COMPANY
PRESENTATION

2024

walter tosto

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Tosto Group

tosto Srl
Holding Company - Italy (Chieti)

100%

BELLELI ENERGY Critical Process Equipment
Company specialized on engineering and production of critical Items
Italy (Mantova)

Oil & Gas
Fertilizier
Gas Monetization
Nuclear & Power
BiG Science

30%

70%

YOUR WAY ON LEISURE FLIGHT SRL
Renting and leasing of air, sea and river transport equipment
Romania (Bucharest)

100%

walter tosto
Company specialized on engineering and production of critical Items
Italy (Chieti)

Chemical Petrochemical
Fertilizier
Refining
Storage Tanks
Gas Process
Power
Big Science
Food & Pharma
LPG Domestic tanks

Maraldi
Storage tanks & Shperes

100%

WTSGAS
LA FIAMMA DELL'INNOVAZIONE
Commercial Company
Italy (Chieti)

LPG Domestic tanks
LPG Business Tanks
LPG Distribution
Project & Design of LPG plants

100%

tosto IMMOBILIARE
Small Real Estate Company
Romania (Bucarest)

100%

walter tosto wtb
Company specialized on Oil&Gas products and Nuclear components
Romania (Bucarest)

Chemical Petrochemical
Fertilizier
Refining
Storage Tanks
Gas Process

49%

51%

seastock
Oil & Gas Storage Plant

Depositi Costieri Trieste
Italy (Trieste)

100%

GRIVITA ROSIE GRIRO
Company specialized on Oil&Gas products and Nuclear components
Romania (Bucarest)

Chemical Petrochemical
Fertilizier
Refining
Storage Tanks
Gas Process

100%

walter tosto wtr
Commercial Company
Turkey

Total Employees 1300

Walter Tosto Company

Walter Tosto Company

340.000 sqm Workshops

110 ml € Turnover

more than 650 Employees

Walter Tosto Company

Sea Front Workshop

Wide Machine Park

60 Years

Experience

Walter Tosto Company

Facts and Figures

Employees:
650

Turnover:
110,000,000 €

Assets:
255,000,000 €

Investments:
75,000,000 € in 5 years

Equity and Reserves:
40,000,000 €

Order Portfolio as 30/09/2023:
520,000,000 €

Company Markets

Refining

Crude Oil Distillation unit

Vacuum distillation unit

Naphtha hydrotreater unit

Catalytic reforming unit

Alkylation unit

Isomerization unit

Distillate hydrotreater unit

Amine gas treater, Claus unit, and tail gas treatment

Fluid catalytic cracking (FCC) unit

Hydrocracker unit

Visbreaker unit

Delayed coking

Chemical & Petrochemical

Ethane cracking: PE/HDPE/LDPE/PP

EB/SM Styrene

Ethylene Oxide (EO)

Ethylene Glycol (EG)

PVC

Propylene Oxide (PO) and

Tertiary Butyl Alcohol (TBA)

Ammonia

Methanol

Urea

Gas Process

Natural GAS Processing (NGL)

Liquefied Natural GAS (LNG)

Gasification Plant

LPG Storage

GAS to Liquid (GTL)

Power

Conventional

Nuclear

Renewable

Licensors

Refining

- Technip Energies
- Chevron Lummus Technology
- TOPSOE
- ExxonMobil
- Axens
- UOP
- Shell Global Solutions
- wood.
- KBR

Chemical & Petrochemical

- Badger
- Technip Energies
- KBR
- CASALE
- Johnson Matthey
- Air Liquide
- Dow
- TOPSOE
- ShinEtsu
- Linde
- BOREALIS
- INEOS
- Stamicarbon
- BASF
- eni versalis
- Lummus Technology

Gas Process

- Axens
- Sasol
- Shell
- Air Products
- ConocoPhillips
- KBR
- Bluewater
- SBM Offshore
- thyssenkrupp

Power

- Areva
- Enel
- Ansaldo Energia
- GE Alstom
- EDF
- Kepco
- Hitachi
- Siemens

Walter Tosto

Refining Products

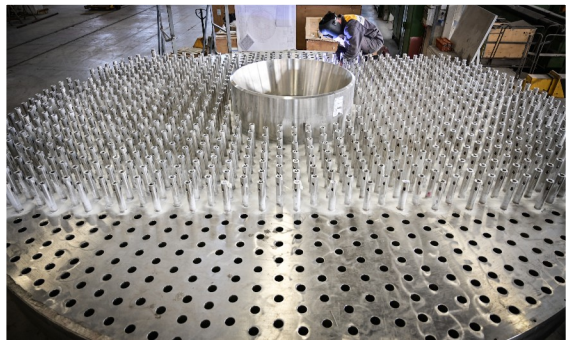
Refining

End user: Thai Oil JV Petrofac/Samsung/Saipem

Plant type: Refinery Thailand DAO LC-MAX

Diam: 4.900 - Thk: 279+5 - Weight: 2.034.100

Refining



End user: Thai Oil JV Petrofac/Samsung/Saipem

Plant type: Refinery Thailand DAO LC-MAX

Diam: 4.900 - Thk: 279+5 - Weight: 2.034.100

WALTER TOSTO

Refining

1° and 2° Stage Reactors
Technip Italy
Bapco – Bahrain
Weigth 1.331.500 kg

Refining

WALTER TOSTO

Refining

HYDROTEATING REACTOR

Weight = 1.458.860 kg

Material = SA 542 Type D Cl4a + WO SS347

Internal Diameter = 5486.4 mm

Thickness = 222.3 + 4.5 WO mm

WALTER TOSTO

Refining

Hydrocracking Heavy Wall Reactors

Foster Wheeler USA – Barrancabermeja Refinery – Colombia

Weight 1.001.500 Kg

Refining

Catalytic Reformer Reactor
Fluor Enterprise
USA

Refining

Vacuum Column

Bechtel Corporation – Cop Wood River Project (USA)

Refining

Deisohexanizer Column

Midor Refinery Expansion project

Technip Italy

Refining

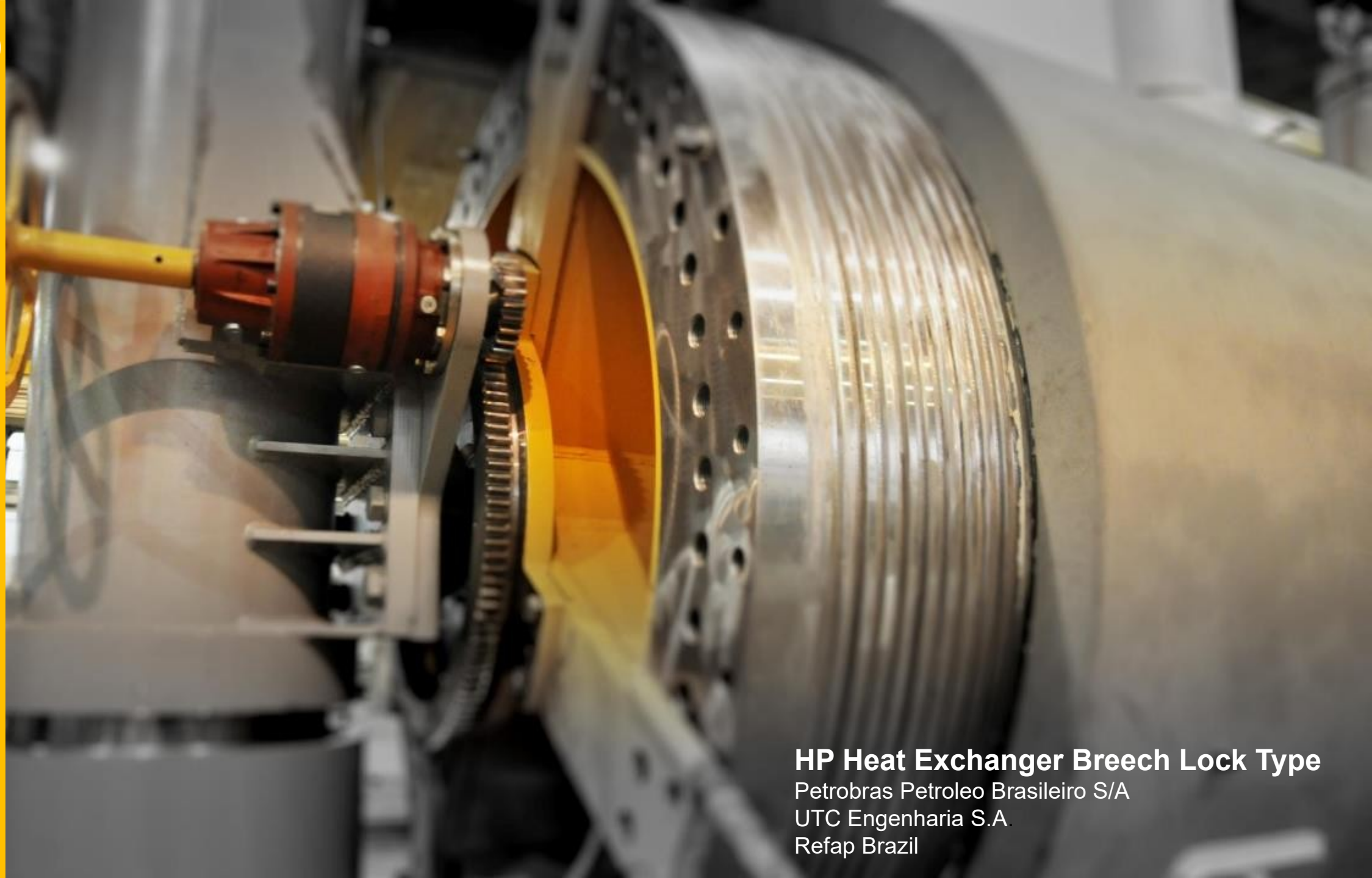
DeisohexanizerColumn
Enoc - Jebel Ali Oil Refinery

Refining

Coke Drum

CB&I Lummus Reficar Cartagena Refinery Expansion proj. - Colombia

Refining



HP Heat Exchanger Breech Lock Type
Petrobras Petroleo Brasileiro S/A
UTC Engenharia S.A
Refap Brazil

Chemical & Petrochemical

Chemical & Petrochemical

Anhydride Maleic Reactor

Polynt, Ravenna (Italy)

Chemical & Petrochemical

Oxychlorination Reactor

Shinetsu VCM - Rotterdam, The Netherlands.

Refining

Syngas Effluent Coolers
Saudi Aramco – Arvos
Jazan Plant – Saudi Arabia

Refining

Feed Vaporizer
Feed-Effluent Exchanger
HP Steam Generator
Sinopec - Shanghai China

WALTER TOSTO

Chemical & Petrochemical

Primary Reactor

Tianjin Dagu Chemical Co.

Shaw Stone & Webster Int.Badger Technologies

Refining

Methanol Reactor

Air Liquide Global E&C Solutions – Yuhuang Chemical Inc. USA

Refining

Methanol Reactor

Haldor Topsoe - Bandar 5000 MTPD Methanol Plant

WALTER TOSTO

Refining

Waste Heat Boiler
Haldor Topsoe
End User Sabic -Russia

Refining

Haldor Topsoe Secondary Reformer
JSC Shchekinoazot - Russia

Chemical & Petrochemical

Stacked Heat Exchanger (three-car-garage)
Tianjin Dagu Chemical Co.
Shaw Stone & Webster Int.Badger Technologies

Chemical & Petrochemical

Ethylene Fractionator
CB&I - Ingleside Ethylene Project (USA)

Gas Process

Refining

HP Absorber – 1400 tons
Abu Dhabi Gas Dev Company
Shah Gas Refinery - UAE

Gas Process

LPG Bullets

Lloyd Jones Construction

Petredec LPG Terminal Port Luis - Mauritius

Gas Process

Ethane Storage Bullets
Braskem Idesa Sapi

Gas Process

Heavies Removal Column

Bechtel International INC.
Wheatstone LNG (Australia)

Gas Process

Feed Separator

Bechtel International INC.

Wheatstone LNG (Australia)

.


