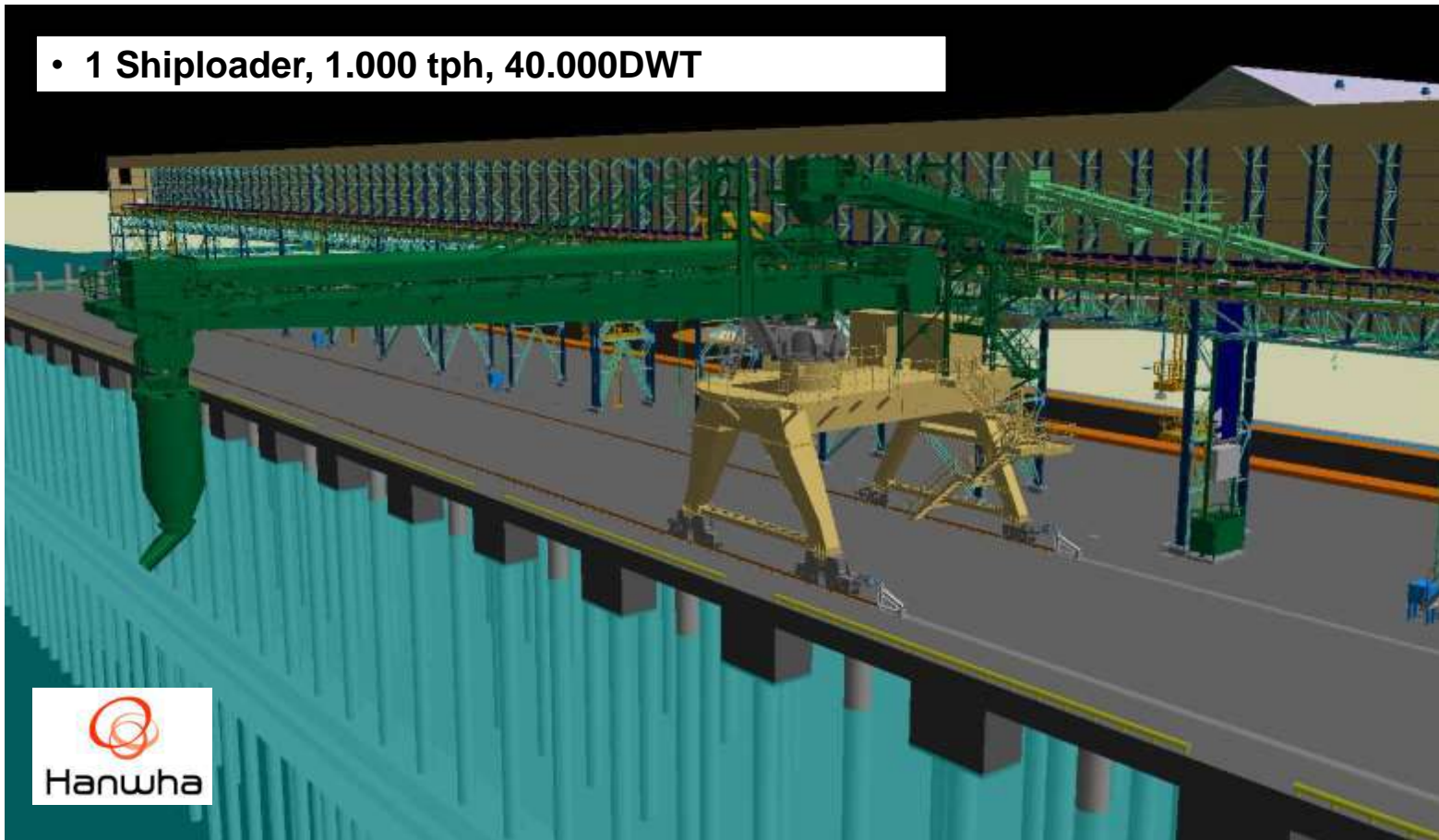


MA'ADEN – Phase II

2 Shiploaders + 2 quay conveyors

Shiploading Capacity 2500 t/h

- 1 Shiploader, 1.000 tph, 40.000DWT



JAZAN REFINERY – Saudi Arabia - ARAMCO HANWHA E&C

- New Sulphur Handling System, 1000 t/h

SAMSUNG



FERTIL 2 – SAMSUNG Engineering - UAE

AMMONIA / UREA - BULK/BAG SHIPLOADER – 2 units

- Loading Capacity: 2000 b/h - 1000 t/h
- Boom length: 28 m
- 45.000 DWT Vessels

Uhde





FERTIL 2 – SAMSUNG Engineering - UAE

AMMONIA / UREA - BULK/BAG SHIPLOADER – 2 units

- Loading Capacity: 2000 b/h - 1000 t/h
- Boom length: 28 m
- 45.000 DWT Vessels

Uhde





FQM– Panama

- Copper concentrate Shiploader, **2400 t/h**, 55 m boom length



Al Jubail Refinery (JER)

- Conveyors System: Curved conveyors, length over 23 km, transport capacity up to 500 t/h
- Coke Stockyard, 130.000 tons capacity
- 1 Reclaimer VP3 500/60
- Conventional conveyors for stacking and reclaiming.

Port Installation (KFIP)

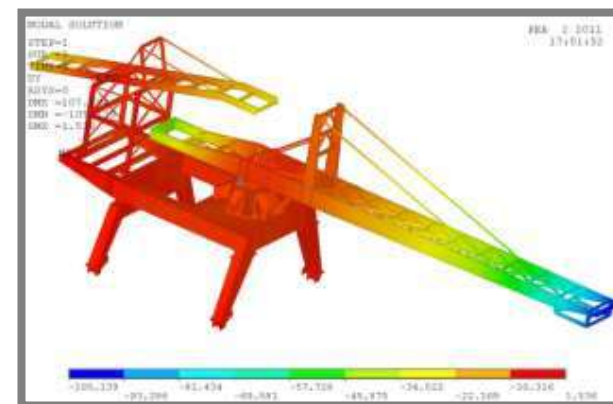
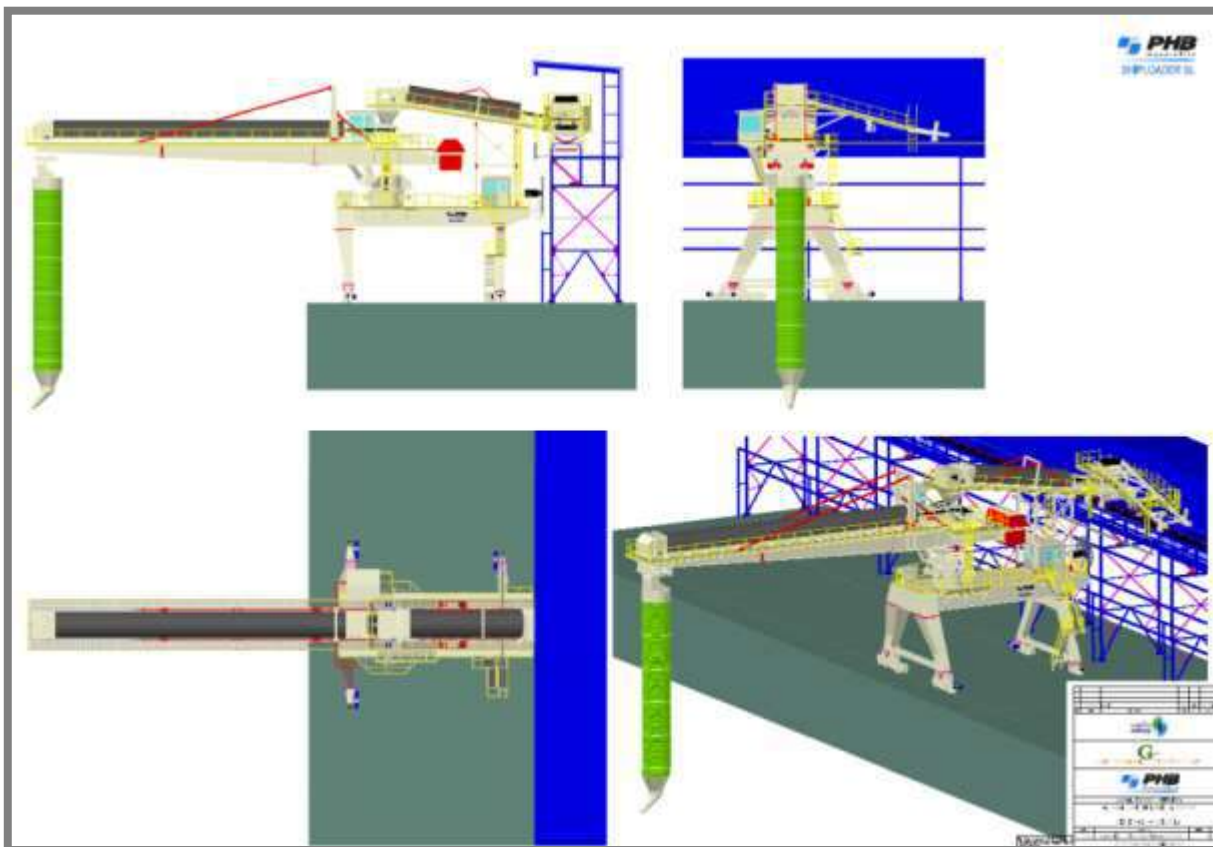
- Two Coke Stockyards, 160.000 tons capacity
- Two portal reclaimers VP3 2000/60
- Conventional conveyors for stacking and reclaiming.

Shiploading Facilities

- Jetty conveyor
- Shiploader SL 2500/28 up to 65.000 DWT vessels
- ❖Complete electrical & control system
- ❖Fire fighting & detection system
- ❖Stockpiles deluge system
- ❖CCTV system
- ❖Etc.

Jubail Export Refinery – Saudi Aramco (Saudi Arabia)

Coke Handling System





MA'ADEN – Dap Granulation Plant (Saudi Arabia)

Shiploader 2500 – 30, 2500 t/h

Ships 65.000 DWT



GSN Petronor – Bilbao (Spain)
Sulphur & Coke Handling System

Shiploaders



CHIYODA CORPORATION

 **Tecnimont**

TECNIMONT – Wafa Coastal plant (Libya)
Sulphur pills shiploader 430 t/h capacity.



CHIYODA – Assaluyeh Amonia Plant (Iran)

Combined bulk and bag shiploader.

45000 DWT vessels – 27 m loading boom length.





- Travelling Telescopic Shiploader
- Capacity 1.000 m³/h
- Port Terminal

REPSOL, La Coruña– Spain
Telescopic Calcined Coke Shiploader



Bucket Wheel



- Capacity: up to 3200 tph
- Materials: Coal and coke
- Location: Port Talbot, Wales



TATA STEEL

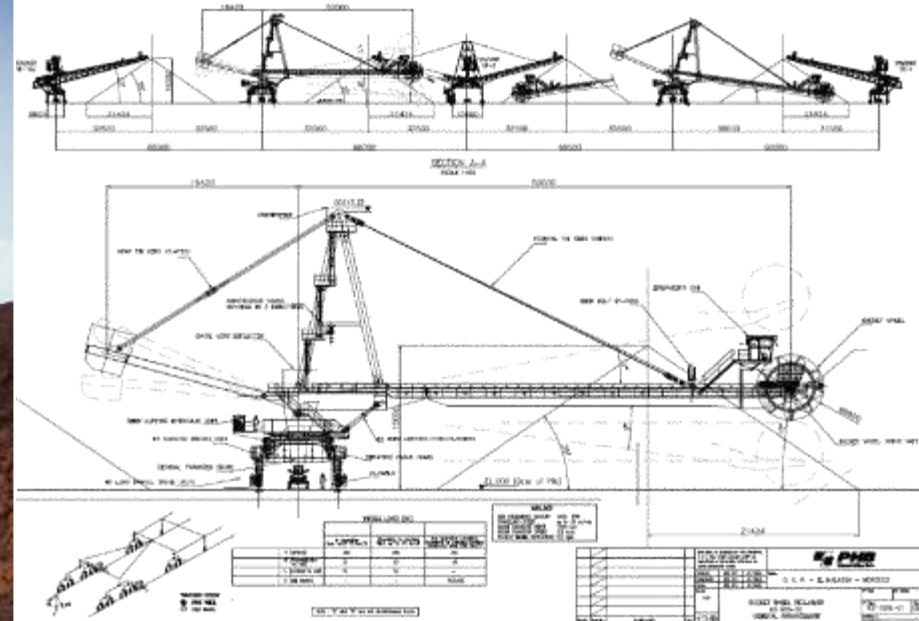
PORT TALBOT STEEL MAKING PLANT – TATA – UK
Design, supply and erection of 2 Bucket Wheel Stackers

Bucket Wheel



Voest Alpine Texas LLC – HBI Facility
Complete Iron Ore & HBI handling facilities





El Halassa, Morocco
Bucket wheel AS 2000/50
Phosphate

Two Units

Bucket Wheel



Jorf Lasfar, Morocco
1 Bucket wheel AS 1800/50
1 Stacker ST 2400/42

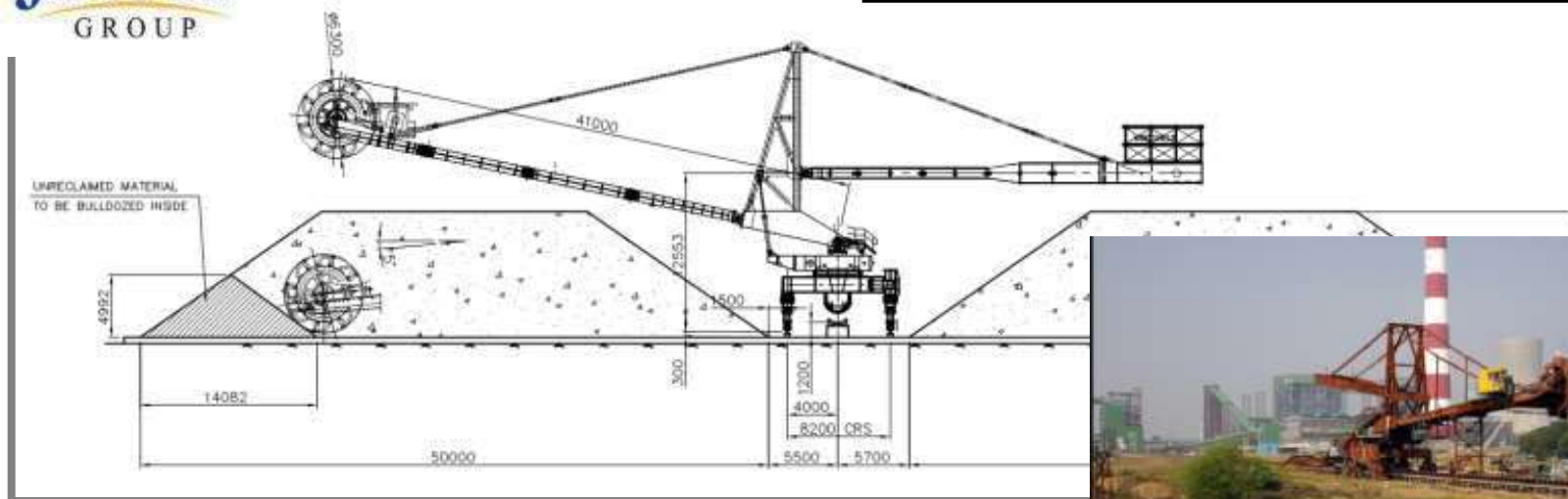


ALSTOM – Can power plant (Turkey)
2 Bucket-wheel stacker-reclaimers 600/600 t/h.
30 m boom length.

Bucket Wheel



Jaypee Nigrie TPP, India
Bucket wheel 1600/41 – 1 Unit
Jaypee Bara TPP, India
Bucket wheel 2000/41 – 2 Units





Musel Port Spain

Shiploading Unloading installation with:

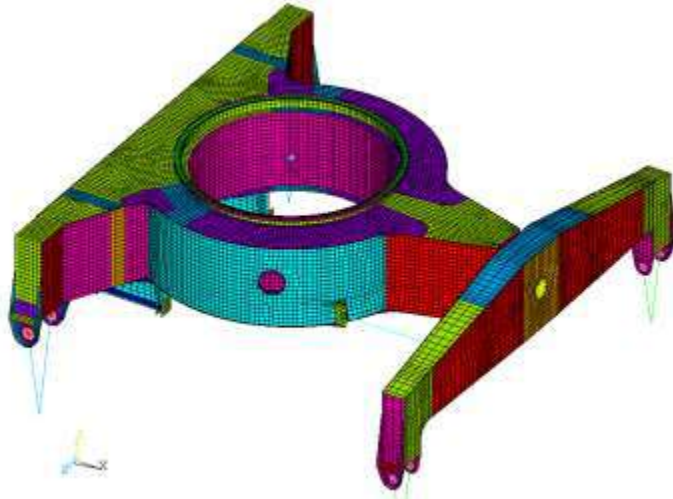
- Grab shipunloaders for 250.000 DWT ships
- Bucket Wheel stacker reclaimers
- Shiploaders
- Coal, coke and Iron ore ; 3200/2800 t/h



Musel Port Spain

Shiploading Unloading installation with:

- Grab shipunloaders for 250.000 DWT ships
- Bucket Wheel stacker reclaimers
- Shiploaders
- Coal, coke and Iron ore ; 3200/2800 t/h



EBHI




ArcelorMittal



TPP Aboño, Spain

- Bucket wheel stacker reclaimers
 - Stackers
 - Frontal Reclaimers
 - Conveyors
- Up to 2800 t/h of coal.

EBHI


ArcelorMittal



Arcelor Veriña, Spain

- Several machines
- Bucket wheel stacker reclaimers
ASK 750 /45



Arcelor Veriña, Spain

- Several machines
- Bucket wheel stacker reclaimers
ASK 750 /45



Arcelor Veriña, Spain

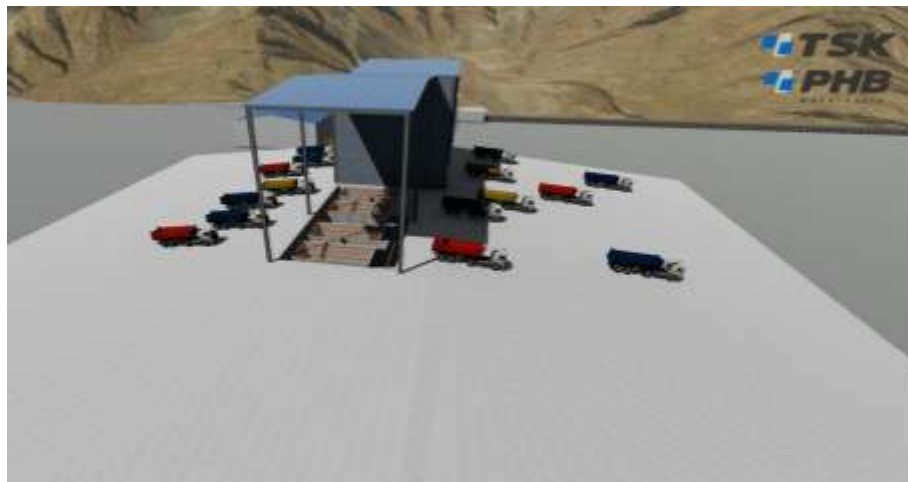
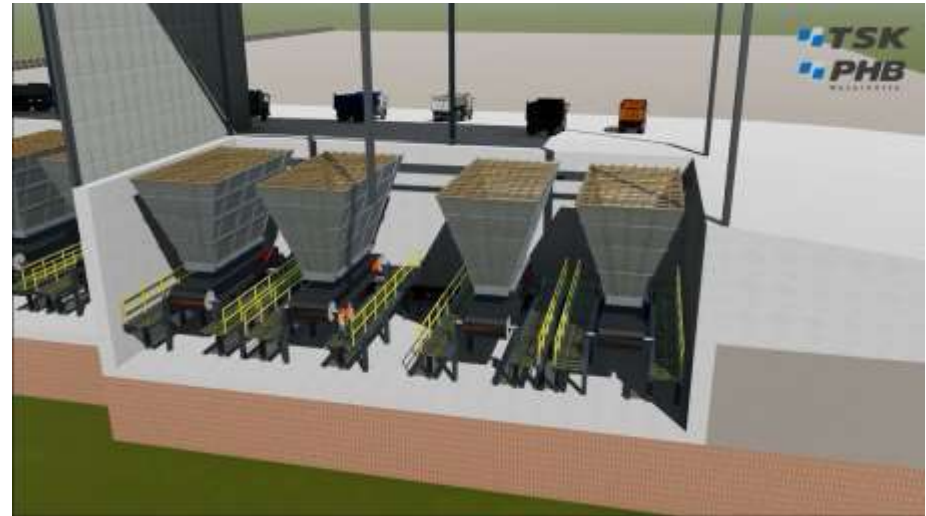
- Several machines
- Bucket wheel stacker reclaimers
ASK 750 /45



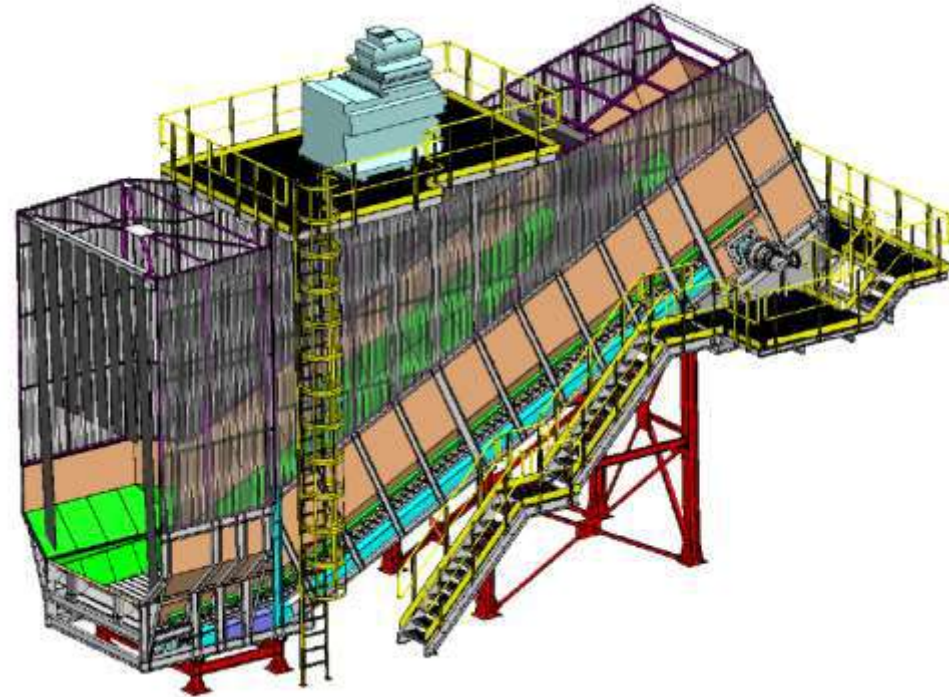
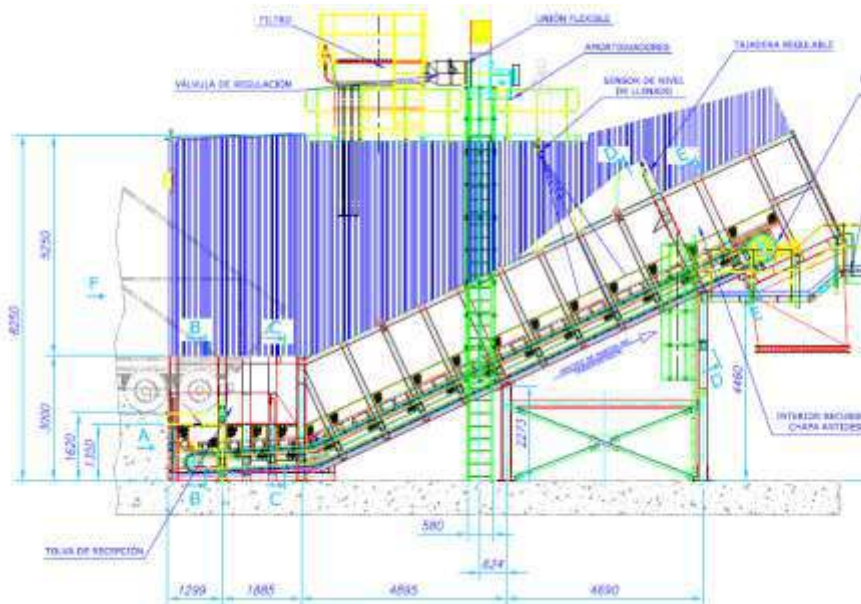
Loading / Unloading



