

Prefero™



**CRYOGENIC
BALL VALVES
REFERENCE
LIST**

Reference List of Major Projects for valves in Cryogenic service

This reference list is **only an extract** of the large number of projects supplied by Perar Spa since it was established in 1962. We have tried to highlight projects supplied **in recent years only**, which we feel are the most representative and cover Perar's wide range of production.

It is always possible that you are not finding listed here below the design, material and application you are looking for. Therefore, **please do not hesitate in contacting us** for further details and **contact names** as in many occasions we can supply you with our previous experience.

Client/Contractor	Foster Wheeler Iberia
End User	Repsol YPF - Enagas
Project name	<u>ENAGAS/REPSOL A.I.E./ BARCELONA</u>
Scope of Supply	Up to 18" class 900 – 1500 Cryogenic Top Entry Valves
Operator	Manual
Year of supply	2004
Notes	P.O. Amount more than 1.000.000 Euros
Client/Contractor	Technip – Coflaxip (France)
End User	Qatargas
Project name	<u>QATARGAS HELIUM PROJECT</u>
Scope of Supply	¾" to 20" class 150 to 600
Operator	Manual
Year of supply	2003 / 2004
Notes	Split Body for Cryogenic service at minus 196 Deg C
Client/Contractor	Technip - JV Technip Middle East – Chiyoda Corporation Japan
End User	Qatar Gas
Project name	<u>LNG DEBOTTLENECKING – RAS LAFFAN - QATAR</u>
Scope of Supply	1" to 14" /150 to 600 and 800
Operator	Manual
Year of supply	2002-2003
Notes	Cryogenic valve in accordance with Kellogs specification Cryo test below -196°C
Client/Contractor	Foster Wheeler Iberia
End User	Repsol YPF - Enagas
Project name	<u>AMPLIACION PLANTA GNL - CARTAGENA</u>
Scope of Supply	¾" to 10" /150 to 900
Operator	Manual
Year of supply	2002-2003
Notes	Cryogenic valve in accordance with Kellogs specification Cryo test below -196°C

Client / Contractor	Entrepose Contracting
End User	Engineering by Paragon Litwin
Project name	SONATRACH (Algeria)
Scope of Supply	Burlington -MLN Block 405 Development
Year of supply	1/2" to 20" class 150 to 2500 and special class 455 bar
Operator	2002
	Manual / Project value of 2,000,000 US Dollars
	The above supply comprise also valve for cryogenic service below to – 130°C
Client / Contractor	VES/John Broen Hydrocarbons Limited (UK)
End User	British Gas / Amerada Hess
Project name	Juno Development – Minerva Platform
Scope of Supply	3/4 to 16" class 2500
Operator	Actuated (Bettis)
Year of supply	2002
Notes	Duplex, F44 valve for low temperature test below to – 120°C, LF2 Fully clad Inconel 625, Riser valves (ESDV)
Client / Contractor	Score Europe
End User	BP/Amoco
Project name	Magnus Enhanced Oil Recovery
	- Wood Group (Offshore)
	- Amec (Onshore)
Scope of Supply	2" to 12" / 150 to 2500 and 10.000psi
Operator	Manual
Year of supply	2001
Notes	CS / SS-316 / Duplex / SS Cryogenic below –160°C.
Client / Contractor	ENAGAS
End User	Enagas – Repsol
Project name	Enagas - Cryogenic valve – Kellogs
Scope of Supply	1" to 6" class 150 and 800.
Operator	Manual
Year of supply	2000
Note	Cryogenic service valves for service up to –196°C
Client / Contractor	M.W. Kellogs
End User	Exxon Chemical Singapore
Project name	Exxon SOP (Singapore Chemical Complex) - Jurong Island.
Scope of Supply	1/2" to 12" class 150 to 1500
Operator	Manual and actuated c/w Biffi pneumatic.
Year of supply	1999
Note	Cryogenic valve down to -101 c/w Lip-seals, and High temperature up to 510 deg C. Valves were supplied metal seated and graphite seals c/w extended bonnet.

