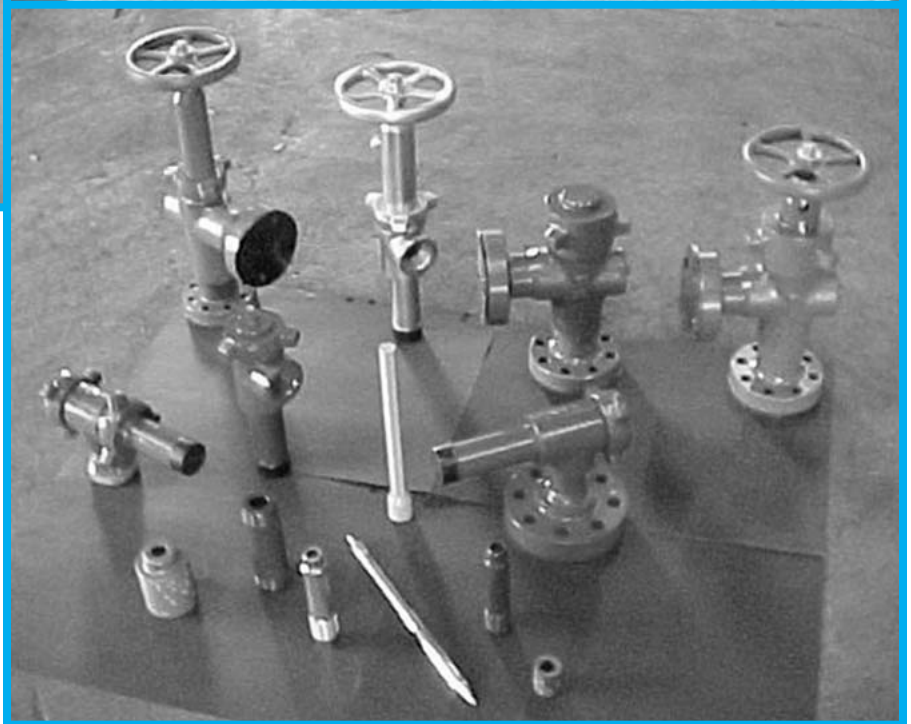
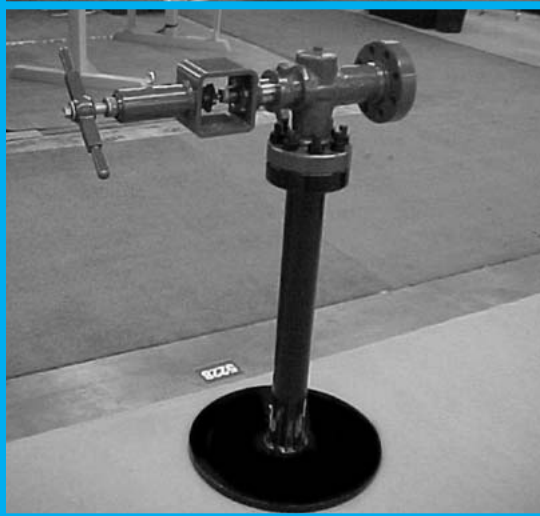
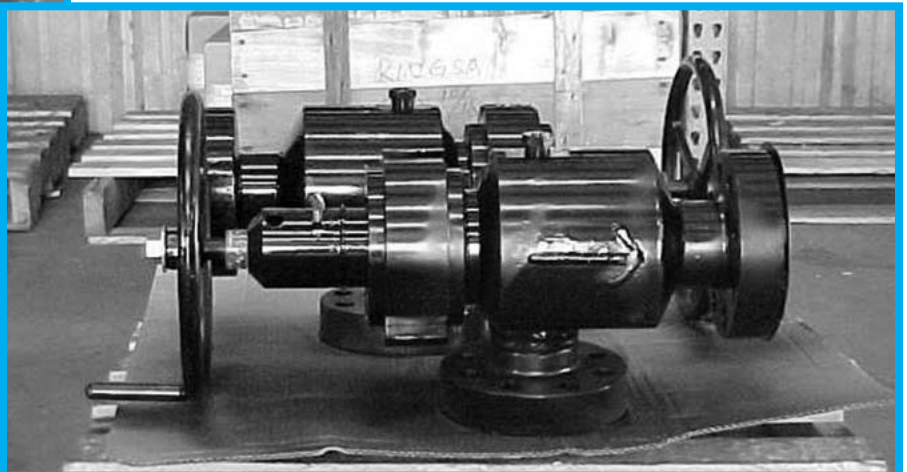