Power

Power

Feed Water Heaters

Cairo Electricity Production Company
PGESCo (Bechtel)

Power

Polysilicon Reactors

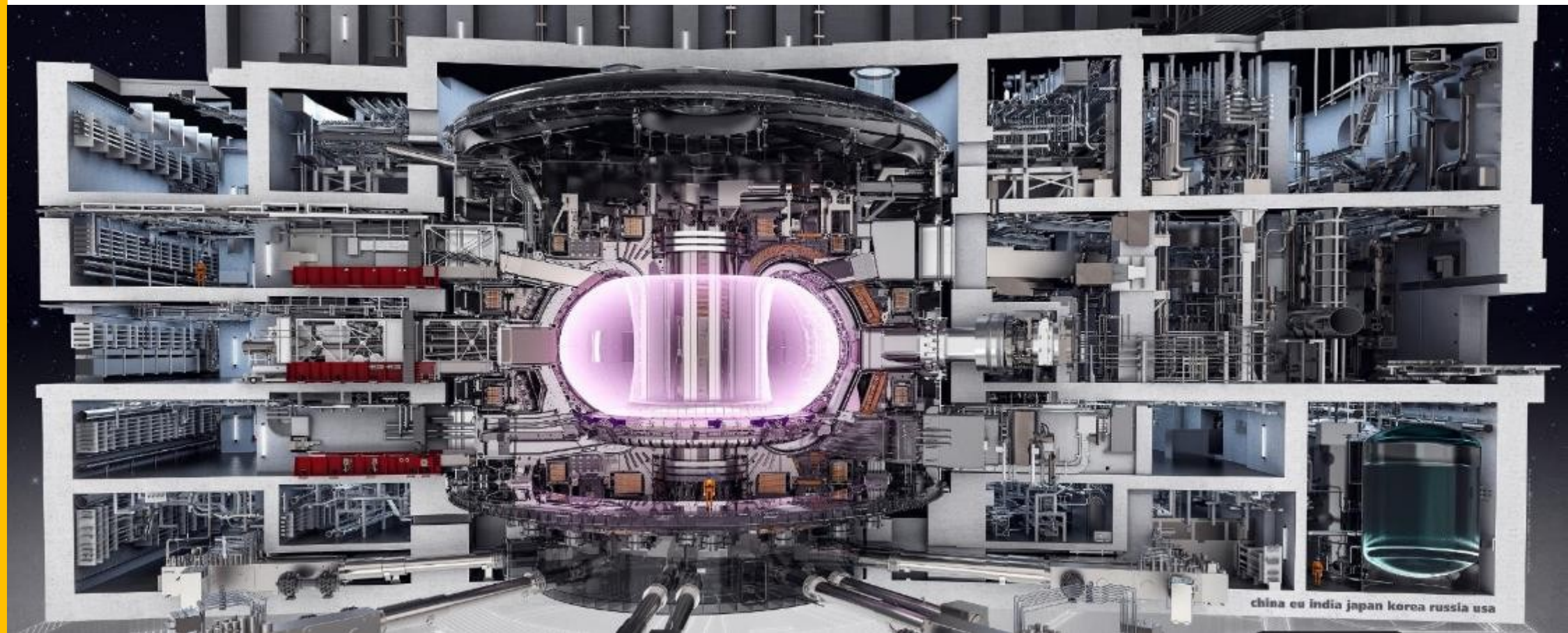
PPPE - China

Big Science

Big Science

The ITER Project

The ITER vacuum vessel is located inside the cryostat of the ITER device and its basic function is to operate as the chamber that hosts the fusion reaction. Within this torus-shaped vessel, plasma particles collide and release energy without touching any of its walls due to the process of magnetic confinement. The vacuum vessel is composed of nine sectors made of thick special grade stainless steel and each sector is 11 metres high, 6.5 metres wide and 6.5 metres deep. All of the sectors are similar and are built with double-walls containing the bolted- on shielded plates with a pressured inter-space which combine to attenuate the thermonuclear flux so as to avoid overheating of the superconducting coils.
The weight of each sector is approximately 500 tonnes and the weight of the entire component, when welded together, will reach an impressive total of 5000 tons which is equivalent to the weight of the Eiffel Tower.



Big Science

WALTER TOSTO

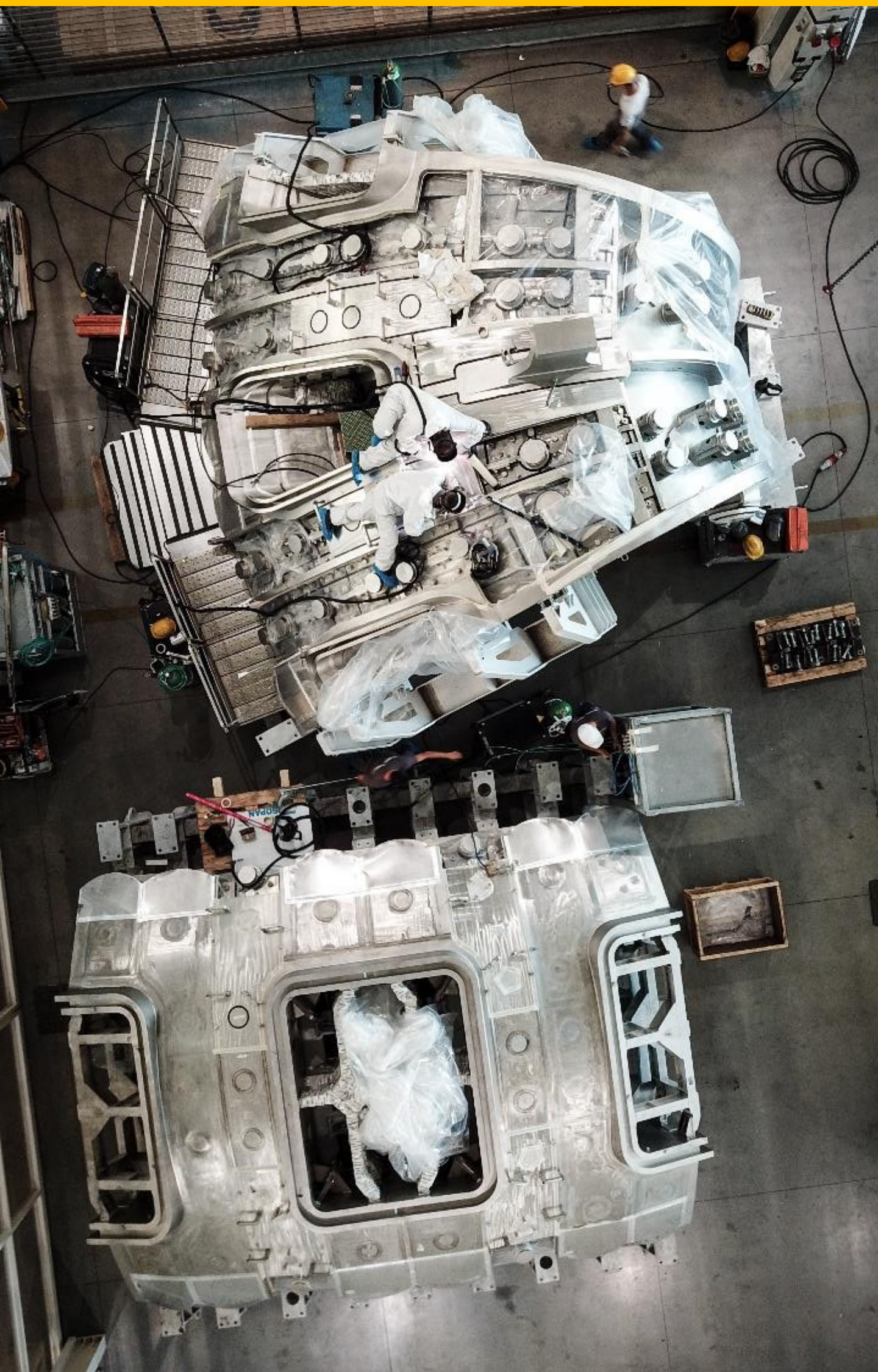
Big Science

The ITER Project

The ITER device promises to be the largest and most powerful fusion reactor in the world today. The ITER project has global significance and is sponsored by the European Union, Japan, Russia, the United States of America, China, South Korea and India.

The AMW Consortium is responsible for the supply of the EU Vacuum Vessel Sectors (5 out of 9). The ITER Vacuum Vessel is a hermetically sealed steel container that confines the plasma. It is one of the most important and technologically challenging components of the ITER project in view of its complexity, its size, the degree of precision and the amount of welding required.

Big Science



Big Science

ITER Vacuum Vessel

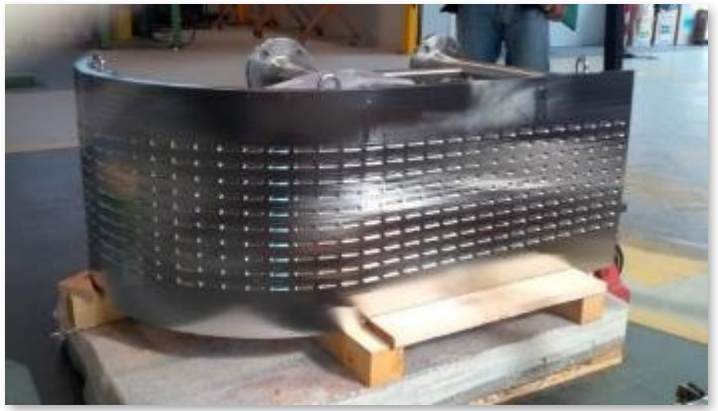
ITER Project - Caradache - Francia

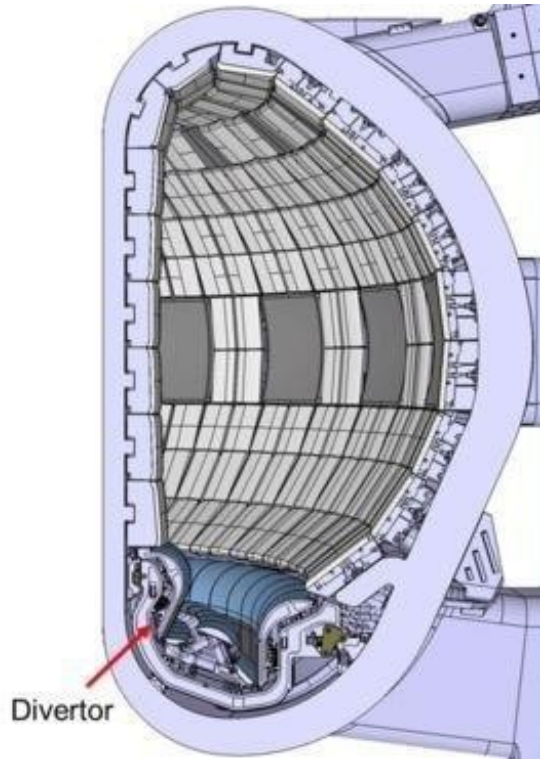
WALTER TOSTO

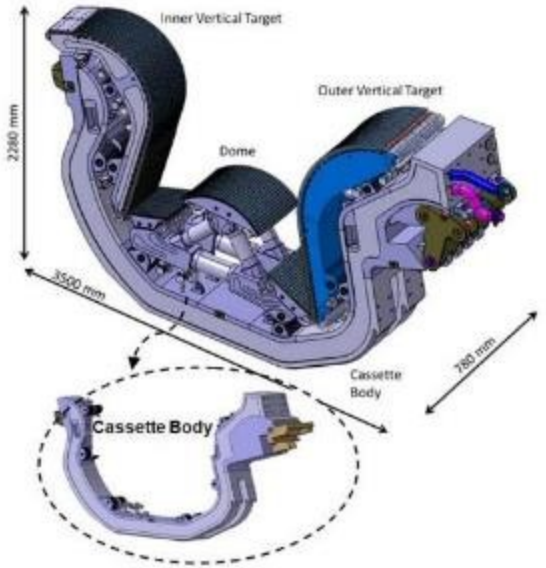
Big Science

The ITER Cassette Body is located at the bottom of the vacuum vessel. It extracts heat and ash produced by the fusion reaction, minimizes plasma contamination, and protects the surrounding walls from thermal and neutronic loads.

Walter Tosto has designed and manufactured a Cassette Body Prototype for a possible series of 58 items.







