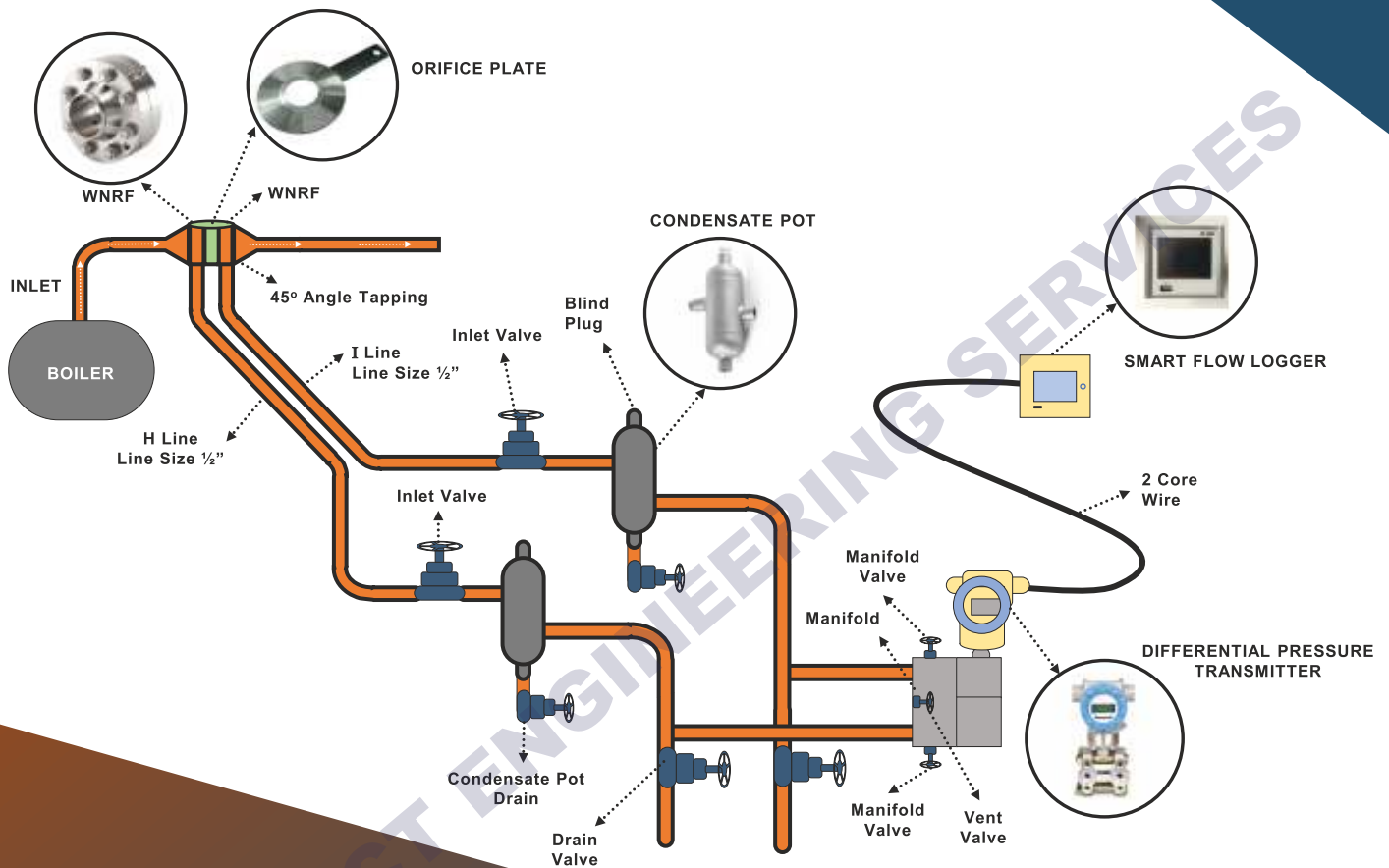


PERFECT  
ENGINEERING  
SERVICES



# IBR STEAM FLOW METER

Providing reliable and accurate steam flow measurement for every complex applications

# Introduction

Perfect Engineering services have been providing Unique and User friendly steam solutions for the past 13 years. We have long been associated with providing cost effective solutions to all aspects of efficient use of steam.