Latest Projects

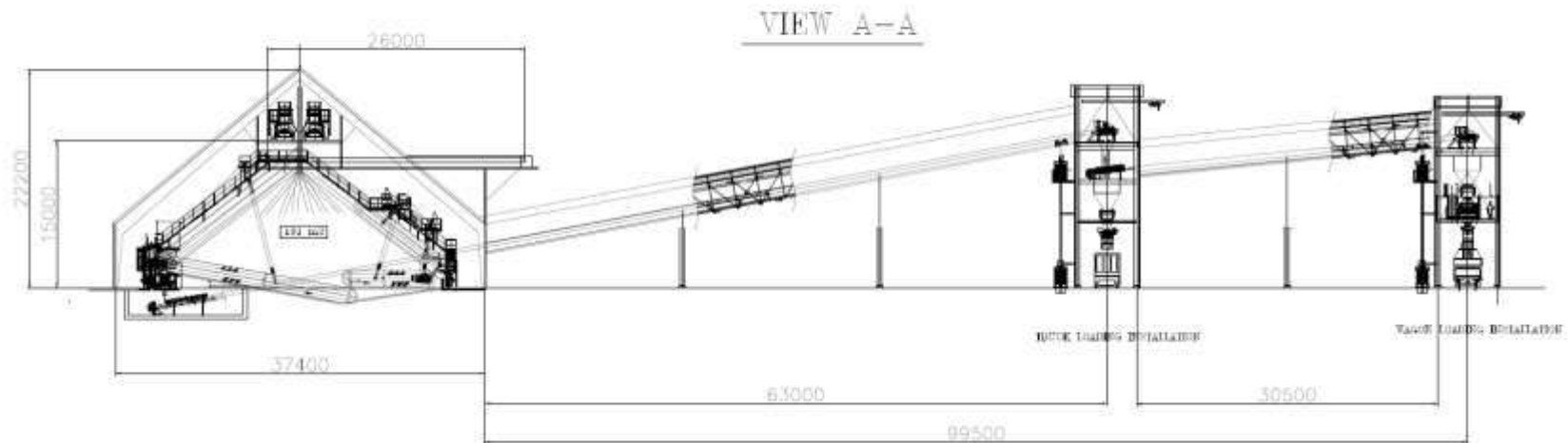


Dibba Port- UAE
Complete EPC: Truckunloading, Pipe conveyor, Shiploader – 4,400 tph



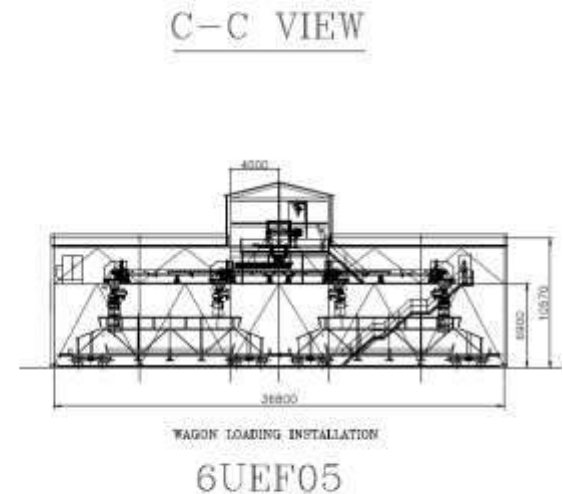
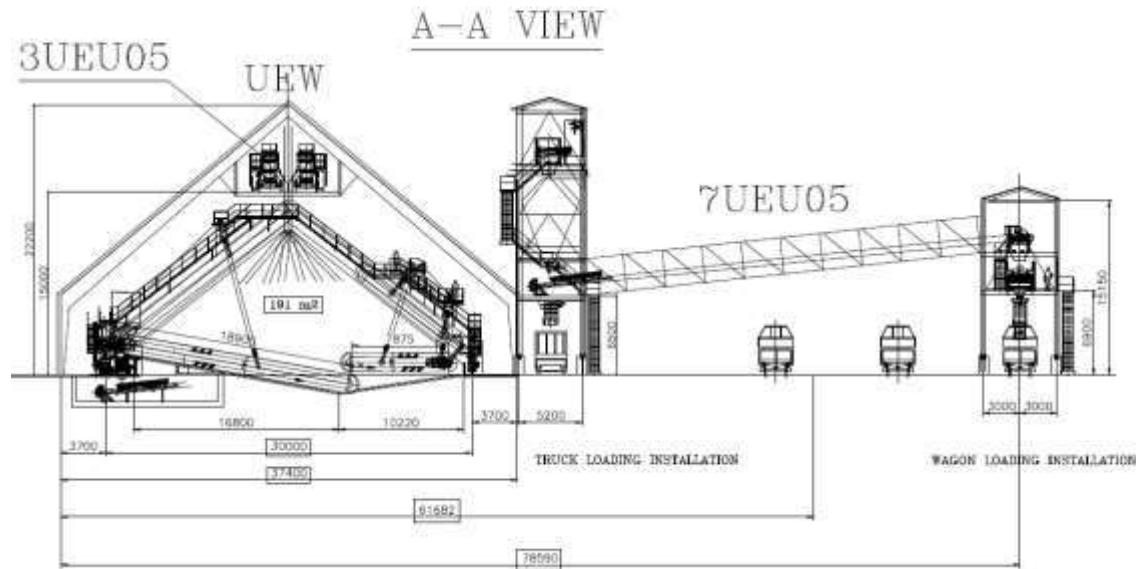
ALICANTE – Eiffage
Truckunloading System
Design, Supply, Erection and Start-up

- Gypsum Truck and Train Loading
- Capacity: up to 1800 tph
- Materials: Coal, Slag and Gypsum.



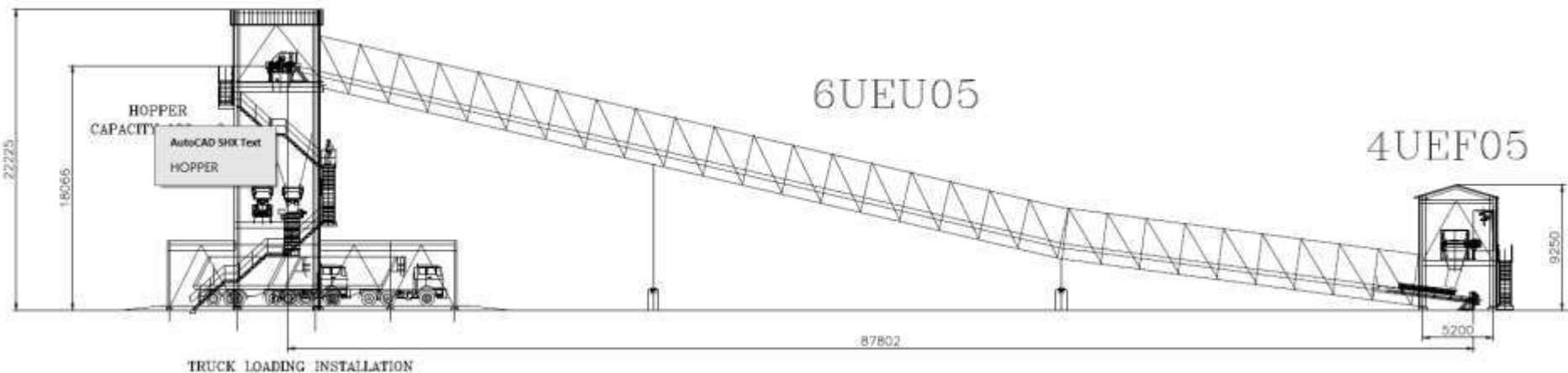
Ostroleka Power Plant - Poland
Complete Coal, Slag & Gypsum Handling system for new Thermal Power Plant

- Slag Truck and Train Loading
- Capacity: up to 1800 tph
- Materials: Coal, Slag and Gypsum.



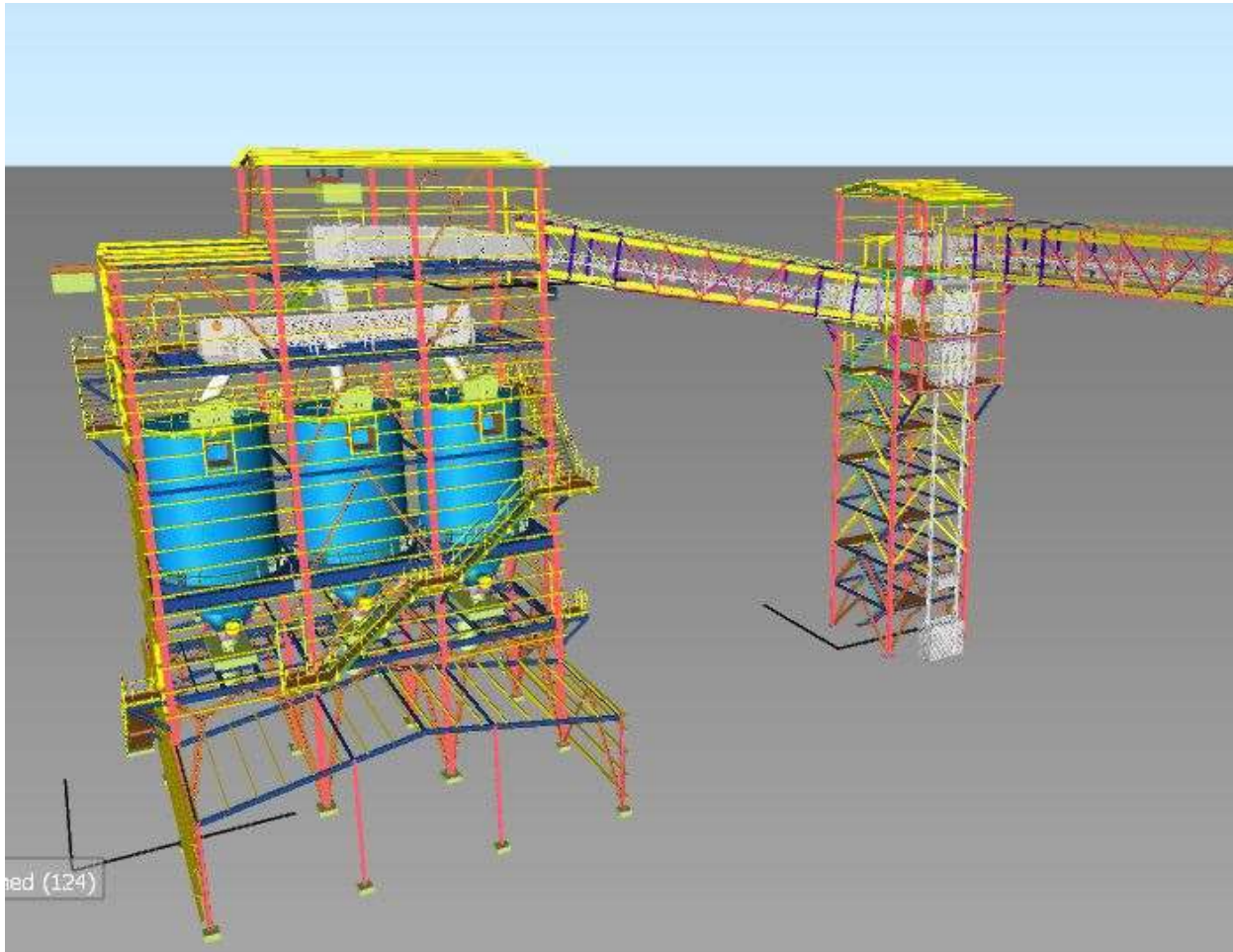
Ostroleka Power Plant - Poland
Complete Coal, Slag & Gypsum Handling system for new Thermal Power Plant

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Ostroleka Power Plant - Poland
Complete Coal, Slag & Gypsum Handling system for new Thermal Power Plant

Loading / Unloading

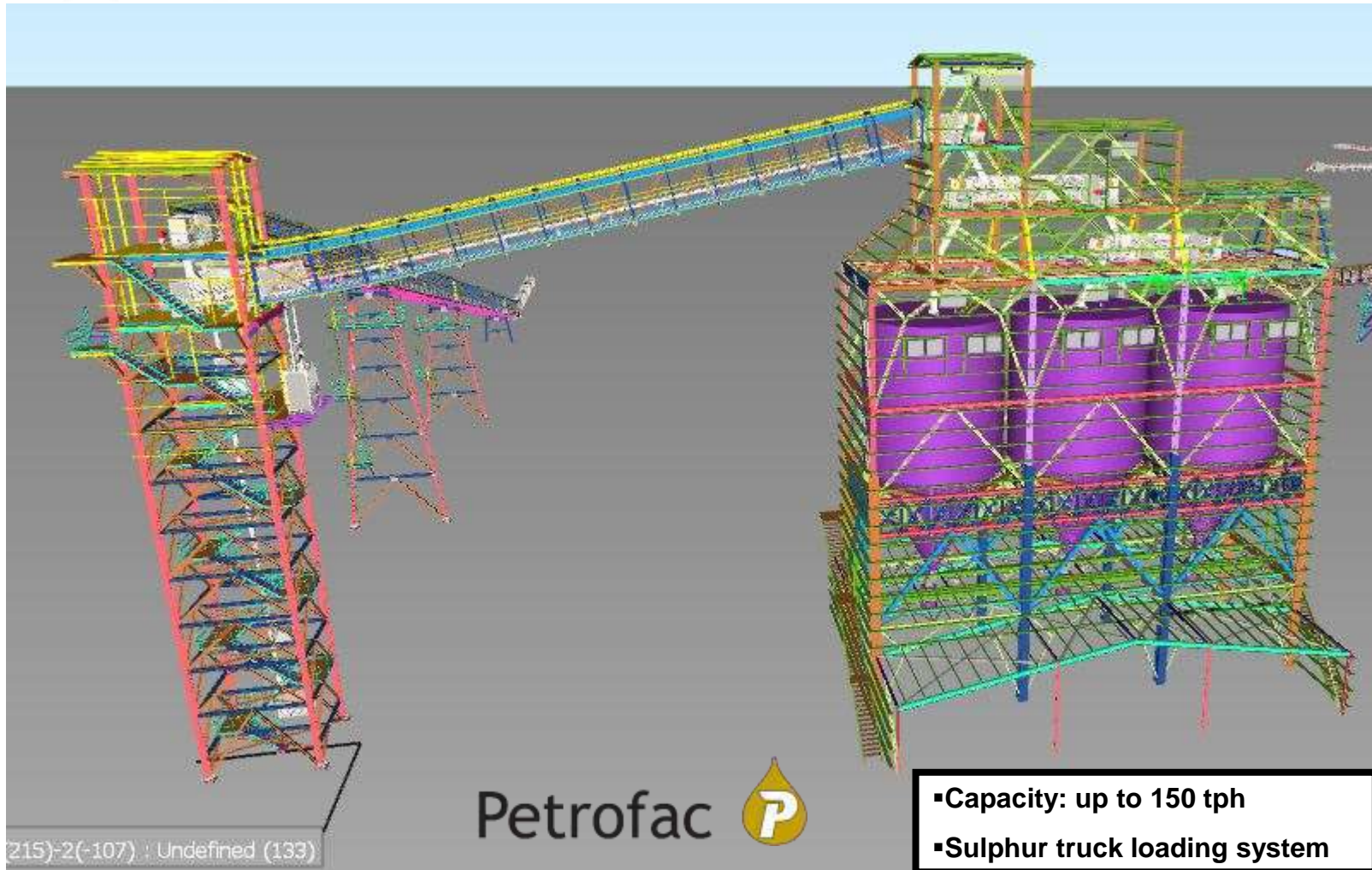


Petrofac 



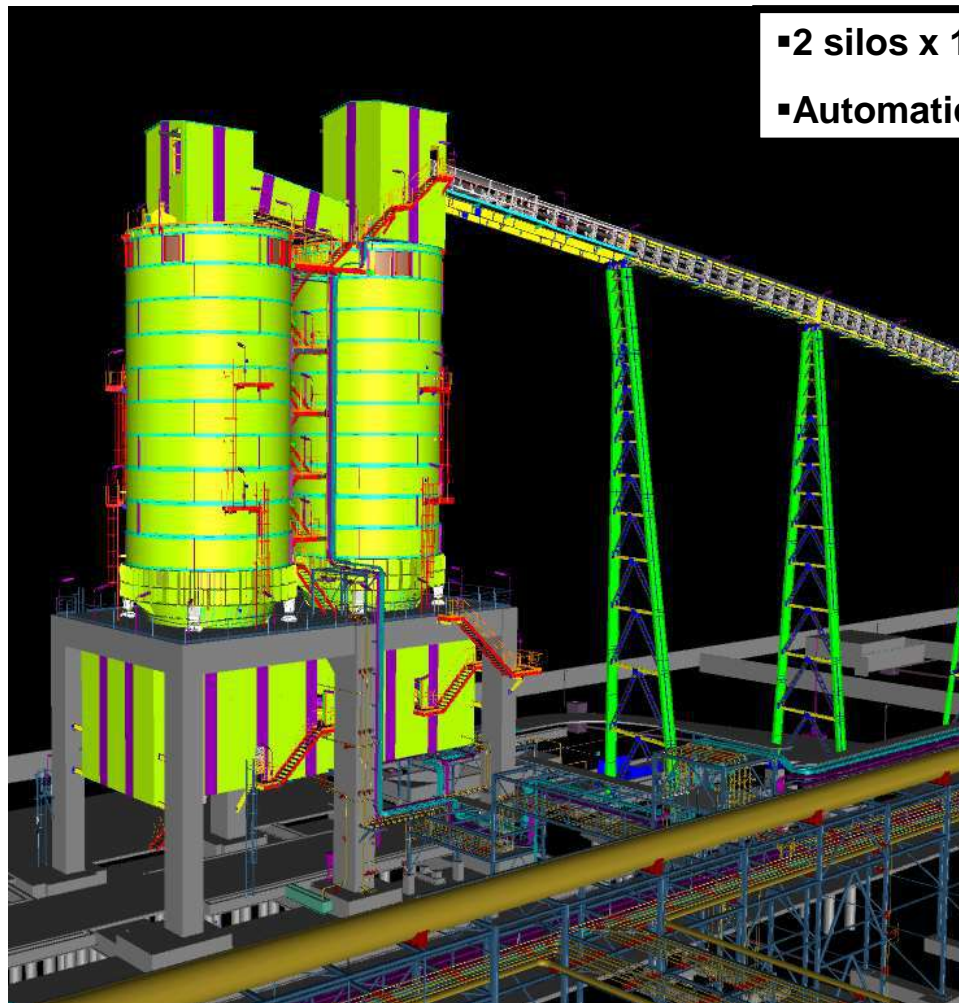
- Capacity: up to 450 tph
- Coke truck loading system

Materials Handling System – Petrofac – Oman
Design, Supply and Supervision of Erection and Start-up



Materials Handling System – Petrofac – Oman
Design, Supply and Supervision of Erection and Start-up

Loading / Unloading

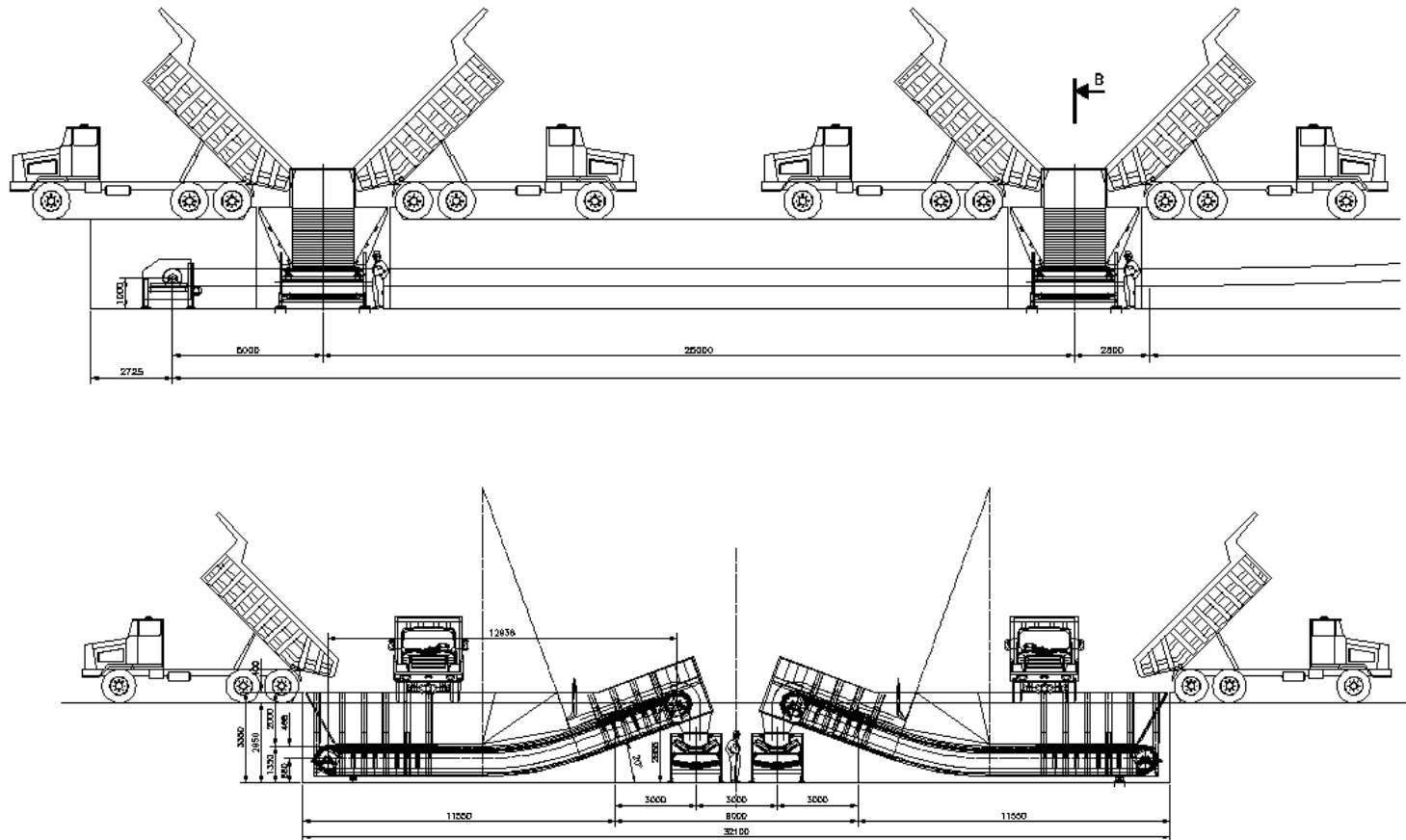


- 2 silos x 1,750 m³
- Automatic Truck Loading



PANCEVO REFINERY - SERBIA
COKE HANDLING SYSTEM

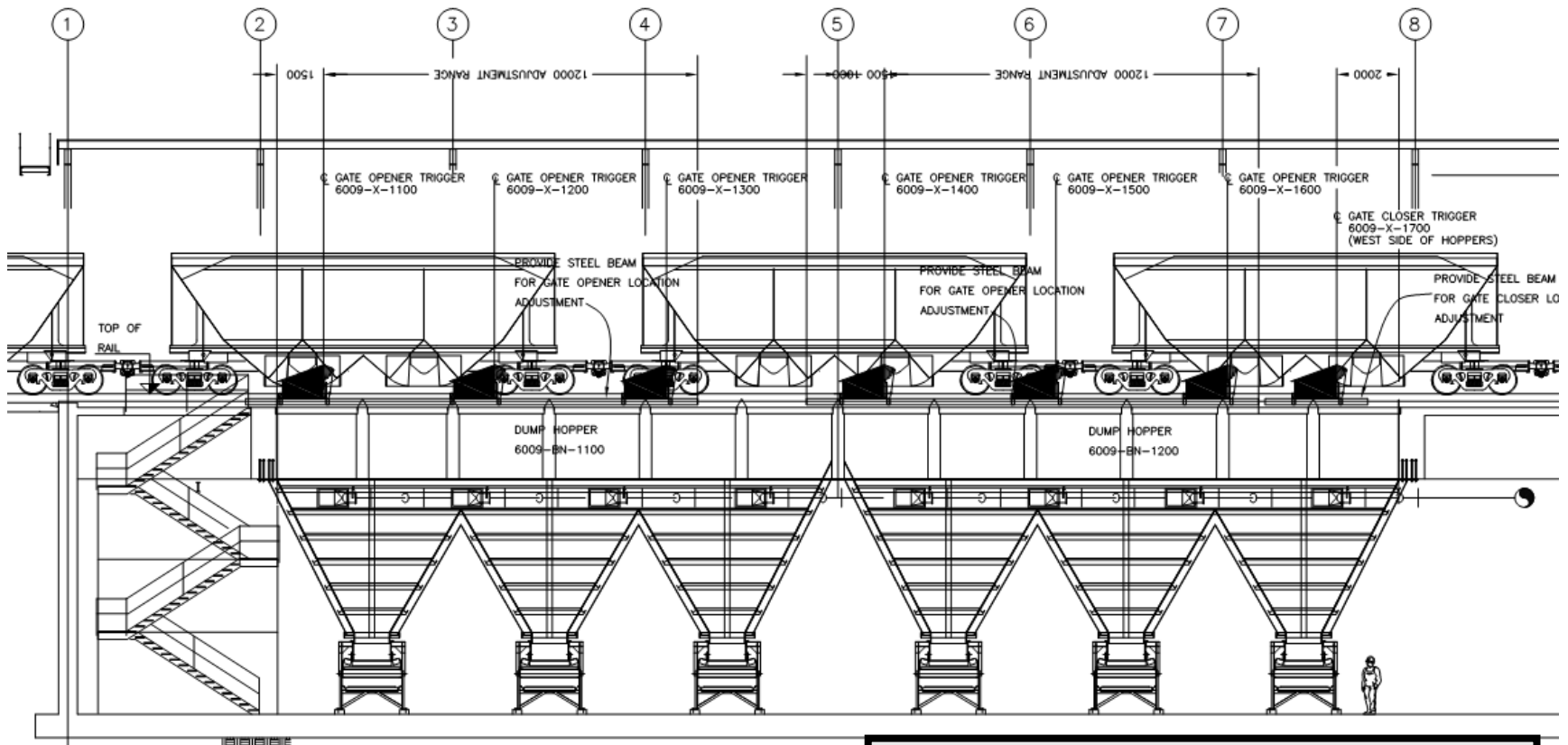




GABBRO TERMINAL – ALSARH JV – Oman
Truckunloading – 4,000 tph
Supply and Erection