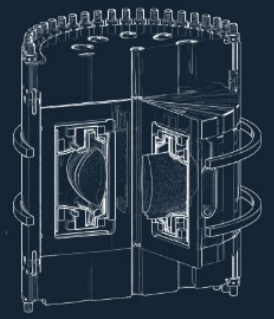
Big Science

SPARC

The first Nuclear fusion demonstration plant, whose task is confirming the correct functioning of the magnets for the toroidal configuration and the achievement of a positive net energy balance where the energy produced is greater than the energy consumed. It will be built in Devens, Massachusetts (USA) by 2025

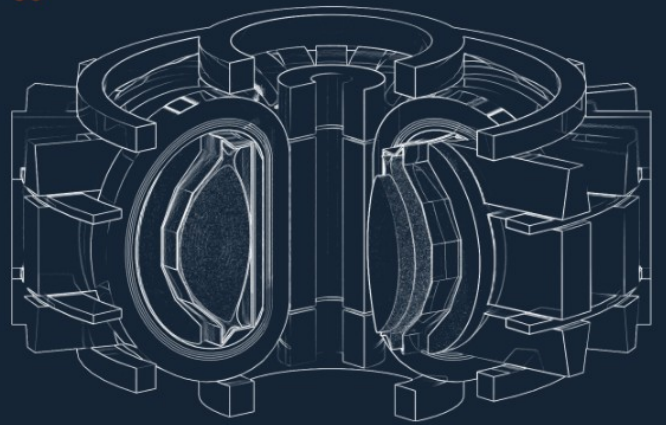
SPARC was awarded by the **Commonwealth Fusion Systems (CFS)**, spin off del **MIT** (Massachusetts Institute of Technology)

01

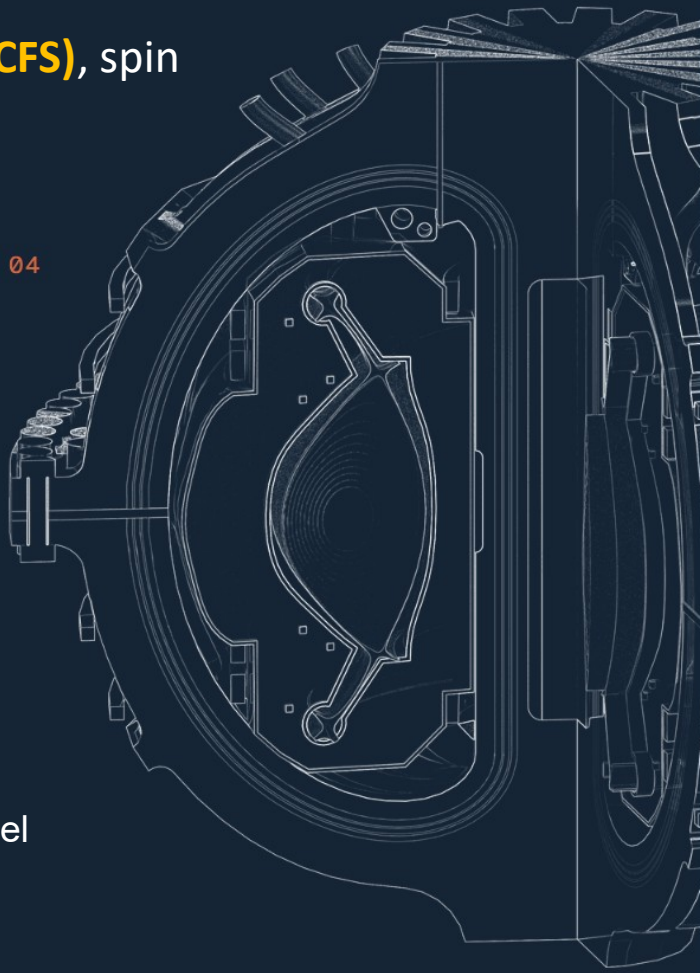


02

03

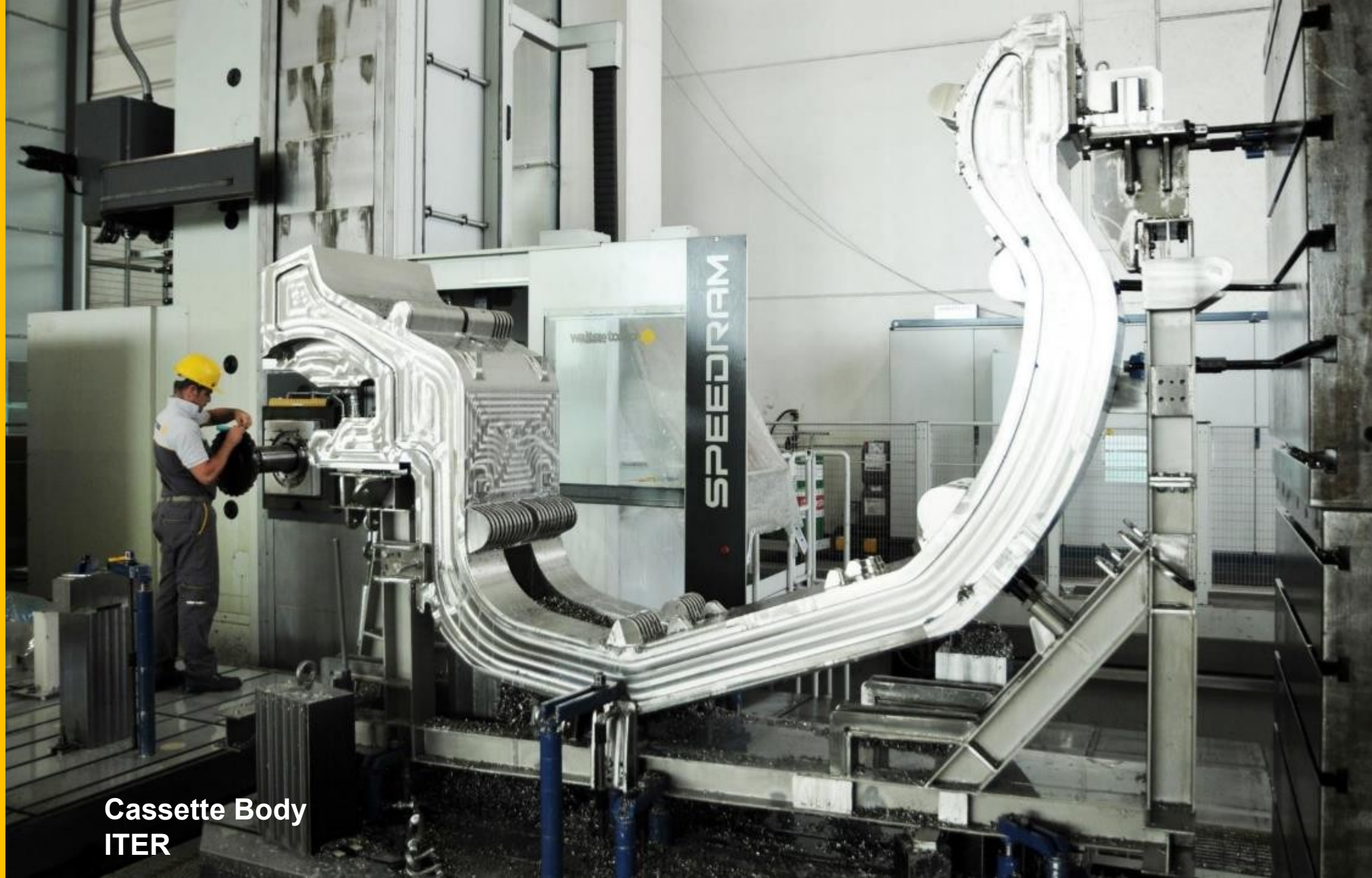


04



For the SPARC Project, Walter Tosto was awarded the supply of the Vacuum Vessel and accessory parts of the internal structure.

Big Science



Cassette Body
ITER

Big Science

ENEA

JT-60SA TF COIL CASINGS

MANUFACTURING HIGHLIGHTS

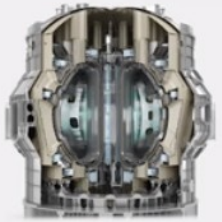
The JT-60SA superconducting tokamak is being constructed in Japan under the Broader Approach agreement between Japan and the EU.

JT-60SA is a fusion experimental project designed to support the operation of ITER and to investigate how best to optimise the operation of fusion power plants that are built after ITER. It is a joint international research and development project involving Japan and Europe, and is to be built in Naka, Japan using infrastructure of the existing JT-60 Upgrade experiment. SA stands for "Super Advanced", since the experiment will have superconducting coils and study advanced modes of plasma operation.

Walter Tosto SpA has been designated by ENEA for supplying 18 Toroidal Field coil casings for JT-60SA, to be furtherly delivered to ASG Superconductors (Genoa, Italy) and Alstom (Belfort, France).

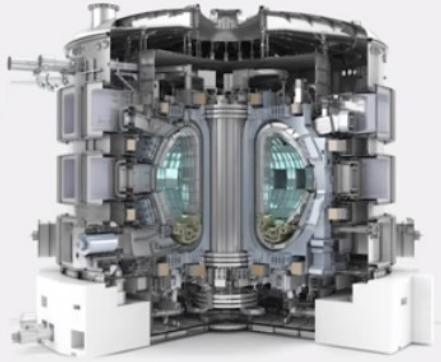
JT-60SA

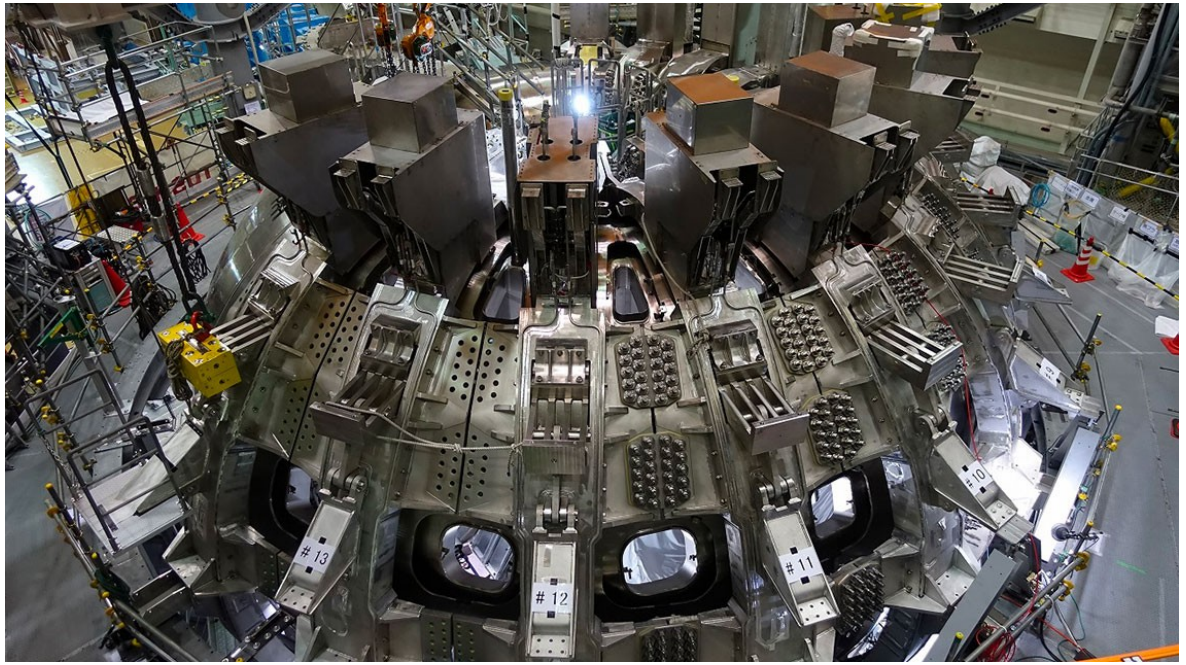
2600 TONNES
SIZE: 13,7 x 15,4 M
PLASMA VOLUME: 130 M³



