



Kuantan, Malaysia

## PIPE MANUFACTURING

### Features

- 1 FBE/3LPE/3LPP coating plant
- 1 internal coating plant
- Pipe storage area - 4,200 m<sup>2</sup>
- Plant - 7,141 m<sup>2</sup>
- Welding speed - 1.0 - 2.5 m/min
- Production capacity - 12,000 MT per month on a 24-hour operation

### Raw Materials

- Strip width-700mm~1,600mm
- Wall thickness - 6mm~25.4mm
- Outer diameter -  $\varnothing$ 1,200mm~ $\varnothing$ 2,200mm
- Inner diameter -  $\varnothing$ 610mm~ $\varnothing$ 780mm
- Max coil weight - 30MT

### Pipe Products

- Outer diameter -  $\varnothing$ 406.4 mm~ $\varnothing$ 1,620mm
- Wall thickness - 6mm~25.4mm (+17.5mm for API-5L X80)
- Pipe length - 9m~16m
- Pipe quality - API 5L, DIN17172 and other international standards
- Maximum unit weight - 16.3MT



### Access Method

Located within the confines of Kuantan Port, trucking route to plant site is approximately six kilometers on well paved asphalt roads. Trucking services to and from Singapore, Johor Bahru, Port Klang and Thailand are readily available from local transportation companies.



## Project Highlights

### APLNG Upstream Phase 1 Project

**Project Owner:** Australia Pacific LNG Gladstone Pipeline Pty Ltd  
**Year of Completion:** 2013  
**Project Location:** Australia (Coating done in Kuantan Plant)

**Types of Products:**  
 724km of 30" - 42" OD pipes.  
 DLFBE, IFC and CWC Coating

### EVA-NMB Gas Delivery System (ENGDS) (JDA) Project

**Project Owner:** Petronas Carigali Sdn Berhad  
**Year of Completion:** Ongoing (2014)  
**Project Location:** Malaysia (Coating done in Kuantan Plant)

**Types of Products:**  
 250km of 24" and 28" OD pipes.  
 3LPP, Internal, AE, 3 Coat System, CWC Coating  
 Preservation (End Caps and VCI),  
 Anode supply and Anode Installation.

### Gorgon Upstream Project

**Project Owner:** Chevron Australia Pty Ltd  
**Year of Completion:** 2010 - 2012  
**Project Location:** Australia (Coating done in Kuantan Plant)

**Types of Products:**  
 850km of 6" - 34" pipes.  
 FBE, 3LPP, Internal, 3 Coat System, CWC Coating,  
 Preservation (End Caps and VCI),  
 Anode supply and Anode Installation.

### Kebabangan Northern Hub Project

**Project Owner:** Kebabangan Petroleum Operating Company (KPOC)  
**Year of Completion:** 2012  
**Project Location:** Malaysia (Coating done in Kuantan Plant)

**Types of Products:**  
 253km of 8"-24" OD pipes.  
 FBE, AE and CWC Coating

### Longford Liquids Pipeline Project (LLP)

**Project Owner:** Esso Australia Resources Pty Ltd  
 (Contractors: Marubeni Itochu Tubulers Oceania Pty Ltd)  
**Year of Completion:** Ongoing (2014)  
**Project Location:** Australia (Coating done in Kuantan Plant)

**Types of Products:**  
 190km of 14" OD pipes.  
 DFBE and CWC Coating

### Polarled Development Project

**Project Owner:** Statoil Petroleum AS on behalf of owner group  
**Year of Completion:** 2015 (ongoing)  
**Project Location:** Norway (CWC)  
 (Internal and anti-corrosion coating done in Kuantan)

**Types of Products:**  
 492 km of 36" pipes  
 3LPE (Linepipe and Buckle Arrestor),  
 3LPP (Linepipe and Buckle Arrestor),  
 IFC (Internal flow coating), CWC Coating,  
 Marine Logistics, Transshipment of CWC pipes,  
 Anode and Doublar plate supply and Installation.

