

# BOILER LIQUID LEVEL GAUGES

## **HEAD OFFICE**

920 MATHESON BLVD EAST MISSISSAUGA, ONTARIO, CANADA L4W 2R8 TEL: 905-614-0024 FAX: 905-614-0899 WWW.QUALITYGAUGE.COM



Quality Gauges and Valves are durable, superior quality products manufactured from the best materials. All gauges meet A.S.M.E. Sec. I, PG-60 code requirements for pressure vessels. Quality Boiler Gauge and Valve assemblies are designed and built for years of dependable operation.

Quality Gauge and Valve offers boiler trim from 300 WSP to 2500 WSP. All gauges are of heavy duty construction with exclusive combination of designs and features that allow for easy readability and maintenance. Special features included high temperature borosilicate glass, high quality mica shielding, Grafoil gaskets, spring washers and continuous visibility. Quality boiler valves are also uniquely developed for easy usability, which include replaceable seats and back-seating stems.

Quality precision manufacturing of these time-tested designs assures outstanding performance and service life. The various designs from, single, double and triple windows allow for maximum visibility that are easy to read with high precision. Quality assemblies are complete with the necessary expansions loops, flanges and chain activated valve wheels. All Quality Boiler Gauges and Valves meet A.S.M.E. Code requirements and have proven their dependability and throughout the industry.



## Quality Gauge & Valve "Steam-Line" Products (You won't get "steamed" with us)

### **RB-20 "Steam Line" Direct Reading Steam/Water Gages** For 300 PSI (Working Steam Pressure) WSP

- Durable Construction for Optimal Performance
- A.S.M.E. Sec.1 Compliant
- Recessed Gasket in Chamber and Cover
- Custom Built to Meet Your Requirements
- Spring Washers Available for Cyclic Conditions
- Special Coating for Steam Service
- Multiple Connections Available

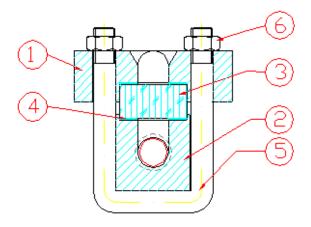


The "Steam Line" RB20 units are designed for steam service to 300WSP. These Gages can be used as Process Steam Gages and Direct Reading Sight Glass for boilers in compliance with A.S.M.E. PG-60.

The prism molded into the reflex borosilicate glass on the process side will display black for water, and white for steam. As a result of this difference, it is not necessary to have overlapping sections. Multiple section gages will have a continuous chamber constructed from a single piece of bar. All units are supplied with recessed gasket seats and forged covers which allows for easy and inexpensive maintenance.

#### **Materials of Construction:**

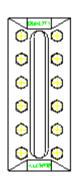
- 1) Cover: Forged Carbon Steel
- 2) Chamber: Carbon Steel
- 3) Glass: Tempered Borosilicate
- 4) Gaskets: HPN—Kevlar Based AFP
- 5) U-Bolts: A193-B7
- 6) Nuts: A194-2H





# "Steam-Line" RB20 – 300WSP Steam/Water Gages

### Single Section



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<u>Model</u>	<u>Visible</u> Inches	<u>Glass</u> mm
Q16RB20	9	229
Q17RB20	10-1/8	257
Q18RB20	11-3/4	299
Q19RB20	12-1/2	318
Q26RB20	17-1/8	435
Q27RB20	19-3/8	492
Q28RB20	22-5/8	575
Q29RB20	24-1/8	613
Q37RB20	28-5/8	727
Q38RB20	33-1/2	851
Q39RB20	35-3/4	908
Q47RB20	37-7/8	962
Q48RB20	44-3/8	1127
Q49RB20	47-3/8	1203
Q58RB20	55-1/4	1403
Q59RB20	59	1499

Connection Type		
SB	Stuffing Box Nipple	
SW	Socket Weld	
FL	Flange	
UN	Union	
NPT	NPT	

<b>Connection Location</b>		
TBH	Top/Bottom Connected	
СН	Side/Side Connected	
тсн	Top Side/Bottom Connected	
BCH	Bottom Side/Top Connected	

