



**OIL & GAS DEVELOPMENT COMPANY LTD**

**(TERMS OF REFERENCE)**

**PURCHASE OF AIR INTAKE FILTERS FOR GAS TURBINES (GE-NP  
Model PGT-10)**

## **1. 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.

Qadirpur is a Gas Processing Plant, located in Ghotki District about 15 km away from Sukkur-Multan Motorway (M5) and approx. 130 km from Sukkur, in 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.

### **1.1. DEFINITIONS**

|                      |   |
|----------------------|---|
| Owner /Company :     | Oil & Gas Development Company Limited (OGDCL)   |
| Supplier /Contactor: | Parties, which vendors and / or supplies material, equipment and services to perform the duties as specified by Company in the scope of supply. |

### **1.2. ERRORS OR OMISSIONS**

1.2.1 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 contract documents.

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

### **1.3. CONFLICTING REQUIREMENTS.**

In the event of conflict, inconsistency or ambiguity between this specifications, National Codes & Standards referenced in this Specification or any other documents, the Contractor/ Supplier shall refer to the Company whose decision shall prevail.

## **2. SCOPE OF SUPPLY & TECHNICAL SPECIFICATIONS.**

### **2.1 INTAKE AIR FILTER CARTRIDGE FOR GAS TURBINE**

Filter elements are required for GE-NP Gas Turbines are as follows

| <b>EQUIPMENT</b>                | <b>NP TURBINE</b>           |
|---------------------------------|-----------------------------|
| Equipment Model#                | PGT-10                      |
| Filter Class                    | F9                          |
| Standard                        | EN779:2012                  |
| Dimension (mm)                  | OD 307<br>ID 197<br>HI 702  |
| Qty No (Per Turbine)            | 144                         |
| No. of Pleats                   | 292                         |
| Moisture resistance             | 100%                        |
| Cover / Base Material           | Hot dip Galvanized Steel    |
| Inner / Outer cage              | Hot dip Galvanized Steel    |
| Sealing Gasket                  | EPDM Rubber /<br>Equivalent |
| Dust Holding Capacity           | -                           |
| Thermal stability               | 70 C                        |
| Air intake flow (Per Cartridge) | 1120 m <sup>3</sup> /h      |
| Initial resistance of Filter    | 230 Pa                      |
| Final resistance                | 1500 Pa                     |

|                                   |         |
|-----------------------------------|---------|
| Service life of filter cartridge  | 8000 hr |
| Pulse Cleaning start up value set | 750 Pa  |
| Pulse Cleaning stop value set     | 450 Pa  |
| Pulse rate                        | 60 s    |
| Pulse Cycle                       | 14 min  |

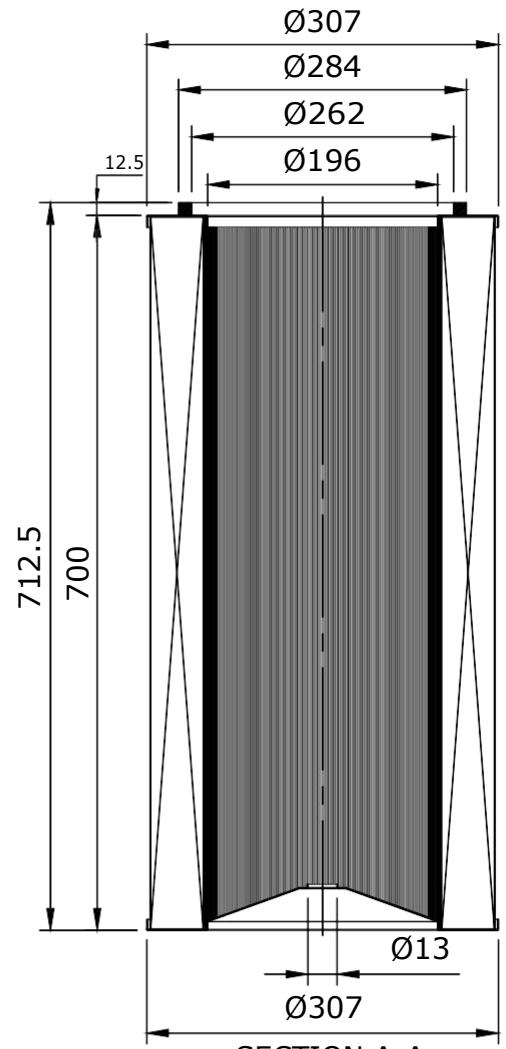
### **3. ENVIRONMENTAL CONDITIONS.**

These filter elements will be utilized at Qadirpur Gas plant which is situated near Ghotki-Sindh Pakistan. The general environment is dusty further detail is as below.