HOUSTON OILFIELD EQUIPMENT, INC.

— **PRODUCT CATALOG 2003** —

FLOW CONTROL EQUIPMENT



**LICENSE
6A-0487**

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MANUFACTURING CAPABILITIES

Houston Oilfield Equipment, Inc.'s objective is to manufacture quality products at competitive prices. The company offers chokes of actual OEM dimensional standards as well as those of custom dimensions. All manufacturing is accomplished with the use of modern CNC equipment and tooling. In addition to choke assemblies, parts for many types of chokes are also manufactured here.

The company employs a quality system which is approved by the American Petroleum Institute under License #6A-0487. Products with ABS and DNV certification may also be provided upon request.

Houston Oilfield Equipment, Inc. has full capabilities of satisfying all of your manufacturing needs.

— CHOKE SELECTION INFORMATION —**SPECIFICATIONS**

Type: Positive and Adjustable
Body Design: Angle Type
End Connections: 1" LPT, 2" LPT
Flanged RTJ and RF
Union Ends
Design Pressure: 2000 PSI CWP
3000 PSI CWP
5000 PSI CWP
10,000 PSI CWP
15,000 PSI CWP
Trim Sizes: 1/2", 3/4", 1", 2"
Trim Materials: Alloy Steel, Stellite
Stainless Steel, Inconel
Stainless Steel Tungsten Carbide

FEATURES AND BENEFITS

- Hammerlug bonnet & cap connections
- Forged Steel bodies - Alloy and 410 SS
- Choice of end connections
- Available H2S Service (NACE MR-01-75)
- Easily converted in field
- Choice of trim materials
- Choice of orifice sizes
- Grease fittings on Adj. Model Bonnets
- Thumb screw for "locking" stem
- 1/2" NPT test port on flanged models
- FMC and H2 profile centerline dimensions
- Easy to read indicator in 64ths inch
- Readily available parts
- Low Maintenance

With so many choices, selection of the proper choke for the job does not have to be difficult. Turn to Houston Oilfield Equipment, Inc. for prompt customer service and a quality manufactured product.

Houston Oilfield Equipment, Inc. is recognized throughout the oil and gas industry as a manufacturer of quality choke products. Our company produces choke assemblies of the FMC and H2 type profiles which are fully interchangeable with those of other manufacturers of the same. This design is a time proven one which has been employed in many types of service within the industry.

Our line of chokes is ideally suited for a broad range of applications. These include wellheads, production manifolds, well testing, choke and kill manifolds, and well clean-up operations.

Chokes may be ordered in both positive and adjustable models. Each model utilizes a hammerlug type connection