Client / Contractor	Kerr McGee (UK)
End User	Kerr McGee
Project name	Janice Offshore Platform.
Scope of Supply	2" to 16" class 150 to 2500 Split body & Top Entry.
Operator	Manual and Actuated c/w Bettis.
Year of supply	1998
Note	Cryogenic test at minus -106 Deg C where part of the scope of supply for valves up to class 2500. Top Entry 12"/1500 metal seated.
Client / Contractor	Aker Maritime
End User	Statoil
Project name	Pierce -Production Boat – APS
Scope of Supply	2" to 16" class 150 to 2500
Operator	Actuated
Year of supply	1999
Note	Valve for low temperature up to minus 101°C I. Material ltrcs/F6nm-F51-F316 – and metal to metal
Client / Contractor	Kværner Process (UK).
End User	British Petroleum
Project name	BP Bruce Phase II.
Scope of Supply	2" to 18" class 150 to 2500 & API 10000.
Operator	Manual and Bettis actuator
Year of supply	1997
Note	Cryogenic test at minus -101 Deg C (10"/2500) were part of the scope of supply. All testing with Nitrogen and Helium gas were performed in house, testing procedure is available upon request. Exotic material such as ASTM A182 F44 (6Mo) and Duplex were the major material used.
Client / Contractor	AMEC Process & Energy (Scotland)
End User	Maraton Oil / Shell Expro
Project name	Kingfisher & West Brae Offshore Platforms.
Scope of Supply	1/2" to 12" class 150 to 2500 & API 10000.
Operator	Manual and Bettis pneumatic actuator.
Year of supply	1996
Note	The above projects for SHELL were supplied in two different phases: Kingfisher first and West Brae shortly after. Duplex and Super-Duplex were the major material used. Valves for low temperature up to –70°C.
Client / Contractor	Ralph M. Parsons (UK)
End User	AMOCO
Project name	Amoco Cats Terminal Phase I & II
Scope of Supply	1/2" to 36" class 600 to 900.
Operator	Manual and Actuated c/w Prime (now Bettis) actuators.
Year of supply	1995 / 1996
Note	Perar supplied Phase I and II and Teeside Gas Plant for a total order value of 4,000,000 US Dollars. Valve for low temperature up to minus –130°C

Client / Contractor	Bechtel
End User	Adnoc
Project name	OGD phase I – Onshore Gas Development – Project 545
Scope of Supply	2" to 20" class 150 to 2500
Operator	Manual and actuated
Year of supply	1994 – 95
Note	Cryogenic test at –125°C
Client / Contractor	Bechtel
End User	Adco
Project name	Thamama C & F Gas project
Scope of Supply	½" up to 20 class 150 to 2500
Operator	Manual and actuated
Year of supply	1994-95
Note	Cryogenic test at –100°C
Client / Contractor	Nutron
End User	TransCanada
Project name	Pan Canadian
Scope of Supply	2"to10" class150 to 300
Operator	Manual
Year of supply	1994
Note	Valve for low temperature up to minus 196°C Material SS –316 / Kel- F
Client / Contractor	Vico Indoneia
End User	PT Indonesia
Project name	LNG Plant
Scope of Supply	2"to6" class150 to 600
Operator	Manual
Year of supply	1994
Note	Valve for low temperature from minus 101°C up to – 196°C
Client / Contractor	KGC
End User	Korea Gas Corporation
Project name	Incheon Terminal
Scope of Supply	6"to12" class900
Operator	Manual and Actuated
Year of supply	1993-1994
Note	Valve for low temperature up to minus 196°C
Client / Contractor	Botas
End User	Botas Turkey
Project name	LNG Import Terminal
Scope of Supply	2" to 12" class 150
Operator	Manual
Year of supply	1992 and 1994
Note	Valve for cryogenic service up to - minus 196°C

Client / Contractor **EIL India**
End User O.N.G.C.
Project name **Hazir Gas Terminal**
Scope of Supply 2" to 12" class 150 - 600
Operator Manual
Year of supply 1993 and 1994
Note Valve for cryogenic service up to - minus 196°C

Client / Contractor **Chinese petroleum Corporation**
End User Chinese petroleum Corporation
Project name **Yung-An LNG Receiver Terminal - Taiwan**
Scope of Supply 2" to 16" class 150-900
Operator Manual and Actuated
Year of supply 1993
Note Valve for cryogenic service up to - minus 196°C

Client / Contractor **KGC**
End User Korea Gas Corporation
Project name **Pyong Teak LNG Terminal**
Scope of Supply 6"to10" class150 - 600
Operator Manual and Actuated
Year of supply 1993-1994
Note Valve for low temperature up to minus 196°C

Client / Contractor **Fincantieri**
End User Snam
Project name **LNG Carrier**
Scope of Supply ½" to 6" / 150 to 900
Operator Manual
Year of supply 1993
Note

Client / Contractor **Global Engineering**
End User Statoil
Project name **Slaipner Gas Terminal**
Scope of Supply 2"to18" class150 to 900
Operator Manual and Actuated
Year of supply 1991-1992
Note Valve for low temperature below to minus 196°C