### Garagol Deniz Project

**Project Owner:** Petronas Carigali (Turkmenistan) Sdn Bhd  
**Year of Completion:** Ongoing (2014)  
**Project Location:** Turkmenistan

**Types of Products:**  
 75km of 14" OD pipes with 3LPE Coating

### Gumusut Kakap Deepwater Project

**Project Owner:** Sabah Shell Petroleum Company  
**Year of Completion:** 2009  
**Project Location:** Malaysia (Coating done in Kuantan Plant)

**Types of Products:**  
 57.7km of 8"-12" OD pipes.  
 FBE, 3LPE,GSPU, Anode Supply  
 and Anode Installation

### Pulau Bukom Project

**Project Owner:** Shell  
**Year of Completion:** 2013  
**Project Location:** Singapore

**Types of Products:**  
 110km of 48" OD pipes with 3LPE  
 and CWC Coating

### Wheatstone Ashburton West Pipeline Project

**Project Owner:** Chevron Australia Pty Ltd  
 (Contractors : Metal One Corporation)  
**Year of Completion:** Ongoing (2014)  
**Project Location:** Australia (Coating done in Kuantan Plant)

**Types of Products:**  
 110km of 16" OD pipes.  
 DFBE, Internal and CWC Coating

### F14 and F29 Project

**Project Owner:** Sarawak Shell Sdn Bhd  
**Year of Completion:** 2013-2014  
**Project Location:** Malaysia

**Types of Products:**  
 49km of 12" and 20" OD pipe with 3LPP,  
 CWC, Neoprene

## About Wasco Pipeline Services

With facilities spanning Asia, West Africa, the Middle East, Europe and the United States, Wasco's Pipeline Services Division is uniquely placed to deliver pipe coating, pipe manufacturing and offshore corrosion control solutions that meet the rigorous demands of utilities and energy players.

We have established a name for ourselves as a leader in pipe coating solutions for the oil, gas and water industries and today operate some of the world's most advanced coating facilities. As a manufacturer of pipes, we have been instrumental in pioneering the development of large diameter spiral pipes in Malaysia. On the offshore corrosion control front, we design and manufacture innovative sacrificial anodes and cathodic protection systems for offshore and marine assets.

### Products And Services



#### Pipe Coating

Wasco's Pipe Coating Division, a leader in pipe coating solutions for the oil, gas and water industries, operates one of the world's most advanced, fully-integrated, coating facilities in Kuantan, Malaysia and has established new facilities in Mo i Rana in Norway and in New Iberia, Louisiana in the United States.



#### Pipe Manufacturing

Wasco's Pipe Manufacturing Division is the pioneer in the manufacture of spiral-welded pipes in Malaysia and has over 30 years of industry experience. Wasco's spiral pipe manufacturing facility in Kota Kinabalu, Sabah is managed by Petro-Pipe (Sabah) Sdn Bhd or PPS.



#### Offshore Corrosion Control

Wasco Corrosion Services designs and manufactures sacrificial anodes and cathodic protection systems for offshore and marine assets. Wasco Corrosion Services brings its expertise in cathodic protection and asset integrity management into play to cater to a growing base of oil and gas clients.



### Our HSE Policy

Wasco practices internationally-recognised Health, Safety and Environment (HSE) standards at each of its operations around the world and is fully committed to the pursuit of high product and service quality while ensuring no harm to people and no damage to the environment. Wasco is committed to providing a safe and healthy workplace and ensuring that all business activities are conducted in a manner that protects the environment. HSE performance is everyone's responsibility throughout the length and breadth of Wasco's operations.



#### CORPORATE

##### WASCO ENERGY GROUP OF COMPANIES

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e enquiry@wascoenergy.com

#### MANUFACTURING PLANTS

##### Asia

##### Pipe Coating Plant and Anode Foundry

Sub Lot 2, Kawasan Perindustrian  
Miel,  
Gebeng, KM 25, Jalan  
Kuantan-Kemaman,  
P.O. Box 240, 25720 Kuantan,  
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##### Asia

##### Pipe Manufacturing

No. 1, Jalan 4, KKIP Timur,  
Industrial Zone 13 (IZ13),  
Kota Kinabalu Industrial Park,  
88460 Kota Kinabalu, Sabah  
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##### Europe

##### Pipe Coating Plant

Terminalveien 22,  
8624 Mo i Rana, Norway

##### USA

##### Deepwater Insulation Plant

4611 Curtis Lane,  
New Iberia,  
LA 70560, USA