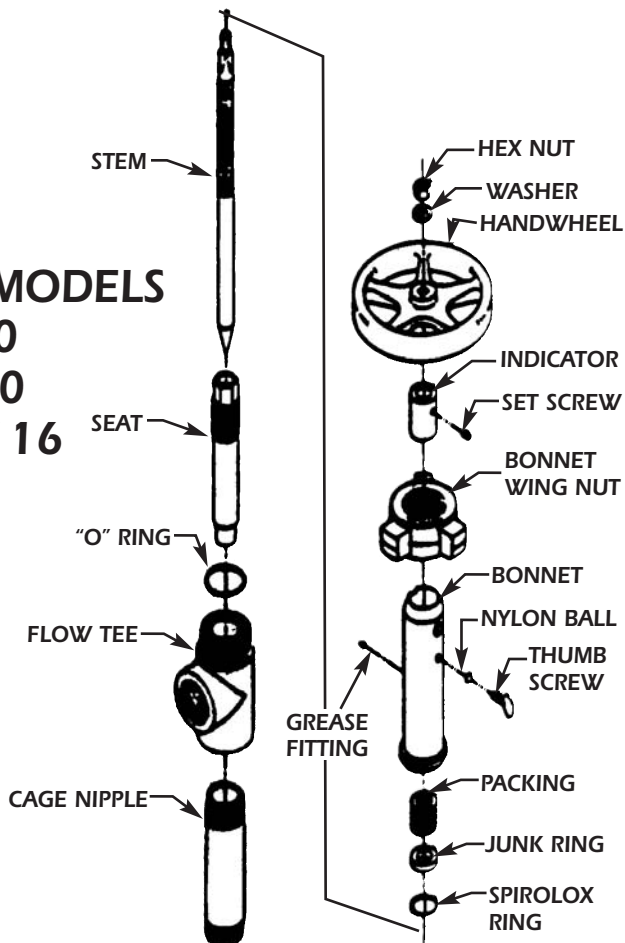
which facilitates the quick changing of flow beans and trims. In addition, each choke is easily converted from positive to adjustable or adjustable to positive while the choke body remains installed in the line. This means more time working and less time waiting as replacement parts are readily available from your local supply store.

Your selection of materials for choke bodies include alloy steel and 410 stainless steel. All FMC profile flanged models employ bodies of forged steel construction with integral flanges while fabricated versions are also available. The standard materials used for our threaded bodies are forged alloy steel with carbon steel also available upon request.

POSITIVE AND ADJUSTABLE CHOKES

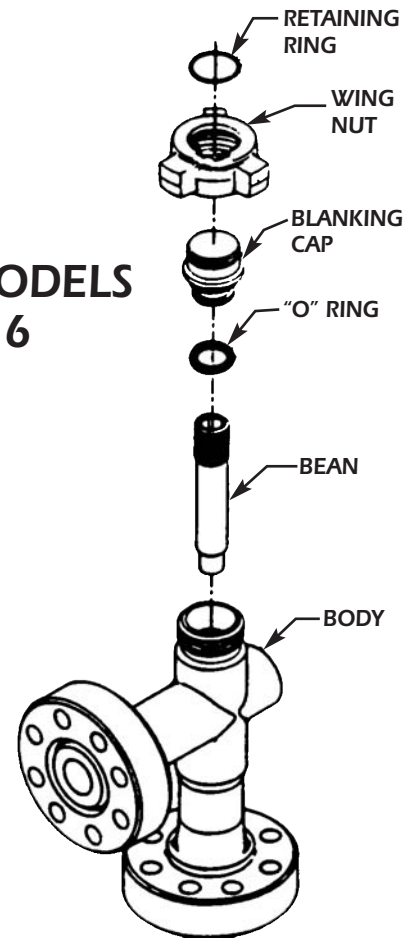
TYPICAL THREADED ADJUSTABLE CHOKE

Ref: MODELS
H0-60
HN-60
HFT-116



TYPICAL FLANGED POSITIVE CHOKE

Ref: MODELS
HFT-116
HT-1
HPC



HOW TO ORDER CHOKES

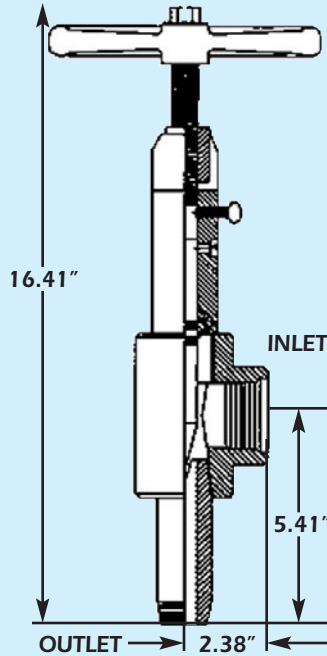
1. Type of Choke - Positive or Adjustable.
2. Specify Working Pressure.
3. Type of Inlet and Outlet Connections; Size and Pressure Rating.
4. Specify Trim Size (Orifice Required).
5. Trim Material - Alloy Steel, Tungsten Carbide, Inconel, Stellite, SS.
6. Specify Heater Choke if applicable.