ITER

23000 TONNES
SIZE: 30 X 30 M
PLASMA VOLUME: 830 M³





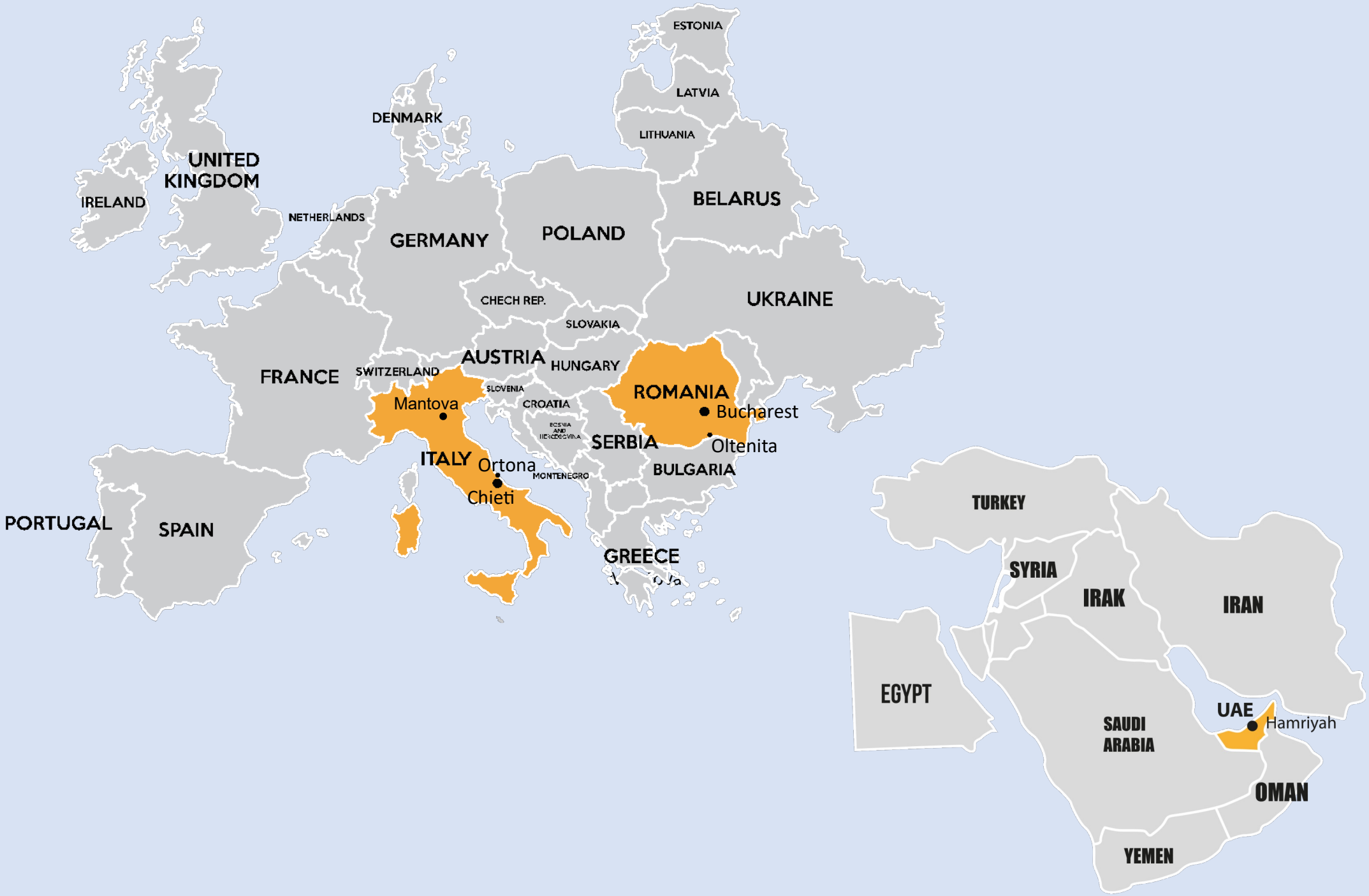
Big Science

Borexino

INFN (Istituto di Fisica Nucleare Italiana) - Italy

Workshops

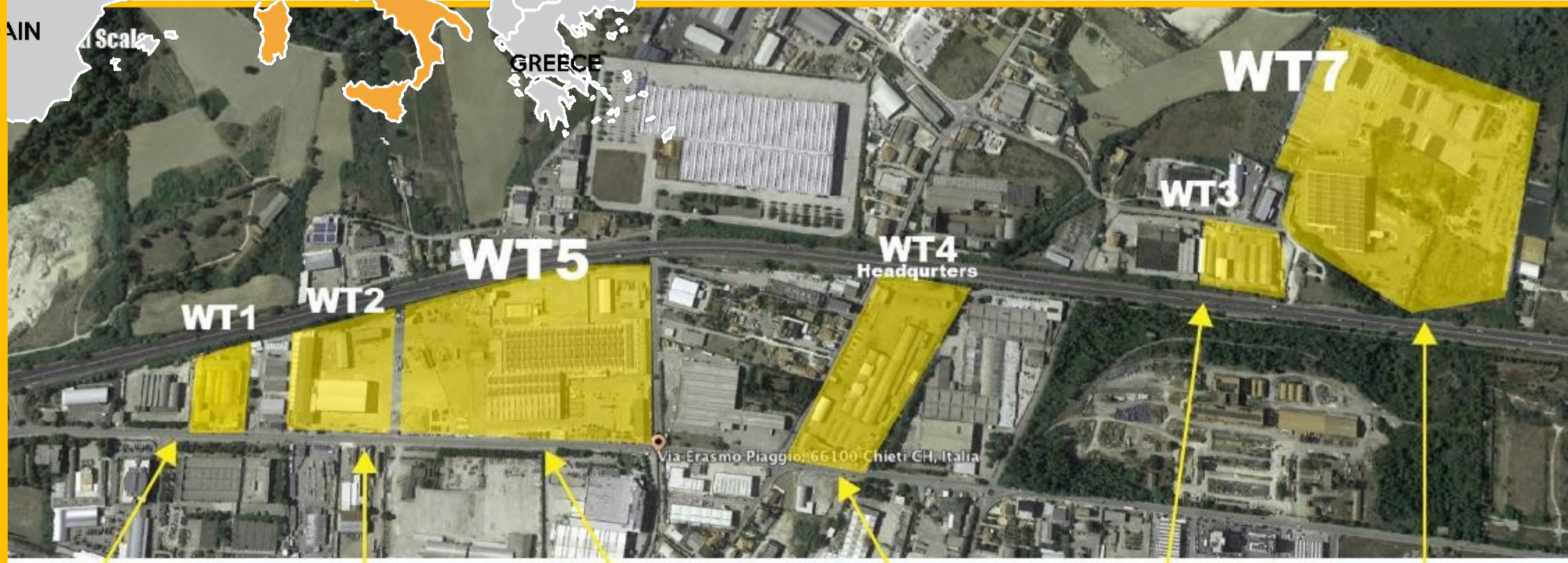
Workshops


ESTONIA
LATVIA
LITHUANIA
DENMARK
UNITED KINGDOM
IRELAND
NETHERLANDS
GERMANY
POLAND
BELARUS
UKRAINE
CHECH REP.
SLOVAKIA
AUSTRIA
HUNGARY
FRANCE
SWITZERLAND
SLOVENIA
CROATIA
ROMANIA
Bucharest
Mantova
BOSNIA AND HERZEGOVINA
SERBIA
Oltenita
ITALY
Ortona
MONTENEGRO
BULGARIA
Chieti
PORTUGAL
SPAIN
GREECE
TURKEY
SYRIA
IRAK
IRAN
EGYPT
UAE
Hamriyah
SAUDI ARABIA
OMAN
YEMEN

Workshops

ITALY - Chieti

The company carries out its activities on a total area of over 300.000 sqm. With eight workshops, six of which are located in Chieti Scalo and a workshop that is located directly on the Adriatic sea, in the port of Ortona, which allows the direct shipment of the items with no limitations.



Workshops

ITALY – Ortona Sea Front Workshop

Walter Tosto Spa owns one sea-front workshop (WT6) directly located in the Ortona Port, on the Adriatic Sea, where there are 3 quays with the following features:

- RIVA : Height: 1.60 mt, Water Depth: 6.00 mt
- RIVA NUOVA : Height: 2.00 mt, Water Depth: 6.00 mt
- NORD NUOVA : Height: 2.00 mt, Water Depth: 7.00 mt

To date, this workshop has allowed us to complete and ship, in one piece, items with noteworthy dimensions. From here, in fact, it is possible to ship items with no diameters limitation. Furthermore, with over 9.000 sqm of covered facilities, Ortona's 3 covered spans are each equipped with double overhead cranage with unique lifting capacities. The significant dimensions of our furnace for Post Weld Heat Treatment (32mt x 11mt x 10mt) allows us to minimize the quantity of localized PWHTs, while its "Cooperheat" combustion system assures a more rapid and uniform heating while allowing an accurate control of the overall temperature within the furnace (maximum deviation +5%).

Workshops

ROMANIA - Bucharest

Walter Tosto WTB's infrastructure in Bucharest is now completely renewed with energy efficient improvements, new machinery equipment and modern facilities for employees.

Covered Area : 32.500 sqm
Uncovered Are : 87.500 sqm

Workshops

ROMANIA - Bucharest

Fecne was acquired by the Italian company Walter Tosto SpA in 2012, which identified in the factory a potential opportunity for the continuation of its growth in the nuclear market.

Workshops

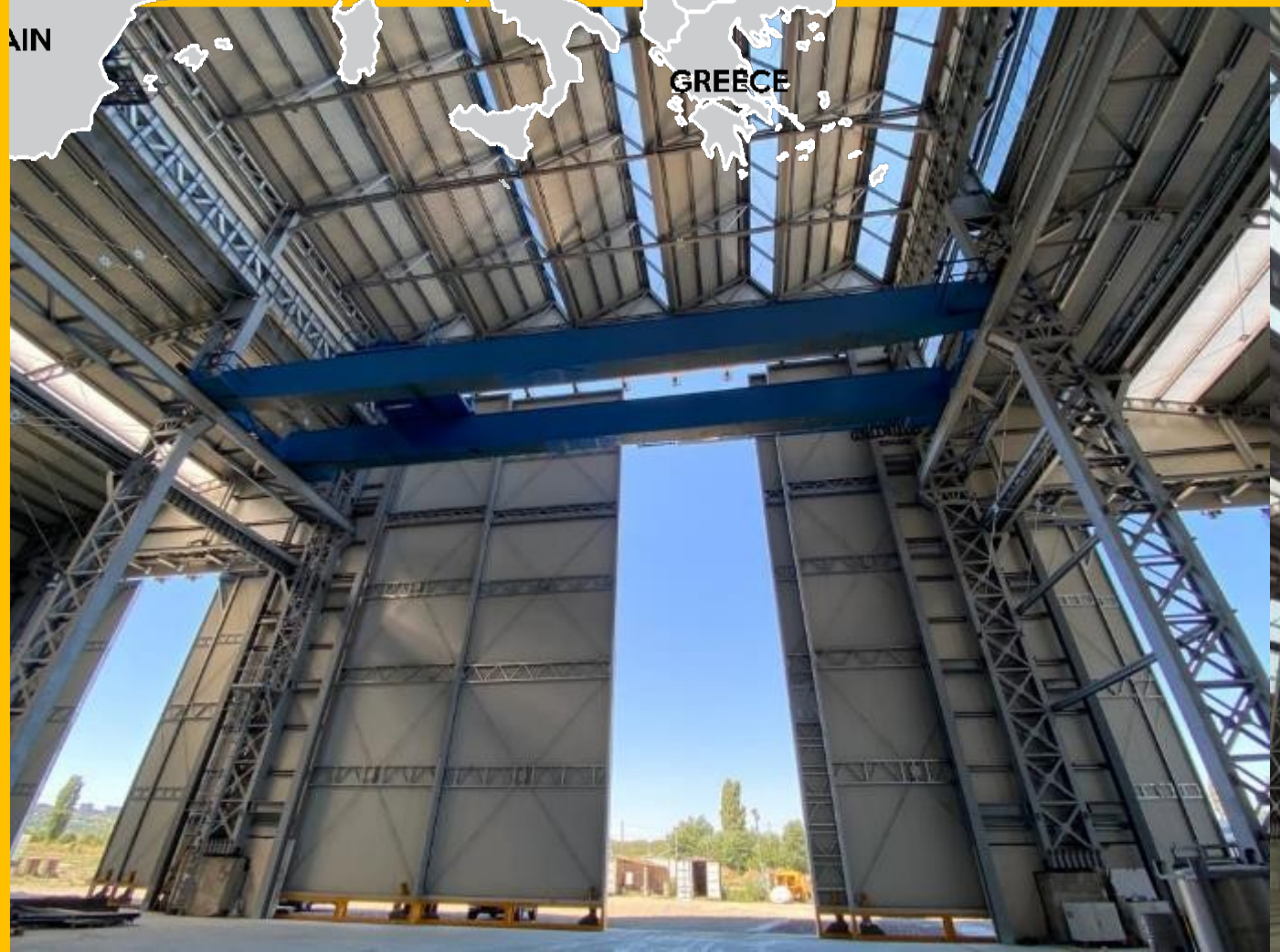
ROMANIA - Oltenita

We own a private River Port in Oltenița where we're currently building a new workshop with a covered area of 7.700 sqm and uncovered areaof 72.000 sqm. All logistics are carried out by self-propelled trailers and mobile cranes, and our own access ramps to the river for roll-on and roll-off operations.

Workshops

ROMANIA - Oltenita

We own a private River Port in Oltenița where we're currently building a new workshop with a covered area of 7.700 sqm and uncovered areaof 72.000 sqm. All logistics are carried out by self-propelled trailers and mobile cranes, and our own access ramps to the river for roll-on and roll-off operations.