GSN Petronor – Bilbao (Spain)
Sulphur & Coke Handling System



- 4600 m belt conveyors system
- Transport Capacity up to 4000 t/h
- Belt width up to 2200 mm

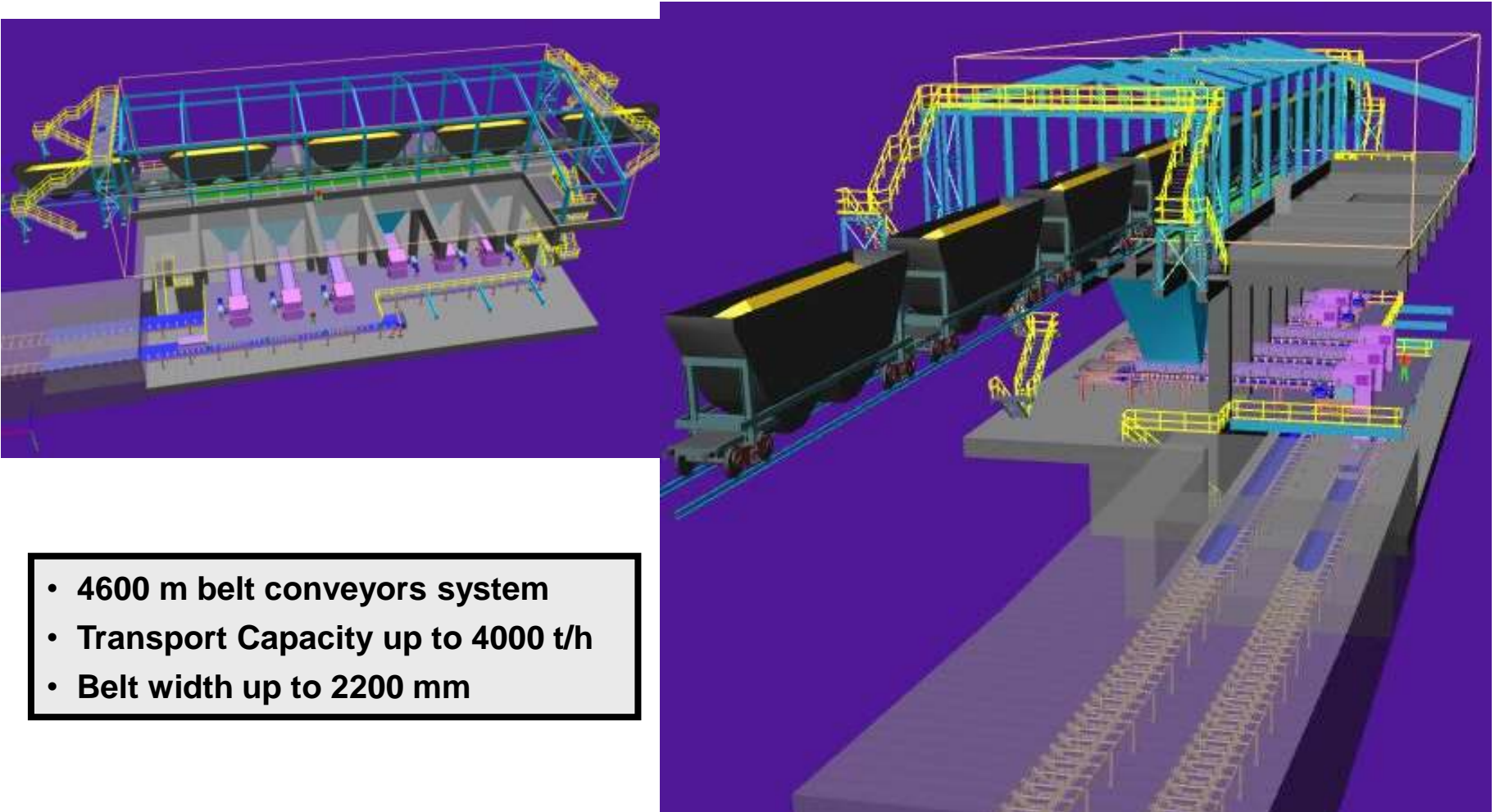
Westmar FLUOR



RUWAIS TERMINAL – Abu Dhabi

• Techint E&C - Gasco





- 4600 m belt conveyors system
- Transport Capacity up to 4000 t/h
- Belt width up to 2200 mm

RUWAIS TERMINAL – Abu Dhabi

- Techint E&C - Gasco

Loading / Unloading

- 4600 m belt conveyors system
- Transport Capacity up to 4000 t/h
- Belt width up to 2200 mm



RUWAIS TERMINAL – Abu Dhabi

• Techint E&C - Gasco

Loading / Unloading



- 4600 m belt conveyors system
- Transport Capacity up to 4000 t/h
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RUWAIS TERMINAL – Abu Dhabi

- Techint E&C - Gasco



Ma'aden – Saudi Arabia

MAP / DAP GRANULATION PLANT – Train Unloading System

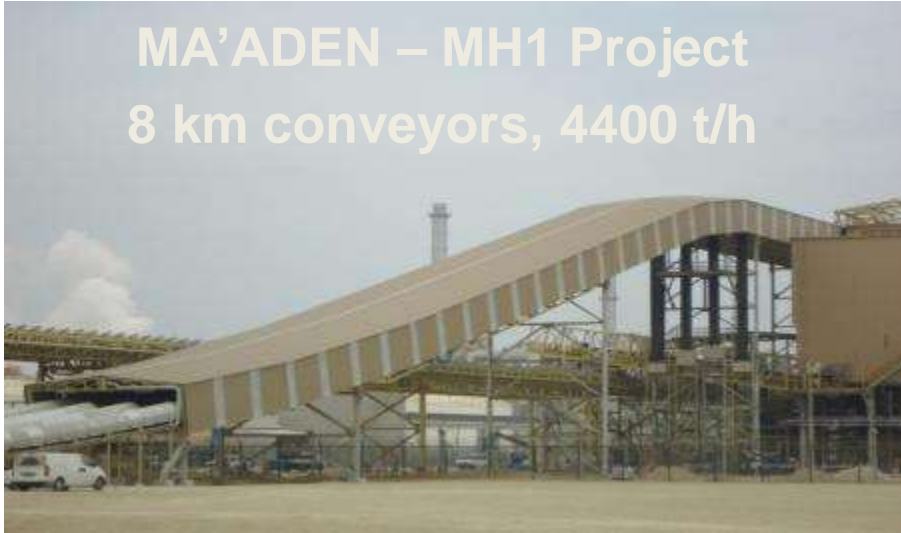


Ma'aden – Saudi Arabia

MAP / DAP GRANULATION PLANT – Train Unloading System

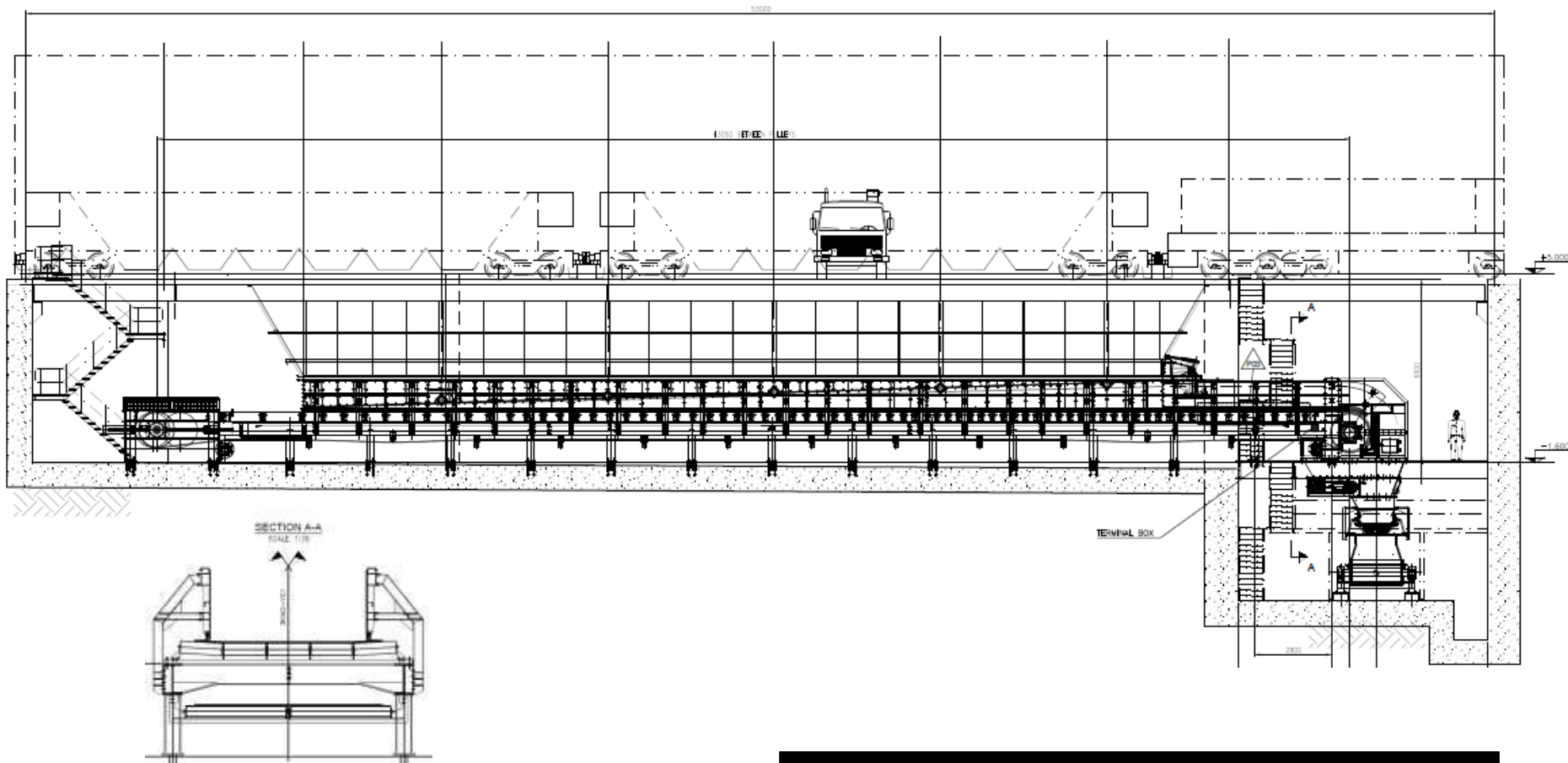
Loading / Unloading

MA'ADEN – MH1 Project
8 km conveyors, 4400 t/h



Belt Feeder of 3.2 m width



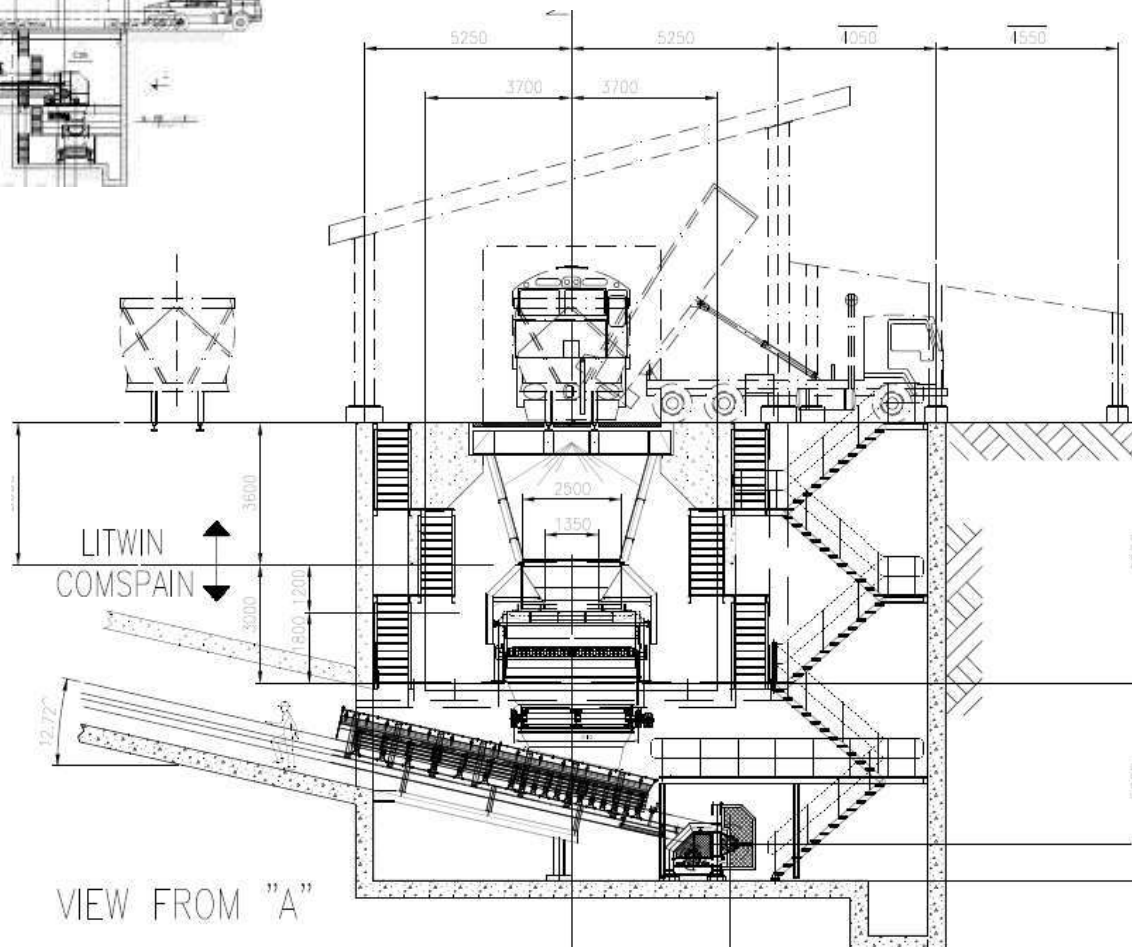
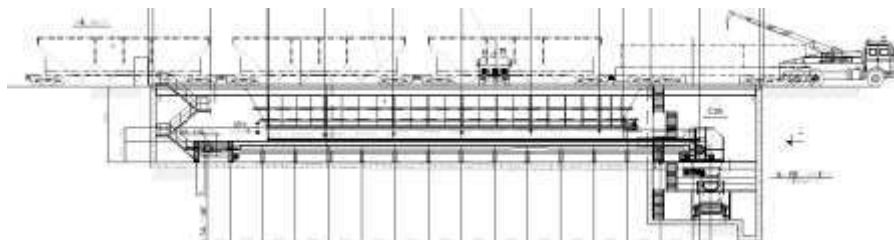


MA'ADEN-MH1 Project 8 km conveyors, 4400 t/h

Belt Feeder of 3.2 m width

Ma'aden – Saudi Arabia

MAP / DAP GRANULATION PLANT – Train Unloading System



Ma'aden – Saudi Arabia

MAP / DAP GRANULATION PLANT – Train Unloading System

Loading / Unloading



- ROM Hopper 250T
- Through Conveyors.
- Reclaimer Hoppers
- Silo 1000 T
- Train loading system
- Electrical equipment
- Steel structures.
- Dust collectors & Dust suppression system
- Novated equipments (Sizers, Apron feeders)



Ma'aden – Saudi Arabia

BAUXITE MINE– Truck Unloading System



Ma'aden – Saudi Arabia

BAUXITE MINE– Train Loading System



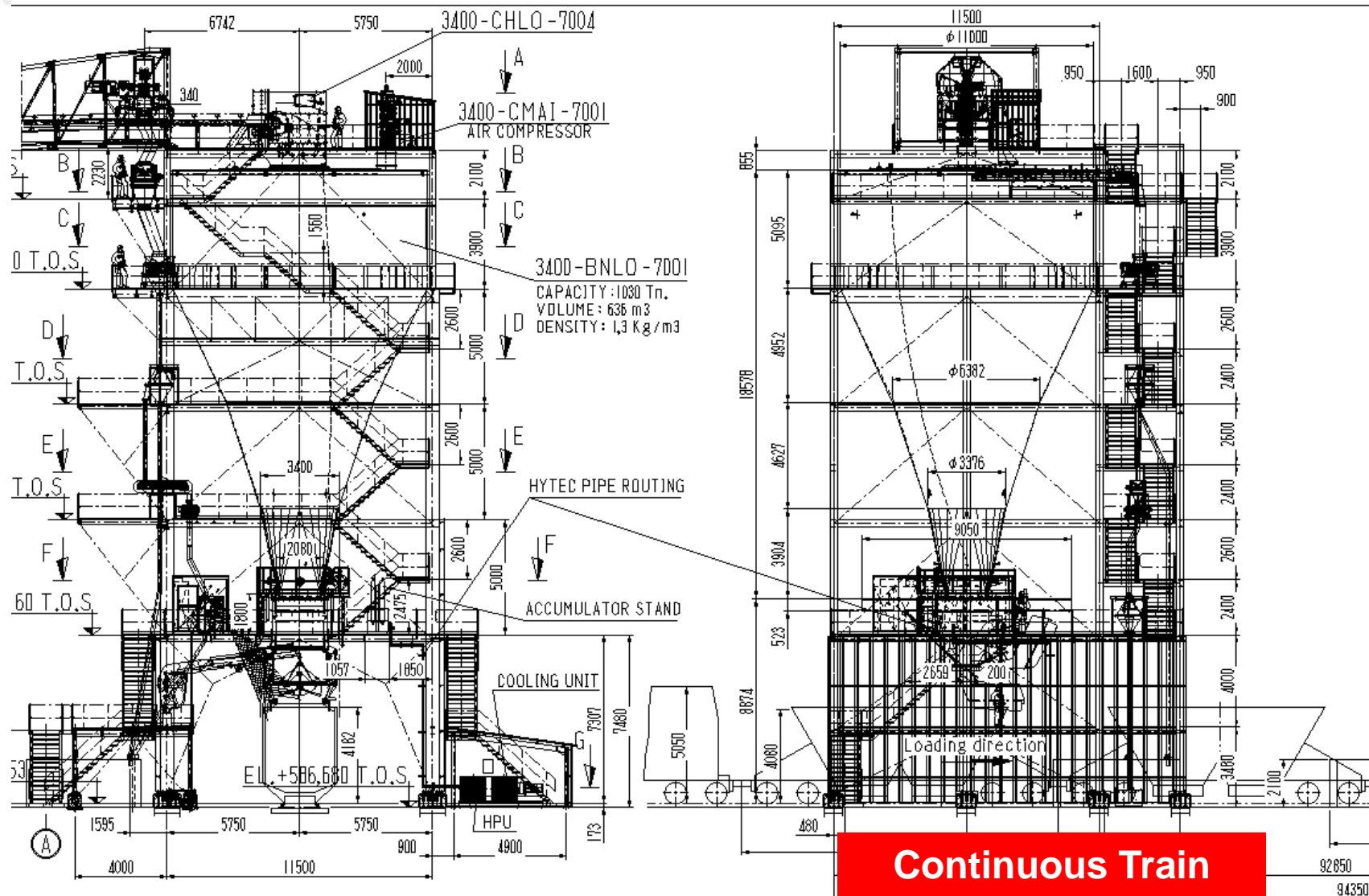
Ma'aden – Saudi Arabia

BAUXITE MINE– Train Loading System



Ma'aden – Saudi Arabia

BAUXITE MINE– Train Loading System



Continuous Train Loading Installation

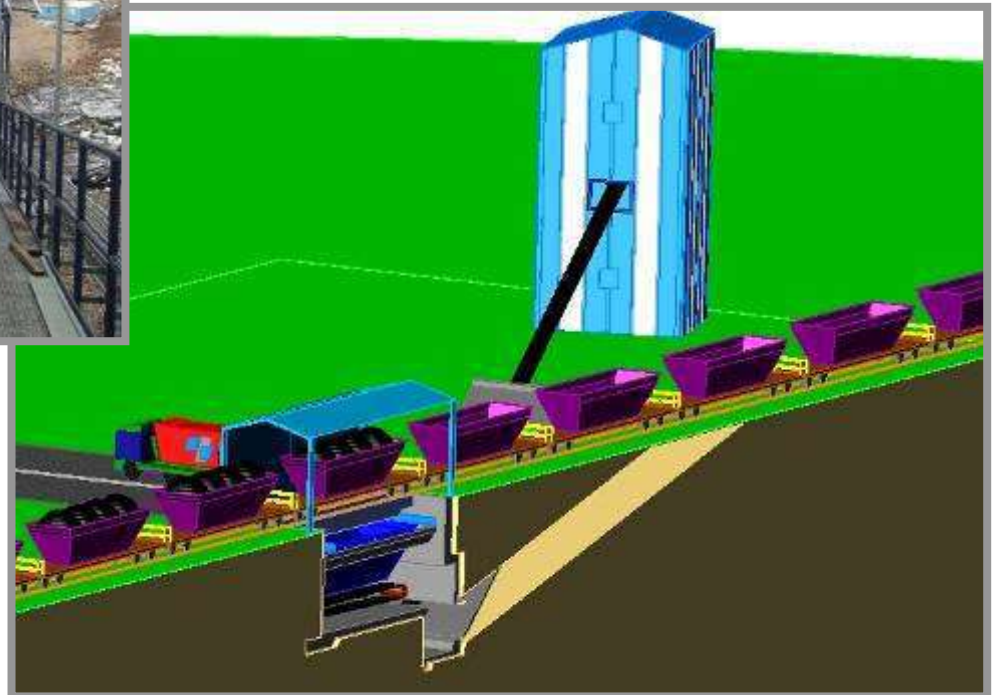
4000 t/h

Loading / Unloading



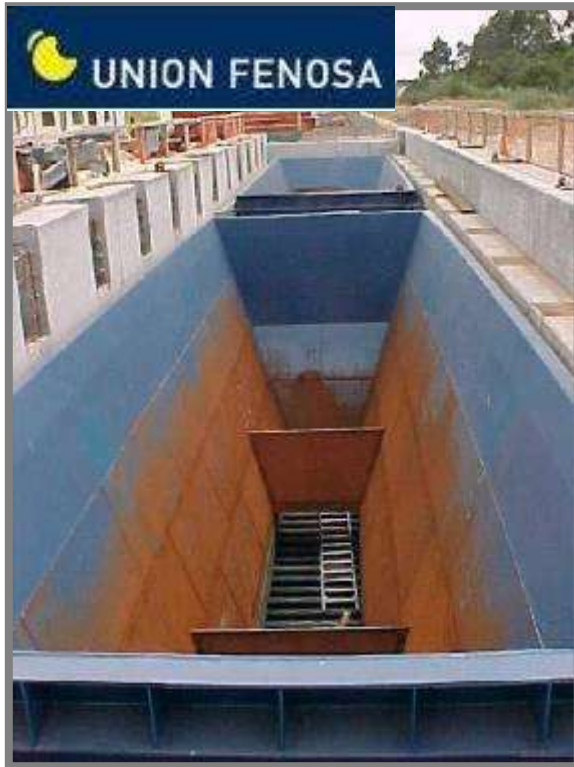
**Continuous Train
Loading Installation
4000 t/h**





UNION FENOSA – La Robla, León (Spain)
Train unloading station, 600 t/h capacity.