We have thus created an IBR steam flow meter that is unique and user friendly. It measures steam flow, provides total steam flow as well. Our Smart flow meter also acts as a Boiler Data Logger as it provides data for the past 2 years. This data is accessible by Wi-Fi as well as USB connectivity.

## Why should we measure steam?

- Measuring Steam Flow is the first step towards optimum use of steam energy.
- It provides insight to direct boiler efficiency as it is the realistic source of measuring efficiency.
- Also, helps us quantify thermal efficiency of the plant.
- Most importantly, it helps us monitor our Fuel Cost.

## Principal of working

We create differential pressure by the use of a calibrated orifice plate which then goes to a Differential Pressure Transmitter (DPT). This DPT is programmed to provide us flow through our Smart Flow Logger.

$$\text{Steam flow} = \text{Constant} \sqrt{(P1 - P2) \times \text{Density}}$$

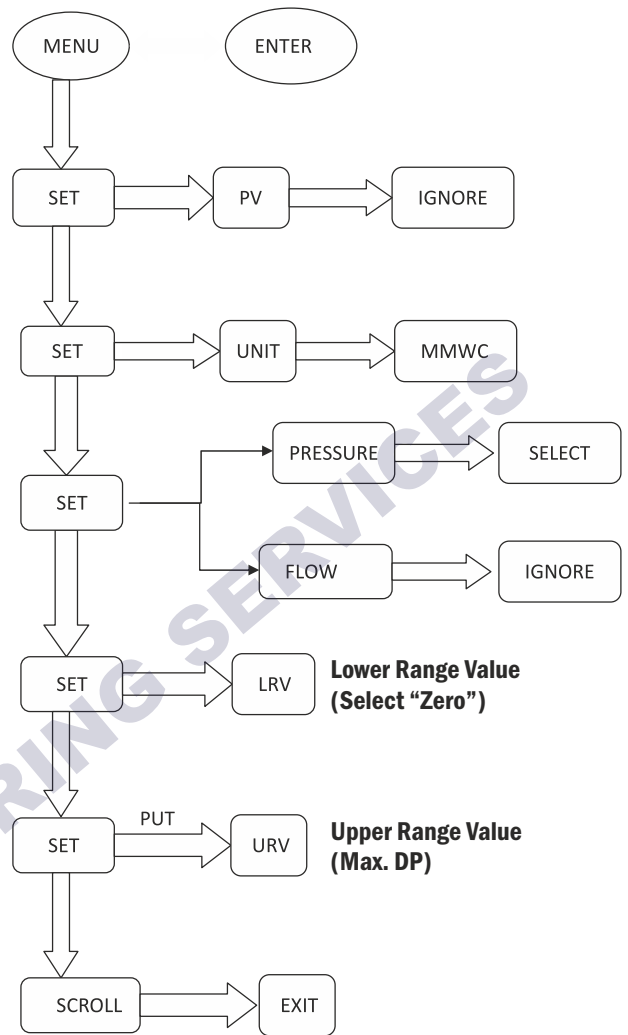
## Advantages of steam flow meter

- Measurement of steam helps determine the manufacturing cost of the product.
- Low cost solution for measurement of Steam.
- Instantaneous and totalized flow are displayed.
- Smart Flow computer accumulates data for over 2 years.
- Wifi Connectivity allows you to access your data all across the world.
- Pen drive facility also available.
- Easy to use and analyse.
- It works as an electronic log book for boiler.