Workshops

Hamriyah Workshop

Workshops

Belleli Energy Srl, Hamriyah Free Zone, Sharjah
'Hamriyah Plant General Layout'

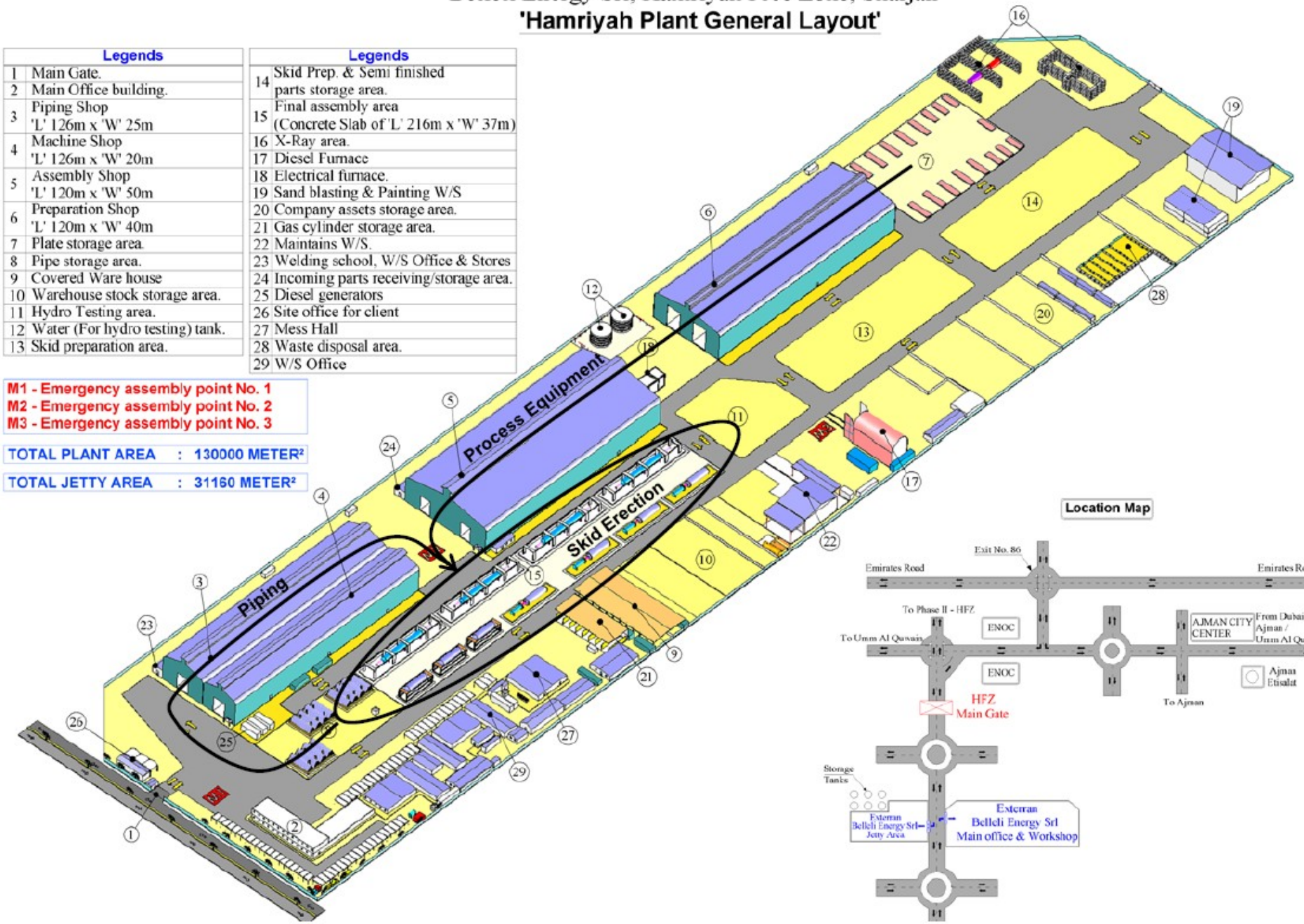
Legends	
1	Main Gate.
2	Main Office building.
3	Piping Shop 'L' 126m x 'W' 25m
4	Machine Shop 'L' 126m x 'W' 20m
5	Assembly Shop 'L' 120m x 'W' 50m
6	Preparation Shop 'L' 120m x 'W' 40m
7	Plate storage area.
8	Pipe storage area.
9	Covered Ware house
10	Warehouse stock storage area.
11	Hydro Testing area.
12	Water (For hydro testing) tank.
13	Skid preparation area.

Legends	
14	Skid Prep. & Semi finished parts storage area.
15	Final assembly area (Concrete Slab of 'L' 216m x 'W' 37m)
16	X-Ray area.
17	Diesel Furnace
18	Electrical furnace.
19	Sand blasting & Painting W/S
20	Company assets storage area.
21	Gas cylinder storage area.
22	Maintains W/S.
23	Welding school, W/S Office & Stores
24	Incoming parts receiving/storage area.
25	Diesel generators
26	Site office for client
27	Mess Hall
28	Waste disposal area.
29	W/S Office

M1 - Emergency assembly point No. 1
M2 - Emergency assembly point No. 2
M3 - Emergency assembly point No. 3

TOTAL PLANT AREA : 130000 METER²

TOTAL JETTY AREA : 31160 METER²



Location Map

Workshops

HAMRIYAH MANUFACTURING FACILITY

PRESSURE VESSELS

Materials : CS, LAS, SS, CLAD
Weight : Up to 1000MT
Size : Up to 10M dia, 70M Lg, 300mm Thk

PIPE SPOOLS

Materials : CS, LAS, SS
INCOLLOY, MONEL

- ID Overlay & Cladding (2"~24")
- Automatic Cutting & Welding
- Pneumatic & Hydrostatic Testing

PROCESS SKIDS

- Water Injection
- Gas Treatment
- Gas Compression
- Sulfur Recovery (SRU)
- Triethylen Glycol (TEG)
- Oil Separation and Dehydration

SERVICES UNDER ONE ROOF

- Design & Detail Engineering
- Supply Chain & Logistics
- Manufacturing
- Heat Treatment
- Non-Destructive Examination
- Painting, TSA Coating
- Insulation, Refractory Lining
- Electricals & Instrumentation

CAPABILITIES

Open Area	: 110,000 Sq.Mtr.
Covered Area	: 20,000 Sq.Mtr.
Workshops	: 3 Nos.
Open Yards	: 4 Nos.

Piping	: 20,000+ Inch Dia / Month
Monthly	: 120,000+ Man-hours

- Blasting & Painting Shops
- Radiography Bunkers
- Cranes & Boogies
- Operational 24x7

Workshops

WELDING CAPABILITIES

More than 2,000 qualified welding procedures. Team of 300+ qualified welders.

ESW Welding Overlay

Automatic Pipe ID Overlay

Petal to Petal SAW Welding

Automatic Tube to Tubesheet Welding

Narrow Gap SAW Tandem Welding

SAW Nozzle Welding

PIPING & MACHINE SHOP

MACHINE SHOP

- Tube-Sheet & Baffles Drilling
- Horizontal Boring Machine
- Vertical Boring Machine
- Lathes, Milling & Drilling Machines
- CNC Machines

PIPE SPOOL SHOP

- Maximized automatic welding
- ID overlay from 2" to 24" diameter
- Pipes sizes from ½" to 50" diameter
- Exotic materials like Inconel, Monel, SS, Super Duplex & Clad pipes

Workshops

ASSEMBLY SHOP

- Heavy Rolling Machine up to 125 mm thick
- EOT crane Lifting capacity up to 175 MT
- Long Furnace up to 750˚C

PREPARATION SHOP

- 200MT Press for Bending Pressing up to 40mm thickness
- CNC Cutting machine
  - 200mm Carbon Steel
  - 80mm Stainless Steel

- Columns
- LPG Bullets
- Pressure Vessels
- Heat Exchangers
- Heavy Wall Vessels
- Compression Equipment Packages

- CNC Beveling machine
  - Single V
  - Double V
  - J Groove
- Medium Rolling Machine up to 40mm thick

Workshops

PORT & LOADOUT FACILITY

Heavy Lift and RO-RO Load Out Capability	Hamriyah Port
Water Depth & Draft (Meter)	14 M & 12.5 M
Linear Meter (LM) of Bulkhead	4 L, 180 W, 15 D
Ocean Access Routing	Ship & Barge