Loading / Unloading



UNION FENOSA – Meirama, La Coruña (Spain)
Train unloading station, 1100 t/h capacity.
Belt conveyors system to existing stockyard.



2500 T/H OR 100 TRUCKS/H



ENDESA SAA– Spain

- Truck unloading installation for coal



- Circular stockyard of 110.000 tons coke
- Stacker machine
- Complete electrical power and control installation
- Complete fire detection and protection system
- Electrical and Mechanical Erection
- CCTV and communication system



Union Fenosa – Coruña Port (Spain) – Medusa Project
HANDLING SYSTEM – Scope of Supply



Bulk Terminal – Port of Santander (Spain)
TRUCKS LOADING STATION

- 4 Lines truck loading station,
- One weighed truck every 5 minutes



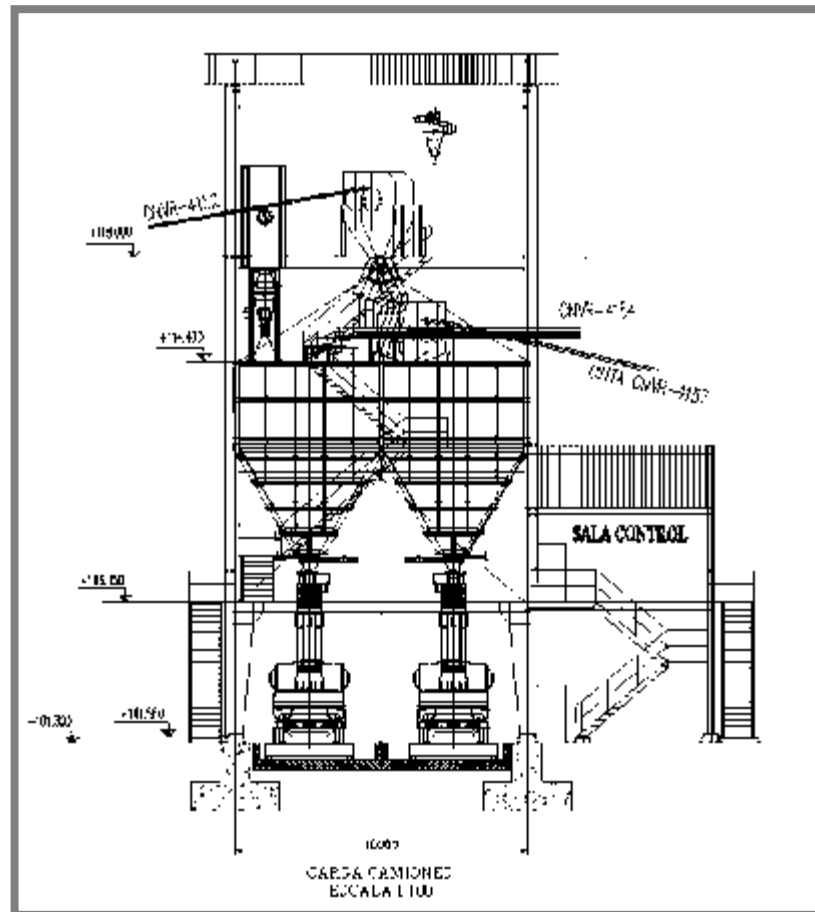
Bulk Terminal – Port of Santander (Spain) ***TRUCKS LOADING STATION***

- 4 Lines truck loading station,
- One weighed truck every 5 minutes



Bulk Terminal – Port of Santander (Spain)
RAIL WAGONS LOADING STATION

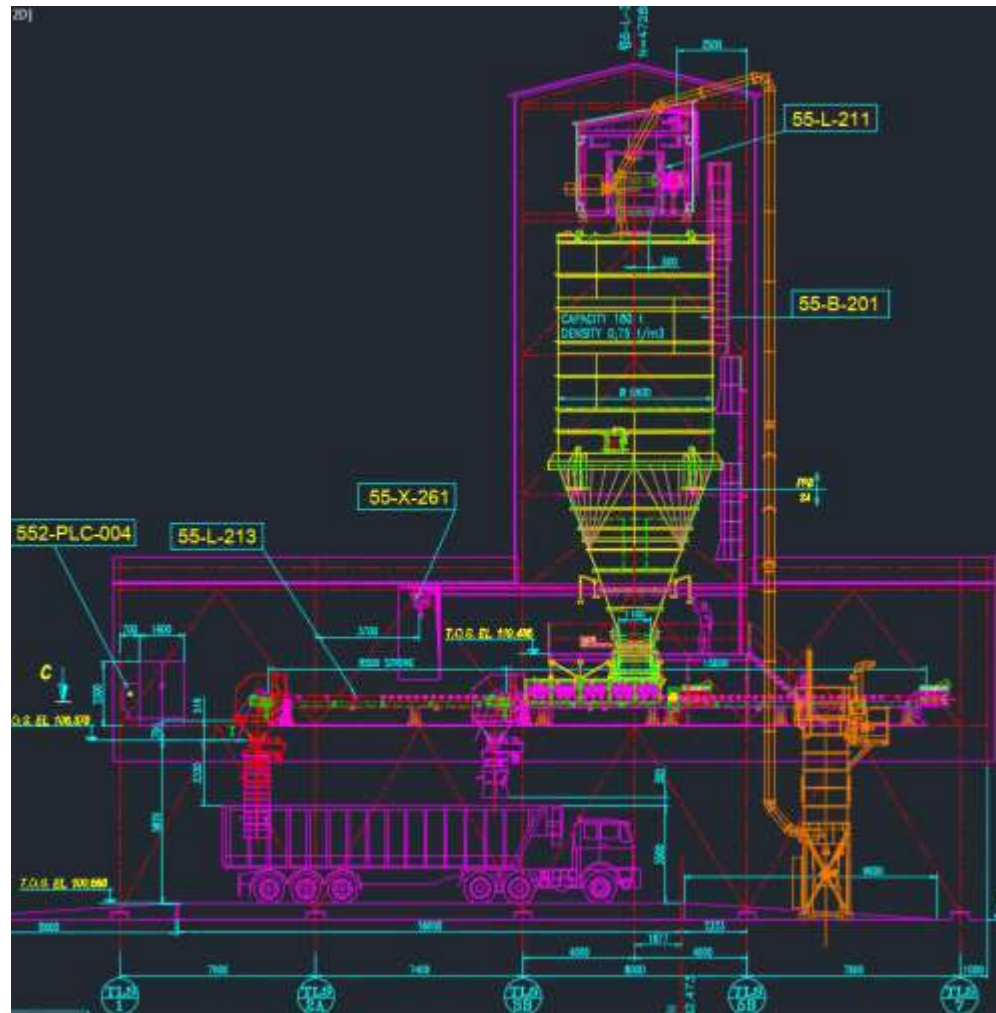
Loading / Unloading



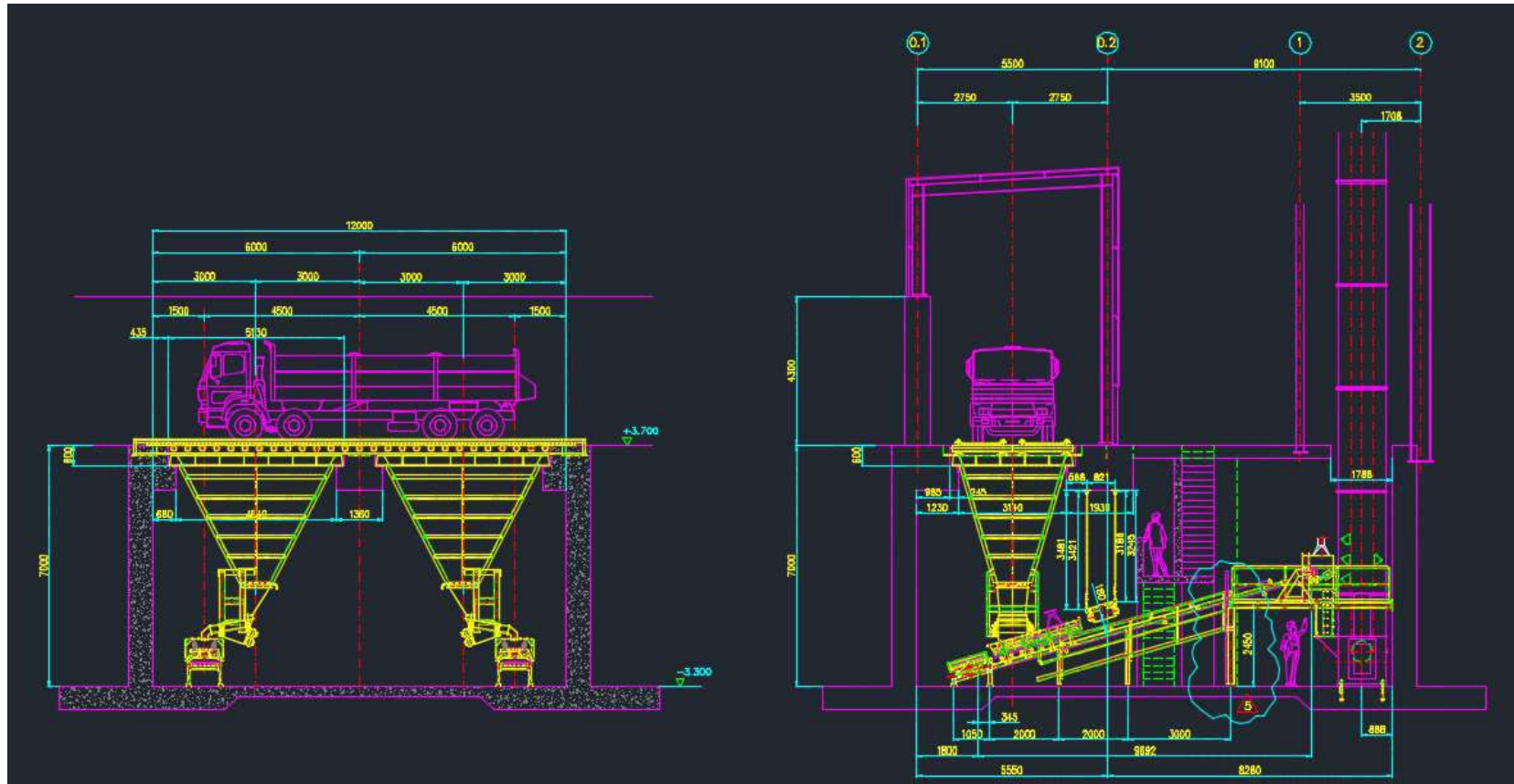
BP (British Petroleum) – Castellon Refinery (Spain)

Green Coke Handling System

CONVENTIONAL BELTS & PIPE CONVEYORS & TRUCKS LOADING



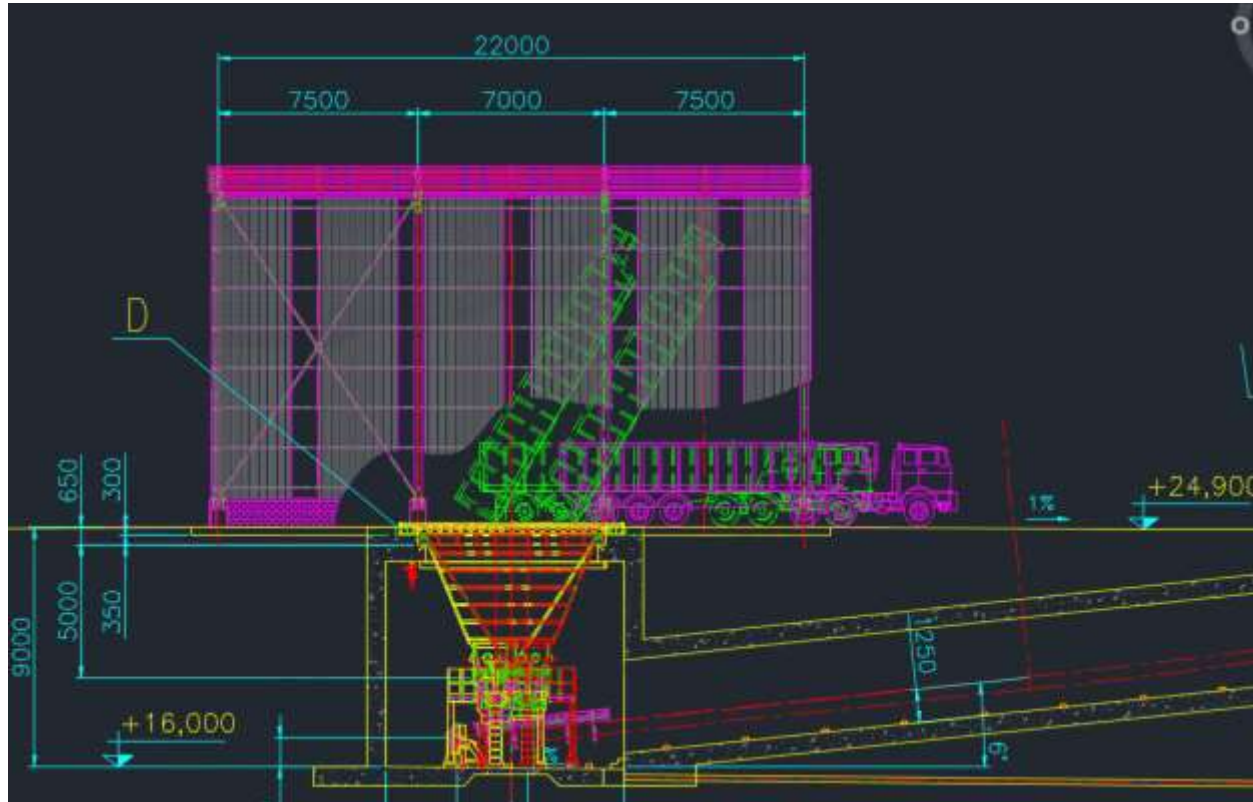
SAFCO V – Urea Handling
MOBILE TRUCK LOADING SYSTEM



Sines Power Plant - Portugal

Gypsum Handling System

Truck Unloading, Bucket Elevators, Silos



Tudela Veguin – Asturias (Spain)
105 m Circular stockyard.
150000 t slag capacity.



Loading / Unloading



Tudela Veguin – Asturias (Spain)

105 m Circular stockyard.

150000 t slag capacity.



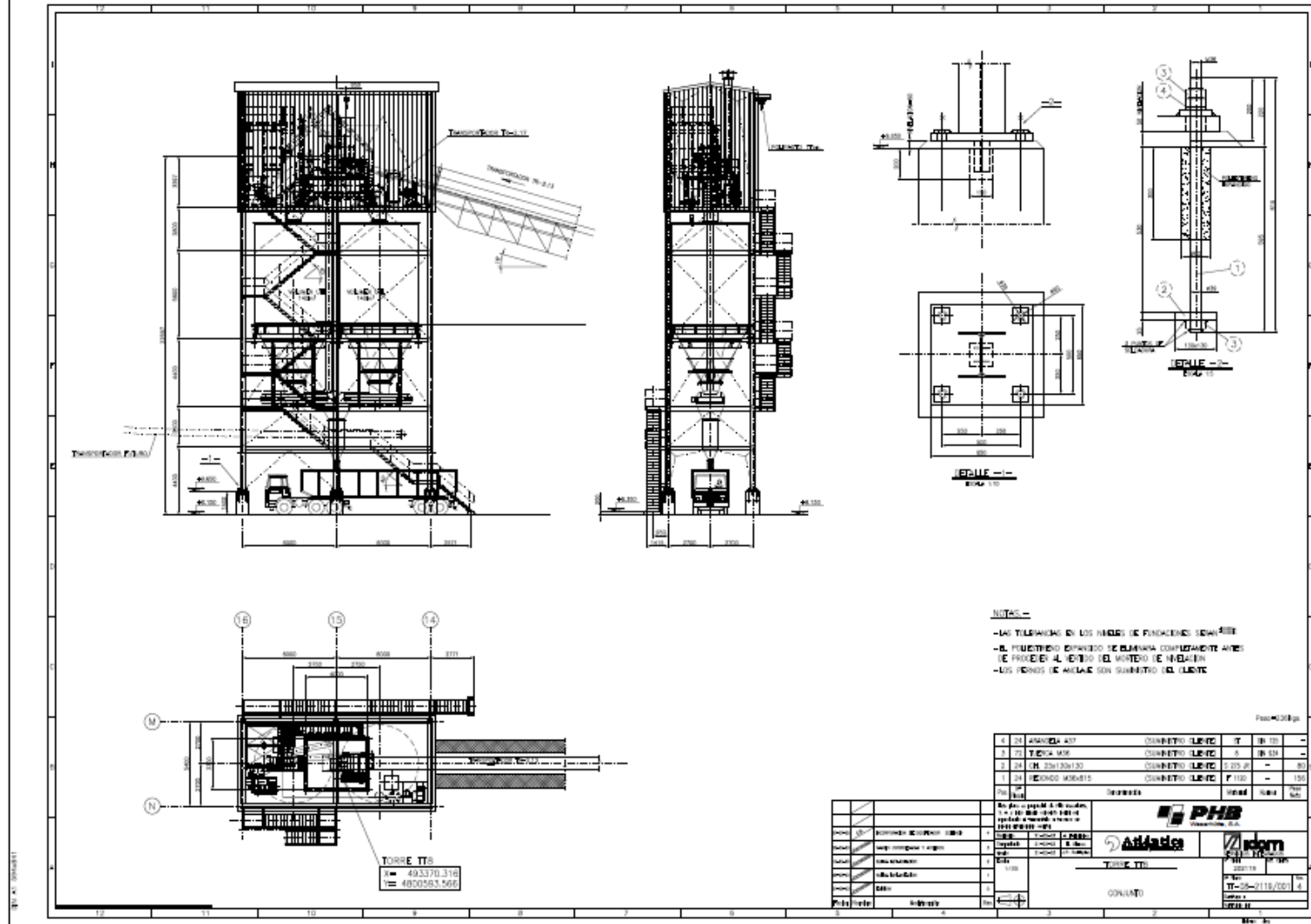


Tudela Veguin – Asturias (Spain)

105 m Circular stockyard.

150000 t slag capacity.





ATLÁNTICA DE GRANELES – Bilbao (Spain)

