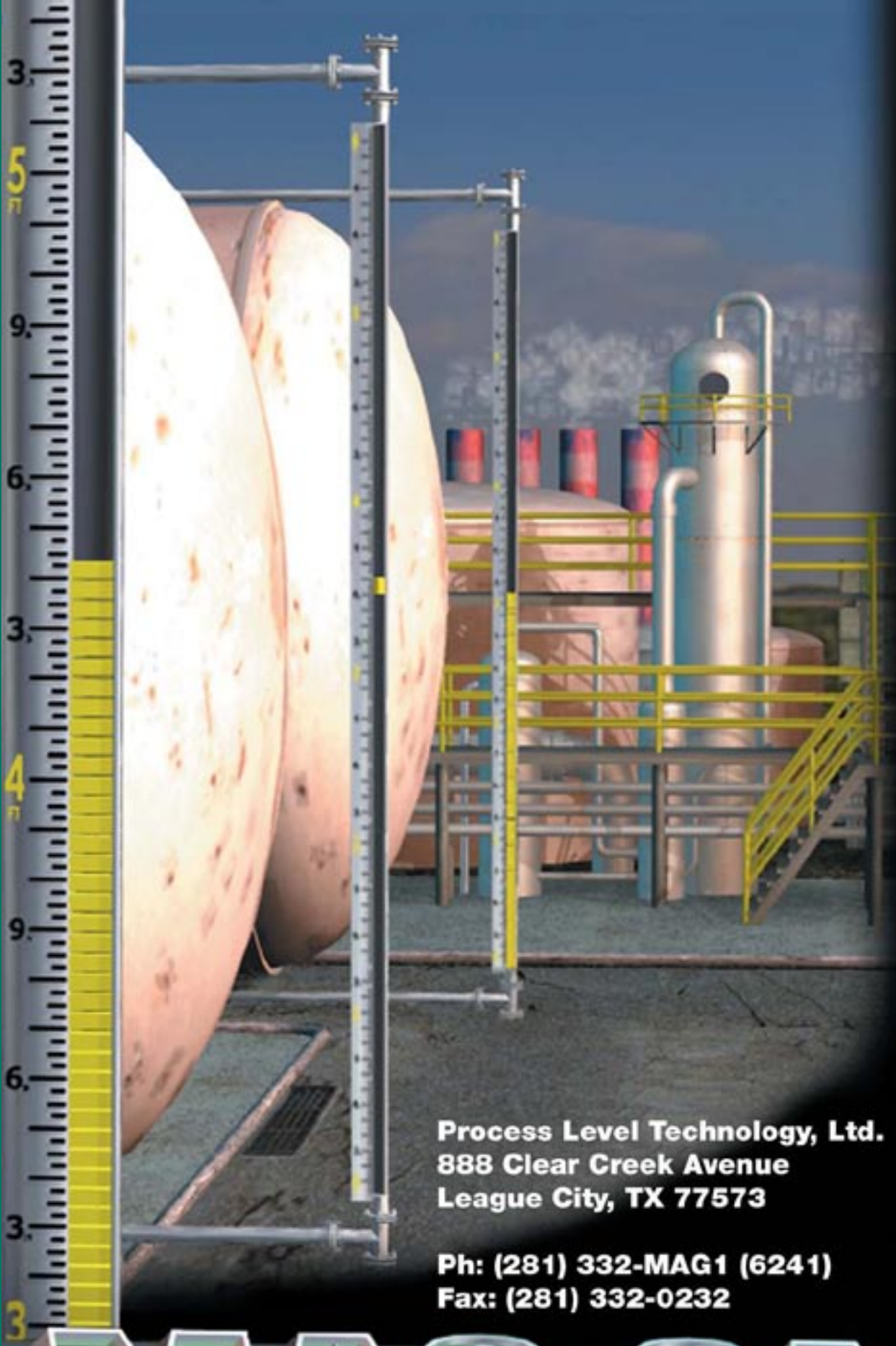


PLT

Mag-Gage™

Magnetic Liquid Level Gages

- *Replaces Sight Glasses*
- *Low Maintenance*
- *No Process to Contact Glass*
- *Reduces Fugitive Emissions*
- *Low Installation Cost*
- *Visual Level Measurement from 200'+*
- *ASME/ANSI Rated*
- *Minimum of Sch 40 construction*
- *Various Materials & Mounting Styles*
- *Performs in Extreme Pressure & Temperature*
- *Choice of Indicator Styles*
- *Extra Wide Indicator Design (patent)*
- *Solid Magnetic Flags*
- *No Aluminum or Plastic Flags to Corode or Fade*
- *Dual Magnetic circuit*
- *Interface Measurement/Control*
- *Non-Invasive Switches & Transmitters*
- *Level Indication & Control in One Unit*
- *Hydrostatic Testing*
- *24 Hour Delivery Available*