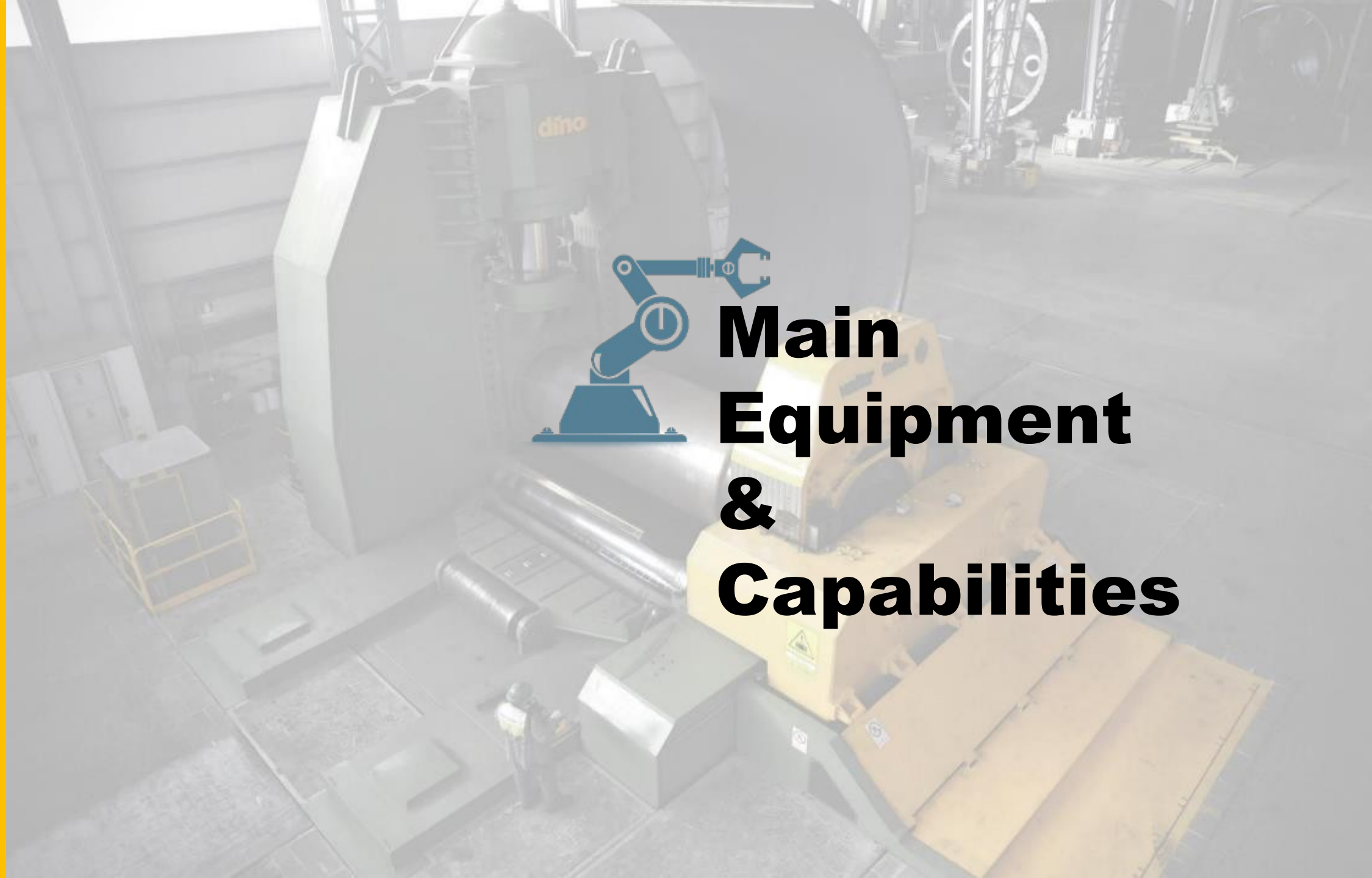
PRESSURE VESSELS



SKIDS & PROCESS MODULES

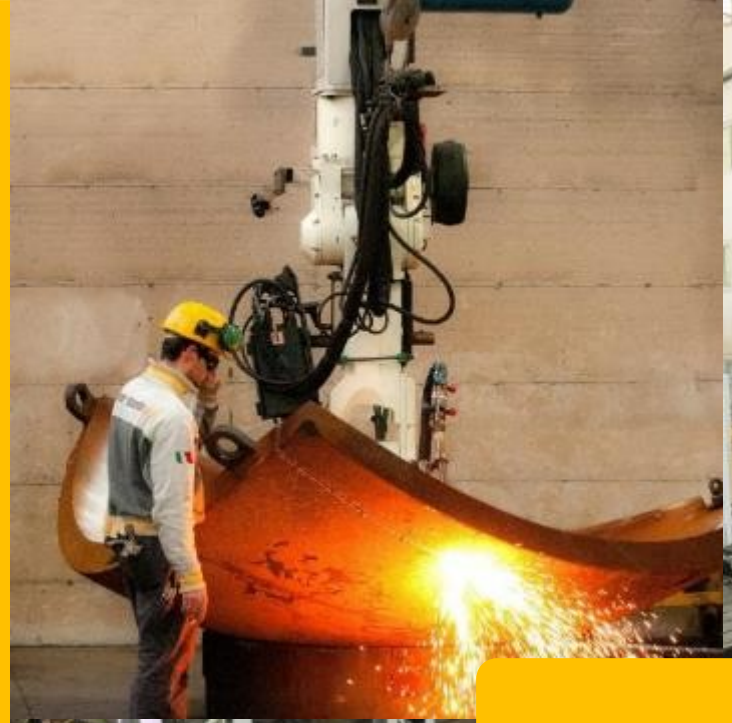
MAJOR CLIENTS

- Acciona
- Alstom
- Arabtank Terminals Limited (ATTL - Yanbu)
- Basrah Gas Company
- CMI Belgium (Currently John Cockerill)
- China Petroleum Engineering & Construction Corporation (CPECC)
- Crescent Petroleum
- Daewoo E & C
- Dana Gas
- DUGAS
- Emirates General Petroleum Corporation
- Fisia Italimpianti
- Flour Corporation
- Hitachi Zosen Corporation
- Horizon Djibouti Terminals Ltd
- Jacobs Engineering Group
- JGC Corporation
- KazakhOil Aktobe LLP
- Kuwait Oil Company
- Lukoil
- Maersk Oil
- Occidental Petroleum (Oxy)
- Pearl Petroleum Co. Ltd
- Petrobas
- Petrofac
- Petronas
- Petroleum Development Oman (PDO)
- Saipem
- Saline Water Conversion Corporation (SWCC)
- Samsung Engineering
- Saudi Aramco
- Sharjah National Oil Corporation (SNOC)
- Shell
- Sidem
- Socar Aurora
- SPETCO International Petroleum Company
- Tatweer Petroleum
- Tecnicas Reunidas
- Technip Engineering Company
- Thermo Design Engineering Ltd (TDE)
- TOTAL
- Toyo Engineering Corporation
- VOPAK Horizon Fujairah
- Zakum Development Company (ZADCO)
- Zhaikmunai LP



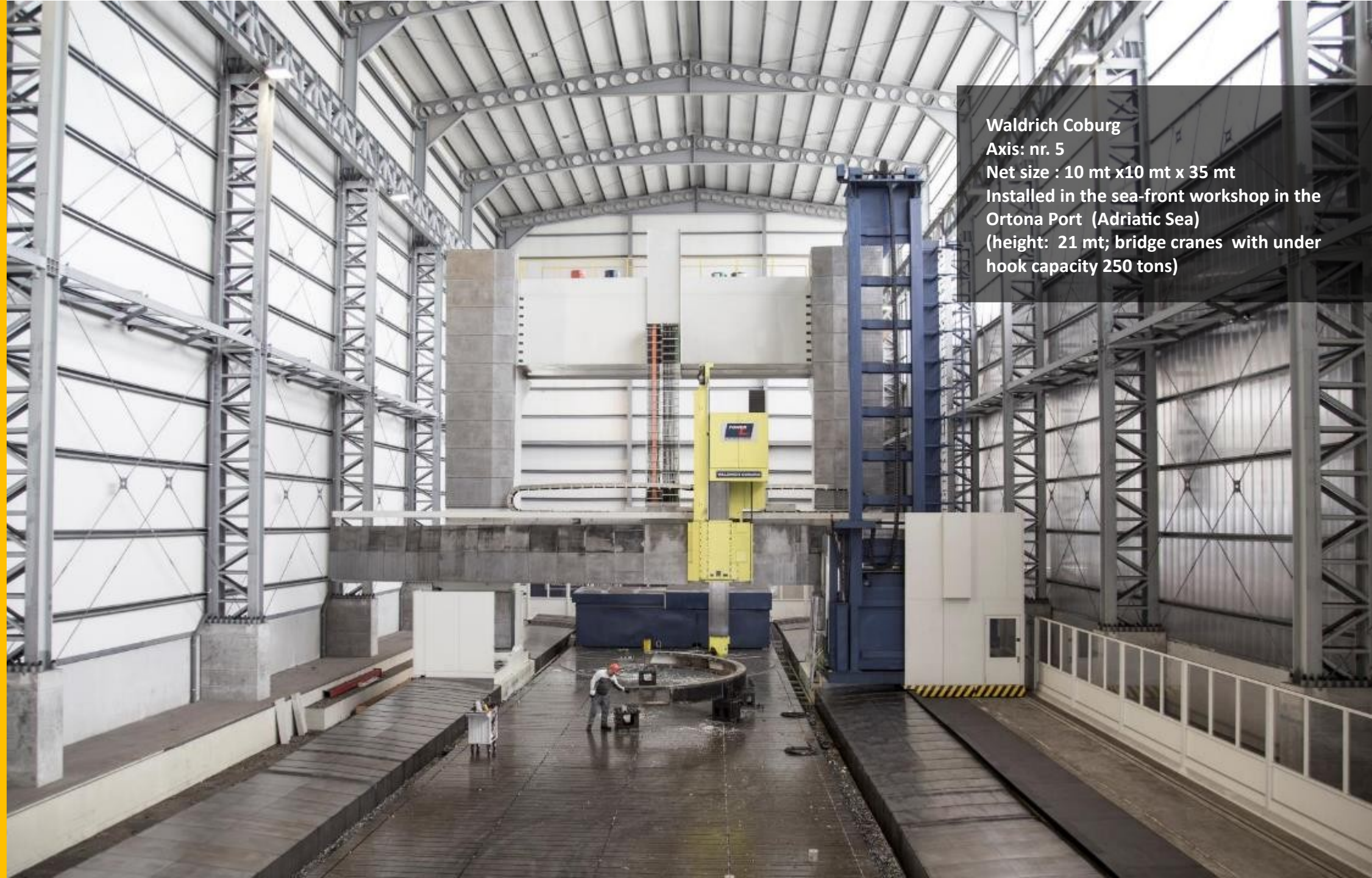
Main Equipment & Capabilities

Main Equipment & Capability



Wide Machine Park

Main Equipment & Capability



Waldrich Coburg
Axis: nr. 5
Net size : 10 mt x10 mt x 35 mt
Installed in the sea-front workshop in the Ortona Port (Adriatic Sea)
(height: 21 mt; bridge cranes with under hook capacity 250 tons)

Main Equipment & Capability

Rolling Machine Dino 9000 T

Pressing power (Tons)9000/1000
Maximum rotating power (Kg/m)1.300.000
Installed power (Kw)1.200
Table width (maximum plate width) (mm)3.600
Diameter of the bottom rolls (mm)860
Diameter of top rolls (mm)1.750

Main Equipment & Capability

PRESSING MACHINE
capacity 2000 tons

Main Equipment & Capability

SANT'EUSTACHIO VERTICAL LATHE

Platform Dia: 8.000 mm
Capacity: Up to 200 Tons
Axis: X 8.300 – Y 4.000
Z1 2.200 – Z2 2.200 – Z3 2.000
CNC: Siemens 840 D

Main Equipment & Capability

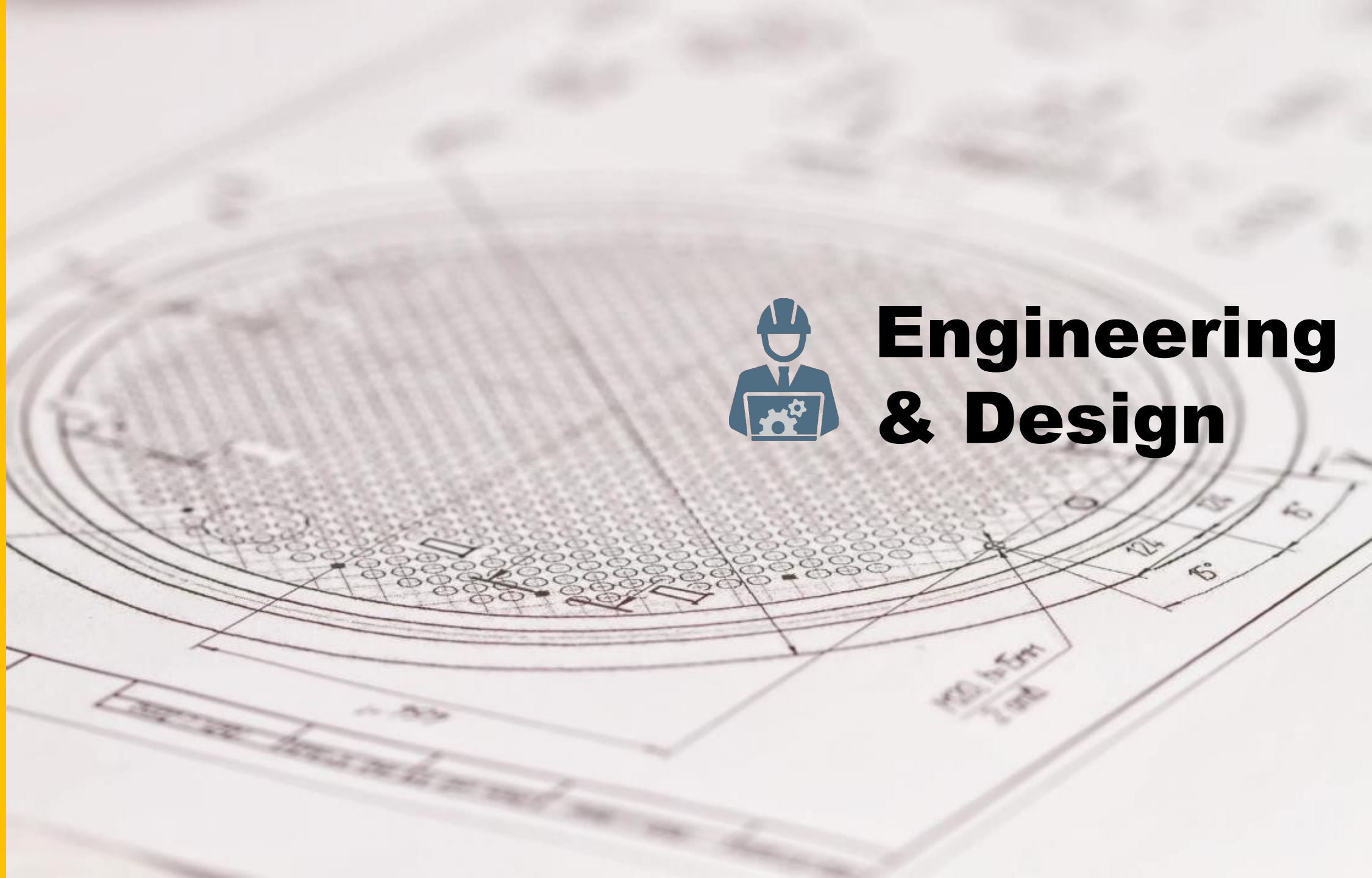
CORREA VERSA

is a Gantry Milling Machine. It has 5 axes able to machine pieces up to mt 10,5 in lenght, 1,65 in height and 6,8 wide with very tight tolerances.

Main Equipment & Capability

The **Walter Tosto electron beam welding** equipment has a 650 cubic meter vacuum chamber, capable to perform welding activities on item up to 14 meters long. Inside the vacuum chamber there is an anthropomorphic robot that moves the electron generator to direct the beam on the work piece. The generator has a power of 40kW capable of performing full penetration and single pass welding on thicknesses up to 80mm of stainless steel.