Truckloading Station

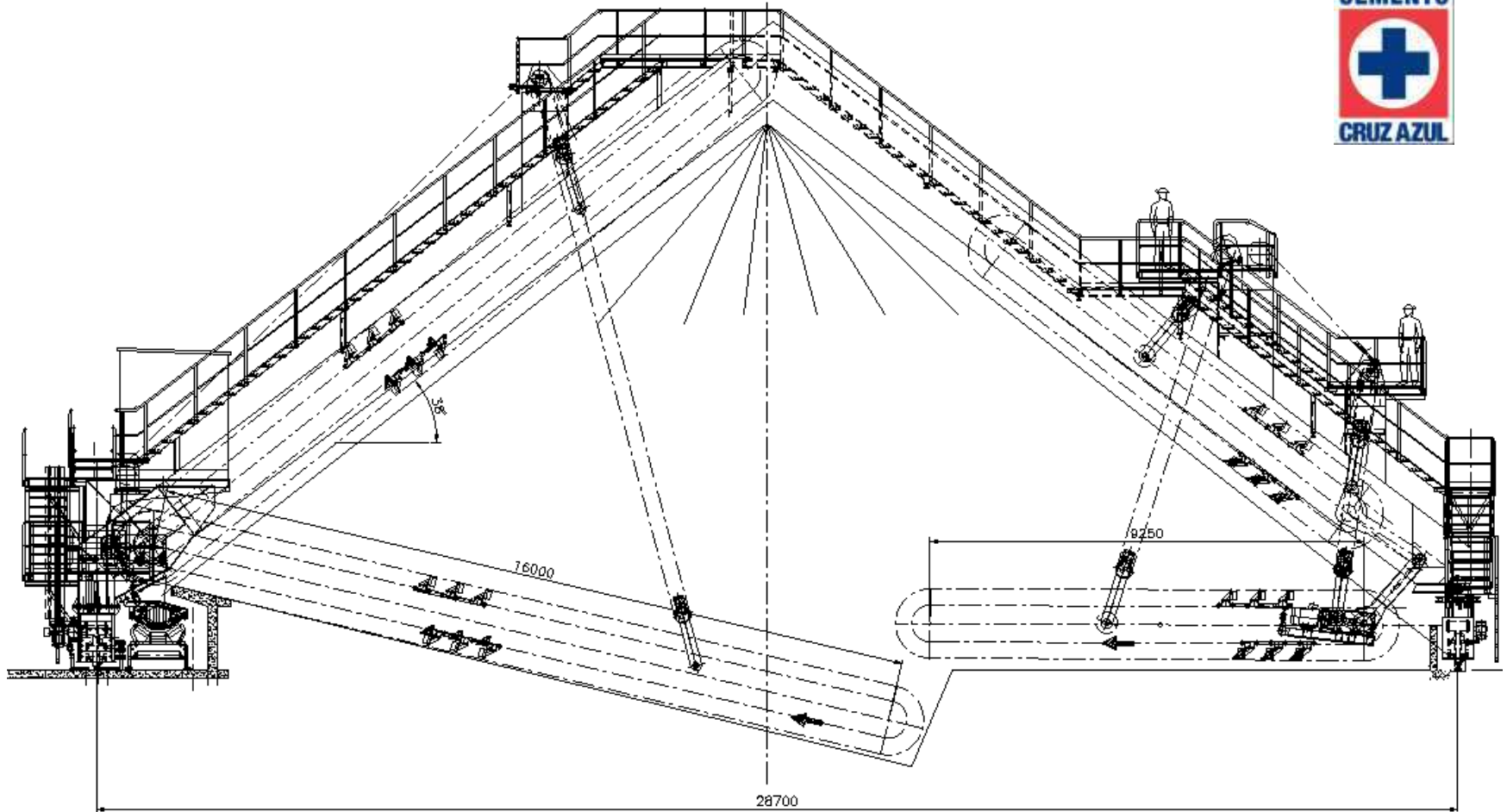


ATLÁNTICA DE GRANELES – Bilbao (Spain)
Truckloading Station

Scraper Reclaimers

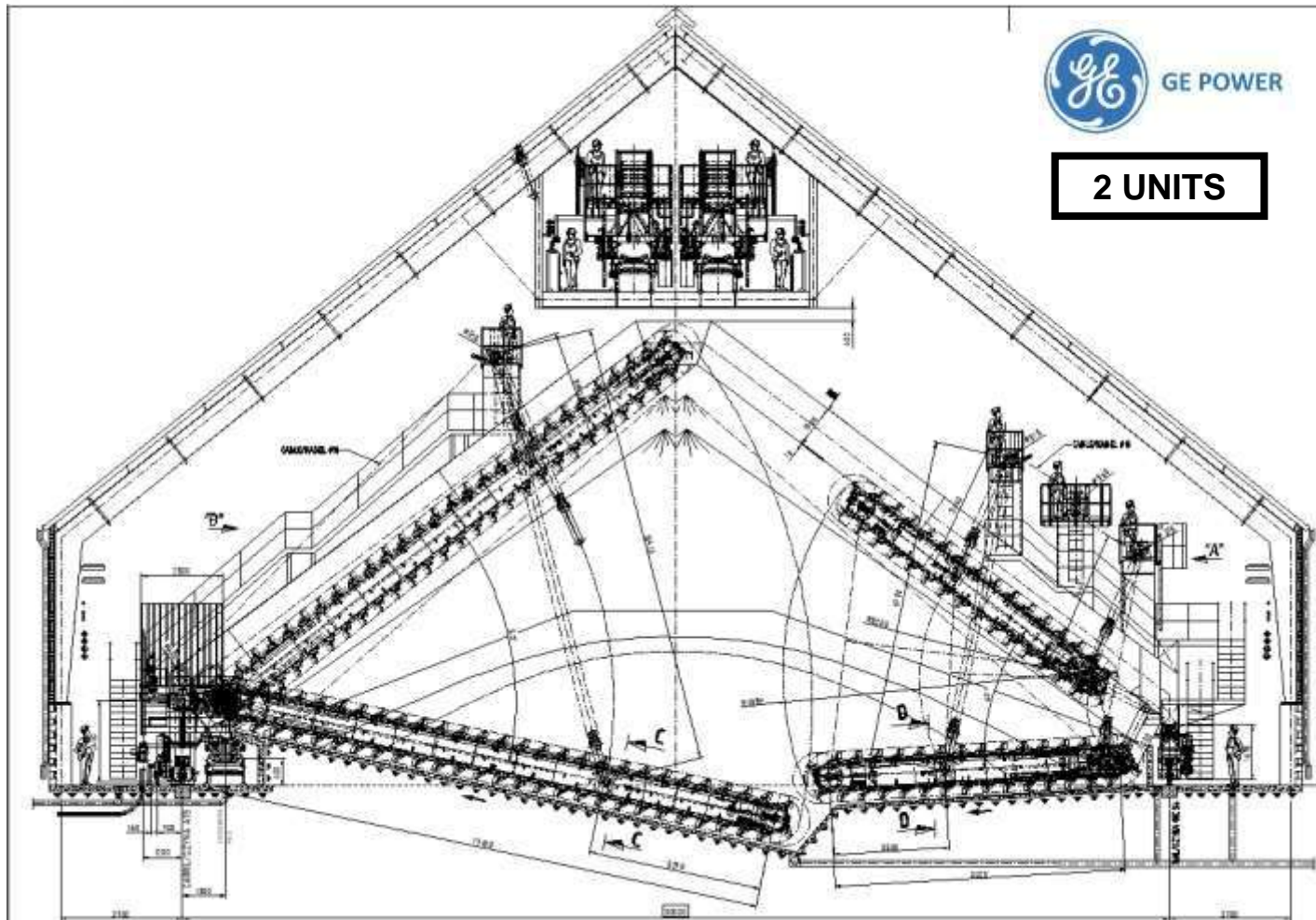


Scraper Reclaimers



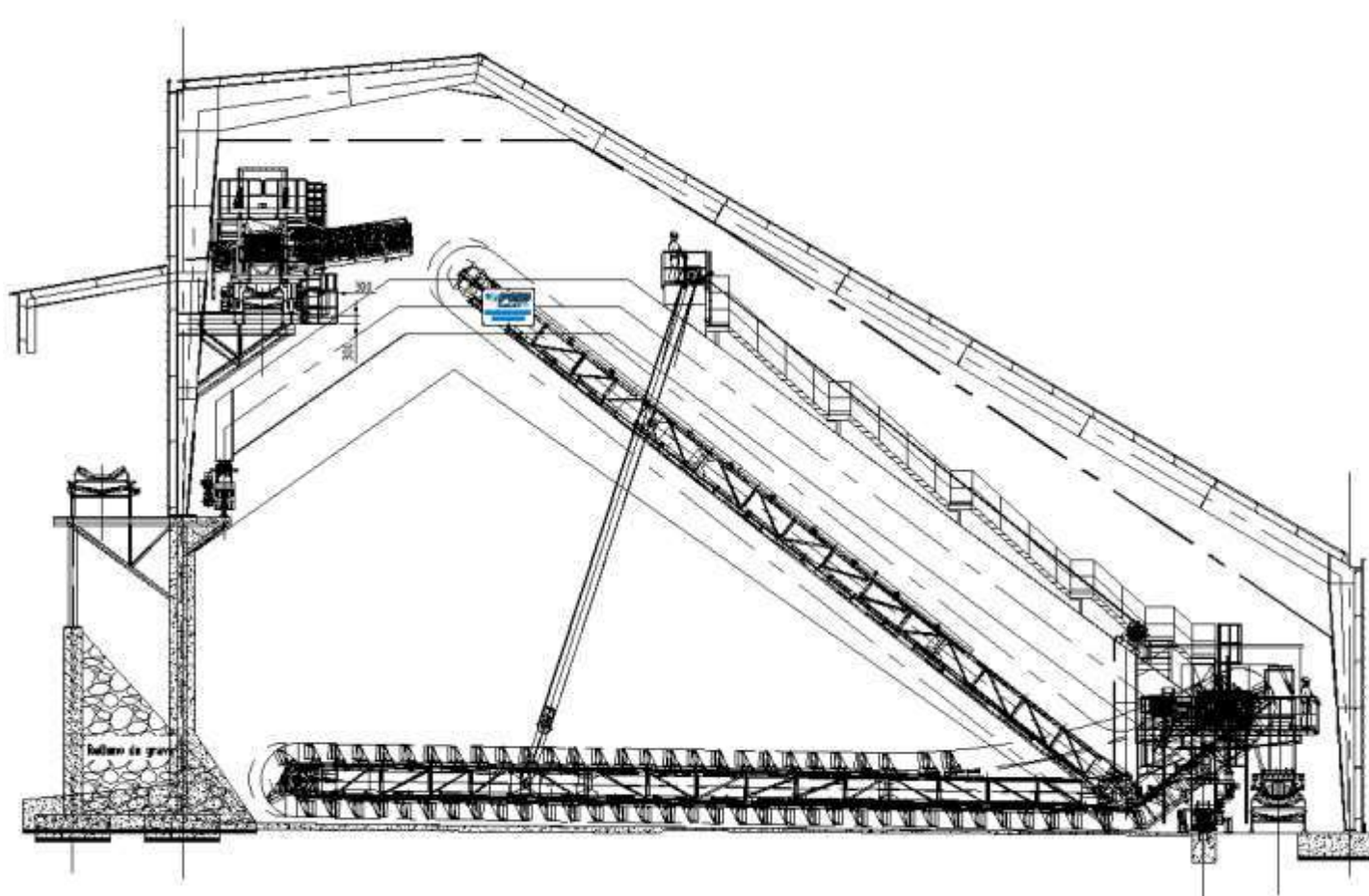
Cementos Cruz Azul - Mexico
Slag & Gypsum Reclaimers – VP2 200 / 29

Scraper Reclaimers

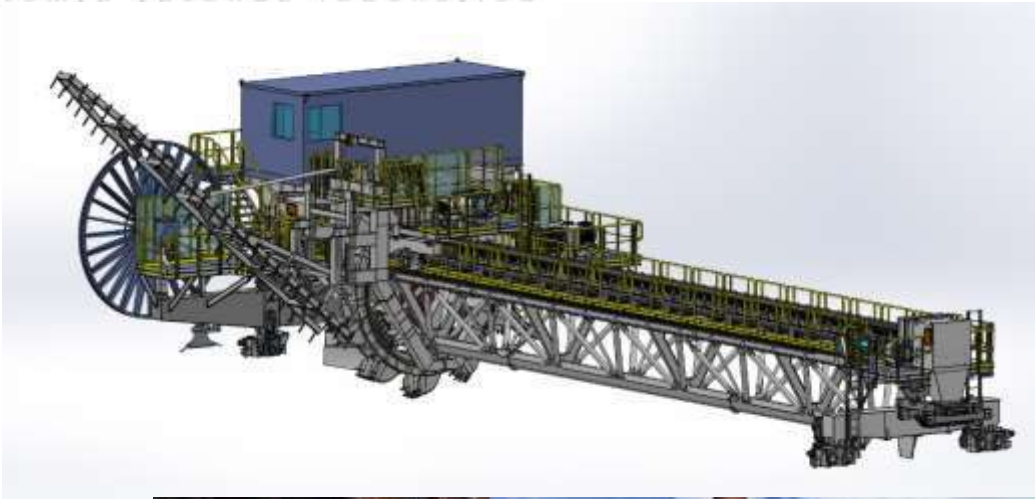


Ostrołęka Power Plant - Poland
Slag & Gypsum Reclaimers – VP2 300 / 30

Scraper Reclaimers



ALICANTE – Eiffage
Reclaimer 2000 tph –
Design, Supply, Erection and Start-up



- Capacity = 800 tph
- Rail Span = 27,5 meters
- Transfer Car
- Iron Ore Handling



ARCELOR MITTAL BREMEN - GERMANY
BRIDGE TYPE BUCKET WHEEL RECLAIMER

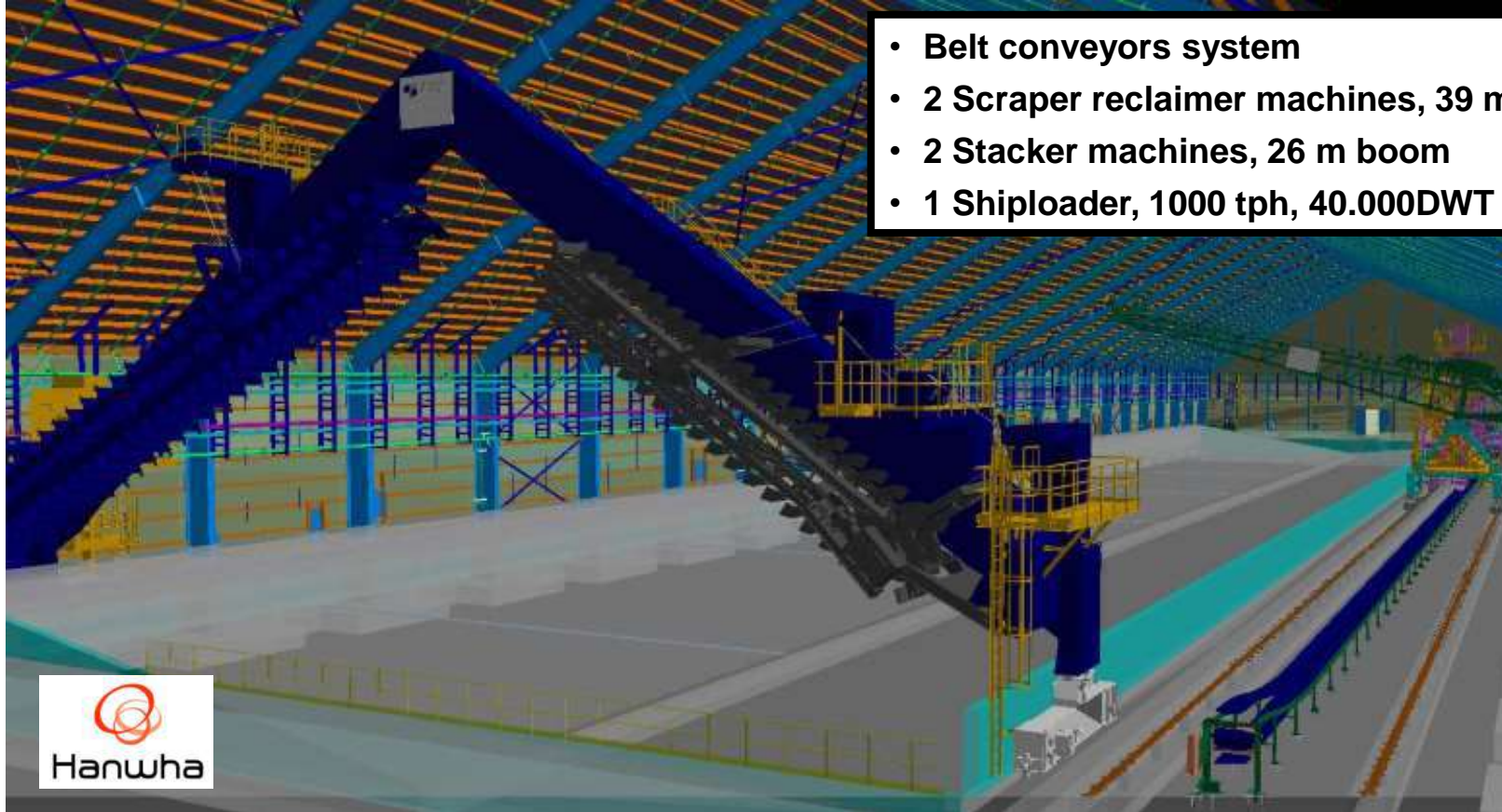
Scraper Reclaimers



- VP2 Reclaimer
- 1800 tons per hour
- 45 m rail span

Voest Alpine Texas LLC – HBI Facility
Complete Iron Ore & HBI handling facilities

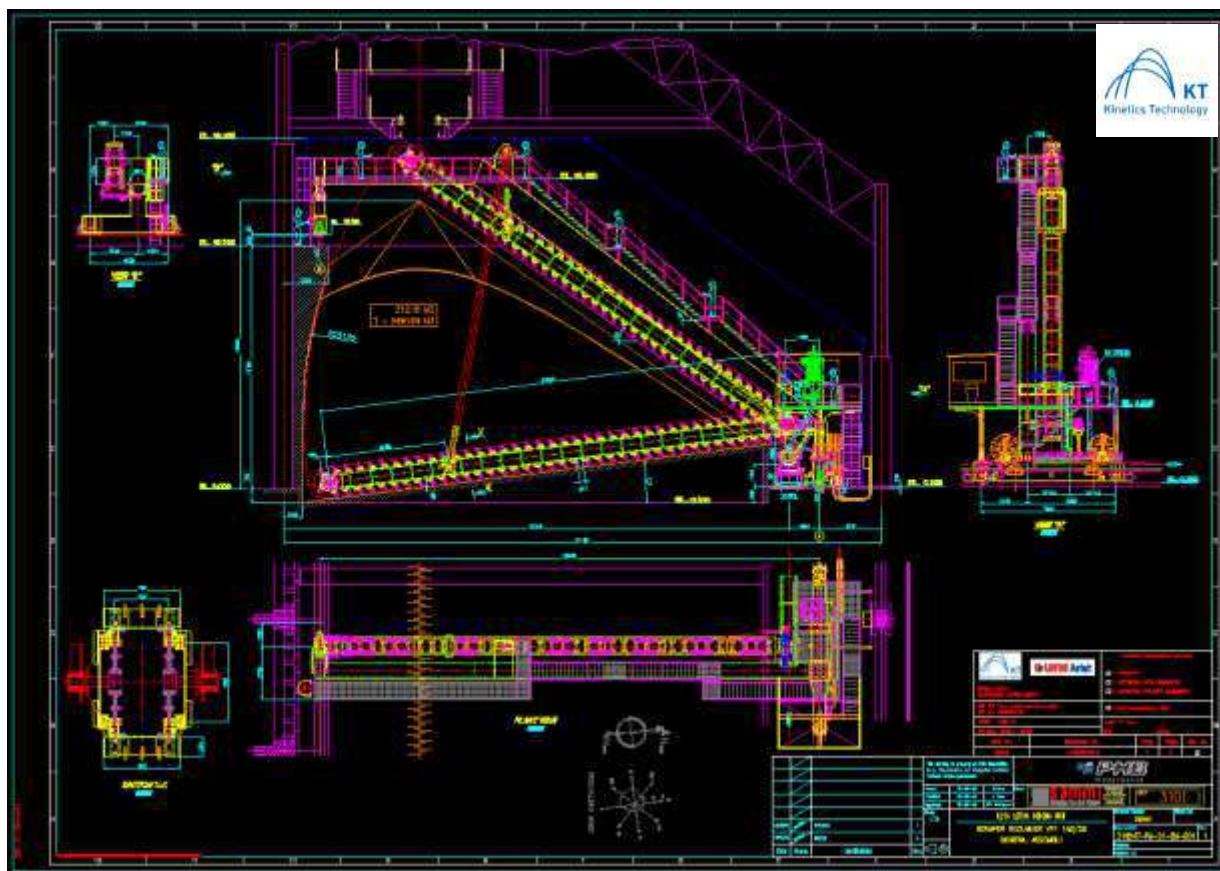
Scraper Reclaimers



- Belt conveyors system
- 2 Scraper reclaimer machines, 39 m span
- 2 Stacker machines, 26 m boom
- 1 Shiploader, 1000 tph, 40.000DWT

JAZAN REFINERY – Saudi Arabia - ARAMCO HANWHA E&C

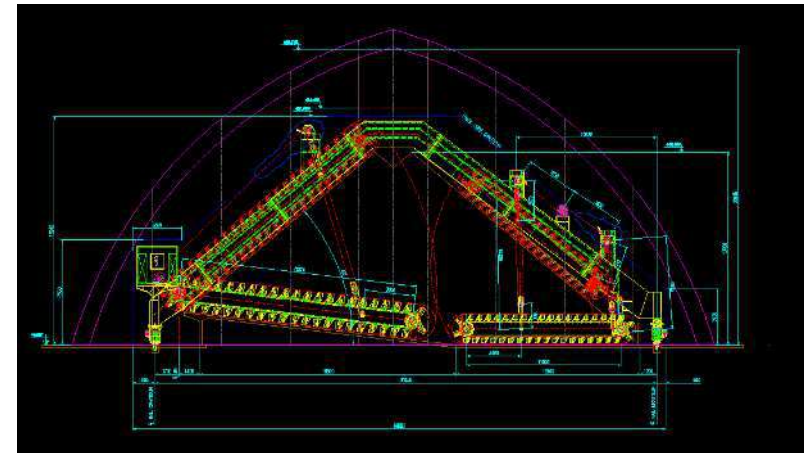
- New Sulphur Handling System, 1000 t/h



GDANSK REFINERY – POLAND
SEMIPORTAL SCRAPER RECLAIMER - VP1 150/26
COKE HANDLING SYSTEM



Scraper Reclaimers



- New Belt Conveyor System
- New Portal Scraper Machine VP2 1200/35,8
- Civil Works
- Full Electrical & Control Package

OCP – Rehabilitation of Installations Soufre JPH (EPC Contract)
Sulphur Handling System - (Jorf Lasfar Port) – (Morocco)

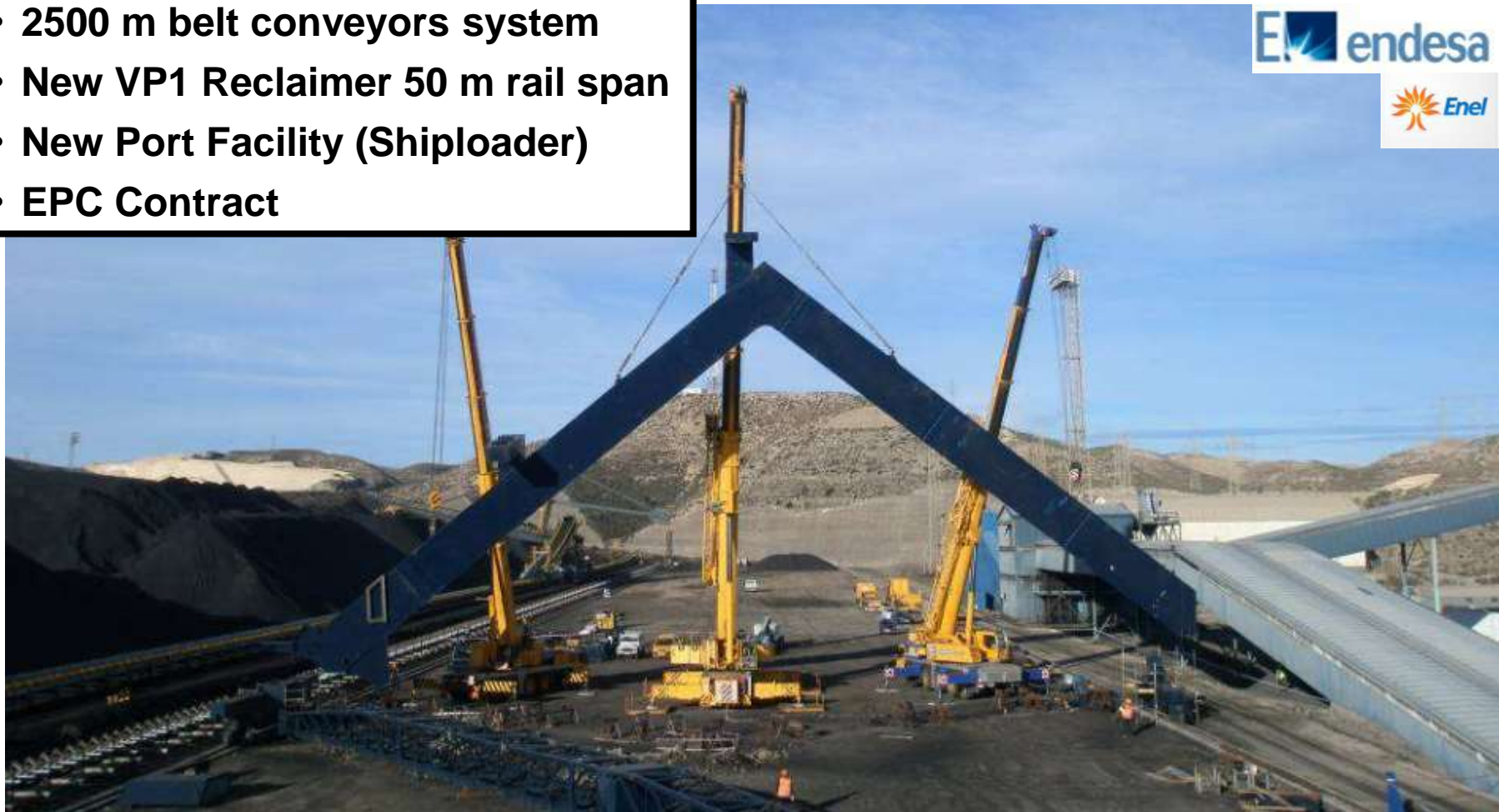


JGCS - NSRP - NGHI SON REFINERY & PETROCHEMICAL COMPLEX (VIETNAM)

- Portal Scraper Reclaimer VP2 700 t/h, 39 m rail span

Scraper Reclaimers

- 2500 m belt conveyors system
- New VP1 Reclaimer 50 m rail span
- New Port Facility (Shiploader)
- EPC Contract

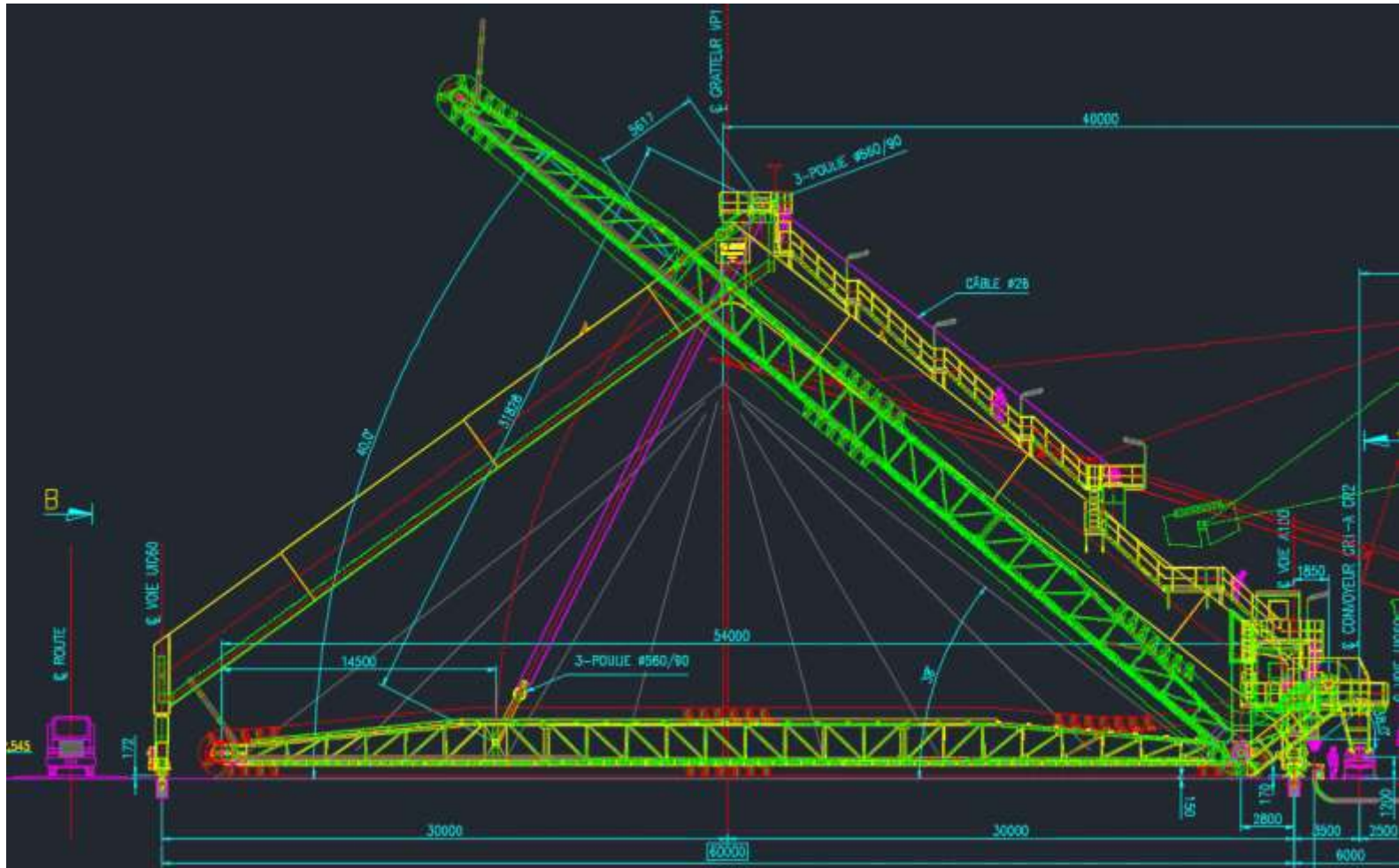


Enesa

Enel

ENDESA LITORAL– Spain

- New Coal Yard and Shiploading facility



O.N.E. - Morocco

- **New Coal Yard 1000tph 60 m rail span**

Scraper Reclaimers



Jubail Export Refinery – Saudi Aramco (Saudi Arabia)

Coke Handling System – VP3 2000/60

Scraper Reclaimers



Jubail Export Refinery – Saudi Aramco (Saudi Arabia)
Coke Handling System – VP3 2000/60 & VP2 500/60

Scraper Reclaimers



Uhde

FERTIL 2 – SAMSUNG Engineering - UAE

AMMONIA / UREA – PORTAL SCRAPER RECLAIMER VP2

- **Reclaiming Capacity: 1000 t/h**
- **Rail Span: 53 m**

Scraper Reclaimers



WorleyParsons
resources & energy

MA'ADEN معادن
شركة التعدين العربية السعودية
Saudi Arabian Mining Company

Uhde

MA'ADEN – Dap Granulation Plant (Saudi Arabia)

Longitudinal stockyard.