	GAUG			<u>NS</u>	
	STUFFING BOX NIPPLE (End Connect)	SOCKETWELD	UNION	FLANGE	NPT
Connection Sizes Available: 1/2" 3/4" 1"					
<u>Quotation In</u>		Maximum Ope Steam Water C Valve Requirei	Connection		



## Quality Gauge & Valve "Steam-Line" Products (You won't get "steamed" with us)

### TB-32 "Steam Line" Direct Reading Steam/Water Gages For 750 PSI (Working Steam Pressure) WSP

- Durable Construction for Optimal Performance
- A.S.M.E. Sec.1 Compliant
- Recessed Gasket in Chamber and Cover
- Custom Built to Meet Your Requirements
- Spring Washers for Constant Torque
- Special Coating for Steam Service
- Multiple Connections Available
- High Quality Mica Shield for Glass Protection

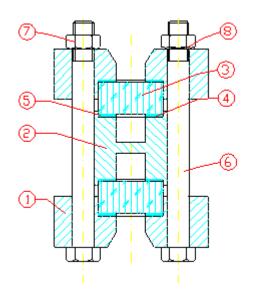
The "Steam Line" TB32 units are designed for steam service to

750WSP. These Gages can be used as Direct Reading Sight Glass for boilers in compliance with A.S.M.E. PG-60. Visible ranges are achieved by using multiple sections with a minimum 1" overlap to ensure continuous visibility. The gage chamber is reinforced with internal tie bars to add durability to the product, and remove the possibility of lateral deflection, which can cause early gasket failure. All units are supplied with recessed gasket seats and forged covers which allow for easy and inexpensive

maintenance.

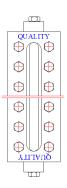
#### Materials of Construction:

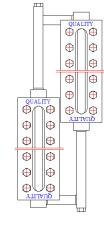
1) Cover:	Forged Carbon Steel
2) Chamber:	Carbon Steel
3) Glass:	Tempered
	Borosilicate
4) Gaskets:	Grafite c/w ss binder
5) Mica	HQ Mica
6) U-Bolts:	A193-B7
7) Nuts:	A194-2H
8) Washers	17-7 PH S.S.





# "Steam-Line" TB32 – 750 WSP Steam/Water Gages





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<u>Model</u>	<u>Visible</u> (Inches)	<u>Glass</u> (mm)
Q16TB32	9	229
Q17TB32	10-1/8	257
Q18TB32	11-3/4	299
Q19TB32	12-1/2	318
Q26TB32	17-1/8	435
Q27TB32	19-3/8	492
Q28TB32	22-5/8	575
Q29TB32	24-1/8	613
Q37TB32	28-5/8	727
Q38TB32	33-1/2	851
Q39TB32	35-3/4	908
Q47TB32	37-7/8	962
Q48TB32	44-3/8	1127
Q49TB32	47-3/8	1203
Q58TB32	55-1/4	1403
Q59TB2	59	1499

Connection Type		
SB	Stuffing Box Nipple	
SW	Socket Weld	
FL	Flange	
UN	Union	
NPT	NPT	

<b>Connection Location</b>		
TBH	Top/Bottom Connected	
СН	Side/Side Connected	
тсн	Top Side/Bottom Connected	
BCH	Bottom Side/Top Connected	

	GAUG			<u>NS</u>	
	STUFFING BOX NIPPLE (End Connected)	SOCKETWELD	UNION	FLANGE	NPT
<b><u>Connection Sizes Available:</u></b> 1/2" 3/4"					
<b><u>Quotation Information Required:</u></b> Maximum Operating Steam Pressure					
		Steam Water ( Valve Require		n Size & Ty	pe



# Quality Gauge & Valve "Steam-Line" Products

You won't get "steamed" with us

### TB1542 "Steam Line" Direct Reading Steam/Water Gauges For 1500 PSI (Working Steam Pressure) WSP

- Durable Construction for Optimal Performance
- A.S.M.E. Sec.1 Compliant
- Recessed Gasket in Chamber and Cover
- Custom Built to Meet Your Requirements
- Spring Washers for Constant Torque
- Special Coating for Steam Service
- Multiple Connections Available
- High Quality Mica Shield for Glass Protection

