# InterFazer™

**OUR PURPOSE - Global Fuels Group (GFG)** will provide every customer with the following benefits:

- Continuous Measurement
- Reliability
- No Moving Parts
- No Maintenance
- Automated water discharge
- Low Voltage/ Power Consumption

## Probe Construction

316 stainless steel material for wetted parts is standard. Other alloys are optional.

Robust design with standard Hasteloy C22 transducer that is tested at 4000psi and 400F, all materials exposed to process are domestic with certificates. Device can be mounted on top, side or bottom of the vessel. Proven performance makes this device unique and a real alternative for the most challenging applications. Device requires no maintenance and can be installed or removed on the run.

## Unique Capability

The **Inter*Fazer*™** has a unique capability to see the real time data (multiple interfaces) from the process often a valuable tool in process characterization and improvement of efficiency and safety.

## Process Connection

The **Inter*Fazer*™** can be top, bottom or side mounted. A unique process connection allows the probe to be installed without process interruption. Flanged units are available.

### Installation & Calibration

**Inter*Fazer*™** installation, calibration, and setup are easy and straightforward. The units are factory calibrated for individual installations, requiring only minor changes during installation. The software is provided with the instrument at no additional cost.

### Applications

- Chemical Plants
- Refineries
- Aviation Storage Tanks

### Reliability

**Inter*Fazer*™** has no moving parts, no mechanical adjustment or calibration of any kind is needed. Once installed no maintenance is required. The device has been tested in extreme hot and cold weather environments. All models are FM certified and conform to refinery and chemical plant hazardous area class requirements.

*US Patent: 6,990,046 B2 – Other Patents Pending*

FM APPROVED

Models:
- TB1
- TBU1
- S1

Materials:
SS-316 & 304
INCONEL
HASTELOY
MONEL

Connections:
2"NPT PLUG
SLIDING SEAL
FLANGE

# InterFazer™

## How Does It Work

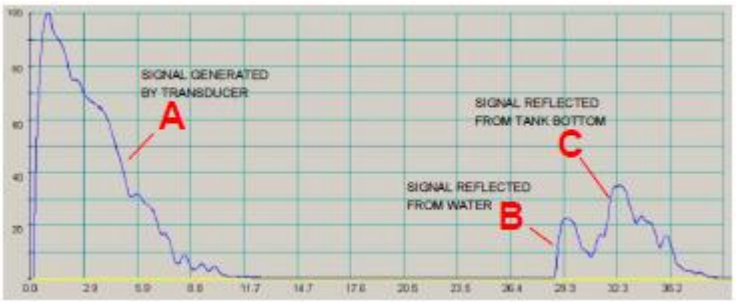
The measurement is based on the speed of a sonar signal in a fluid. The transducer emits a sonar signal, which travels through the liquid and a portion of that signal is reflected off the interface, solids, and the surface level.
The **Inter*Fazer*™** can be installed through a three inch valve located on the side of the floating roof storage tank located approximately six inch below the roof's lowest position. The probe is equipped with sliding seal mechanism and can be removed at any time without taking the tank out of service.

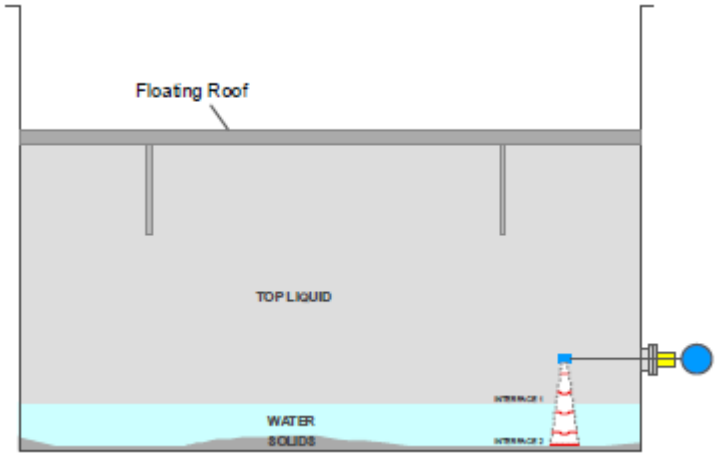
## Typical Application

If the tank capacity is 50,000 barrels and is used to store finished product at the refinery tank farm. A 4-20mA output signal is configured to start the water discharge pump when the water level reaches eight inches in height and stops once the water level is at four inches in height. In addition the original 4-20mA signal is connected to a local display and wireless device that transmits the 4-20mA signal to DCS. During startup a laptop computer is connected via a RS-485 to the device to verify the setup configuration and allow raw signal data to be collected. The data will be used as a reference point for monitoring the buildup of solids on the tank bottom and for long term performance evaluation of the instrument.

## Raw Signal Interpretation

Sonar signal **A** is generated and is traveling downward.
A portion of the signal energy is reflected from the water interface **B** and the tank bottom **C**.




## Specifications: *(Model TB1 - Standard)* *(WE WILL MEET OR EXCEED REQUIREMENTS AS NECESSARY)*

| | |
|---|---|
| Weight | 8lb / 3.6kg |
| Length | 3 feet / 60cm (lengths up to 20ft are available) |
| Measurement Range | Min. 10"/ 25cm, Max. 38 feet / 12m |
| Resolution | 1/16" / 2mm |
| Accuracy | 1% of Range |
| Min. Insertion Opening | 1.7" / 43mm |
| Process Connection | 2"NPT (Sliding Seal and Flange optional) |
| Temperature Range Electronics | -13F to 170F / -25C to 75C |
| Temperature Range Process | -13F to 400F / -25C to 200C |
| Operating Pressure | 200psi (high pressure units are available) |
| Outputs | 4-20mA, RS-485 |
| Adjustments | None |
| Material Exposed to the Process | Stainless Steel 316, Inconel (SS-304, Monel, Hasteloy optional) |
| Power | 18-36 VDC @ 40mA |
| Safety Rating | FM Approved: CL I, DIV. I, GRPS. B,C,D CL. II/III. GRPS. E, F, G, |