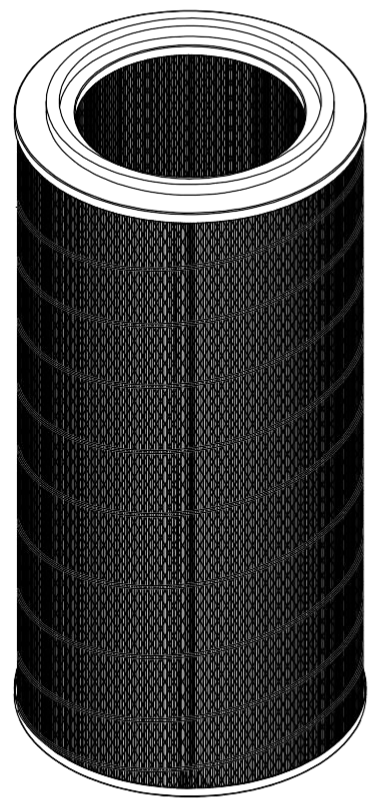
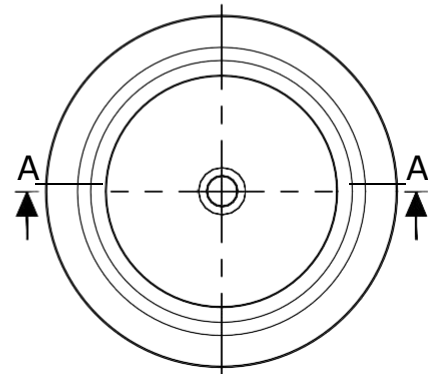
| <b>ENVIRONMENTAL DATA</b>         |         |     |
|-----------------------------------|---------|-----|
| Ambient Temperature, Maximum      | 55      | °C  |
| Ambient Temperature, Minimum:     | 0       | °C  |
| Maximum Daily Rainfall (24 hours) | 86 mm   | mm  |
| Highest Average Monthly Rainfall  | 286     | mm  |
| Maximum Velocity (Wind)           | 100     | mph |
| Relative Humidity                 | 18 ~ 76 | %   |
| Elevation                         | 72      | m   |

### **4. DIMENSIONAL DETAIL**

In order to understand the shape, fits & tolerance, please refer to the attached drawings. Bidder should ensure sealing & mounting as per provided dimension. Acceptance of minor dimensional deviation will be sole discretion of OGDCL keeping in view the surety of efficiency & performance, provided that it's fitting / mounting & complete sealing at the existing panel of air filters shall not be compromised. Bidders are encouraged to visit the Qadirpur Gas Plant to observe & take the dimensions of Filters themselves (if deem necessary).



SECTION A-A



|                 |           |
|-----------------|-----------|
| -               | 3400-1751 |
| PART CODE       | FILE. #   |
| NEXT ASSY./DWG. |           |

NP TURBINE AIR FILTER

| PART CODE | MODEL        | MATERIAL | PROCESS    | COLOR  | FINISH  |
|-----------|--------------|----------|------------|--------|---------|
|           |              |          |            |        |         |
|           |              |          | SCALE      | NTS    | UNIT    |
|           |              |          | mm         |        |         |
|           |              |          | DATE       | DRAWN  | CHECKED |
|           |              |          | 08-08-2023 |        |         |
| REV       | MODIFICATION | DATE     | ECO #      | DWG. # | ED.#    |
|           |              |          |            |        | 00      |





OD=307

ID=197

HI=702