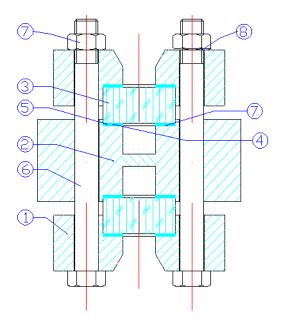


The "Steam Line" TB1542 units are designed for steam service to 1500WSP. These Gauges can be used as Direct Reading Sight Glass for boilers in compliance with A.S.M.E. PG-60. Visible ranges are achieved by using multiple sections with a minimum 1" overlap to

ensure continuous visibility. The gauge chamber is full width with a ½" vision slot, and reinforced with internal tie bars to add durability to the product. This will remove the possibility of lateral deflection, which can cause early gasket failure. All units are supplied with recessed gasket seats and forged covers which allow for easy and inexpensive maintenance.

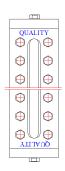
### Materials of Construction:

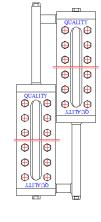
1) Cover:	Forged Carbon Steel
2) Chamber:	<b>Carbon Steel-Full Width</b>
3) Glass:	Temp. Borosilicate
4) Gaskets:	Grafite c/w SS binder
5) Mica	HQ Mica
6) U-Bolts:	A193-B7
7) Nuts:	A194-2H
8) Washers	17-7 PH S.S.

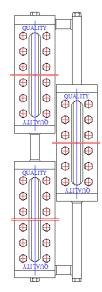




# Steam–Line TB1542 – 1500WSP Steam/Water Gages







<u>Model</u>	<u>Visible</u> (Inches)	<u>Glass</u> (mm)
Q16TB1542	9	229
Q17TB1542	10-1/8	257
Q18TB1542	11-3/4	299
Q19TB1542	12-1/2	318
Q26TB1542	17-1/8	435
Q27TB1542	19-3/8	492
Q28TB1542	22-5/8	575
Q29TB1542	24-1/8	613
Q37TB1542	28-5/8	727
Q38TB1542	33-1/2	851
Q39TB1542	35-3/4	908
Q47TB1542	37-7/8	962
Q48TB1542	44-3/8	1127
Q49TB1542	47-3/8	1203
Q58TB1542	55-1/4	1403
Q59TB1542	59	1499

<b>Connection Type</b>		
SB	Stuffing Box Nipple	
SW	Socket Weld	
FL	Flange	
UN	Union	
NP	NPT	

Connection Location		
TBH Top/Bottom Connected		
СН	Side/Side Connected	
тсн	Top Side/Bottom Connected	
BCH	Bottom Side/Top Connected	

	GAUGE CONNECTION OPTIONS		
	STUFFING BOX NIPPLE	ALL SOCKETWELD	FLANGE
	Connection Sizes	3	/2" /4" – Stuffing Box L"
<b>Quotation Information Required:</b> Maximum Operating Steam Pressure Steam Water Connection Size & Type Valve Requirements			



# Quality Gauge & Valve "Steam-Line" Products

You won't get "steamed" with us

### TB2042 "Steam Line" Direct Reading Steam/Water Gauges For 2000 PSI (Working Steam Pressure) WSP

- Durable Construction for Optimal Performance
- A.S.M.E. Sec.1 Compliant
- Recessed Gasket in Chamber and Cover
- Custom Built to Meet Your Requirements
- Spring Washers for Constant Torque
- Special Coating for Steam Service
- Multiple Connections Available
- High Quality Mica Shield for Glass Protection

The "Steam Line" TB2042 units are designed for steam service to

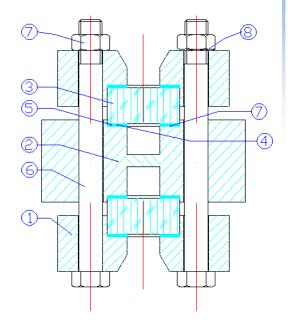


2000WSP. These Gauges can be used as Direct Reading Sight Glass for

boilers in compliance with A.S.M.E. PG-60. Visible ranges are achieved by using multiple sections with a minimum 1" overlap to ensure continuous visibility. The gauge chamber is full width with a ½" vision slot, and reinforced with internal tie bars to add durability to the product. This will remove the possibility of lateral deflection, which can cause early gasket failure. All units are supplied with recessed gasket seats and forged covers which allow for easy and inexpensive maintenance.

