

The promise of precision, every time.



www.mac-weld.com

Revised (04/26/2022)

Mac-Weld Level Chambers

for External Process Level Measurement

Mac-Weld Level Chambers are an external chamber designed and manufactured to measure process level measurements on a vessel.

Our high quality chambers allowing external mounting of radar level measurement on process vessels. The chamber is designed for horizontal or vertical vessels. External level measurements avoid multiple difficulties faced in vessel level measurements.

The following constraints that are eliminated are:

- Turbulent process parameters
- Hazardous liquids
- Agitators
- Easy and live maintenance
- Isolation of the instrument
- Safety
- Heat exchangers

Chamber Design

- Designed to ASME B31.3. (ASME B31.1 available upon request)
- All chamber material used is fully traceable.
- Standard sizes from 1.5 inches to 4 inches with S40 or S80, CS or 316SS (L) available. Other sizes and material are available upon request. Various process sizes and connection types are available.
- Our chambers use only certified and traceable materials and are manufactured using full penetration welds with welders and welding procedures qualified to ASME standards.
- All chambers are hydro tested upon completion, with a full range of NDT or customer inspection options available to order.

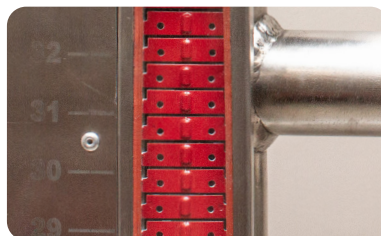
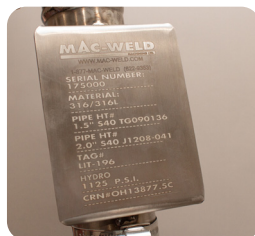


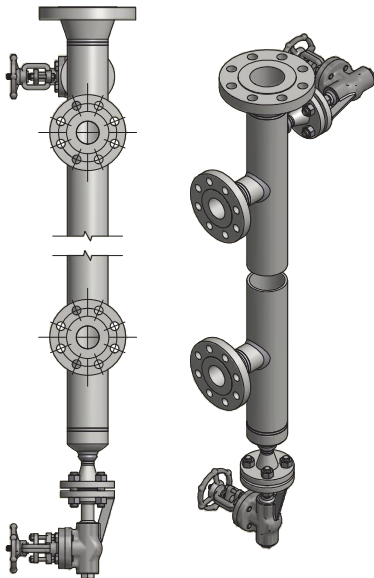
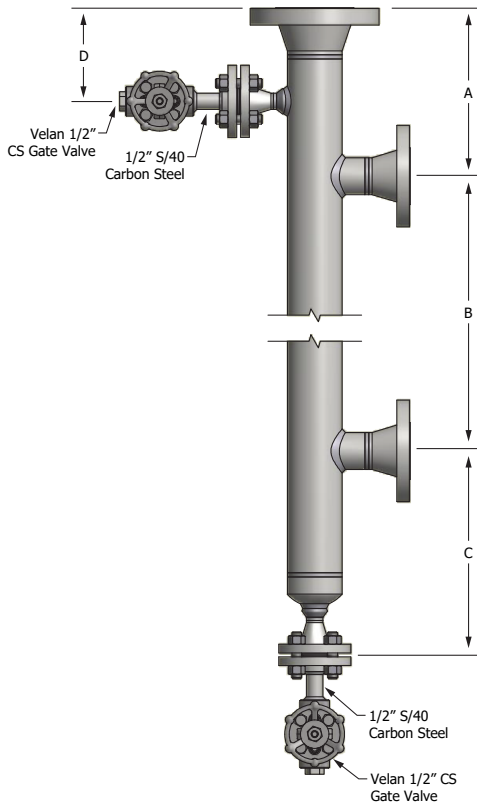
Float



Available Options:

- Various Process Connections
- Drain and/or Vent





External Process Level Measurement

Designed & built in accordance with ASME B31.3 or B31.1, allowing users to combine an integrated bolt on level device, or simply a chamber for use with existing instrumentation.

The chambers are suitable for:

- Magnetic level indication (Flag & Float type)
- Guided Wave Radar
- Dual Chambers built to combine above technologies for redundancy.

Specifications

- Chamber Flange Rating; 150# to 2500#
- Chamber Configuration: Side-side standard. Other options also available
- Pipe Schedule: 10, 40, 80 or 160 welded or Seamless.
- Chamber Material: Stainless Steel and CS material standard. Other material available as optional.
- Name plate location can vary depending on design requirements
- Highly Visible Indicator: Metric/Imperial Scale.
- Measuring Range: 6" to 20'. Other lengths available as an option.
- Float: To obtain Highest Accuracy, Floats are Designed & Weighed.

Testing & Documentation

- Hydro test
- PMI (Positive Material identification)
- Dye Penetration test
- CRN (Canadian Registration Number)
- Material Traceability
- Heat Treating
- X-Ray, Butt Weld Joint
- ASME B31.3 (B31.1 available as an option)
- Additional special requirements available upon request
- Nace compliant



