

**SPECIFICATION FOR
SWING CHECK VALVES 16”
FOR PIPELINE SERVICE**

23001131

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1. **GENERAL**

This specification covers the manufacture assembly, inspection, testing and supply of flanged check valves for EAPC Ltd.

The check valves is for installation on 16" ASHKELON– HIFA pipeline, site condition specified in paragraph 3.

2. **SCOPE OF SUPPLY**

The scope of supply shall include the following:

- 2.1 Two (2) Check valves.
- 2.2 The check valves shall be zero leakage, design as fire proof, full bore check valves ANSI 600 RF ends.
 - 2.2.1 Full opening swing check valves.
 - 2.2.2 Clapper lock open position – st.st 316 shaft mechanism.
- 2.3 The quotation shall include the list of recommended spare parts a special tools with brake down prices.

3. **DESIGN REQUIREMENTS**

3.1 **General**

The valves should be swing check valves.

The full-bore design shall provide the same pressure drop as an equivalent length of pipe and **shall allow passage of all types of scrapers (PIGS)**. The check valves design shall provide the option for repair the valves while in line (pressure removed and valve drained).

3.2 **Pipeline Data**

- 3.2.1 Diameter: 16"
- 3.2.2 Standard: API 5L-X52
- 3.2.3 W.T: 0.406"

3.3 **Site Conditions**

- 3.3.1 Eastern Mediterranean inland terminals,
- 3.3.2 Temperature: 5 – 55 °C
- 3.3.3 Humidity: up to 90%

3.4 **Process Conditions**

Fluid : Sour Crude Oil
Temperature : +2°C to 55°C
Special Conditions : No
Installation : Underground Service

3.5 **Standards of Compliance**

- 3.5.1 Basic design: API 6D
- 3.5.2 Flanged end as per ASA600 ANSI B16.5
- 3.5.3 Test & Inspection: API 6D
- 3.5.4 Fire safe conforms: API 6FA

3.6 **Materials of Construction**

- 3.6.1 According to API 6D

4. **TESTING**

Test certificates shall be transmitted to purchaser in 3 copies.

Vendor shall furnish details of the extent of shop assembly and testing procedures he intends to follow.

The testing shall be in accordance with API 6D standard.

5. **PAINTING**

5.1 The check valves shall be coated in accordance with manufacturer standard and to meet site conditions as specified in para. 3.

5.2 Vendor shall specify proposed coating in his quotation.

6. **ASSEMBLY OF COMPONENTS**

All units shall be supplied completely assembled – ready for installation.

7. **TAGGING**

7.1 The valves shall be tagged with number specified by purchaser and fitted with a S.S. 316 nameplate containing at least the following data:

- 7.1.1 Name of manufacturer
- 7.1.2 Size, rating and max. operating temperature
- 7.1.3 Manufacturer serial number

7.1.4 Purchaser tag number

8. MECHANICAL GUARANTEE

Vendor will guarantee that the equipment furnished is free from faults in design, workmanship and materials.

Should any defect in design, materials, workmanship or operating characteristics develop during the first year of operation (but not over twenty four (24) months from the date of shipment), the Vendor will make all necessary or desirable alternations, repairs and replacements of said defective equipment, free of charge and shall also pay transportation involved of the above mentioned to and from the plant.

If the defect or functional failure cannot be corrected, the Vendor agrees to replace promptly, free of charge, the faulty equipment.

9. DOCUMENTATION

The following documents are to be transmitted in 3 copies in English:

With bid: General arrangement drawings of check valves with overall dimensions

Cross section showing construction details

Material Specification

Itemized price list of recommended spare parts

With Order: Installation, Operating and Maintenance Instruction.

Eur1 certificate or US Certificate of Origin will be required.

11. BILL OF QUANTITIES

EAPC Pipeline – Swing Check Valves design according to API 6D					
Item	Type	Size/Class/ Ends	Qty	Unit Price	Total Price
1	SWING CHECK VALVES	16" ANSI 600 F.E	2		