2 Portal scraper reclaimer with 3 scraper booms (2 main and 1 auxiliar) Reclaiming capacity 2000 t/h, 52 m rail span.

Scraper Reclaimers



Ma'aden – Saudi Arabia

MAP / DAP STOCKYARD

- 1 Portal Scraper Reclaimer with 3 booms (2 main & 1 auxiliar)
- Reclaiming capacity: 2,500 tph
- Rail Span: 61 m



Ma'aden – Saudi Arabia

MAP / DAP STOCKYARD

- 1 Portal Scraper Reclaimer with 2 booms (1 main & 1 auxiliar)
- Reclaiming capacity: 1000 m³/h
- Rail Span: 61 m

Scraper Reclaimers



- Mill station and preparation up to bunkers
- Conventional Conveyors system
- Coal / Coke Stockyard – Capacity 750.000 tons
- Complete electrical power and control
- CCTV and communication system
- Under UBC 4 earthquake classification.
- Biomass material handling stockyard



CT Andina – Mejillones (Chile) / Coal - Coke Handling System
SCOPE OF SUPPLY



SAFCO V– Saudi Arabia

- New Urea Handling System, 1500 t/h

Scraper Reclaimers



- Civil Works & Warehouses included
- Belt conveyors system
- 2 Longitudinal Stockyards
- Scraper reclaimer 1 boom – 44,5 m – 750 tph
- Wagon loading system
- Erection and Supervision included.



Minera El Brocal – Colquijirca (Perú)

Concentrate Materials Handling System – Cu,Pb,Zn

Scraper Reclaimers



Chiyoda – Assaluyeh Amonia Plant (Iran)

UREA STOCKYARD

- 3 Portal Scraper Reclaimers with 3 booms (2 main & 1 auxiliar)
- Reclaiming capacity: 100 – 1800 m³/h
- Rail Span: 54 m

Scraper Reclaimers



Gratteurs Safi - MAROC PHOSPHORE

Two Portal Reclaimers VP2 , rail span 34

Warehouse of Concrete



مجموعة د ش ف
Groupe OCP



OCP – New warehouses (Jorf Lasfar Plant) – (Morocco)
DAP / MAP Handling System – 2000 tph



OCP – New warehouse (Jorf Lasfar Port) – (Morocco)
Sulphur Handling System – VP3 2000 tph 43 m boom length

Scraper Reclaimers



TOYO – Petrobras (Brasil)

Longitudinal stockyard.

Portal scraper reclaimer 270 t/h, 35 m rail span



ATLÁNTICA DE GRANELES – Bilbao (Spain)

Longitudinal stockyard.

Portal scraper reclaimer 200 t/h, 30 m rail span.

Scraper Reclaimers



Enel - CENTRALE TERMoelecttrica TORREVALDALIGA NORD-(ITALIA)
Conveyors and reclaimers for gypsum and limestone handling

Scraper Reclaimers



Endesa Teruel TPP (Spain) *COAL STOCKYARD*

2 Bridge type reclaimers LHO 1300/43

Reclaiming Capacity: 1300 t/h

Rail span: 43 m

Scraper Reclaimers



ACERALIA – Gijón (Spain)

Ore bridge scraper 2000 t/h.

Belt conveyors system.

Scraper Reclaimers



Cemex - Yaqui Plant - Mexico

- Limestone
- 750 T/h
- 29 m Rail Span

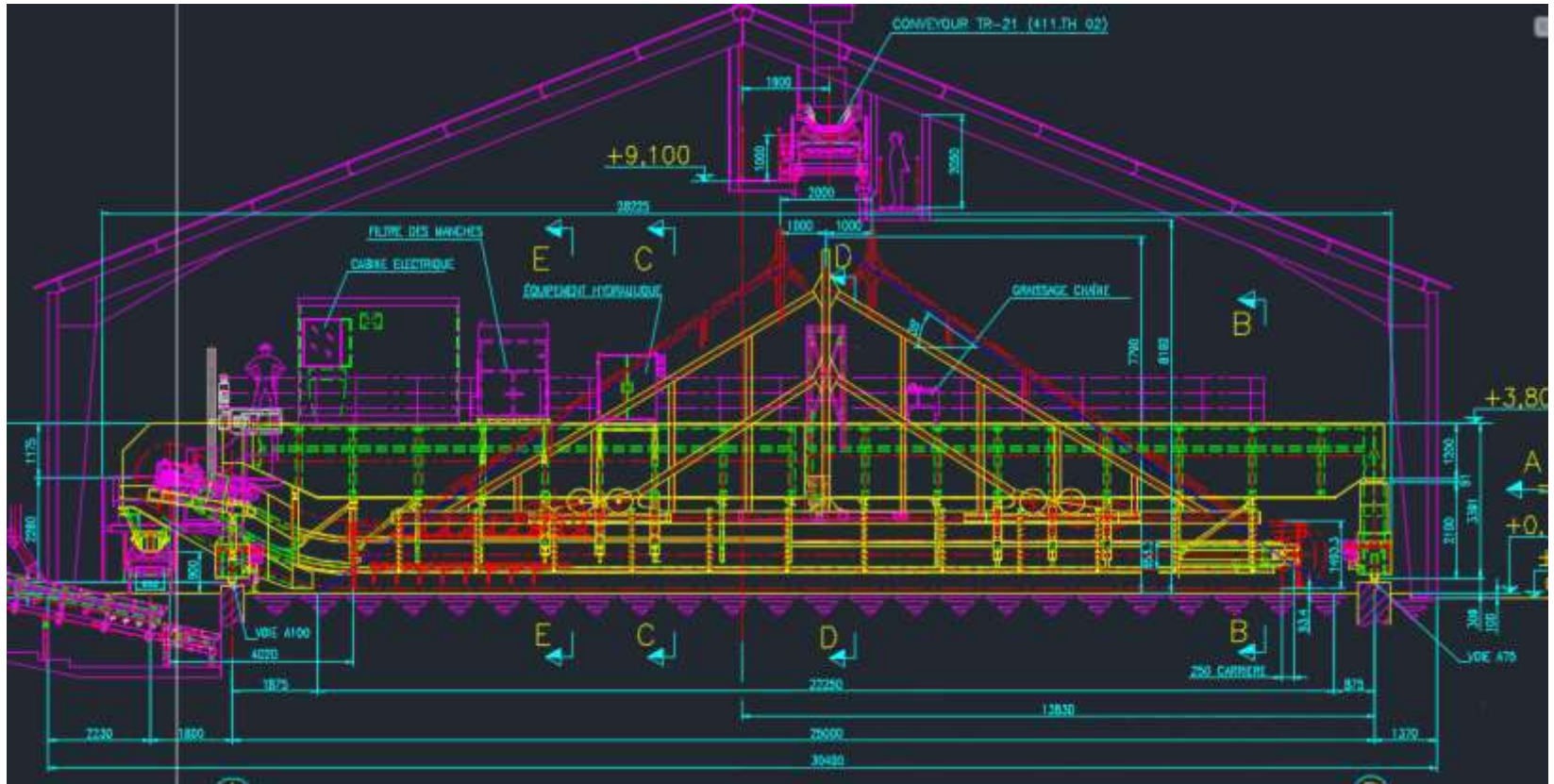
Scraper Reclaimers



CEMEX – El Yaqui (Mexico)

Limestone Handling System

1 Luffing Stacker ST 1000/19 & 3 Frontal Reclaimer LHO 750/29



Sete Cement Plant – Lafarge – France

- Clinker
- 150 T/h
- 25 m Rail Span

Scraper Reclaimers



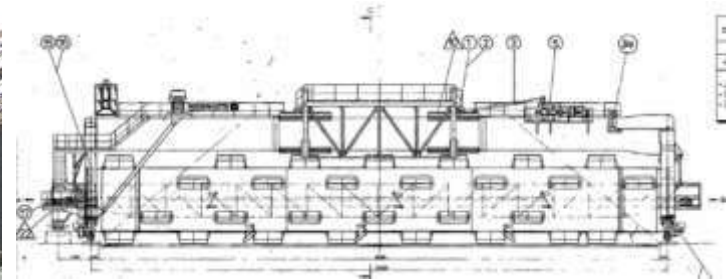
Cementos Balboa – Alconera Cement Plant – Spain

Additives

400 T/h

24 m Rail Span

Scraper Reclaimers



- 2 Revamped Barrel Reclaimers
(600 t/h - 4.3 m Ø – 39m rail span)



**ABOÑO (SPAIN) – ARCELOR MITTAL STEEL MAKING PLANT –
2 BARREL RECLAIMERS (UPGRADE) PROJECT**

Scraper Reclaimers



ASLAND LAFARGE – Sagunto, Valencia (Spain)
Combined stacker-reclaimer, portal type, stacking: 400 t/h,
reclaiming: 100 t/h, 45 m rail span

Scraper Reclaimers



BP (British Petroleum) – Castellon Refinery (Spain)
Green Coke Handling System

Scraper Reclaimers



BP (British Petroleum) – Castellon's Refinery (Spain)
Green Coke Handling System – *PORTAL STACKER RECLAIMER*

Scraper Reclaimers



CEMEX – El Yaqui (Mexico)

Coke Handling System

1 Luffing Slewing Stacker STD 300/16.7

& 2 Lateral Cantilever Reclaimer SKV 250/24

Scraper Reclaimers



TERMINAL MARITIMA ALTAMIRA - (Mexico)
2 side scrapers for cereals, 350 t/h capacity.



CEMEX – Balcones (USA)
Limestone Handling System
1 Frontal Reclaimer LHO 567/35.9

Scraper Reclaimers



Consignaciones TORO & BETOLAZA – (Bilbao, Spain)

Sodium sulphate handling terminal

Truck unloading system, Stackers ST 250/500-7, Reclaimer SKDW 700/18, Warehouse, Shiploader CTD 700/21,5 for 30.000 DWT Vessels

Scraper Reclaimers



GSN Petronor – Bilbao (Spain)
Sulphur & Coke Handling System

Scraper Reclaimers



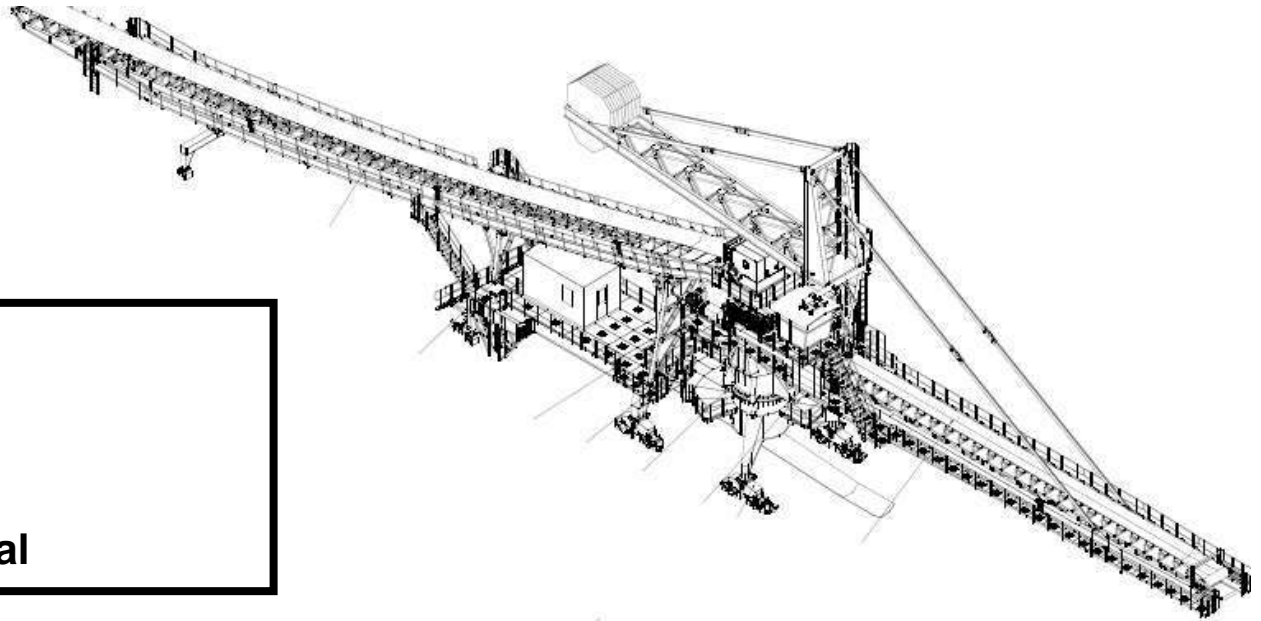
CT Andina – Mejillones (Chile) / Coal - Coke Handling System

WOODEN CHIPS HANDLING SYSTEM

1 Stacker Machine ST 375/18

1 Lateral Cantilever Scraper Machine SKV 150/24





- **Stacker STD 4800/38**
- **Boom length: 38 m**
- **Capacity: 4800 t/h**
- **Material handled: Coal**



JORF LASFAR– Morocco

- **New Coal Yard and Wagon Loading stations**



Voest Alpine Texas LLC – HBI Facility
Complete Iron Ore & HBI handling facilities



Miguel Hidalgo Refinery – Pemex, Mexico
Pet-Coke Stacker

GDF SUEZ



SKANSKA



- Mill station and material preparation up to bunkers
- Conventional Conveyors system
- Coal / Coke Stockyard – Capacity 750.000 tons.
- Stacker and reclaimer machines
- Complete electrical power and control installation
- Complete fire detection and protection installation
- Electrical and Mechanical Erection.
- CCTV and communication system
- Under UBC 4 earthquake clasification.
- Biomass material handling stockyard

CT Andina – Mejillones (Chile) / Coal - Coke Handling System

- Civil Works included
- Belt conveyors system (over 10 km)
- 3 Stacker machines
- Electrical and control system included
- Erection and Supervision included

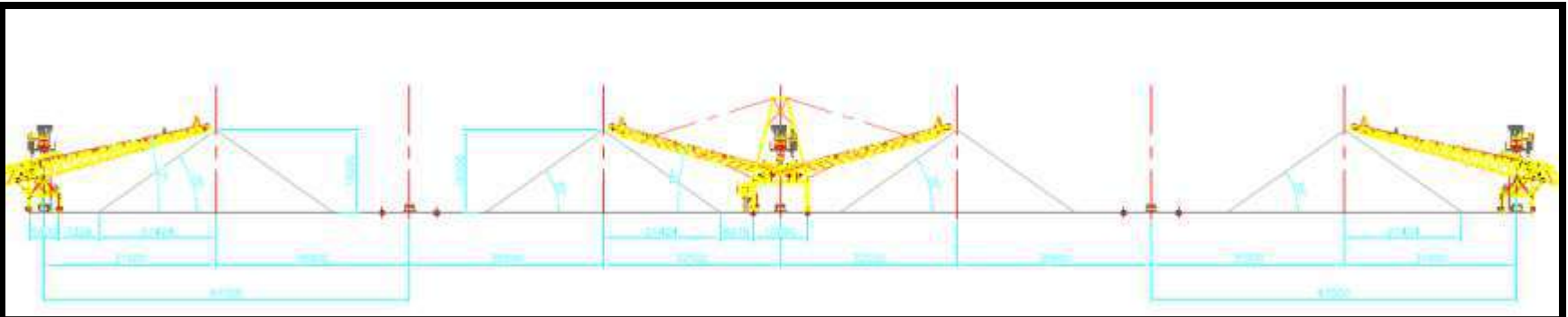


El Halassa – (Morocco)

Phosphates Handling System – 2000 tph



- Civil Works included
- Belt conveyors system (over 10 km)
- 3 Stacker machines
- Electrical and control system included
- Erection and Supervision included



El Halassa – (Morocco)

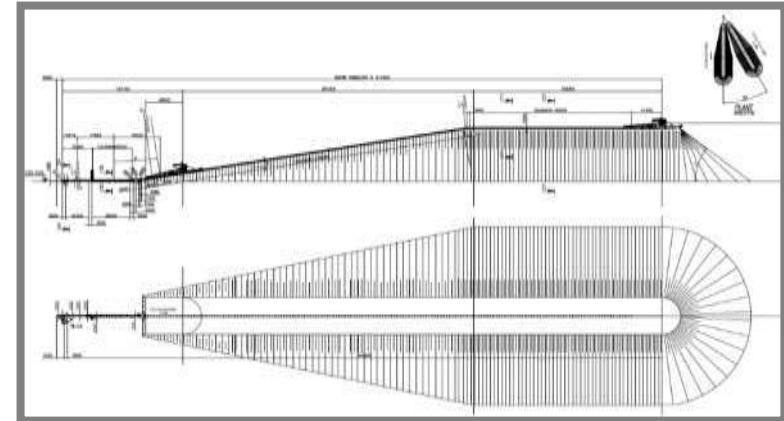
Phosphate Handling System – 2000 tph



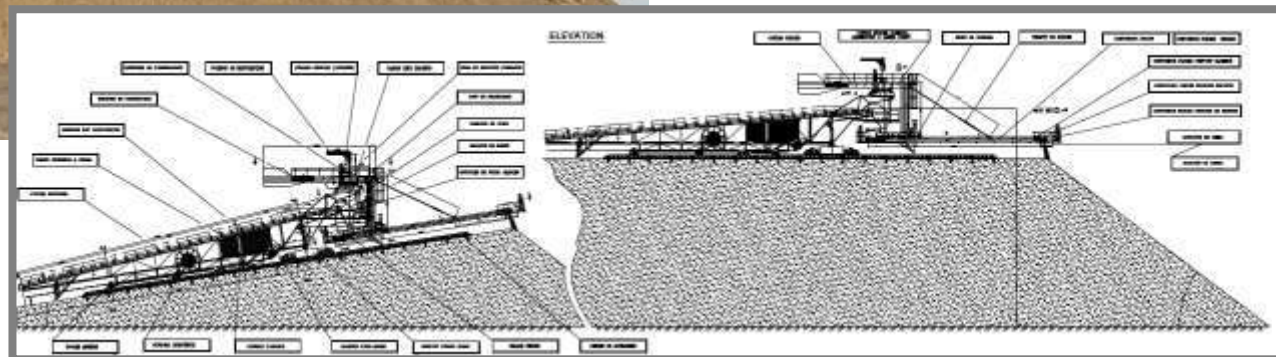
- 2 Stackers (identical machines) & Transport System
- Conveying System, belt width up to 1.400 mm
- Stackers ST 3120 / 31
- Stacking & transport capacity = 3120 t/h
- Material handled: Phosphate



OCP Projet Laverie Mea – Khouribga (Morocco)
Phosphate Handling System



JACOBS™



El Halassa - Morocco

- **Belt feeders 2200 mm**
- **Belt width 1600 mm, Total length 4 Km**





Jorf Lasfar, Morocco
1 Bucket wheel AS 1800/50
1 Stacker St 2400/42



Endesa Teruel TPP (Spain) *COAL STOCKYARD*

1 Luffing Slewing Stacker machine STD 2250/30

Stacking Capacity: 2250 t/h

Boom Length: 30 m



Endesa Prioriño Terminal (Spain) COAL STOCKYARD

1 Luffing Slewing Stacker machine STD 5400/47

Stacking Capacity: 5400 t/h

Boom Length: 40 m



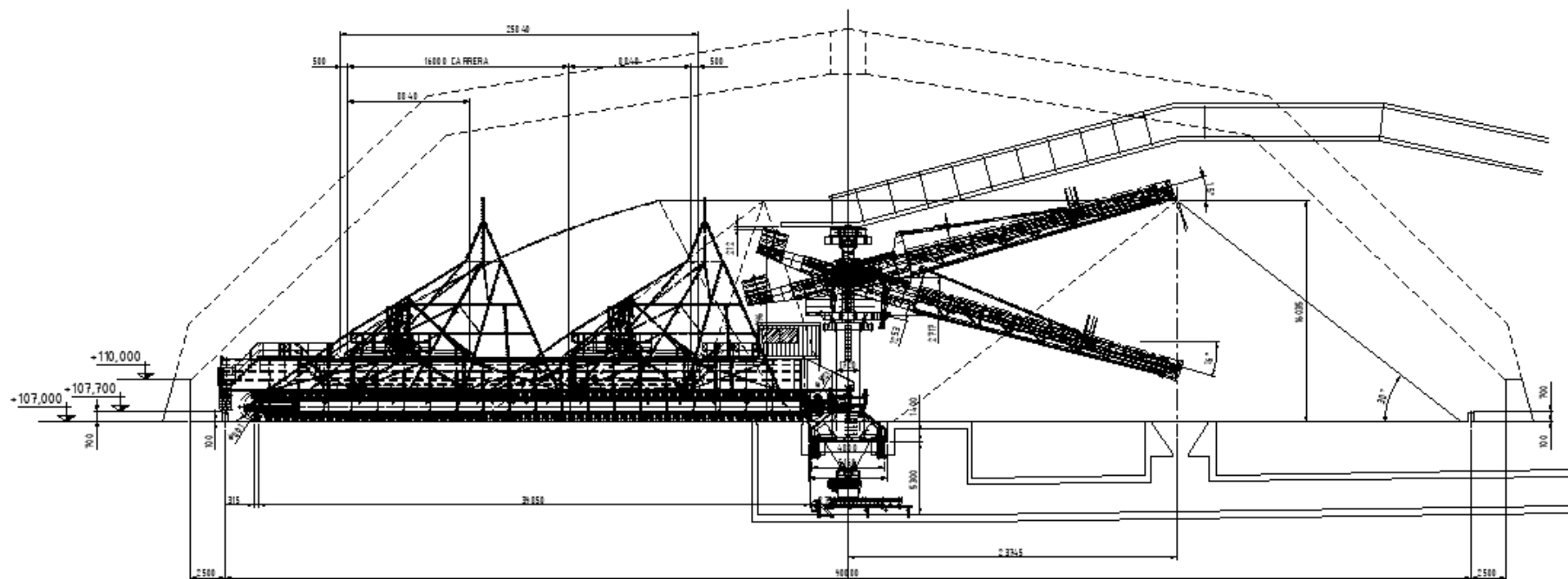
TOYO – Petrobras (Brasil)

Longitudinal stockyard.

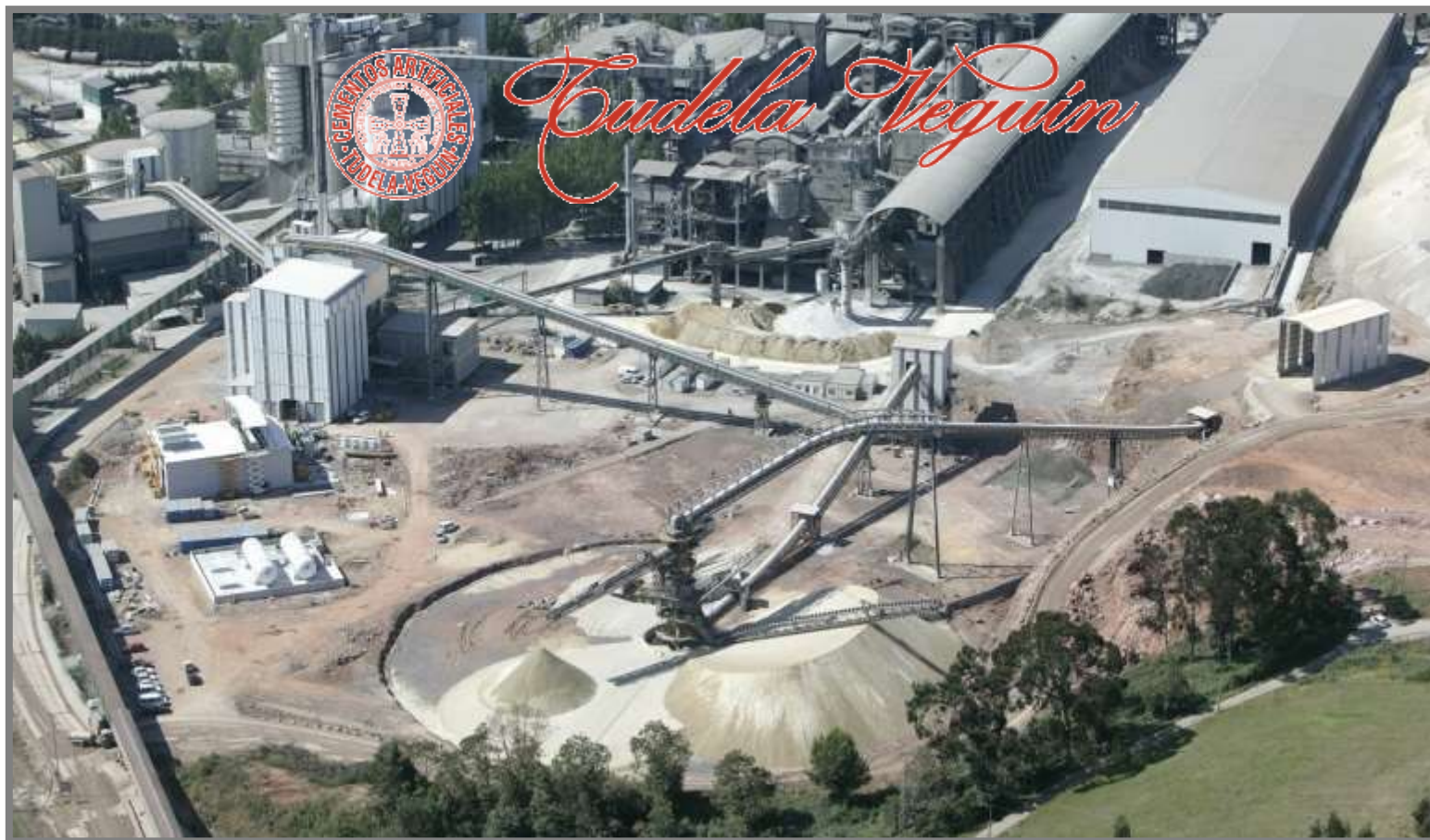
Stacker 150 t/h, 24 m boom length.