Process Level Technology, Ltd.
888 Clear Creek Avenue
League City, TX 77573

Ph: (281) 332-MAG1 (6241)
Fax: (281) 332-0232

MAG-GAGE™

WWW.MAG-GAGE.COM

Mag-Gage™

PROCESS LEVEL TECHNOLOGY, LTD

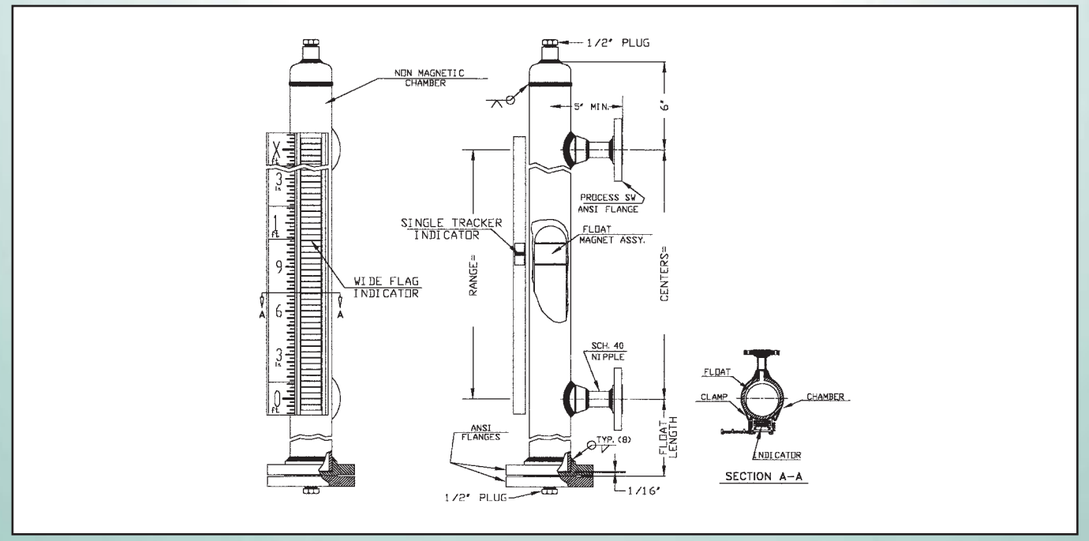
The Process Level Technology **Mag-Gage™** is a proven method to measure liquid levels. The **Mag-Gage™** is one of the safest and most economical ways to measure and control your level requirements. It can be installed on almost any shape, size or type of vessel in the industry. In applications on extreme pressure, temperature, vibration and highly corrosive or hazardous material the **Mag-Gage™** will perform where all others fail.

Principle of Operation

The **Chamber** is constructed of non-magnetic materials, and process connections to mate with those of the tank, vessel or other equipment where the level is to be measured.

The **Float** is engineered and located inside the Chamber. It is sized and weighted to the specific gravity of the process fluid to be measured. The float contains a 360°. Magnetic Assembly which generates a strong uniform magnetic circuit. The magnetic Flux Lines generated by the float interlocks with the indicator.

The hermetically sealed **Indicator**, the Wide Flag or Tracker Style, contains its own magnetic assemblies which interlock with the float through the Chamber, therefore providing a strong and reliable design. As the Float moves with the changes in the liquid level, the magnetic attraction between the Indicator & Float will ensure that the Indicator will track the position of the float exactly and thus, the liquid level is measured precisely.