NOTE: Beans for Positive Chokes are not furnished with assemblies and must be ordered separately.

**— THREADED CHOKE ASSEMBLIES —
FMC PROFILE**

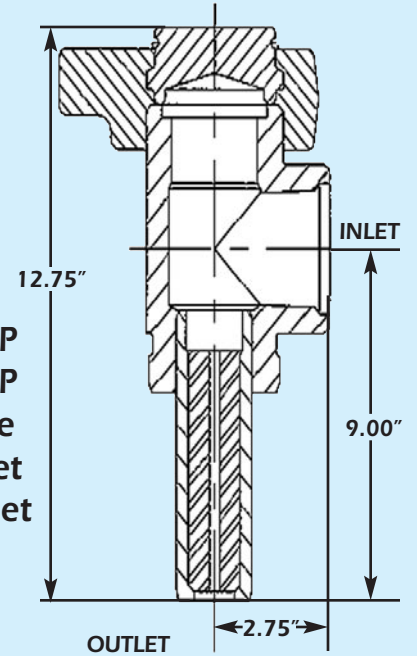
TYPE H-29

2,000 PSI CWP
Adjustable Choke
with 2" LP Inlet
and 2" LP Outlet



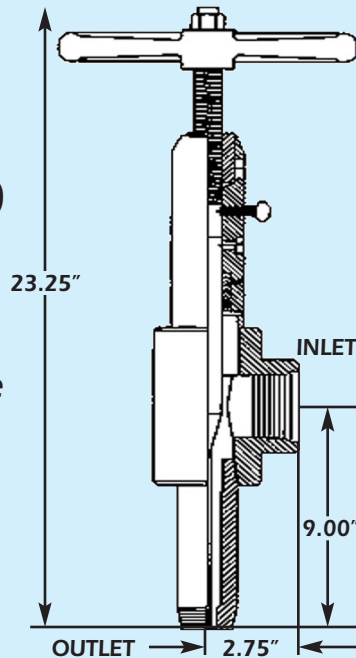
**TYPE
H-FT-108**

3,000 PSI CWP
5,000 PSI CWP
Positive Choke
with 2" LP Inlet
and 2" LP Outlet



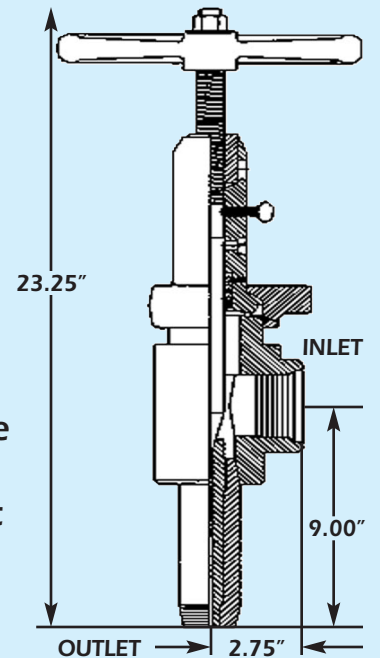
TYPE HO-60

3,000 PSI CWP
Adjustable Choke
with 2" LP Inlet
and 2" LP Outlet



**TYPE
H-N-60**

3,000 PSI CWP
5,000 PSI CWP
Adjustable Choke
with 2" LP Inlet
and 2" LP Outlet



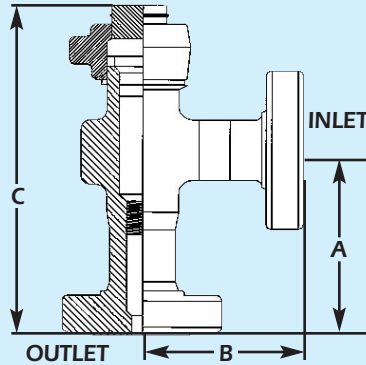
H-29 and H-O-60 not acceptable for H2S service

H-FT-108 & H-N-60 also available with 1" LP connections and 3/4" or 1" trim

NOTE: Positive Chokes not furnished with flow beans, must order separately.