Circular Stockyards





CEMENTOS CRUZ AZUL – Mexico
New Circular Stockyard
Stacking 1300tph / Reclaiming 850 tph
Diameter 90 m



Tudela Veguin – Asturias (Spain)
105 m Circular stockyard.
150000 t slag capacity.



Circular Stockyards



GSN Petronor – Bilbao (Spain)
Sulphur & Coke Handling System

Circular Stockyards



Holcim – Almeria (Spain)

COAL / COKE CIRCULAR STOCKYARD

Circular Stockyard – Diameter 105 m

90.000 tons Coal & Coke Total Capacity



Circular Stockyards



Jaypee Himachal Cement Plan (India) – Scope of Supply:
KHO 2188-1250 D 102 – Circular Stockyard for limestone
KHO 250-250 D 70– Circular Stockyard for coal / coke
VP1 438/35 – Longitudinal Stockyard for additives

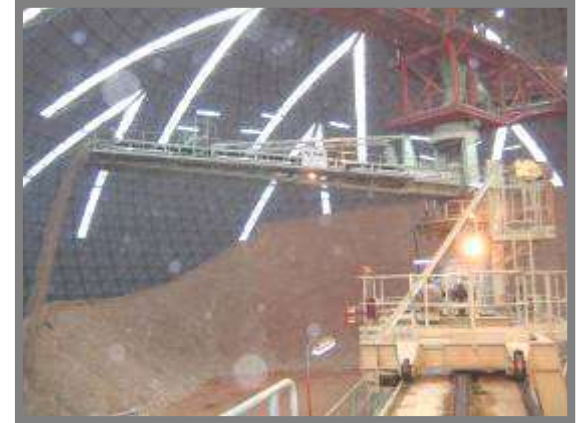


JAYPEE Group - DALA & BELLA (India)

Revamping:

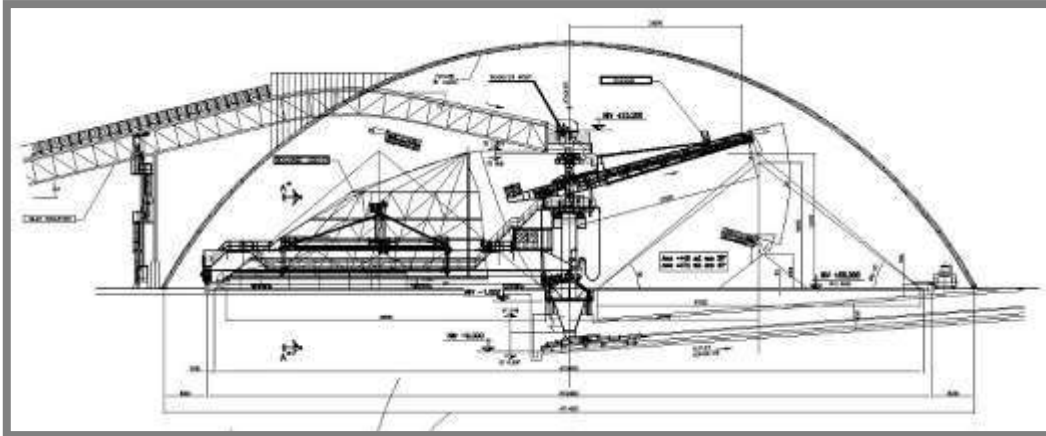
- ✓ **Circular Stockyard KHO 900/400-D82 to RKHO 800/500-D82**
- ✓ **Frontal Bridge Reclaimer LHO 800**

Circular Stockyards



CEMEX – San Pedro de Macoris (Dominican Republic)
85 m Circular stockyard, 50000 t limestone and clay capacity for blending.
Stacking capacity: 1300 t/h. Reclaiming capacity: 800 t/h

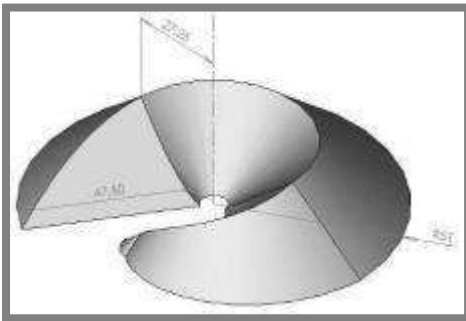
Circular Stockyards



KHO 2188-1250 D 102

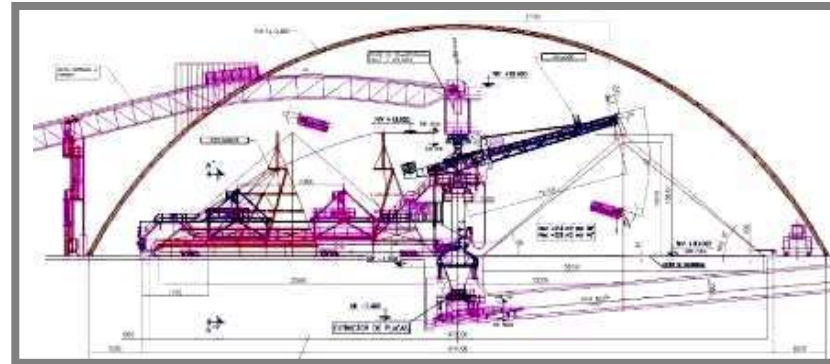
KHO 250-250 D 70

VP1 438/35



JAYPEE HIMACHAL CEMENT PROJECT–(India)
2 Circular Stockyard & 1 Portal Scraper Reclaimer

Circular Stockyards



CEMEX – Mérida (Mexico)

74 m Circular stockyard, 33000 t limestone capacity for homogenizing.

Stacking capacity: 565 t/h. Reclaiming capacity: 360 t/h



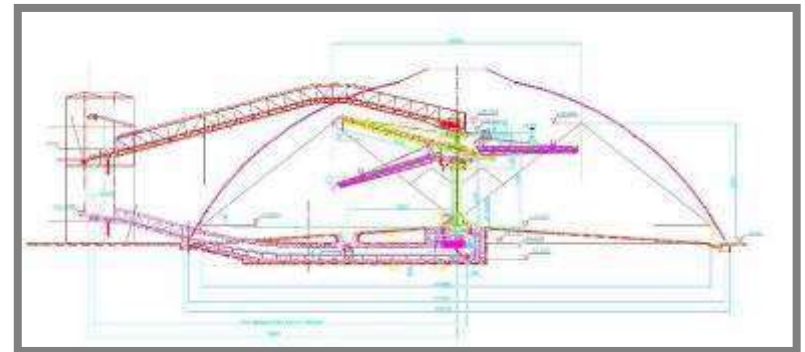
CEMEX – Andorra Teruel (Spain)

Limestone Handling System – Circular Stockyard KHO 600/400 D74

Coal Handling System – Circular Stockyard STDSK 30/100 D55

Additives Handling System – Longitudinal Stockyard ST 200/5 & SKV 200/17

Circular Stockyards



UNION FENOSA – MASA – Medusa Project (A Coruña – Spain)
Circular Stockyard STD 2000/24,5. Diameter: 105 m

Circular Stockyards



TPP La Pereda

COAL / COKE CIRCULAR STOCKYARD

Circular Stockyard – Diameter 90 m

45.000 tons Coal & Coke Total Capacity

Circular Stockyards

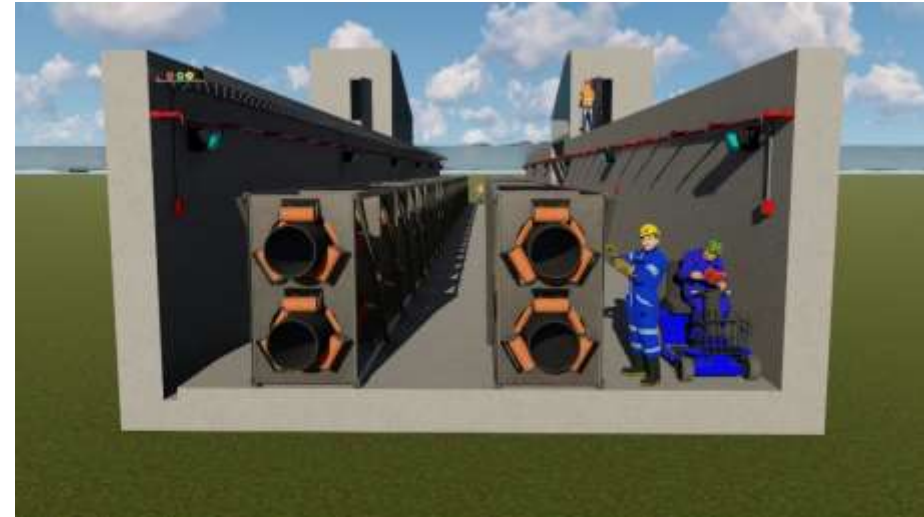


Cementos Balboa - Badajoz (Spain)
COAL / COKE CIRCULAR STOCKYARD
Circular Stockyard – Diameter 70 m
35.000 tons Coal & Coke Total Capacity

Belt Conveyor Systems

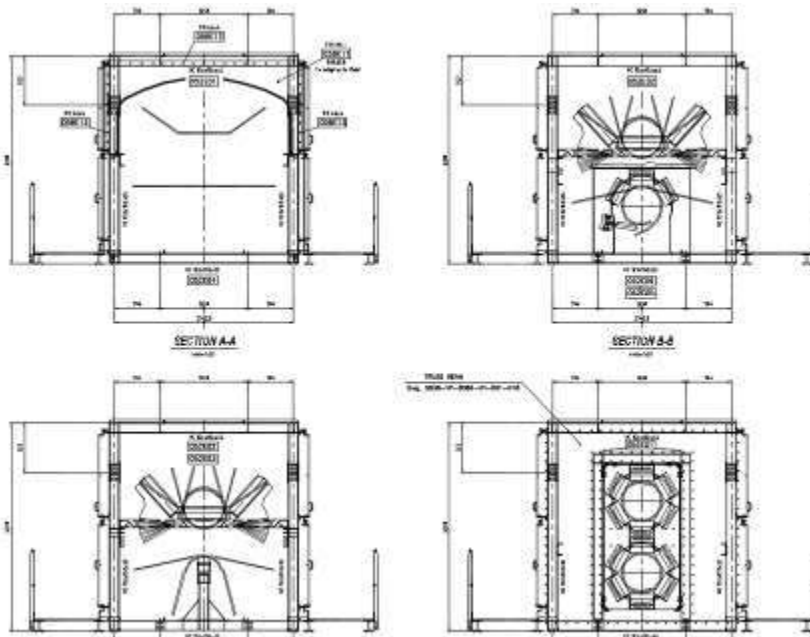


Belt Conveyor Systems

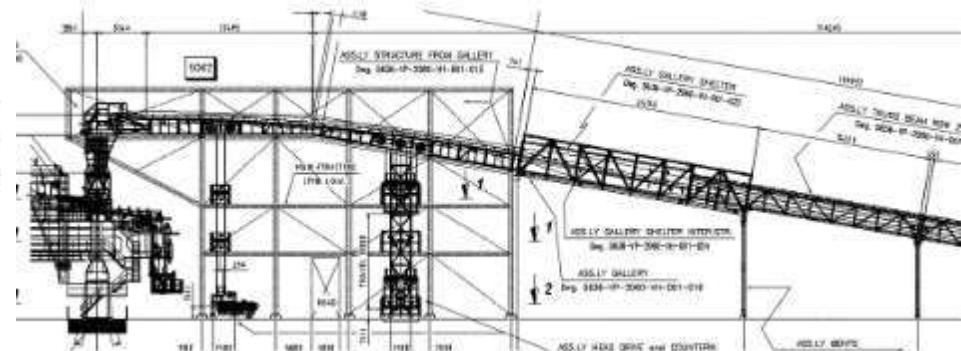


Dibba Port- UAE – 4,5 Km Diam 550 mm
Complete EPC: Truckunloading, Pipe conveyor, Shiploader – 4,400 tph

Belt Conveyor Systems



BELT CONVEYOR 2060-VH-001		
MATERIAL TO BE CONVEYED		CALCINED COKE
BULK DENSITY	t/m ³	0.7-0.95
THEORETICAL CAPACITY	t/h	2380
WIDTH/TYPE - BELT	mm	2200 / EP 1200S/5+3
BELT COVER QUALITY		K
BELT SPEED	m/s	4.50
POWER/SPEED - MOTOR	kW/r.p.m.	3x375 / 1000
ROLL DIAMETER/TROUGHING ANGLE - IDLERS	mm/°	159 / 35
LUMP SIZE	mm	< 50
MOTOR TYPE		TYPE 9

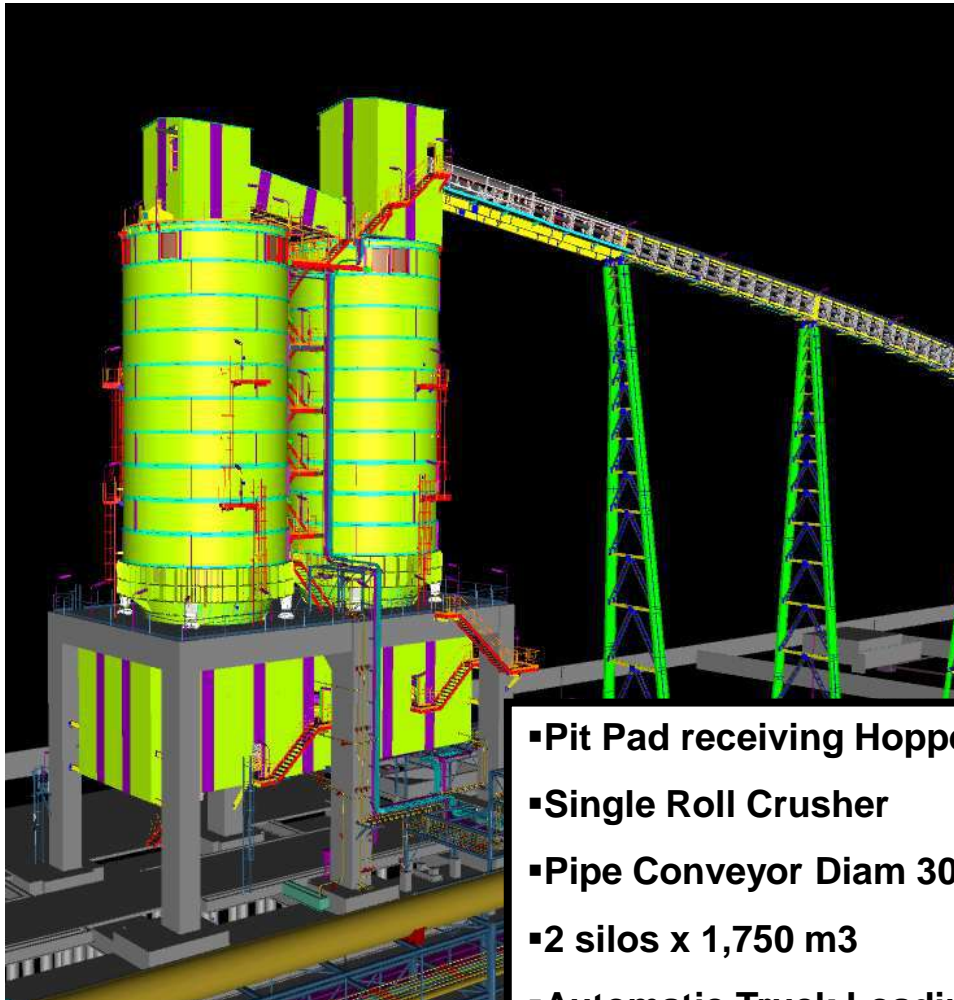


• Pipe Conveyor Diam 600 mm, 1,1 Km

TAKREER CBDC - Samsung

• Carbon Black Delayed Coker

Belt Conveyor Systems



- Pit Pad receiving Hopper
- Single Roll Crusher
- Pipe Conveyor Diam 300
- 2 silos x 1,750 m³
- Automatic Truck Loading



**PANCEVO REFINERY - SERBIA
COKE HANDLING SYSTEM**

Belt Conveyor Systems



BP (British Petroleum) – Castellón's Refinery (Spain)
Green Coke Handling System – 3 Pipe Conveyors Diam 250 mm

Belt Conveyor Systems

- EPC Contract (civil works included)
- Belt conveyors system (over 10 km)
- Longest conveyor of 4,5 Km
- 3 Stacker machines



JACOBS



El Halassa – (Morocco)

Phosphates Handling System – 2000 tph



CT Andina – Mejillones (Chile)

Belt conveyors system for Coal/coke and wooden chips

Capacity up to 1200 t/h

Belt width up to 1400 mm

Belt Conveyor Systems



- Conventional Conveyors system
- Two longitudinal stockyards 2x100.000 tons
- Stacking system with trippers.
- Two VP3 Portal reclaimers
- Screening and crushing with recirculation line
- Bucket elevators and process conveying system
- Complete Sampling station
- Complete electrical power and control installation
- Electrical and Mechanical Erection
- CCTV and communication system
- Harbour export conveyors and Jetty conveyor
- Shiploader for 65.000 DWT PANAMAX

Ma'aden – Saudi Arabia

MAP / DAP GRANULATION PLANT – Scope of Supply

Belt Conveyor Systems



Ma'aden – Saudi Arabia

MAP / DAP STOCKYARD

- **Warehouse Extension Conveyors**

Belt Conveyor Systems



Ma'aden – Saudi Arabia

Raw Materials STOCKYARD

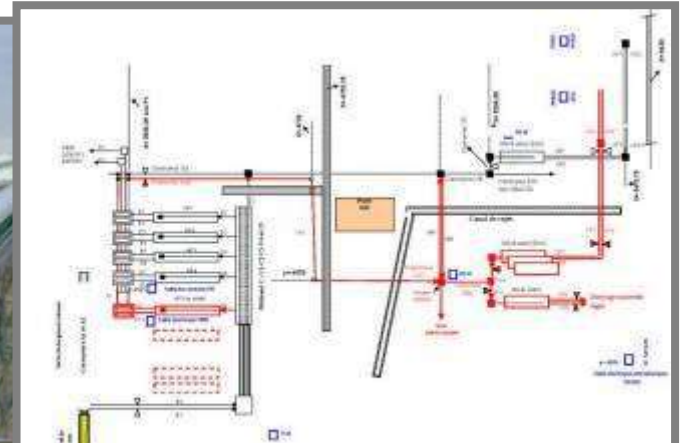
- Truck unloading
- Belt conveyors
- Hoppers

Belt Conveyor Systems



Belt Feeder - 3.2 m width

Belt Conveyor Systems



- 3000 m belt conveyors system
- Transport Capacity up to 1500 t/h
- Weighing tower
- Civil Works & Storage Building
- Complete electrical power and control installation
- Electrical and Mechanical Erection.
- Material handled: Phosphates

OCP – Jorf Lasfar (Morocco)
Phosphates Handling System

Belt Conveyor Systems



مجموعة د ش ف
Groupe OCP



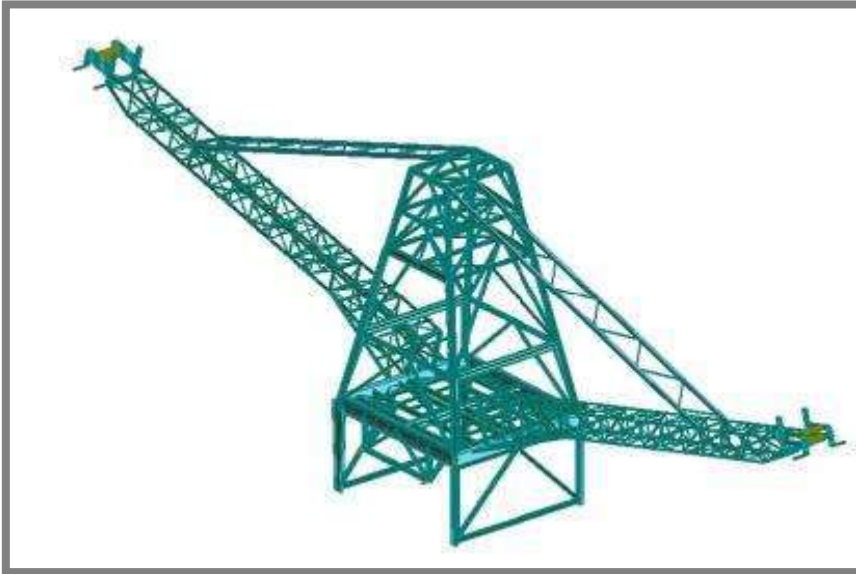
- Civil Works included
- Belt conveyors system (2.5 km)
- 2 Reclaimer machines VP3-2000/43
- Electrical and control system included
- Erection and Supervision included

JACOBS



OCP – Engrais Lot 4 – (Morocco)
Sulphur Handling System – 2000 tph

Belt Conveyor Systems



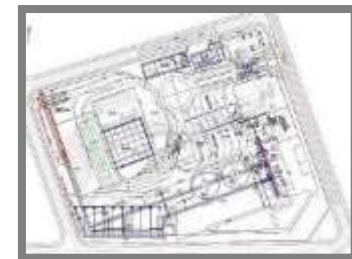
- Civil Works included
- Belt conveyors system (over 10 km)
- 3 Stacker machines
- Electrical and control system included
- Erection and Supervision included



El Halassa – (Morocco)

Phosphates Handling System – 2000 tph

Belt Conveyor Systems



CEMEX (Cartagena – Spain)
New Escombreras Cement Plant
Belt conveyors system (11 units), 800 - 1200 mm width, 800 t/h.