INDICATORS

SINGLE TRACKER

Annodized Aluminum Enclosure

STAINLESS STEEL SINGLE TRACKER

Stainless Steel Enclosure

WIDE FLAG

Annodized Aluminum Enclosure

(PATENT 6435026B1)

STAINLESS STEEL WIDE FLAG

Stainless Steel Enclosure

(PATENT 6435026B1)

- **Extra Large Indicator**
- **1.40" Wide X 1.5" long**
- **Bright Yellow** (other colors available)
- **Dual Magnetic Coupling**

- **1.40" Wide**
- **180 degree rotation**
- **Solid One Piece High Temp. Magnetic Flags**
- **Dual Rotation Points**
- **Yellow Liquid Black Vapor**
- (Other colors available)

CUSTOM FEATURES AVAILABLE

INSULATION

High Temperature with Red / White WF option

Cryogenic with non-frost extension

DRUM LEVEL INDICATOR

Meets ASME Boiler Code (PG60) for water level indicators on Boiler Drum

PLT Mag-Gage™ Process Level Technology, Ltd.

STANDARD SPECIFICATIONS

- NON MAGNETIC CHAMBER MATERIAL
- ALL FLANGES, FITTINGS & PIPE MEET ASME/ANSI STANDARDS
- **FABRICATED/WELDED TO B31.1/B31.3 CODE**

FLOAT CHAMBER:
- 2"-3" PIPE W/RF FLANGES - SCH 40
- 1/2" FNPT VENT & DRAIN CONNECTIONS
- ALL FLANGES & FITTINGS RATED FOR PROCESS CONDITIONS
- CONNECTIONS: 1/2" THRU 8" PLUS
- PRESSURE RATINGS: UP TO 5000 PSIG
- TEMPERATURE RATING: -300°F to +1100°F
- SPECIFIC GRAVITY RANGE: .28 AND UP
- LENGTHS FROM 4.0" TO 50 FEET

SCALE:
- FEET & INCHES WITH 1/4 INCH DIVISIONS
- PHOTOECHED & BACKFILLED STAINLESS STEEL
- METRIC, PERCENTAGE, VOLUMETRIC AVAILABLE
- OPTIONAL 3 1/2" WIDE ACRYLIC SCALES

INDICATOR:
- BRIGHT COLORED
- CAN BE SEEN FROM 200 FEET OR MORE
- 1.4" WIDE
- HERMETICALLY SEALED

TO CONSTRUCT A Mag-Gage™

MG											
1	2	3	4	5	6	7	8	9	10		11

2 MATERIAL

4S	=	304SS
4C	=	304SS/CS
6S	=	316SS
6C	=	316SS/CS
2S	=	321SS
4T	=	TFE LINED
4H	=	HALAR (ECTFE) COATED
NS	=	NON STICK COATING
AL	=	ALUMINUM
A2	=	ALLOY 20
MO	=	MONEL
TT	=	TITANIUM
HB	=	HASTALLOY B
HC	=	HASTALLOY C
ZR	=	ZIRCONIUM
CP	=	CPVC
PV	=	PVC
PF	=	PVDF (KYNAR)
TF	=	TEFLON (PFA)
CM	=	ANY OTHER NON-MAGNETIC MATERIAL- SPECIFY

3 STYLE

4 PROCESS CONNECTION SIZE

5 FLANGE RATING

01	=	150#
03	=	300#
06	=	600#
09	=	900#
15	=	1500#
25	=	2500#
50	=	5000#

6 SPECIFIC GRAVITY

7 MAX WORKING PRESSURE

8 MAX WORKING TEMPERATURE

9 MEASUREMENT LENGTH

10 INDICATION TYPE
WF - Wide Flag
SWF - SS Wide Flag
ST - Single Tracker
SST - SS Single Tracker

11 OPTIONS

EXAMPLE: P/N MG - 6C - A-1.0"- 15 - .40 -1200 - 500F - 38.0" - WF-WN-HB

DESCRIPTION

1. **Mag-Gage series**
2. Chamber Material: 316SS with Carbon Steel Flanges/Fittings
3. Style: A
4. Process Connection: 1.0" Raised Face Flange
5. Flange Rating: 1500#
6. Specific Gravity: .40
7. MAX Working Pressure: 1200psig.
8. MAX Working Temperature: 500F
9. Process Connection C/L: 38.0" Measurement Length: 38.0"
10. Wide Flag Indication
11. Option: Weld Neck Flanges Insulation Blanket

