

Subject: **Clarification # 1**

Tender Enquiry # PROC-FE/CB/P&P/NASHPA-4958/2021

Procurement of level transmitters with level troll for separators of NASHPA plant.

Following information may please be web posted against the subject tender enquiry for the information of all the prospective bidders. The bids are due on **10th March 2021.**

| LEVEL TRANSMITTERS WITH LEVEL TROLL FOR SEPARATORS OF NASHPA PLANT | | | | |
|---|--|-----------------------------|-----------------------------|-----------------------------|
| Process Data | Tag# LT-H01 (Oil side) | Tag# LT-H02 (water side) | Tag# LT-M02 (water side) | Tag# LT-L02 (water side) |
| Pressure Normal/ Minimum/ Maximum | 1080/1040/1100 psig | 1080/1040/1100 psig | 300/295/330 psig | 100/80/ 200 psig |
| Temperature Normal/ Minimum/ Maximum | 95/75/120 °F | 95/75/120 °F | 120/100/140 °F | 100/80/140 °F |
| Fluid | NGL | NGL-Water | NGL-Water | NGL-Water |
| Interface | No | Yes | Yes | Yes |
| Lower Fluid density/specific gravity | 0.7 to 0.8 | 1 | 1 | 1 |
| Upper Fluid density/specific gravity | N/A | 0.7 to 0.8 | 0.7 to 0.8 | 0.7 to 0.8 |
| Instrument Data | | | | |
| Level Troll | yes | yes | yes | yes |
| Flange size/ Rating /Type: | 1"/ 900#/RTJ | 1"/ 900#/RTJ | 1"/ 600#/RTJ | 1"/ 150#/RF |
| Flange Mounting | Side-Side | Side-Side | Side-Side | Side-Side |
| Flange-Flange length | 1065mm | 1615mm | 985mm | 590mm |
| Displacer Type | Displacer | Displacer | Displacer | Displacer |
| Displacer Material | 316L SS | 316L SS | 316L SS | 316L SS |
| Torque Tube/Spring Type | Vendor To Select | | | |
| Chamber Material | Vendor To Select as per Process Parameters | | | |
| Chamber Drain connection. | Vendor must installed valve(Gate/Ball) and dead plug | | | |
| Level Transmitter | yes | yes | yes | yes |
| Power Supply | 24VDC, 2Wire | 24VDC, 2Wire | 24VDC, 2Wire | 24VDC, 2Wire |
| Output Signal | 4-20 mA DC/HART | 4-20 mA DC/HART | 4-20 mA DC/HART | 4-20 mA DC/HART |
| Local LCD display | yes | yes | yes | yes |
| Cable Entry | Yes for 20 mm Gland size | | | |
| Ingress Protection | IP65 as a minimum | IP65 as a minimum | IP65 as a minimum | IP65 as a minimum |
| Area Classification | ATEX Explosion Proof | | | |
| Painting | As per OEM standard | | | |
| Documents | | | | |
| MTC | Material Test Certificates: yes | | | |
| Calibration certificates | yes | | | |
| OEM data sheet | yes | | | |
| Literature | CD/Hard copy original | | | |