

Compression Coat

PRODUCT EXPERIENCE SHEET

From the first Compression Coat concrete weight coating projects in the 1970's, over 500 projects for more than 150 customers in over 60 locations around the world have been successfully completed, proving the extraordinary versatility and productivity of the Compression Coat solution. In the 1970's and 1980's the product and the application technology behind it were fine-tuned to include the most stringent needs of the customers. The plants applying Compression Coat started to be mobilized from their central hub near Houston, Texas, and went closer to the pipeline project location, improving the overall project economics for the customers. It was then that Compression Coat became a mobile coating solution. By the mid-1980's, the Compression Coat plants had been mobilized to over 40 different locations in the United States and had coated more than 2,000 km of pipelines with the Compression Coat concrete weight coating.



Protective & Weight Coatings

COMPRESSION COAT QUICK FACTS

- 500+:** number of Compression Coat projects completed
- 20+:** number of countries where Compression Coat weight-coated pipes have been installed
- 7.50":** maximum Compression Coat thickness applied in a project (for Northern Borders Pipe Line Co)
- 48":** maximum diameter of a pipe coated with Compression Coat (projects for ICA Fluor and Brown&Root/Chicago Bridge&Iron)
- 687 km:** the longest Compression Coat project to date (Gulfstream project in the US)

BECOMING A GLOBAL COATING SOLUTION

In the 1990's, Compression Coat was applied for the first time in mobilized plants outside the United States. Compression Coat weight-coated pipes were now installed as far as West Africa, Europe and China. Coating projects also became longer, the pipe diameters increased and pipelines were installed in deeper waters. Below is a list of projects coated during this period:

PROJECT	CUSTOMER	COUNTRY	PIPE DIAMETER	LENGTH	YEAR
Mississippi Canyon	Southern Natural Gas	USA	20"	98 km	1991
South Pass	Tenneco/ Viosca Knoll Pipeline	USA	16", 20"	198 km	1994
Mars	Shell/ Mars Shallow Water Pipeline	USA	14"-24"	127 km	1994
Amberjack	Shell/ Amberjack Pipeline	USA	24"	84 km	1995
Bridgeline Gas	Texaco	USA	24"	183 km	1996
LNG Upstream Development	Amoco Trinidad Oil	Trinidad and Tobago	12", 18", 20", 36", 40"	205 km	1997
North Crossing to Cantarell	ICA Fluor Daniel/ CNC	Mexico	36", 42", 48"	121 km	1998
Sable Offshore	Shell/Exxon Mobil	Canada	8", 12", 18", 26"	380 km	1998



RECENT SUCCESS STORIES

Compression Coat has proven to be the pipeline industry's leading weight and mechanical protection coating system for projects requiring rapid mobilization or coating near the right-of-way. Compression Coat became the solution of choice for increasingly challenging pipeline projects. Here is a selection of the projects completed during the last years:

PROJECT	CUSTOMER	COUNTRY	PIPE DIAMETER	LENGTH	YEAR
Deep Panuke	EnCana	Canada	22"	173 km	2008
Balearics Gas Pipeline	Enagas	Spain	20"	268 km	2008
Hasdrubal Gas Pipeline	BG Tunisia Ltd	Tunisia	18"	108 km	2008
Pol A	Oceanografia	Mexico	30"	56 km	2006
West Africa Gas Pipeline	WAP Co	Ghana	18", 20"	598 km	2005
Lobina & Carpa	Global Offshore Mexico	Mexico	6", 12", 16"	280 km	2005
Angostura Field Development	BHP Billiton	Trinidad & Tobago	18"	85 km	2004
Mardi Gras	British Petroleum	USA	30"	147 km	2003
Nakika	Shell Oil Co	USA	18", 24"	63 km	2002
Gulfstream	Gulfstream Co./Williams	USA	30"	687 km	2001
Tasmania Natural Gas Pipeline	Onesteel/ Duke Energy	Australia	14"	303 km	2001

Compression Coat Experience

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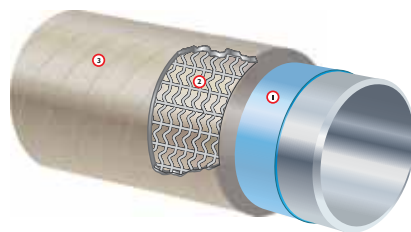
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COMPRESSION COAT



- ① Anti-Corrosion Layer
- ② Reinforced Concrete
- ③ Outer Wrap

The Compression Coat concrete coating system is designed to provide negative buoyancy and mechanical protection for pipelines in submarine and wet environments. Compression Coat uses a side-wrap application process making it ideal for both small and large diameter pipelines. The product is available in various thicknesses and densities and can be applied over anti-corrosion and insulation coatings.

GLOBAL AVAILABILITY

Bredero Shaw offers the Compression Coat weight and protective system from a network of fixed coating plants strategically located across the world to minimize pipe transportation costs. In addition, Bredero Shaw has unique portable facilities that can be mobilized in a short period of time to meet specific project requirements. This can significantly reduce pipe transportation and handling costs. Plant mobilization near the pipeline right-of-way can improve the overall economics of the project and qualify for in-country content requirements.

BREDERO SHAW: THE GLOBAL LEADER IN PIPE COATING SOLUTIONS

Bredero Shaw is the world leader in pipe coating solutions, with more than 75 years of experience, over 27 pipe coating facilities on 6 continents and the largest team of technical and service specialists in the business. Bredero Shaw offers technologically advanced solutions for anti-corrosion coatings, protective and weight coatings, thermal flow assurance coatings, internal coatings, custom coatings and field joints for both onshore and offshore applications. This broad range of products and services provides Bredero Shaw with the unique capability to service the full spectrum of pipeline protection and flow assurance requirements. Consult your Bredero Shaw representative for your unique project requirements.

The information contained herein is indicative of the types of coatings provided by Bredero Shaw, and is not intended to be a guarantee that a particular coating will be suitable for a given application. Since many unique environmental, operating, and design conditions must be considered, the user shall determine the suitability of the coating for the intended use and assume all the risks and liabilities in connection therewith. Bredero Shaw's liability is stated in our standard conditions of sale.

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