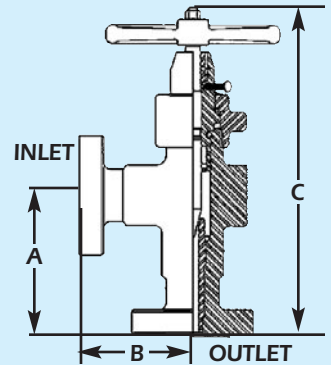
FLANGED CHOKE ASSEMBLIES

**TYPE H-PC
POSITIVE
CHOKE**



SIZE	CWP	A"	B"	C"
2"	5,000	9.38	7.50	14.13
2 9/16"	5,000	9.38	9.38	15.56
1 13/16"	10,000	9.38	7.50	14.13
2 1/16"	10,000	9.38	7.50	16.31
2 9/16"	10,000	9.38	9.38	15.56
1 13/16"	10,000	9.38	7.50	14.00

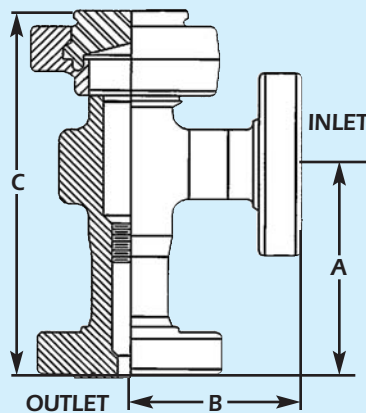
**TYPE H-JWA
ADJUSTABLE
CHOKE**



SIZE	CWP	A"	B"	C"
2"	5,000	9.38	7.50	20.81
2 9/16"	5,000	9.38	9.38	20.81
1 13/16"	10,000	9.38	7.50	21.06
2 1/16"	10,000	9.38	7.50	21.38
2 9/16"	10,000	9.38	9.38	20.81

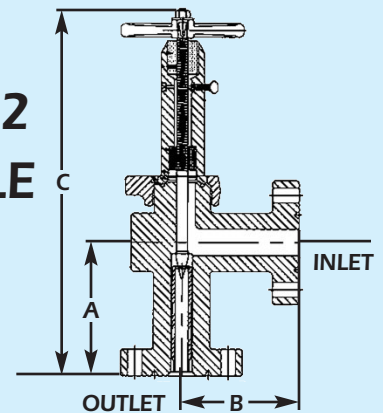


**TYPE H-T-1
POSITIVE
CHOKE**



SIZE	CWP	A"	B"	C"
2"	2,000	9.38	7.50	14.50
2"	5,000	9.38	7.50	13.88
2"	150 ANSI	9.38	7.50	14.13
2"	300 ANSI	9.38	7.50	16.31
2"	600 ANSI	9.38	7.50	14.13

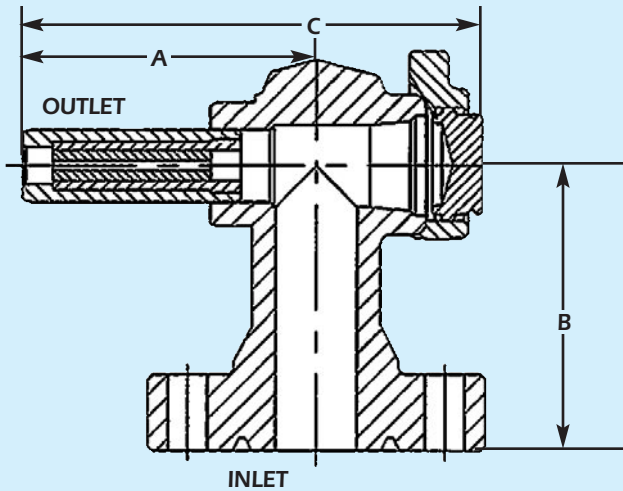
**TYPE H-N-62
ADJUSTABLE
CHOKE**



SIZE	CWP	A"	B"	C"
2"	2,000	9.38	7.50	24.38
2"	5,000	9.38	7.50	24.38
2"	150 ANSI	9.38	7.50	24.38
2"	300 ANSI	9.38	7.50	24.38
2"	600 ANSI	9.38	7.50	24.38