Main Equipment & Capability



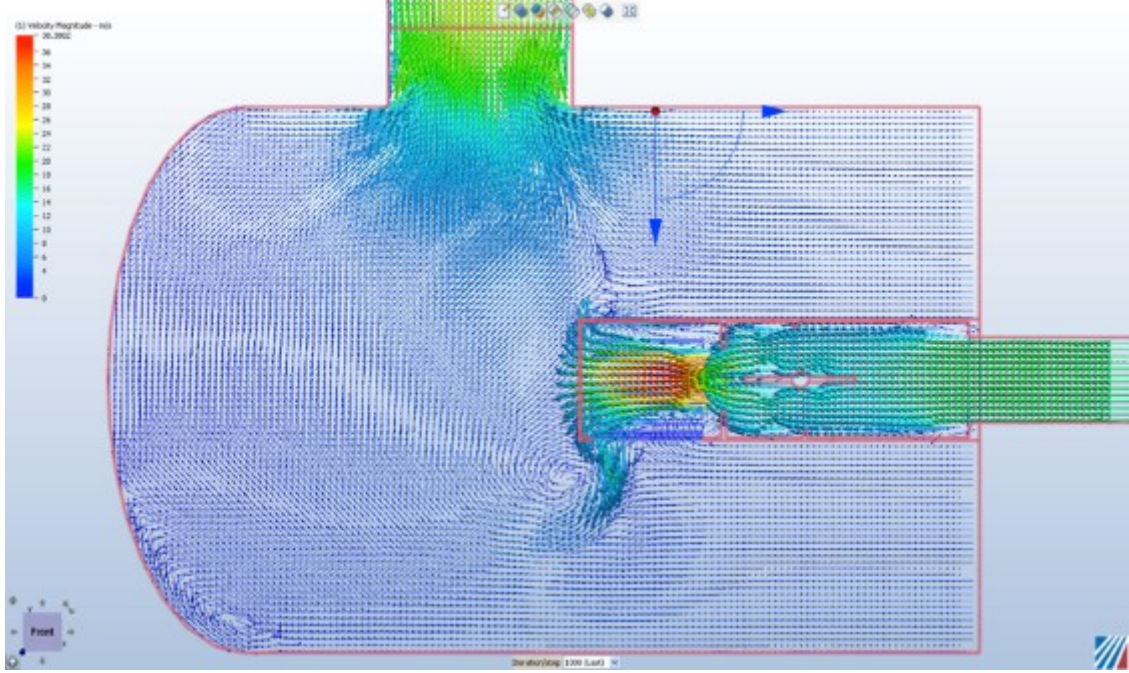
Engineering & Design

Engineering & Design

FEA

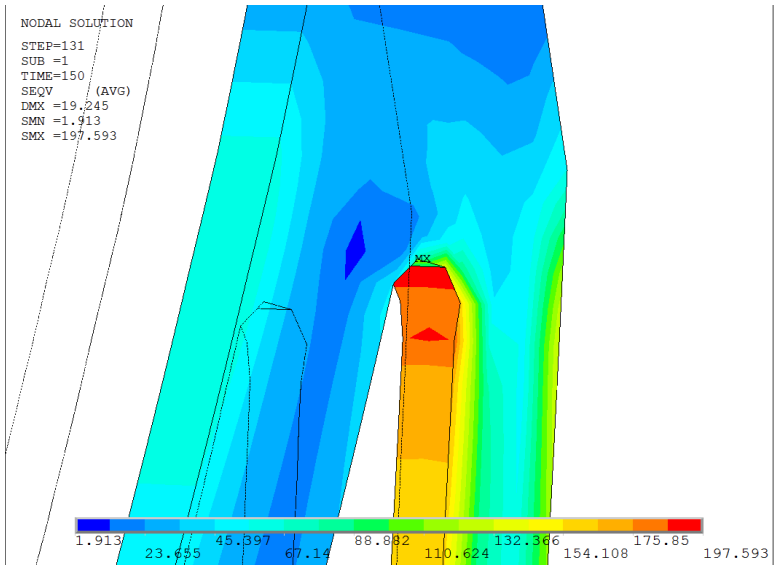
The full knowledge and the familiarity with all the existing design codes such as **ASME, BS 5500, CODAP, Stoomwelzen, AD Merkblatt and GOST** allow us to develop the best design, from the mechanical point of view, for the customer. Furthermore, the in-house presence of **FEM** experts, together with the several **ANSYS** licenses, make the **Finite Element Analysis** a powerful instrument in our hands, for the design of critical parts of the equipment. Beside the mechanical design, Walter Tosto has **strong skills** for the development of the thermal and **fluid-dynamic design** of Heat Exchangers for Oil & Gas and Power industry, starting from Process Data Sheets, ensuring all the required guarantees to our customers.

Some of the applicable design - codes and standards		
ASME-VIII Div. 1	ASME-VIII Div. 2	PD5500
AD Merk Blatter 2000	ASME I VSR	Stoomwelzen
SQL/SELO	API	CODAP
CODRES	HTRI	HEI



Process and Mechanical Design - Optimization of Heat Exchangers using a CFD Technique
Computational Fluid Dynamics (CFD) technique can be applied in order to optimize the critical process design and mechanical design aspects of some special heat exchangers.

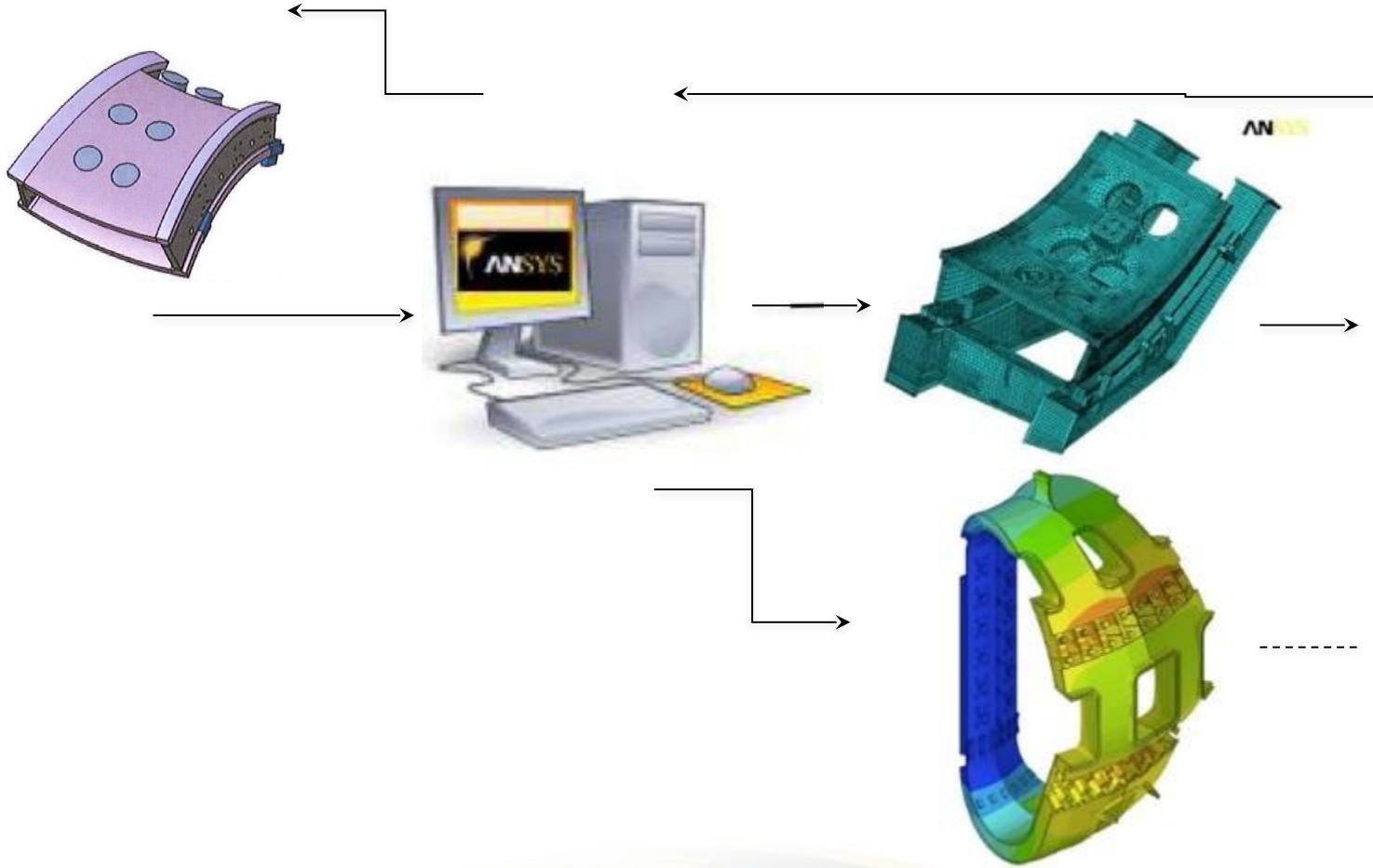
System Name	Purpose	Developer
Finglow	Calculation software	Finglow Ltd
CATIA V5	3D drawing calculation software	Dassault Systemes
Soild Edge	3D drawing calculation software	USG
Pro Engineer	Parametric 3D drawing program	PTS
AutoCAD	2D drawing Program	Autodesk
ANSYS	Finite Elements Analisys	ANSYS
Aspen Suite	Heat Exchangers Mec. Design - Shell & Tube Exchanger Design Rating Software	Aspentech
Sant'Ambrogio	Mechanical calculation software	Sant'Ambrogio
PAAC	Feedwater Heater and surface condenser thermal design	



Engineering & Design

FINITE ELEMENT DISTORSION ANALYSIS

This sophisticated technique allows us to predict the deformation due to weld thermal input As this deformation is expected, it may be managed by proper preforming process in order to match the required final geometry.

