

# GUARUJÁ YARD

BRAZIL



SAIPEM



# GUARUJÁ YARD

## SAIPEM DO BRASIL

### CTCO - OFFSHORE TECHNOLOGY AND CONSTRUCTION CENTRE FABRICATION AND MARINE BASE

#### TECHNICAL SPECIFICATIONS

##### GENERAL INFORMATION

- Overall area: 354,000 m<sup>2</sup>
- Overall open area: 235,000 m<sup>2</sup>
- Overall covered fabrication, warehouse and maintenance areas: 25,600 m<sup>2</sup>
- Overall office and facilities areas: 10,000 m<sup>2</sup>
- Other yard areas: 83,000 m<sup>2</sup>
- Distance to closest international airport: 95 km
- Average annual temperature: 24.7 °C
- Average annual rainfall: 284.4 in
- Soil bearing capacity: 10 t/m<sup>2</sup>

##### OFFICES AND FACILITIES

- Office area: 7,200 m<sup>2</sup>
- Canteen and vest rooms: 2,800 m<sup>2</sup>

##### FABRICATION AND MARINE BASE AREA

###### Structural steel fabrication area

- Covered workshop: 4,704 m<sup>2</sup>

###### Piping fabrication area

- Workshop for carbon steel: 6,437 m<sup>2</sup>
- Workshop for exotic materials: 864 m<sup>2</sup>
- Heavy/light welding line: 4,704 m<sup>2</sup>

###### Blasting/painting area

- Covered workshop: 1,056 m<sup>2</sup>

###### Warehouse & bulk storage area

- Covered: 3,360 m<sup>2</sup>

###### Maintenance area

- Covered: 4,464 m<sup>2</sup>

##### QUAY

- Length: 580 m
- Reinforced length: 505 m
- Soil bearing capacity: 10 t/m<sup>2</sup>
- Distance to open sea: 4 km
- Water min. depth: 12 m
- Tide variation: 1.1 +/- m

##### YARD EQUIPMENT

###### Preparing, beveling and welding

- Rolling machine  
Max. thickness: 60 mm  
Max. width: 4,000 mm
- Profiling machine (plate)  
Max. cutting width: 4,000 mm  
Max. cutting length: 26,000 mm

###### Welding machines

- 48 x SMAW
- 16 x MIG/MAG (GMAW)
- 25 x TIG (GTAW)
- 48 x FCAW
- 5 x SAW (TANDEM)
- 7 x GOUGING

###### Lifting and handling

- Tower crane  
Capacity max.: 350 t
- Mobile crane  
Capacity max.: 60 t
- 26 x Overhead crane  
Capacity max.: 64 t
- 2 x Forklift  
Capacity max.: 7 t

- Multiwheel  
Capacity max.: 600 t
- Cherry picker  
Additional equipment available upon request

##### YARD GENERAL FABRICATION CAPACITY

- Annual tonnage: 9,000 t/year
- Annual man-hours: 1,500,000 mhrs/year
- Largest jacket weight: 10,000 t
- Largest module weight: 4,000 t
- Load out method: skidding, multiwheels, cranes (350 t tower crane)

##### CERTIFICATIONS

- ISO 9001: 2015
- ISO 14001: 2015
- OSHAS 18001: 2007

Saipem developed the CTCO in 2011, strategically located in Santos Basin, SP. The combination of this fabrication and marine base facility, with the Engineering Center of excellence based in the company's headquarters in Rio de Janeiro, made it possible to deliver EPCI projects enhanced with local content for the Brazilian oil and gas industry.

## DID YOU KNOW?

FROM 2012 TO 2014,  
THE CTCO GENERATED  
AROUND 5,000 JOBS  
IN BRAZIL AND AROUND  
2,000 IN THE BAIXADA  
SANTISTA REGION.