



**OIL & GAS DEVELOPMENT COMPANY LTD**

**TENDER NO.PROC-FC/CB/P&P/KPD-TAY-5366/2022**

**SCHEDULE OF REQUIREMENT (SOR) & TERMS OF  
REFERENCE (TOR)**

**FOR PROCUREMENT OF VALVES FOR KPD-TAY PLANT**

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## **1.0 INTRODUCTION:**

Oil and Gas Development Company Ltd (OGDCL) is Pakistan's National Oil & Gas Exploration and Production Company. OGDCL is currently operating Country's largest Oil & Gas sector including saleable Oil & Gas Processing Plants.

Kunnar-Pasakhi-Deep and Tando-Allah-Yar (KPD-TAY) is a Gas & LPG Processing Plant, located in Hyderabad District about 25 km away from Hyderabad and approx. 195 km from Karachi, Sindh Province of Pakistan. The Plant is comprised of two gas processing trains installed in the close proximity of oil wells. The processing plant is connected with the wells through gas gathering network which terminates into slug catcher at the process plant premises.

OGDCL intends to purchase valves for KPD-TAY Plant from an experienced and well reputed manufacturer / supplier to fulfil the operational requirement.

## **2.0 DEFINITIONS, ERRORS & CONFLICTS:**

Owner /Company : Oil & Gas Development Company Limited (OGDCL)

Supplier /Contractor : Parties, which vendors and / or supplies material, equipment and services to perform the duties as specified by Company in the scope of supply.

### **2.1 Errors or Omissions:**

2.1.1 Review and comment by the Company at any Contractor / Supplier's drawings, procedures or documents shall only indicate acceptance of general requirements and shall not relieve the Contractor / Supplier of its obligations to comply with the requirements of this specification and other related parts of the tender documents.

2.1.2 Any errors or omissions noted by the Contractor / Supplier in this Specification shall be immediately brought to the attention of the Company.

### **2.2 Conflicting Requirements:**

In the event of conflict, inconsistency or ambiguity between this specifications, codes & standards referenced in this specification or any other documents, the Contractor/ Supplier shall refer to the Company whose decision shall be final.

## **3.0 SCOPE OF SUPPLY:**

The scope covers the supply of valves as per Schedule of Requirement (SOR) and reference standards/specifications mentioned in detail below.

## **4.0 REFERENCE STANDARD:**

Following standards to be followed:

- |   |                        |
|---|------------------------|
| i. Design & Test                                    | ANSI B16.34 / API 598* |
| ii. Face to Face and End to End Dimension of Valves | ASME 16.10             |
| iii. Flanged Connection End                         | ASME 16.5              |

\*Refer Section 6.0 (Specifications of Valves) for complete details.

## 5.0 GENERAL TERMS & CONDITIONS:

- i. The OEM must have at least 15 years' of experience in manufacturing of valves. Verifiable list along with supporting documents must be provided for the supply of valves, besides unpriced copy of contract/purchase order with name and full contact details of the purchaser with the technical bid proposal. The bidder must be authorized by OEM authority letter of OEM to be provided.
- ii. All technical details of offered valves including part numbers, technical literature/brochure, drawings mentioning the applicable code & standard etc. should be provided along with the technical bid proposal.
- iii. Valve hydro test certificates verified by any certified third party to be provided along with delivery of material.
- iv. Valve test certificate of each valve to be provided containing details of valve parts along with their chemical composition and mechanical properties.
- v. Production qualification certificate of each valve during manufacturing to be provided conforming to manufacture, inspection and test requirements as mentioned in Section 6.0.
- vi. List of valve part materials that are used in pressure component to be provided.
- vii. Bidder must provide detailed Operation & Maintenance Manual of each valve along with delivery.
- viii. General Drawing showing part number of each component along with part number of repair kit of the valves to be provided.
- ix. The MTCs & Manufacturer Certificate to be provided.
- x. All valves shall be packed as per industrial standards designed to protect the material from the normal hazards associated with inland transportation, port handling, ocean shipping and site storage.
- xi. Valves assembly & final inspection record to be provided.
- xii. Bidders are encouraged to quote valves from Western Europe / UK / USA / Canadian origin.
- xiii. All valves to be supplied must be newly manufactured & free from any defect. The bidder should submit a confirmation letter (**attachment-01**) along with the technical bid stating that all supplied valves will be brand new.
- xiv. If bidder found any ambiguity in specifications of valves, it should be cleared two weeks prior to bid submission.
- xv. Valves must have standard OEM warranty / guarantee as per tender requirement. Any defect notified with warranty period shall be cleared or replaced free of cost to the company and allied charges in this regard shall also be borne by the bidder.
- xvi. Delivery period must not exceed 120 days CFR Karachi by Sea Basis from date of establishment of letter of credit Confirmation to be provided as per **attachment-02**. The bidder must provide a "certificate of compliance/acceptance" (**attachment-03**) of complete tender document, SOR & TOR along with the technical bid

## 6.0 SPECIFICATIONS OF VALVES:

### 6.1 VB-101:

Sr. No	Parameter	Value
1	Rating	Class 800 (2000 psig @ 100°F – 1740 psig @ 350°F)
2	Ends	Socket Weld per ANSI B2.1
3	Style	Bolted Body, Replaceable Seats, Full Port
4	Operator	Lever
5	Body Material	Steel
6	Stem Material	Type 316 S.S.
7	Seats Material	Filled PTFE
8	Bolting Material	Cadmium Plated
9	Seal Material	Filled PTFE
10	Ball Material	316 S.S.
11	Dimensions	Mfr. Std.
12	Design and Test	API Std. 598