Belt Conveyor Systems



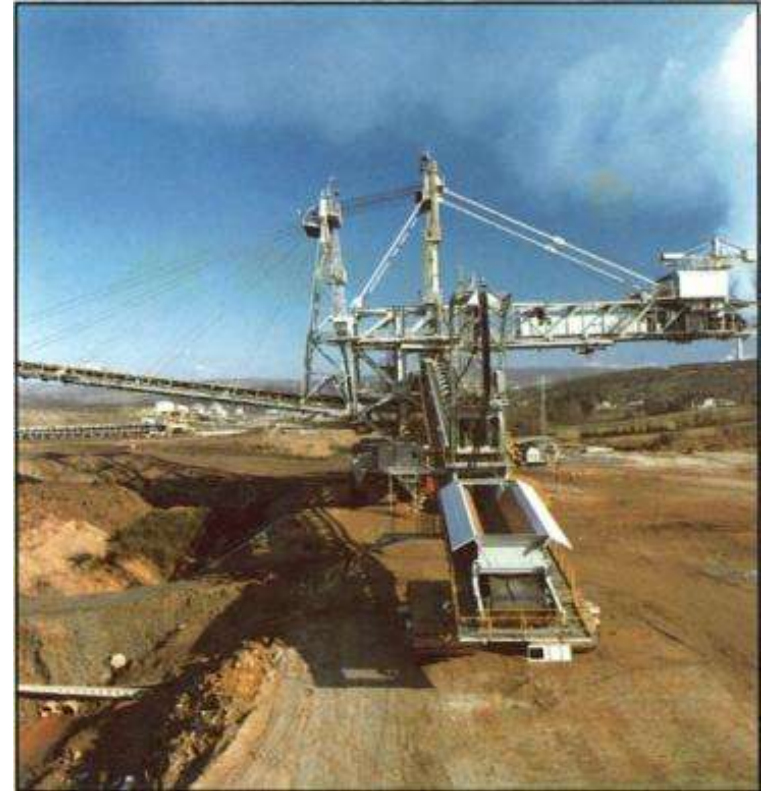
Endesa Puentes (Spain) *LIGNITE MINE*

1 Distributing car for stacker

1 Crawled mounted Stacker 1800m³/h

Conveying system

Belt Conveyor Systems



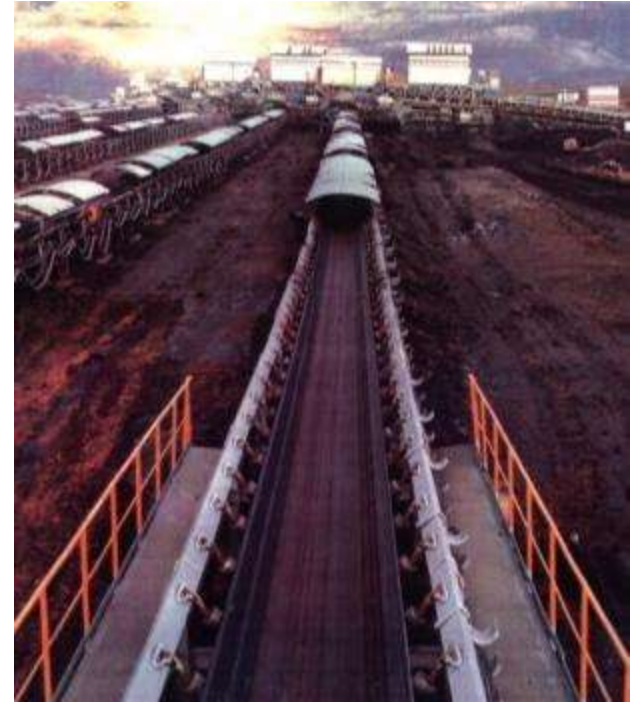
Endesa Puentes (Spain) *LIGNITE MINE*

1 Distributing car for stacker

1 Crawled mounted Stacker 1800m³/h

Conveying system

Belt Conveyor Systems



Endesa Puentes (Spain) *LIGNITE MINE*

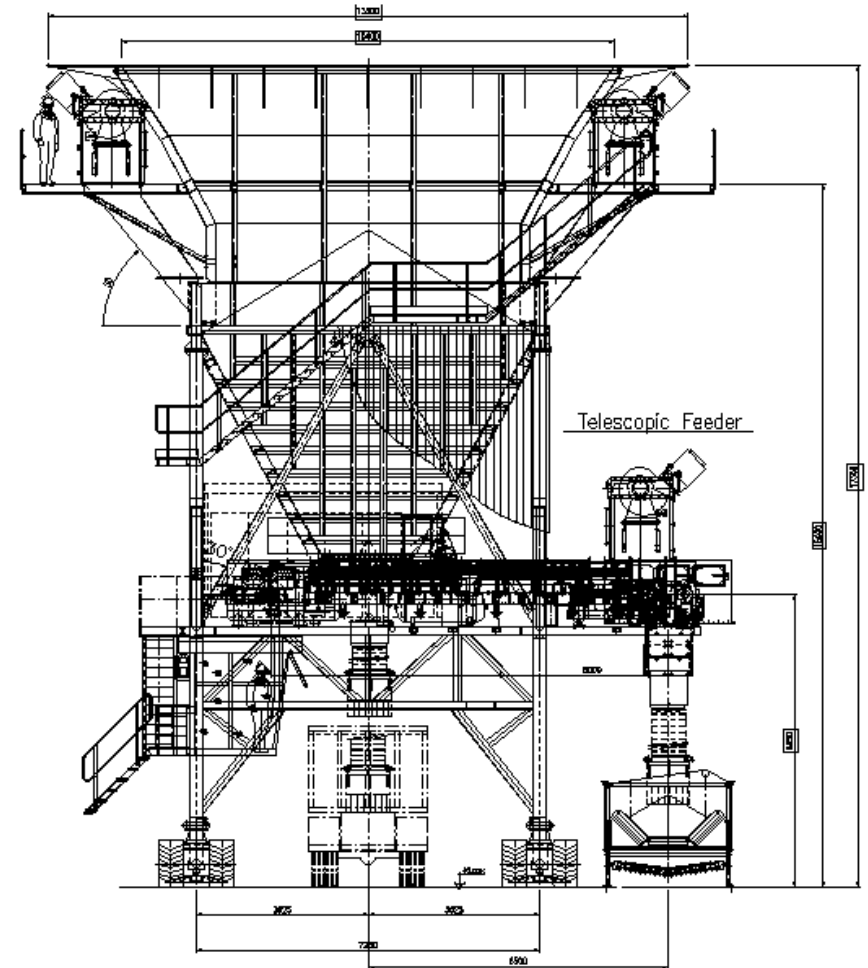
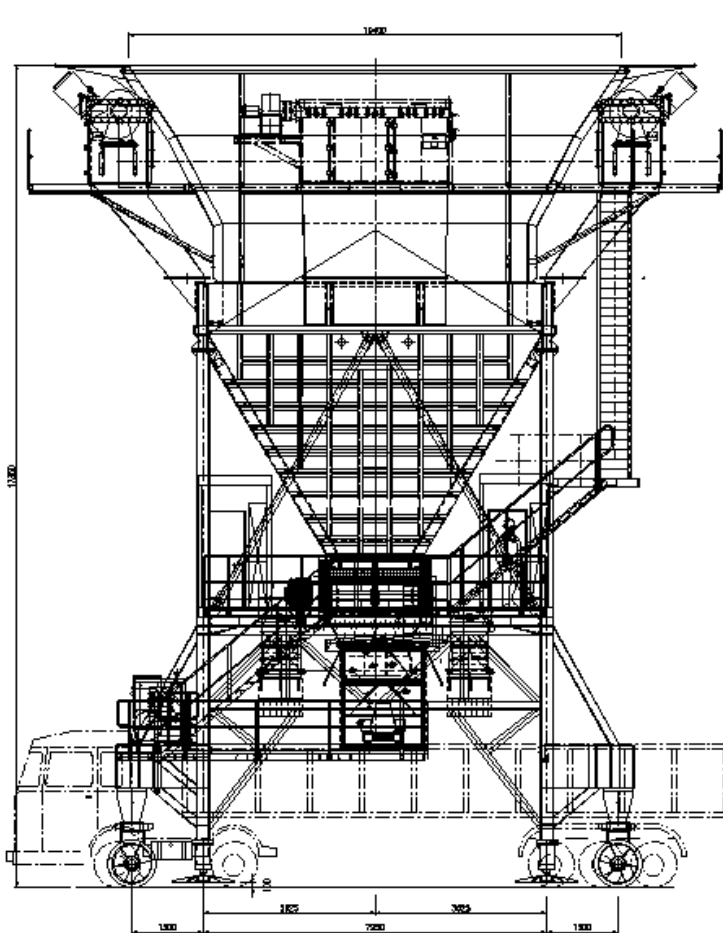
1 Distributing car for stacker

1 Crawled mounted Stacker 1800m³/h

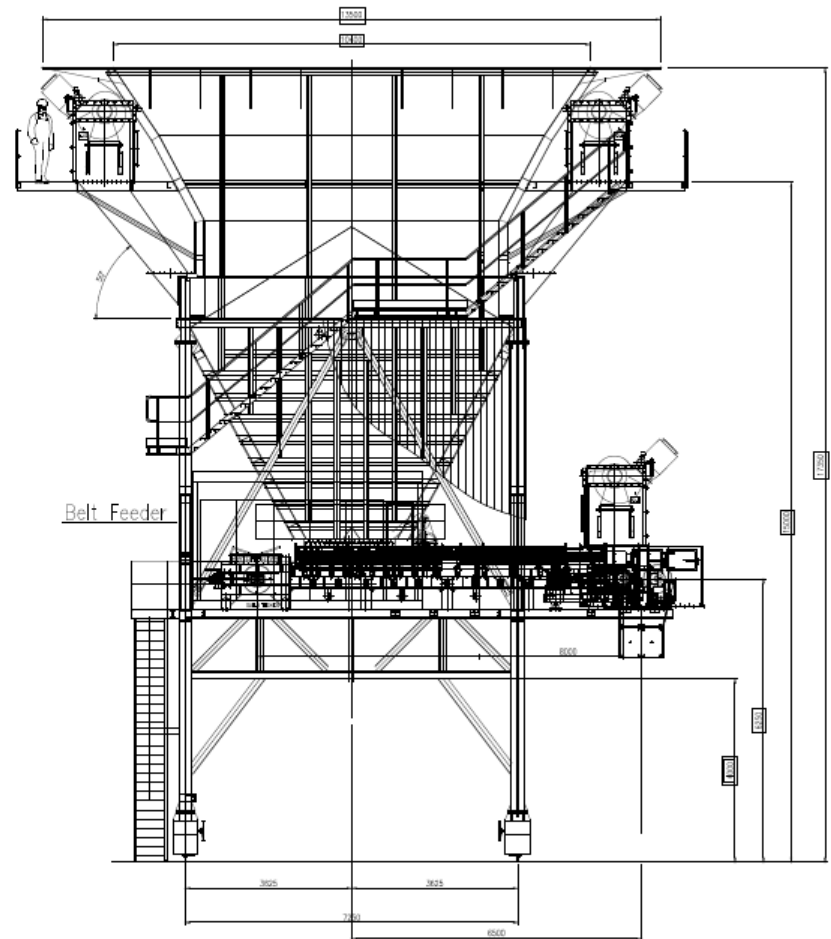
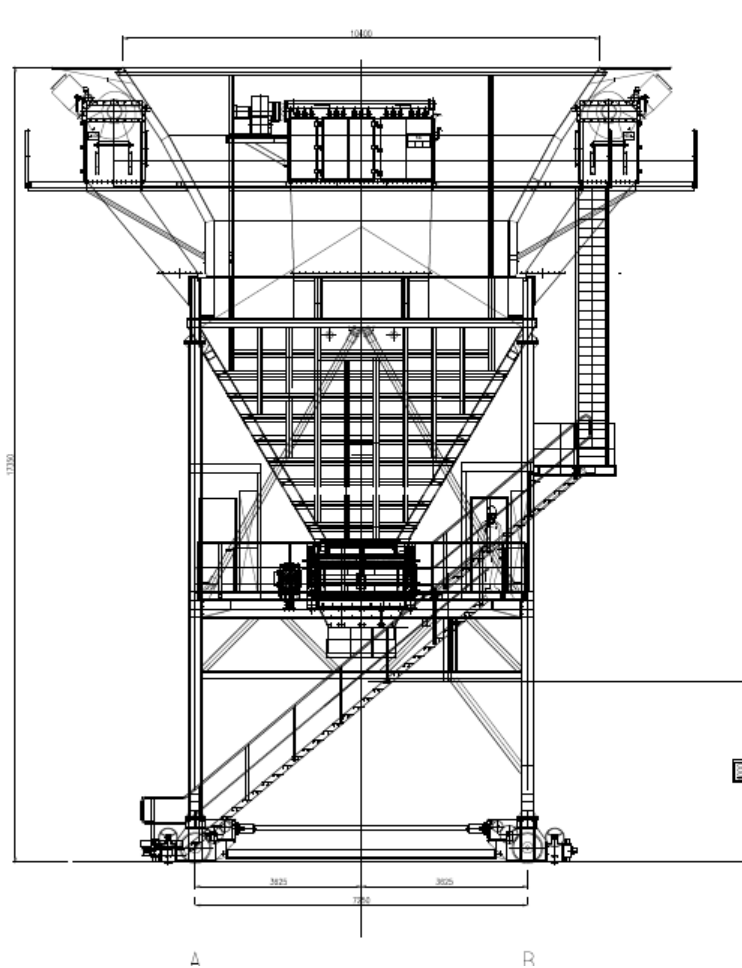
Conveying system

Other equipment

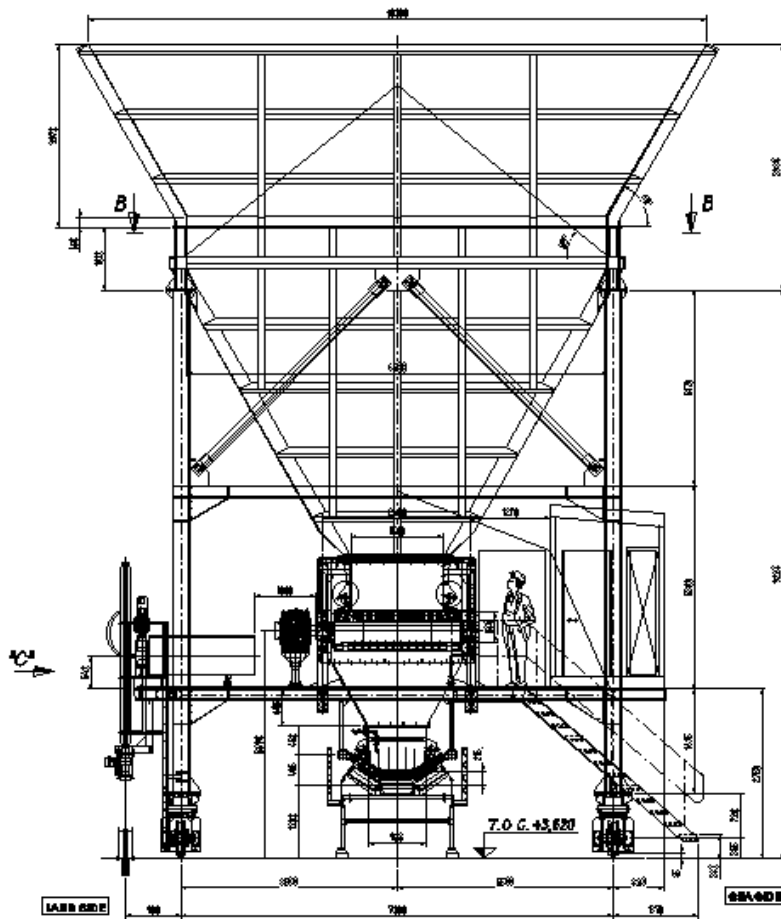




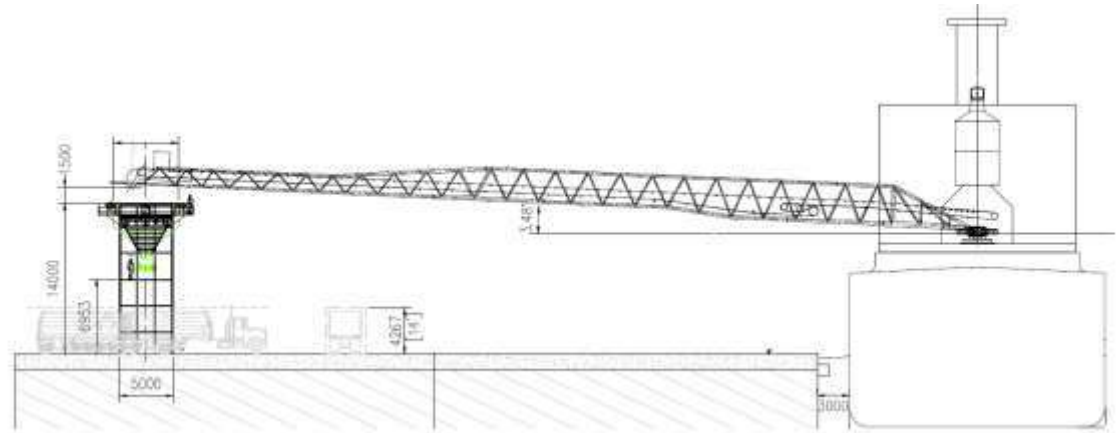
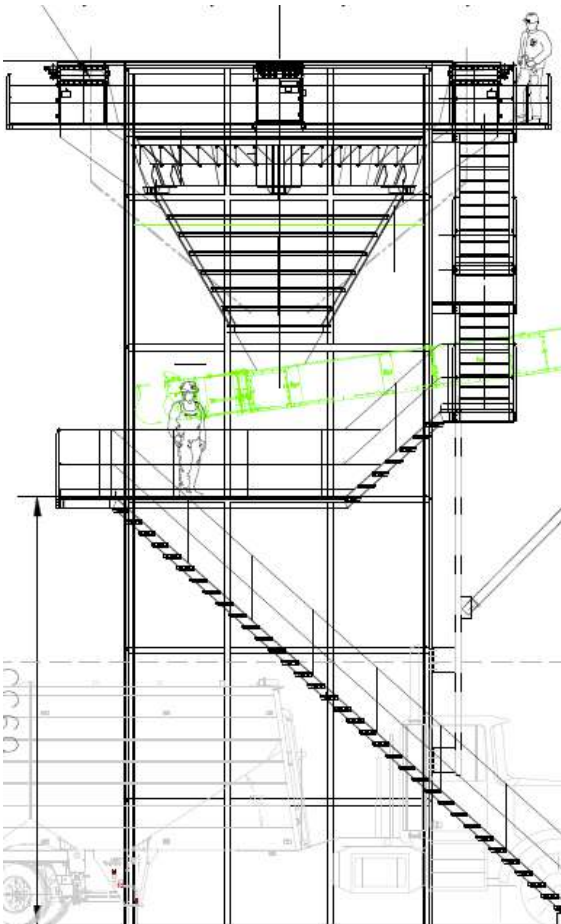
GALIGRAIN, Grupo Nogar - Spain
Eco-Hopper – 1500 tph



ERSHIP- Cartagena, Spain
Eco-Hoppers – 2 x 1000 tph



Yanbu Refinery – Durrah Sugar, KSA
Travelling Hopper – 1500 tph



- Capacity up to 1200 tph
- Fixed Ecological Hopper for self unloader vessel
- Agri-food materials: Soy meal, Corn, Wheat, Barley, Soybean, Wheat bran, Flour, etc.

FWS Group- Quebec - Canada
Agri-food Materials Ecological Hopper - Design, Supply and Supervision of Erection and Start-up

Other equipment



- Capacity up to 1200 tph
- Fixed Ecological Hopper for self unloader vessel
- Agri-food materials: Soy meal, Corn, Wheat, Barley, Soybean, Wheat bran, Flour, etc.

FWS Group- Quebec - Canada
Agri-food Materials Ecological Hopper - Design, Supply and Supervision of Erection and Start-up

Other equipment



eZZsteel
حديد عز



DP WORLD
Sokhna



- 3 ECOLOGICAL HOPPERS – SOKHNA PORT (EGYPT) / DP WORLD**
- **BULK UNLOADING TERMINAL (Iron Ore/ Pellets/Fines/Concentrates)**



MATSA – TRAFIGURA / MINING GROUP (HUELVA PORT - SPAIN)

- **Concentrate Port Facilities – Cu,Pb,Zn (Shiploader – Jetty Gallery – Hopper – Connection Belt Conveyors,....)**



Carboneras Port Terminal

- **2 Ecological Hoppers**
- **75 m3 Capacity each Hopper**
- **Truck loading system**
- **Mobile on tyres**



Atlántica de Graneles - Bilbao Port Plant

- **2 Ecological Hoppers**
- **70 m3 Capacity each Hopper**
- **550 T/h each Hopper**
- **Mobile on rails**



Bulk Terminal – Port of Santander (Spain)

MATERIALS HANDLING SYSTEM – Scope of Supply:

- 3 Ecological Hoppers 350 m³
- 2,5 Km Length Conveyors System – Capacity: 2500/1200 t/h
- Truck Loading Station
- Rail Wagons Loading Station



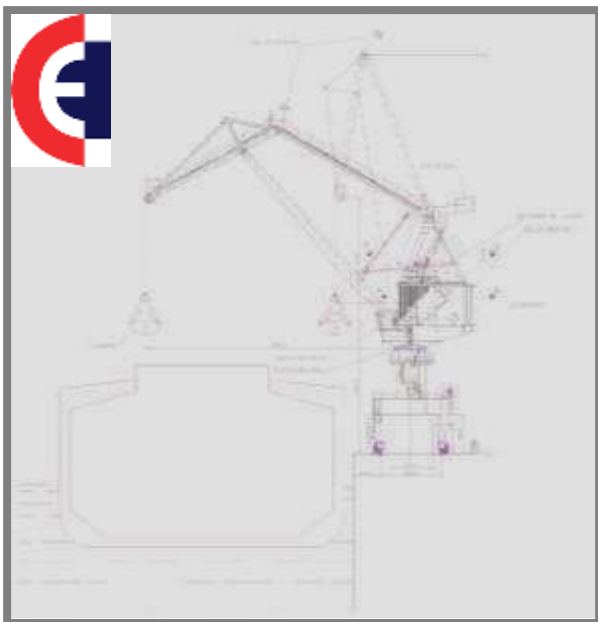
Holcim - Almería

- 2 Ecological Hoppers
- 70 m3 Capacity each Hopper
- Mobile on tyres
- Truck-loading system
- Materials handled: Clinker and Coke



Ternium Siderar - Argentina

- 1 Ecological Hopper
- 150 m3 Capacity
- 1.500 T/h
- Materials handled: Iron Ore



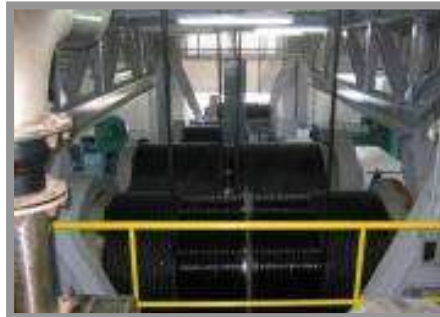
CEMENTOS ESPECIALES – Canary Islands (Spain)
Jib Articulated Crane JAC 16/30



**ARCELOR – Port of Avilés
(Asturias - Spain)
Modernization
Slewing crane 30t / 30m**



Other equipment

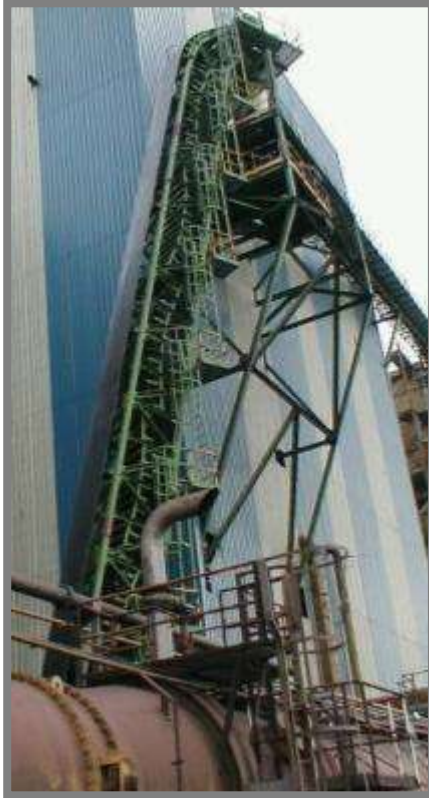


U.S. NAVY – Rota, Cádiz (Spain)

Complete modernization port crane 50/15/5 t

Max capacity / length: 50 t / 40 m – 5 t / 68 m.

Weight: 800 t



ACERALIA – Gijón (Spain)

Coal handling system.

**Sandwich conveyor: capacity: 250 t/h, height: 35 m,
slope: 70°**

Mainly over 800 tons we have the following references:

- 1_Steel Silo of 2000 tons, Cement plant of Tudela Veguin, Aboño, Fly ash**
- 2_Steel Silo of 2000 tons, Cement plant of Tudela Veguin, Aboño, Gypsum**
- 3_Steel Silo of 1000 tons, Cement plant of Tudela, Oviedo, Clinker.**
- 4_Steel Silo of 1000 tons, Arcelor Veriña, Pulverized Coal Installation.**
- 5_Steel Silo of 3000 tons, Sines Thermal Power Plant, Portugal.**
- 6_Concrete Silo of 5400 tons, Raw Material, Tudela Veguin, Spain.**
- 7_Concrete Silo of 6500 tons, Clinker, Tudela Veguin Spain.**
- 8_Steel Silo of 800 tons, coke fines, Arcelor Veriña, Spain**





FCM & MHI – Madrid (Spain)

Special belt conveyor for TBM (tunnel boring machine), 1800 t/h capacity, valid for curves up to 350 m radius.



Parque Científico y Tecnológico de Gijón
C/ Ada Byron- 33203 Gijón - Spain



Tel: +34 984 495 640



www.pwh.es
pwh@pwh.es

