

HANCOCK

Forged Steel Class 2500 Instrument Needle Valve.

Features

- Top entry design, allows parts removal without removing valve from line.
- One-piece forged body, no gasket leaks.
- Integral needle-point stainless steel disc for accurate control.
- Integral hardened seats.
- Heavy duty, forged one-piece yoke for maximum rigidity.
- One-piece forged gland flange allows for packing replacement without disassembling valve.
- Corrosion resistant trim.
- Available in socket weld and threaded ends for pressures up to 6000 psig at 100°F.



Applications

- Instrument panels
- Gauge isolation
- Gauge and Instrument by-pass
- Metering
- Regulator load and bleed
- Drains and vents

Available Types

- 8130S-1 T-Type, Threaded End to ANSI B1.20.1
- 8130W-1 T-Type, Socket Weld to ANSI B16.11

Sizes

1/4", 3/8", 1/2"

Features

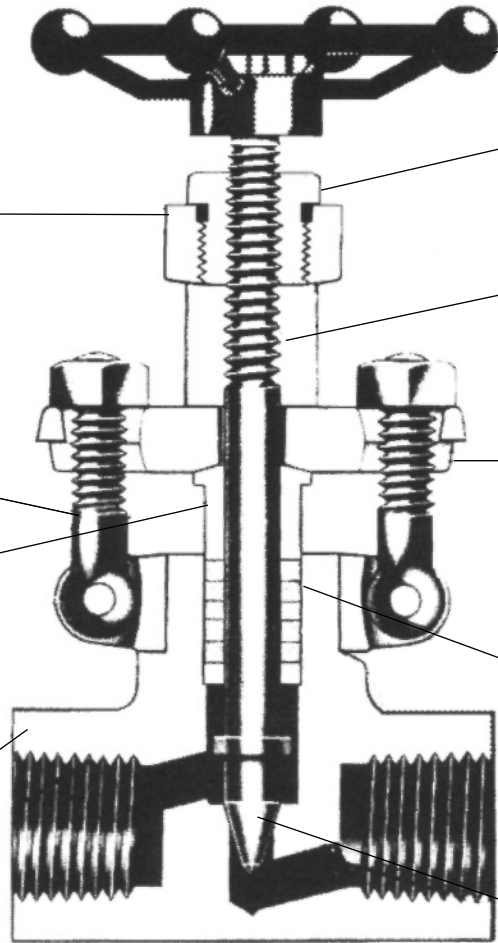
Top Entry Design, all parts removable from the top without removing valve from line.

Forged Yoke, one-piece design for maximum rigidity.

Swing Bolt, permit unobstructed packing replacement.

Packing Gland, allows easy replacement and recompression of packing.

One-Piece Forged Body, eliminates body-bonnet gasket and any possibility of leakage.



Sure Grip Handwheel, for ease of operation.

Stainless Steel Thread Bushing, maximum strength and long wear.

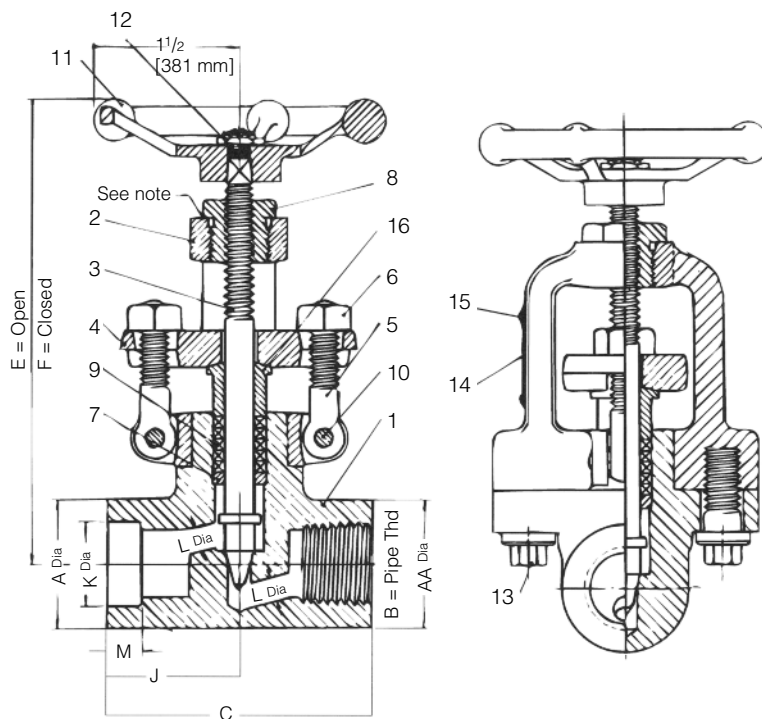
Stainless Steel Stem, hardened for durability. Fine threads allow precise control.