OPTIONS

Chamber

WN	=	WELD NECK FLANGES
SL	=	STUB END/LAP JOINT FLANGES
RJ	=	RING JOINT FLANGES
BW	=	ALL BUTT WELD CONSTRUCTION

Scale/Indicator

MS	=	METRIC SCALE
PS	=	PERCENTAGE SCALE
NS	=	NEGATIVE SCALE
SS	=	CUSTOM SCALE (SPECIFY)
AS	=	3 1/2" WIDE ACRYLIC SCALE
PI	=	POLYCARBONATE (MAX 250° F)
FE	=	NON FROST EXTENSION
DI	=	DUAL INDICATION (ST/SST ONLY)
IF	=	INTERFACE INDICATION
AR	=	ARROW POINTERS
IL	=	ILLUMINATOR
IG	=	INDICATOR GUARD

Temp Control

CI	=	CRYOGENIC INSULATION W/ FROST EXTENSION
HB	=	HIGH TEMP INSULATION BLANKET
EH	=	ELECTRICAL HEAT TRACING
FP	=	FREEZE PROTECTION (ELECTRICAL)
ST	=	STEAM TRACED

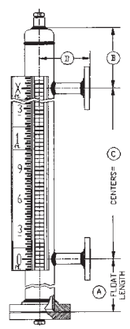
Valves

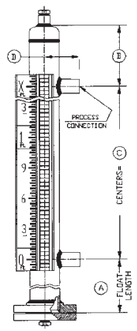
GV	=	GATE VALVES (SPECIFY TYPE)
VD	=	VENT & DRAIN VALVES

Testing/Material

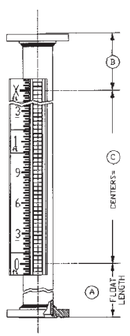
NM	=	NACE MRO175
NDE	=	100% NONDESTRUCTIVE TESTING (DIE PENETRATION, X-RAY)

CHAMBER STYLE

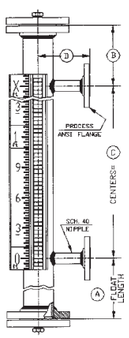

A



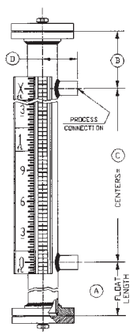
B



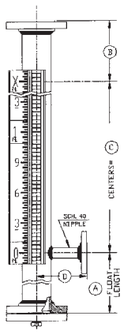
C



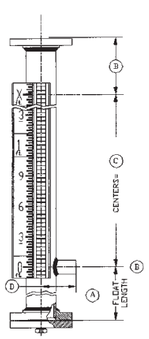
D



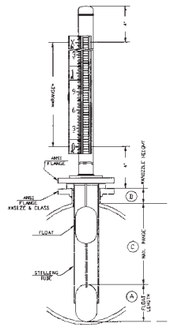
E



F



G


Top Mount
H

CUSTOM CHAMBERS CAN MEET MOST PIPING REQUIREMENTS

I

***TYPICAL DIMENSIONS A = 12.0" B = 6.0" D = 5.0" C = SPECIFY**

***Dimensions may vary with process conditions and/or applications.**

TRANSMITTER SWITCHES

MGT-2000
DESCRIPTION

The MGT-2000 is a non-invasive transmitter. It contains two components...

1. The Sensor
2. The Transmitter

The Sensor is a network of Reed Switches and resistors contained in a heavy wall stainless steel pipe. The sensor is mounted parallel with the Chamber. As the float rises or falls it is closing Reed Switches therefore changing the resistance proportionally to the level.

The Transmitter takes the change in resistance from the Sensor, conditions it and transmits a 4-20 ma 2 wire signal. The Transmitter is field rangeable to provide a full scale output over any portion of the span.

SPECIFICATIONS

Transmitter

Output: 4-20mA (2 wire)

Power: 24 VDC Nom.
11 VDC - 30 VDC

Housing: Class 1 Div 1
Grps B, C, D

Temp: -40°F to 200°F

Sensor

Max Length: Up to 25 Ft

Resolution: .50" Standard
.25" Optional

Housing: Stainless Steel

Max Temp: 500°F

The switches are non-mercury. The bias magnet design latches the switch maintaining the contact after the level continues to rise or fall. The switches are fully adjustable and non-invasive. Switch Points can be changed easily without any interruption to the visual indication or process.