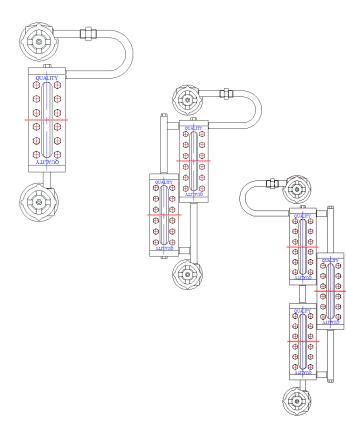
### Materials of Construction:

1) Cover: **Forged Carbon Steel** 2) Chamber: **Carbon Steel-Full Width** 3) Glass: **High Pressure Borosilicate** Grafite c/w SS binder 4) Gaskets: 5) Mica **HQ** Mica 6) U-Bolts: A193-B7 7) Nuts: A194-2H 8) Washers 17-7 PH S.S. 9) Heavy Duty CS Exp. Coil





# Steam–Line TB2042 – 2000WSP Steam/Water Gages



<u>Model</u>	<u>Visible</u>	<u>Glass</u>
Q16TB2042	(Inches) 9	<u>(mm)</u> 229
Q17TB2042	10-1/8	257
Q18TB2042	11-3/4	299
Q19TB2042	12-1/2	318
Q26TB2042	17-1/8	435
Q27TB2042	19-3/8	492
Q28TB2042	22-5/8	575
Q29TB2042	24-1/8	613
Q37TB2042	28-5/8	727
Q38TB2042	33-1/2	851
Q39TB2042	35-3/4	908
Q47TB2042	37-7/8	962
Q48TB2042	44-3/8	1127
Q49TB2042	47-3/8	1203
Q58TB2042	55-1/4	1403
Q59TB2042	59	1499

Connection Type		
SW Socket Weld		
FL Flange		

Connection Location		
CH Side/Side Connected		
TCH Top Side/Bottom Connected		
BCH	Bottom Side/Top Connected	

	GAUGE CONNECTION OPTIONS		
	SOCKETWELD	FLANGE (GAUGE TO VALVE FLANGED OPTIONAL)	
	Connection Sizes Available: 1/2" 3/4" 1"		
<u>Quotation Information Required:</u> Maximum Operating Steam Pressure Steam Water Connection Size & Type Valve Requirements			



# Quality Gauge & Valve "Steam-Line" Products

You won't get "steamed" with us

## TB2550 "Steam Line" Direct Reading Steam/Water Gauges For 2500 PSI (Working Steam Pressure) WSP

- Durable Construction for Optimal Performance
- A.S.M.E. Sec.1 Compliant
- Recessed Gasket in Chamber and Cover
- Custom Built to Meet Your Requirements
- Spring Washers for Constant Torque
- Special Coating for Steam Service
- Multiple Connections Available
- High Quality Mica Shield for Glass Protection



The "Steam Line" TB2050 units are designed for steam service to 2500WSP. These Gauges can be used as Direct Reading Sight Glass for boilers in compliance with A.S.M.E. PG-60. Visible ranges are

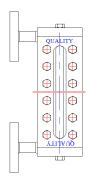
achieved by using multiple sections with a minimum 1" overlap to ensure continuous visibility. The gauge chamber is full width with a ½" vision slot, and reinforced with internal tie bars to add durability to the product. This will remove the possibility of lateral deflection, which can cause early gasket failure. All units are supplied with recessed gasket seats and special large covers which allow for easy and inexpensive maintenance.