Thermowells



Orifice Plates



Bleed & Flush Rings



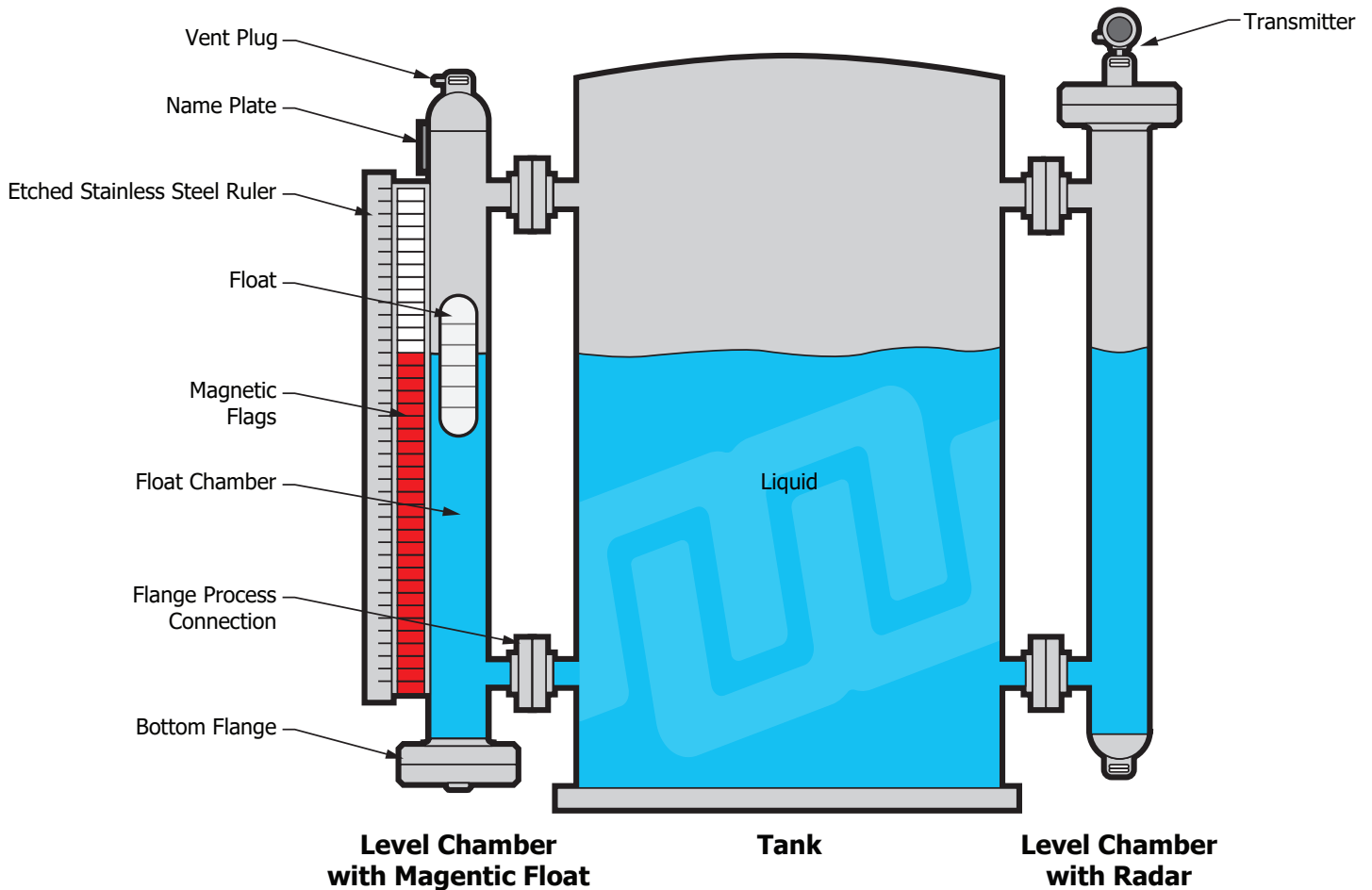
Pressure Vessels



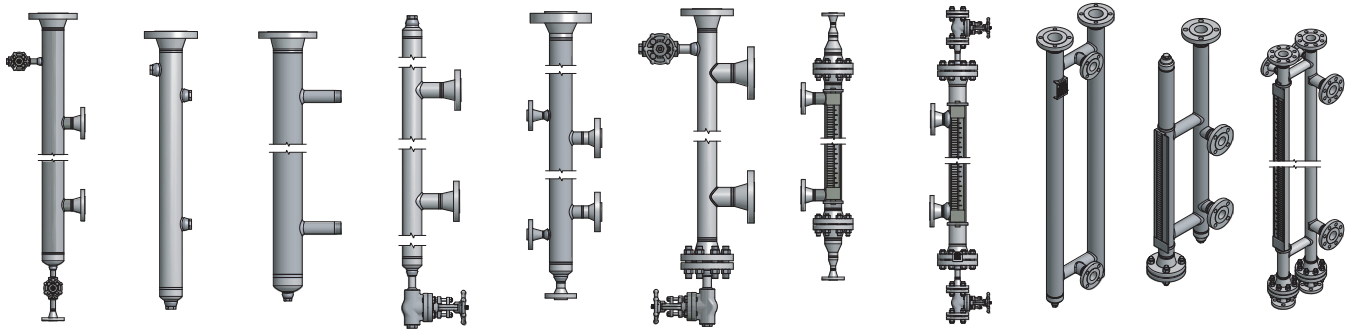
Valves & Manifolds



Specialty Products



Examples of Level Chamber Configurations



LEVEL CHAMBERS



Level Chamber
with Float



Dual Level Chamber
with Float

Mac-Weld Level Chamber - Required Details

Specification	Details
Tag#	
Material Grade	
Transmitter Connection	
process Connections Size and Number	
Schedule	
Vent Connection	
Drain Connection	
Dimension "A"	
Dimension "C to C"	
Dimension "B"	
Specific Gravity (for Mag Level)	
Scale increments (for Mag Level)	
Additional Notes:	