Bolted Gland Flange, one-piece forging allows for packing replacement without disassembling valve.

Deep Stuffing Box, allows use of various types of packing. Standard packing is GRAFOIL®.

Integral Needle-point Disc, assures accurate control.

Specifications



Materials of Construction

No.	Part	Material	Specification
1	Body	Forged Steel	SA182 Gr. F6a ³
2	Yoke	Forged Steel	SA105 (Phosphated)
3	Stem	Stainless Steel	410 Stainless Steel
4	Packing Gland Flange	Carbon Steel	A105 Carbon Steel (Phosphated)
5	Packing Gland Bolt	Stainless Steel	410 Stainless Steel, Cadmium Plated
6	Packing Gland Bolt Nut	Stainless Steel	Steel, Cadmium Plated
7	Packing Stop Ring	Stainless Steel	410 Stainless Steel
8	Thread Bushing	Stainless Steel	410 Stainless Steel
9	Packing	Compressed Graphite	Corrosion Inhibited
10	Packing Gland Bolt Pin	Stainless Steel	410 Stainless Steel
11	Handwheel	Ductile Iron (Phosphated)	ASTM A47 Gr. 32510
12	Handwheel Nut	Steel	Lock-Type
13	Yoke Cap Screw	Alloy Steel	ASTM A193 Gr. B7
14	Marker Plate	Etched Aluminum	Commercial
15	Drive Screw	Steel	Commercial
16	Packing Gland	Stainless Steel	410 Stainless Steel

Notes

1. Threaded ends to ANSI B1.20.1.
2. Socket weld ends to ANSI B16.11.
3. Also available in 316 SS.

Dimensions, Weights and C_v Values

Size	A	AA	B	C	E	F	J	K	L	M	Weight	C _v
1/4"	7/8	15/16	1/4	2 ³ / ₄	5 1/32	4 ²³ / ₃₂	1 ³ / ₈	0.555	1/4	3/8	2.25	0.7
3/8"	1 1/32	15/16	3/8	2 ³ / ₄	5 1/32	4 ²³ / ₃₂	1 ³ / ₈	0.690	1/4	3/8	2.25	0.7
1/2"	1 ⁵ / ₁₆	1 ⁵ / ₁₆	1/2	2 ³ / ₄	5 1/32	4 ²³ / ₃₂	1 ³ / ₈	0.855	1/4	3/8	2.25	0.7

Ordering Information

Figure Numbers

Hancock forged steel valves are available with a variety of standard and special materials, trims and operators. The diagram below is an explanation of Hancock figure numbers.

1/2" 8130 W — 1 - 2476



Material Combination Suffix

None – F6a Body, SA105 Yoke, 13 Cr. Trim
-2476 – 316 Body, F6a Yoke, 13 Cr. Trim

Design Change Number

1

End Connection

S – Threaded End
W – Socket End

Valve Type Number

8130 – Instrument Needle Valve, No Bonnet, OS&Y

Nominal Valve Size

1/4"
3/8"
1/2"

How to Order

When ordering Hancock valves, please specify:

- A. Quantity Required
- B. Valve Size
- C. Figure Number - See Below
- D. Valve Type - Instrument
- E. Pressure Class
- F. Operator Type - Manual
- G. Valve Style - No Bonnet
- H. Valve Materials - Body, Trim, Yoke, See Table
- I. End Connection - Threaded, Socket Weld
- J. Code Requirements - ASME/ANSI B16.34; ASME Boiler and Pressure Vessel Code, Section I
- K. Service Conditions - Operating pressure, operating temperature, design pressure, design temperature, flow media, flow capacity (if required)

Body and Trim Material Combinations

Variation	Standard F6a Body 13% Cr. Trim	Stainless Steel with Alloy Trim 316 Body/F6a Yoke 13% Cr. Trim
Suffix No. Valve Types Available	None 8130S 8130W	-2476 8130S 8130W
Body	SA182 Gr. F6a SS	SA182 Gr. F316 SS
Yoke	SA105	SA182 Gr. F6a SS
Seat	Integral	Integral
Integral	410	410
Stem-Disc	SS	SS
Packing Gland	410 SS	410 SS
Gland Flange	410 SS	410 SS
Body Bolting	A193 Gr. B7 Alloy Steel	A193 Gr. B7 Alloy Steel
Packing	Compressed Graphite - Corrosion Inhibited	

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