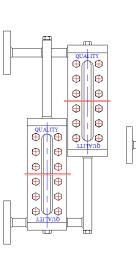
### Materials of Construction:

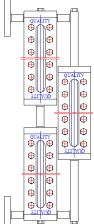
1) Cover: **Carbon Steel** 2) Chamber: **Carbon Steel-Full Width** 3) Glass: High Temp. Aluminosilicate Grafite c/w SS binder 4) Gaskets: 5) Mica **HQ** Mica 6) U-Bolts: A193-B7 7) Nuts: A194-2H 8) Washers 17-7 PH S.S. 9) ½" – 2500# RTJ CS Flange



# Steam–Line TB2550 – 2500WSP Steam/Water Gages







<u>Model</u>	<u>Visible</u>	<u>Glass</u>
	<u>(Inches)</u>	<u>(mm)</u>
Q16TB2550	9	229
Q17TB2550	10-1/8	257
Q18TB2550	11-3/4	299
Q19TB2550	12-1/2	318
Q26TB2550	17-1/8	435
Q27TB2550	19-3/8	492
Q28TB2550	22-5/8	575
Q29TB2550	24-1/8	613
Q37TB2550	28-5/8	727
Q38TB2550	33-1/2	851
Q39TB2550	35-3/4	908
Q47TB2550	37-7/8	962
Q48TB2550	44-3/8	1127
Q49TB2550	47-3/8	1203
Q58TB2550	55-1/4	1403
Q59TB2550	59	1499

Connection Type		
SW Socket Weld		
FL	Flange = ½"-2500# RTJ	

Connection Location		
CH Side/Side Connected		
тсн	Top Side/Bottom Connected	
BCH	Bottom Side/Top Connected	

	GAUGE CONNECTION OPTIONS		
	SOCKETWELD FLANGE		
		(GAUGE TO VALVE FLANGED OPTIONAL)	
	Connection Sizes Available: 3/4" 1"		
<b><u>Ouotation Information Required:</u></b> Maximum Operating Steam Pressure Steam Water Connection Size & Type			

Valve Requirements



### Series Q66B & Q67B Boiler Gauge Valves

These valves have a dropped forged body with a cast iron hand-wheel. Longevity is assured a stainless seat, stainless steel stem and stainless steel ball check. All carbon steel parts are coated with a rust inhibitor. **Q66B Valve:** Offset pattern with female NPT gauge connection. **Q67B Valve:** Offset pattern with union gauge connection. **Pressure rating 4000 lbs @ 100°F, 1500 lbs @750°F** 

#### Common features for series Q66B and Q67B.

**Safety shut-off**. The valves are equipped with stainless steel ball check to shut off flow automatically in case of glass breakage.

Offset pattern. These valves are designed so that the gauge and the drain connections are offset 7/8 inch from the centre line of the vessel connections. Due to offset pattern, the gauge could be cleaned by removing the drain plug or valve without disassembling the gauge. Quick close feature. The Q66 and Q67 Valves are both quick closing stem. Quick closing valve stems have quadruple thread for full closing or opening in <sup>1</sup>/<sub>4</sub> turn

**Regrindable**, renewable seat. The seat may be reground. The seat may be renewed

### Extra features for Q67B valve compared to Q66B valve.

The Q67 valve has a union gauge connection which allows a top or bottom gauge to be turned to any desired angle for the most suitable visibility. It also allows for removal of the gauge without removing the valves. This feature saves time when the gauge must be cleaned.

#### Standard connections for Q66B and Q67B series.

Vessel -3/4 inch NPT male Drain -1/2 inch NPT female Gauge -1/2 inch NPT female

#### **Optional connection**

 Vessel -1/2 inch male or female -3/4 inch female -socket weld, flanged or solid shank
Gauge -3/4 inch female for Q66B -1/2 inch or ¾ inch male on union for Q67B -1/4 inch or ¾ inch female on Q67B -socket weld, flanged or solid shank



Q67B BOILER GAUGE VALVES





JG€ÁT Œ/PÒÙUÞÁÓŠXÖÁÒŒÙV TOÙÙÙÙŒVÕŒÉÚÞVŒÜQJÉÂԌތÖŒ ŠIYÁQÜÌ ÚPKÁJ€ÍËFIË€€GI ØŒÝKÁJ€ÍËFIË€ÌJJ

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