# Technical Specifications

Service	Saturated Steam
Size	40 to 1000 NB and more
Type of Flow meter	Differential Pressure (DP) type
Fow Element	Calibrated Orifice Plate (SS316L)
Pressure Condensation	Can be provided
Temperature Condensation	Can be provided
Type of Flanges	WNRF, ANSI /ASME
Accuracy of meter	+/-0.5%
Display	Separate Display windows for current (4 digit) and total flow (6 digit) indication. LED type.  Wi-Fi Connectivity All across the globe. USB facility.
Output	4 to 20 MAP
Mounting	Wall mounting
Enclosure	Aluminium Die-Cast
Protection Class	Equivalent to IP65
Humidity	90% RH max
Programming	By Keypad with 3 level password protection
Design Standard	ISO5167, BS1042, ASME PT-19.5

## CONFIGURATION OF DIFFERENTIAL PRESSURE TRANSMITTER



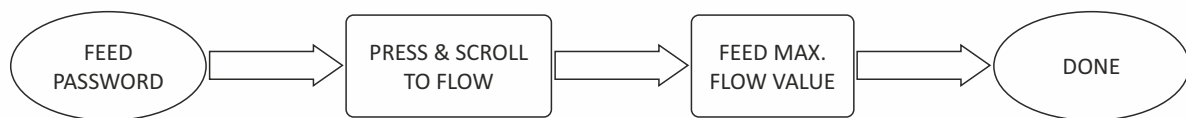
**DPT CONFIGURED**

## Ordering Data Required

- Maximum, Minimum and Normal Flow:-
- Maximum, Minimum and Normal Pressure:-
- Pipe line Size and Schedule:-
- Media:-
- Maximum Temperature:-

## CONFIGURATION OF TOTALIZER

Follow User Manual Instructions for Setting Password



**TOTALIZER CONFIGURED**

# OUR PRODUCTS



Thermodynamic  
Steam Straps



High Pressure TD  
Steam Straps



Bimetallic  
Steam Straps



Inverted Bucket  
Steam Straps



Safety Relief  
Valve



Ball Float  
Steam Straps



Condensate  
Recovery  
System



Thermal Relief  
Valve



Liquid  
Drain Traps



APT



Vacuum  
Breaker



Thermostatic  
Air Vent



Actuated  
Ball Valve



Pneumatic  
Cylinder



Ball Valve  
(Manual)



Blowdown  
Valve



Breather  
Valve



Piston  
Valve



Bucket  
Strainers



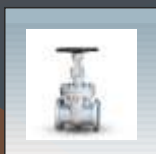
Y Strainer



Diaphragm  
Valve



Dual Plate  
Check Valve



Gate  
Valve



3 Piece  
Ball Valve



Globe  
Valve



Control Valve



Knife Edge  
Gate Valve



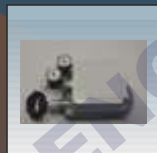
Needle  
Valve



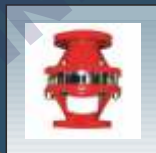
Swing  
Check Valve



Wafer  
Check Valve



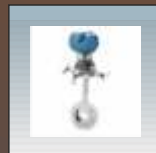
Electro Pneumatic  
Positioner



Flame  
Arrester



Flash  
Vessel



Flow  
Meter



Pneumatic Angle  
Seat Control Valve



Moisture  
Separator



PID Controller



Pressure  
Gauge



RTD  
Sensor



Sight  
Glass



Spiral  
Wound Gasket



Manifolds



Butterfly  
Valve



Actuated  
Butterfly Valve



Robotrol



Electromagnetic  
Flow meter



Deluge  
Valve



Flanges

## HEAD OFFICE:

### PERFECT ENGINEERING SERVICES

C-601, Badhwar Apartments, Plot No.3, Sector-6, Dwarka, New Delhi-110075

Ph: 011 - 28034280/81 | +91-9891016735 / +91-9350216735 | +91-9999991337 | +91-9811557391

vksood@perfect.org.in | sales@perfect.org.in | info@perfect.org.in | solutions@perfect.org.in

www.perfectengineeringservices.co.in