

ANNEXURE - 17

DESIGN AND PROCESS PARAMETERS

Project Name : Industrial Metering Skid

Revision : 0

1. **Confirming Standard** : PNGRB Technical Standard, ASME B 31.8 and IGE/TD/13, (Latest Edition)
2. **Piping/Filter Standard** : ASME B 31.8, API 1104 and ASME Sec.- VIII & IX with (latest addenda)
3. **Functional Requirements** : IGE/TD/13 and as per agreed MANUFACTURER's Recommendation
4. **Class Location** : Location Class 4 as per PNGRB T4S Standard for CGD networks
5. **Design & Operating Data** :

Item No.	Description	Design Flow, SCMH	Meter Model	Design Pres. Bar g	Design Temp. Deg. C	Inlet Pressure Bar g	Outlet Pressure Bar g	Op. Temp. Deg. C
1	Ind. Met. skid 110mbar with G25 meter (1"x 1½")	40	G25	19	0-65	0.5 - 5.5	110 mbarg	0-50
2	Ind. Met. skid 110mbar with G40 meter (1"x 1½")	65	G40	19	0-65	0.5 - 5.5	110 mbarg	0-50

6. Limiting gas Velocity:

- Regulator Upstream - Designing of pipeline size before regulator, velocity to be considered 30 m/s.
- Regulator Downstream - Velocity to be consider 15 m/s

7. Site Conditions

The entire instrumentation system shall be designed for the following site conditions:

Relative Humidity : 100%
 Hazardous Area classification : **Zone 1, Gas group IIA / IIB, Temp. Class T3**

8. Typical Gas Composition:

Following Gas composition has been considered for design and engineering of skids:

Typical Gas Composition	
Component	Mole % (v/v)
CH ₄	92.66%
Nitrogen	0.42%
C ₂ H ₆	6.32%
C ₃ H ₈	0.49%
i-C ₄ H ₁₀	0.05%
n-C ₄ H ₁₀	0.06%