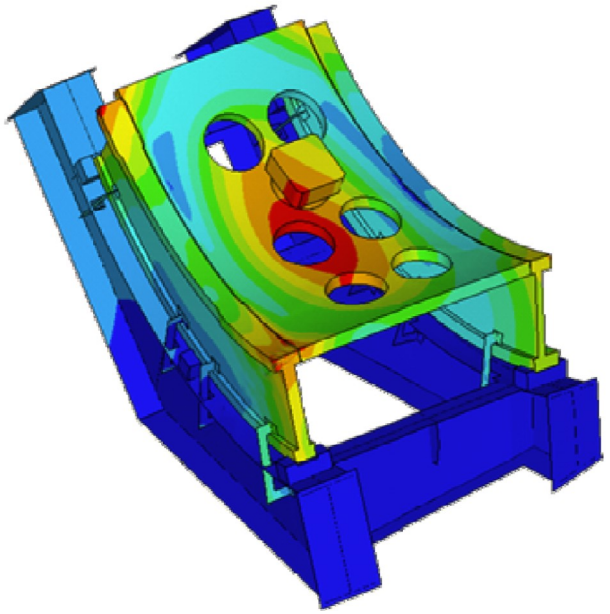


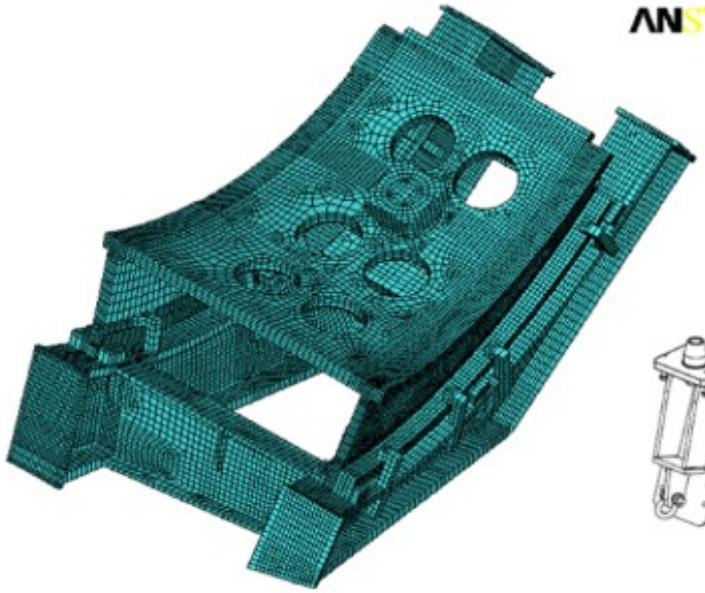
WALTER TOSTO

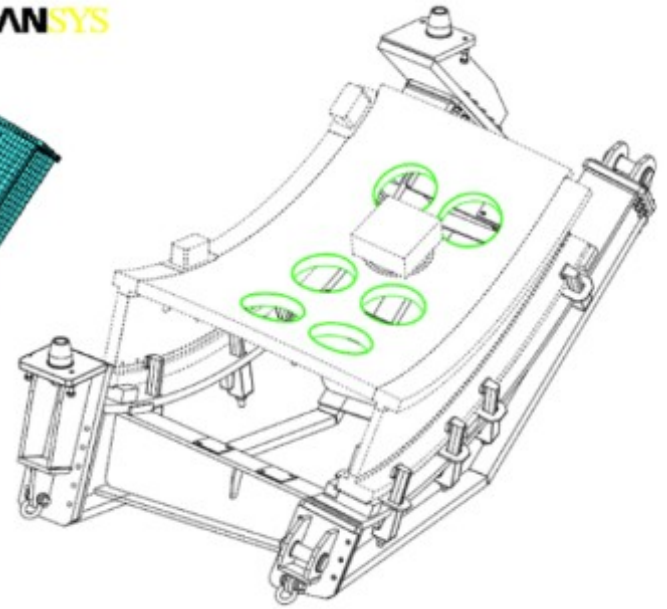
NATEC INGENIEROS subcontractor

Engineering & Design

PS2 Mock-up Welding Distortion Simulation







Engineering & Design

Materials

Carbon Steel (CS)
Fine-grain Steel/Normalized

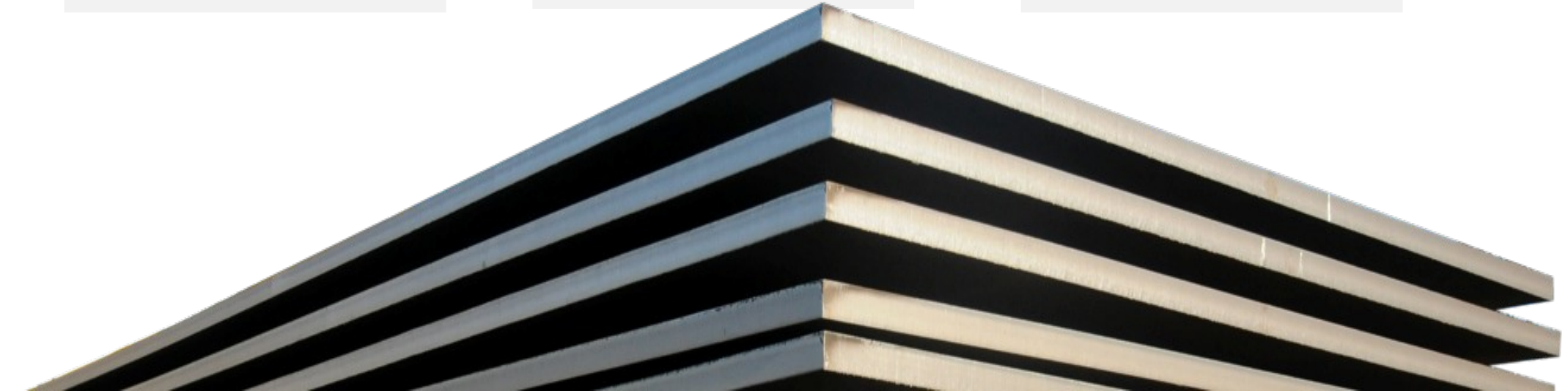
Cr – Mo alloys
0,5 Mo
1 Cr – 0,5 Mo
2,25 Cr – 1 Mo
2,25 Cr – 1 Mo 0,25V

Ferritic Austenitic Steel Duplex
S 31803
S 32205

Ni – Alloyed Steel
0,5 Ni
3,5 Ni

Stainless Steel
Ferritic
Austenitic
Alloy cladded

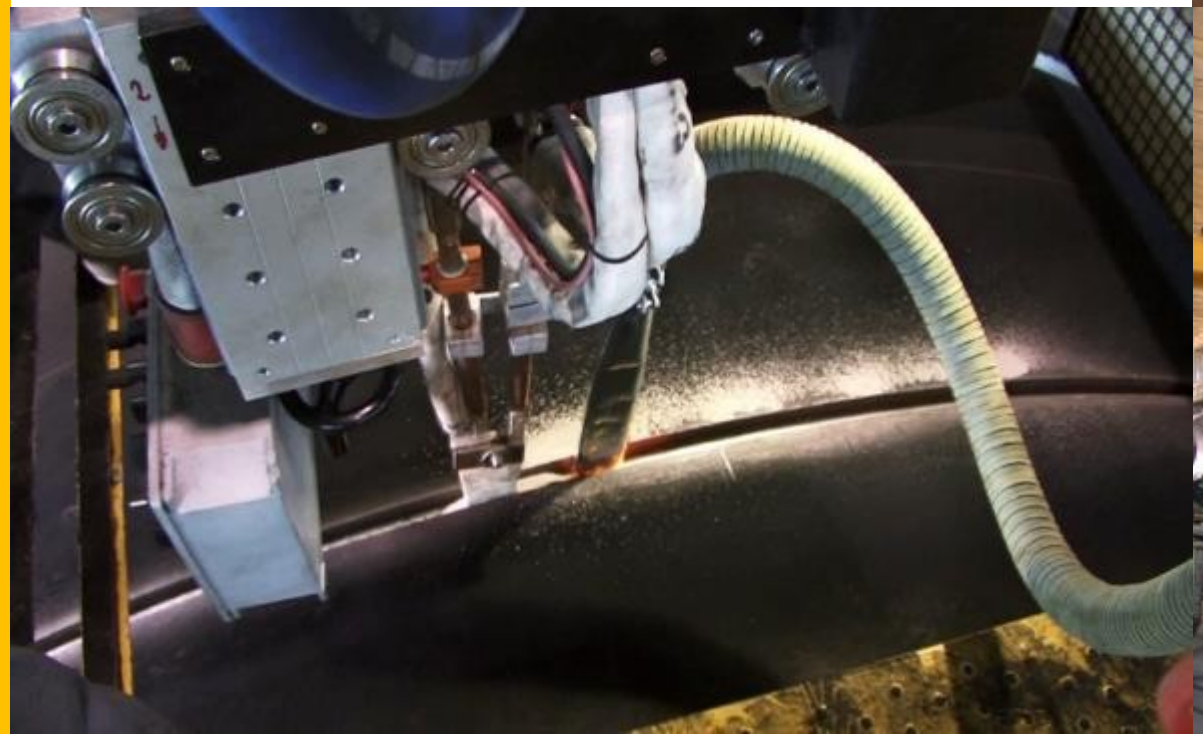
Non Ferr. Materials
Ti-Gr I/Gr. II
Copper Alloy
High Nickel Alloy



Welding

Welding

Welding process employed		Manual	Automatic
SMAW	Shielded Metal-Arc welding	X	
SAW	Submerged-Arc Welding		X
SAW STRIP	Subm.-Arc Weld. with strips		X
SAW Tandem	SAW Double Wire		X
GMAW	Gas Metal-Arc Welding	X	X
GTAW	Gas Tungsten-Arc Welding	X	X
FCAW	Flux-Cord Arc Welding	X	X
ESW	Electro Slag Welding		X
PAW	Plasma-Arc Welding		X



Welding

Quality

Quality

Non-destructive testing	IN-HOUSE	CONTRACT
UT / Ultrasonic	x	
UT / TOFD ("Ttime of Flight Diffraction")	x	
RT / X-Ray	x	
RT / Gamma Ray	x	
PT / Dye-Penetrant	x	
MT / Magnetic Particle	x	
HB, HV, HRC / Hardness Testing	x	
Air Pressure Testing	x	
Tightness / LeackageTesting Helium	x	
Hydro Pressure Testing	x	
Delta Ferrit Testing	x	
PMI	x	
UT Phased array	x	

Mechanical Test	IN-HOUSE	CONTRACT
Tensile	x	x
Impact T.	x	x
Hardness	x	x
Bending	x	x
Macrotest	x	x

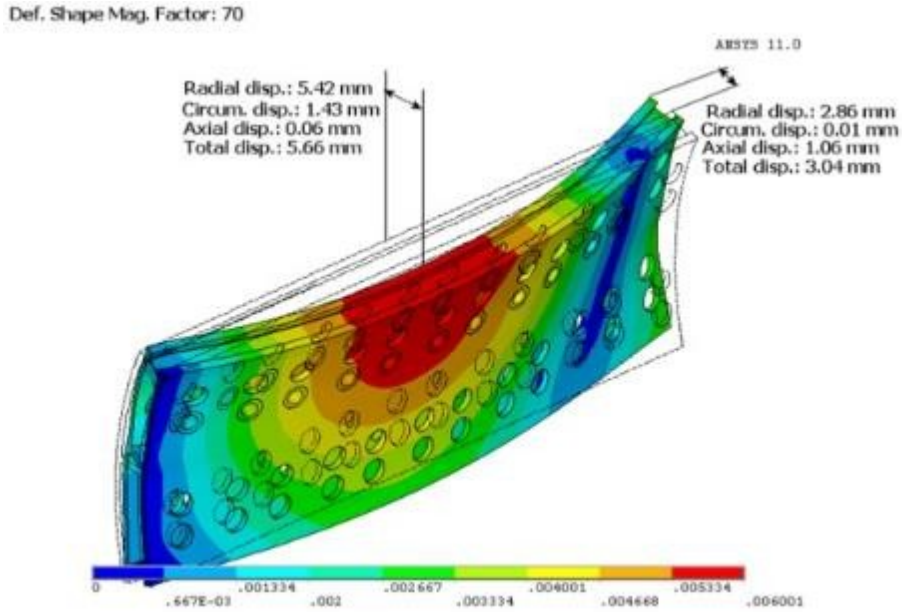
Others	IN-HOUSE	CONTRACT
Disbonding		x
Microtest		x
Chemical analisys		x

Qualit

y

Dimensional Checking

Sophisticated dimensional tests are performed using Laser Scanner & Laser Tracker. These tests can be implemented where ultra stringent tolerances are applicable while full recordable data is requested



Quality

Materials Traceability

Walter Tosto SPA records the barcodes of all materials (Plates, Forges and Flanges) on **ORACLE** Internal Computer System.

These barcodes are positioned directly on the parts by stickers and they report the following information: Job number, Product code and Description, Heat Number, Plate number, Drawing and position number, P.O.number, Supplier name, Material Test Report Number, Barcode and TAG Number, Operator name, Date. In these way, thanks to a **special device capable to read bardoces, it's possibile to have all information at any time of the manufacturing process.**

Quality

Certificates

CERTIFICATES

ISO 3834-2:2008

ISO 9001:2008

ISO 14001:2008

PED MODULO H1

SELO: PRESSURE VESSELS

SELO: BOILER

CERTIFICATE OF AUTHORIZATION U

CERTIFICATE OF AUTHORIZATION U2

CERTIFICATE OF AUTHORIZATION U3

CERTIFICATE OF AUTHORIZATION S

CERTIFICATE OF AUTHORIZATION R

CERTIFICATE OF AUTHORIZATION NATIONAL BOARD

CERTIFICATE OF AUTHORIZATION N

CERTIFICATE OF AUTHORIZATION NPT

OHSAS 18001:2007

Quality

HSE

The safety policy of the Tosto Group is considered as an essential part of the general policy of its companies. The safety aspect is indeed placed at the same level as productivity, effi ciency, quality, environment and other factors of signifi cant importance for the company. The policy is shared among the companies, embracing all the organization levels in order to eliminate dangerous situations and behaviors that can cause accidents or injuries. Any document connected to said policy shall be available in any office or department, in order to avoid improper and dangerous situations leading to accidents and injuries.

Human Resources

Human Resource

Training

Yearly Master of Pressure Process Equipment: Design and Manufacturing

Walter Tosto SpA organizes Masters of ‘Pressure Process Equipment: Design and Manufacturing, in collaboration with the University of L’Aquila and the IIS (Italian Welding Institute).

Details of latest Master:

- 20 students attended the Master
- 12 of them are now part of the Walter Tosto SpA staff

Human Resource

Training

Pressure Equipment Operator

Walter Tosto SpA is the first company to promote and activate the **Professional Qualification in Pressure Equipment Operator** in collaboration with IIS "U Pomilio" of Chieti, AIPE, CNA Abruzzo, CNA Chieti, CCIAA - Chieti, Internationalization Agency, Nexus Srl and Llyod's Register. The qualification was recognized by the Abruzzo Region and it can be obtained at the third year of the professional institute. Subsequently, students have the opportunity to do an internship in the company.” .

Human Resources

Training

Mechanical pressure equipment project with the Technical Institute

Walter Tosto actively collaborates with the technical institute L. Savoia of Chieti with which an ad-hoc study path involving the Mechanical address was created, in order to fully reflect the needs of the sector in which the company operates, that is pressure equipment, as well as to allow students to acquire the specific skills needed to enter in the world of work.

Walter Tosto's engineers and technicians were directly involved in the implementation of the study plans in collaboration with the teachers of the Technical Institute.

The project was activated in September 2017 and is carried out within an experimental class of the mechanical address with declination on pressure equipment.

Human Resource

Training

Welding course

Since 2006, the company carries out a professional training course for welders, divided between practical training (200 hours) and theoretical lessons (20 hours). About 20 young people participate in each edition and 80% of them end up positively the program by becoming a qualified welder, while 50% of the participants are subsequently included in the company's staff.

Thank you for your attention