MGS-200EX

Max Volts: 150 VAC/VDC
Max Current: 1.0 AMPS
Max Power: 25 Watts
Dead Band: .50 Inch
Max Temp: 600°F
Min Temp: -40°F
Contacts: SPDT or
-2 option DPDT
Elec. Class, Class 1 Div 1
Group B, C, D

MGS-500EX

Max Volts: 500 VAC/VDC
Max Current: 3.0 AMPS
Max Power: 100 Watts
Dead Band: .5 Inch
Max Temp: 600°F
Min Temp: -40°F
Contacts: SPDT or
-2 option DPDT
Elec. Class, Class 1 Div 1
Group B, C, D

MGS-700EX

Max Volts: 125/250 VAC
Max Current: 10.0 AMPS
Max Power: 2500 Watt
Dead Band: .5 Inch
Max Temp: 600°F(HT)
Min Temp: -40°F
Contacts: SPDT or
-2 option DPDT
Elec. Class, Class 1 Div 1
Group B, C, D

MGS-900EX

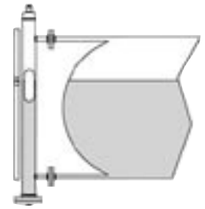
Max Volts: 125/250 VAC
Max Current: 15.0 AMPS
Max Power: 3750 Watt
Dead Band: .50 Inch
Max Temp: 600°F(HT)
Min Temp: -40°F
Contacts: SPDT
-2 option DPDT
Elec. Class, Class 1 Div 1
Group B, C, D

MGS-100
Non bleed Pneumatic Switch

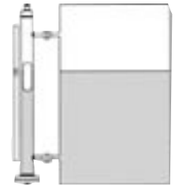
Specifications...

Supply Pressure: VAC-200 PSIG
Dead Band: .50 Inch
Max Temp: 200°F
Min Temp: 0°F
Enclosure: Stainless Steel

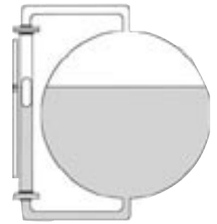
TYPICAL INSTALLATION



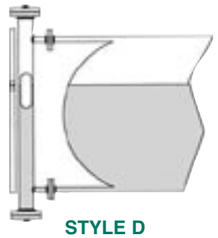
STYLE A



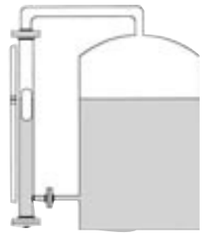
STYLE B



STYLE C



STYLE D



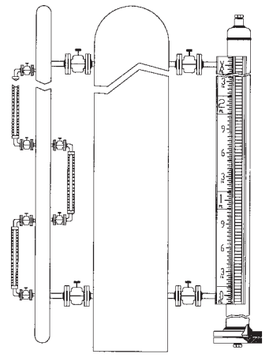
STYLE F

Interface/Dual Indication

STYLE I

STYLE H

SIGHT GLASS REPLACEMENT



- **LOWER INSTALLATION COSTS** One piece **Mag-Gage™** is easily installed. Does not require multiple tank connections or expensive piping required with sight glasses.
- **EASY TO READ LIQUID LEVEL** The **Mage-Gage™** has no blind spots.
- **LOW MAINTAINENCE**
  No Glass in contact with process

MGT-5000

OTHER PRODUCTS

Magnetostrictive Transmitters
Float Switches
Magnetic Point Level Indicators
Lube Oil Indicators
Fluid Recovery Pumps/Systems
Magnetic Sight Flow Indicators
Seal Pots
Day Tanks
Tank Bridals
Vessels/Tanks

Custom Day Tanks

MSF-6000
(Patent 6526907B1)

APPLICATIONS:

Acetic Acid
Ammonia
Asphalt Settler
Benzene
Blow case
Boiler steam drums
Butane
Caustics
Cooling Towers
Deionized Water
Dow Therm
Drip pot
Feedwater Heaters
Flare Drums
Freon
Glycol
Hydraulic Oil
Hydrazine
Hydrochloric Acid
Hydrofluoric Acid
Hydrogen Sulphide
Interface (ie: oil/water)
Jet Fuel
LPG
Liquid Carbon Dioxide
Liquid Ethylene
Molten Sulfur
Phosgene
Propane
Seal Oil Pots
Slop Oil
Sour Oil
Sump
Underground Storage ***And More!!!***

6 Acres, 10,000 sqft

Represented By:

© Copyright 2003