### 6.2 VB-201:

Sr. No	Parameter	Value
1	Rating	Class 150 (285 psig @ 100°F – 215 psig @ 350°F)
2	Ends	Raised Face Flange
3	Style	Bolted Body, Replaceable Seats, Regular Port, Trunnion Mounted Ball over 4 inch
4	Operator	Lever (Gear over 8")
5	Body Material	Steel
6	Stem Material	13% Cr. S.S.
7	Seats Material	Filled TFE
8	Bolting Material	Cadmium Plated
9	Seal Material	Filled TFE
10	Ball Material	Chrome Plated Steel
11	Design and Test	ANSI B16.34

### 6.3 VB-202:

Sr. No	Parameter	Value
1	Rating	Class 150 (285 psig @ 100°F – 215 psig @ 350°F)
2	Ends	Raised Face Flange
3	Style	Bolted Body, Replaceable Seats, Regular Port, Trunnion Mounted Ball over 4 inch
4	Operator	Lever (Gear over 6")
5	Body Material	Steel
6	Stem Material	Type 316 S.S.
7	Seats Material	Filled TFE
8	Bolting Material	Cadmium Plated
9	Seal Material	Filled TFE
10	Ball Material	Type 316 S.S.
11	Design and Test	ANSI B16.34

**6.4 VB-206:**

Sr. No	Parameter	Value
1	Rating	Class 150 (285 psig @ 100°F – 215 psig @ 350°F)
2	Ends	Raised Face Flange
3	Style	Bolted Body, Replaceable Seats, Regular Port, Trunnion Mounted Ball over 4 inch
4	Operator	Lever (Gear over 6")
5	Body Material	Type 316 S.S.
6	Stem Material	Type 316 S.S.
7	Seats Material	Filled TFE
8	Bolting Material	Cadmium Plated
9	Seal Material	Filled TFE
10	Ball Material	Type 304 S.S.
11	Design and Test	ANSI B16.34

**6.5 VB-211:**

Sr. No	Parameter	Value
1	Rating	Class 300 (740 psig @ 100°F – 640 psig @ 350°F)
2	Ends	Raised Face Flange
3	Style	Bolted Body, Replaceable Seats, Regular Port, Trunnion Mounted Ball over 4 inch
4	Operator	Lever (Gear over 8")
5	Body Material	Steel
6	Stem Material	13% Cr. S.S.
7	Seats Material	Filled TFE
8	Bolting Material	Cadmium Plated
9	Seal Material	Filled TFE
10	Ball Material	Chrome Plated Steel
11	Design and Test	ANSI B16.34

**6.6 VB-222:**

Sr. No	Parameter	Value
1	Rating	Class 600 (1480 psig @ 100°F – 1280 psig @ 350°F)
2	Ends	Raised Face Flange
3	Style	Bolted Body, Replaceable Seats, Regular Port, Trunnion Mounted Ball over 4 inch
4	Operator	Lever (Gear over 6")
5	Body Material	Steel
6	Stem Material	Type 316 S.S.
7	Seats Material	Filled TFE
8	Bolting Material	Cadmium Plated
9	Seal Material	Filled TFE
10	Ball Material	Type 316 S.S.
11	Design and Test	ANSI B16.34

**6.7 VB-224:**

Sr. No	Parameter	Value
1	Rating	Class 600 (1480 psig @ 100°F – 1280 psig @ 350°F)
2	Ends	Raised Face Flange
3	Style	Bolted Body, Replaceable Seats, Regular Port, Trunnion Mounted Ball over 4 inch
4	Operator	Lever (Gear over 8")
5	Body Material	Duplex SS 22% Cr.
6	Stem Material	Duplex SS 22% Cr.
7	Seats Material	Filled TFE
8	Bolting Material	Cadmium Plated
9	Seal Material	Filled TFE
10	Ball Material	Duplex SS 22% Cr.
11	Design and Test	ANSI B16.34

**6.8 VC-205:**

Sr. No	Parameter	Value
1	Rating	Class 150
2	Ends	Raised Face Flange
3	Style	Bolted Bonnet, Swing Type, Renewable Seats
4	Body Material	Type 316 S.S.
5	Pin Material	Type 316 S.S.
6	Seats Material	Type 316 S.S.
7	Bolting Material	Cadmium Plated
8	Seal Material	Mfr. Std.
9	Disc Material	Type 316 S.S.
10	Design and Test	ANSI B16.34

**6.9 VC-221:**

Sr. No	Parameter	Value
1	Rating	Class 600
2	Ends	Raised Face Flange
3	Style	Bolted Bonnet, Swing Type, Renewable Seats
4	Body Material	Steel
5	Pin Material	13% Cr. S.S.
6	Seats Material	Hard Faced 13% Cr. S.S.
7	Bolting Material	Cadmium Plated
8	Seal Material	Mfr. Std.
9	Disc Material	Steel
10	Design and Test	ANSI B16.34

**6.10 VGL-201:**

Globe Valve with Stem Protector		
Sr. No	Parameter	Value
1	Rating	Class 150
2	Ends	Raised Face Flange

3	Style	OS&Y, Bolted Bonnet, Bolted Gland, Renewable Seats, Loose Disc
4	Operator	Hand wheel
5	Body Material	Steel
6	Stem Material	13% Cr. S.S.
7	Seats Material	Hard Faced 13% Cr. S.S.
8	Bolting Material	Cadmium Plated
9	Packing Material	Mfr. Std.
10	Design and Test	ANSI B16.34