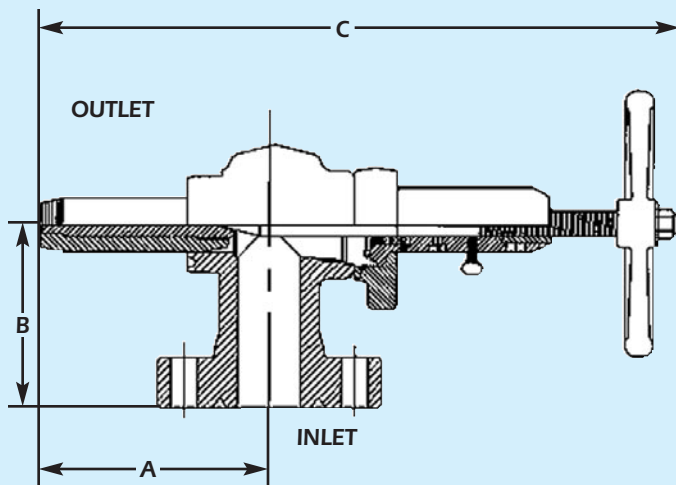
**FLANGED CHOKE ASSEMBLIES
FMC PROFILE**

**TYPE H-FT-116-F
POSITIVE CHOKE**



SIZE	CWP	A"	B"	C"
2"	3,000 And 5,000	8.75	6.63	13.25

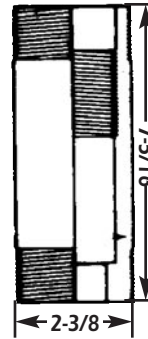
**TYPE H-FT-116-F
ADJUSTABLE CHOKE**



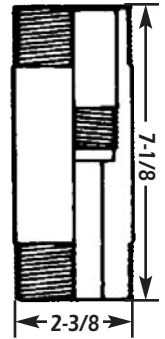
SIZE	CWP	A"	B"	C"
2"	3,000 And 5,000	8.75	6.63	23.25

**CAGE NIPPLES
POSITIVE AND
ADJUSTABLE CHOKES**

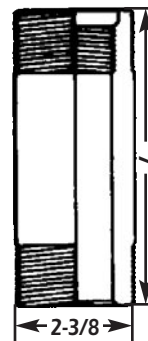
TYPE
OCT FC -140
PART NO.
1041



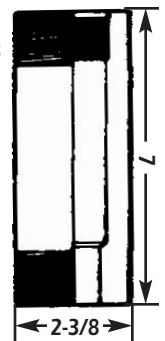
TYPE
TC-1018
PART NO.
1121



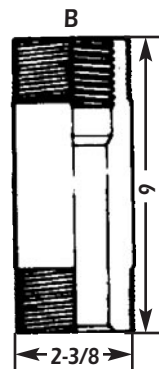
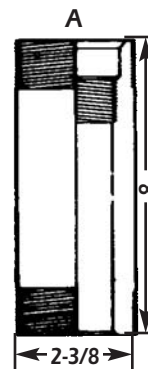
TYPE
McEVOY R
(NO. 10530)
PART NO.
1095



TYPE
GULFCO RB
(NO. RB-2,
RB-3)
PART NO.
1098

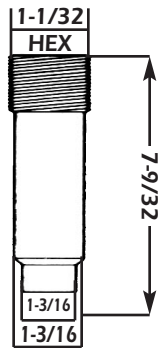


TYPE
A. GRAY-60
B. GRAY-80
PART NO.
1096
1097



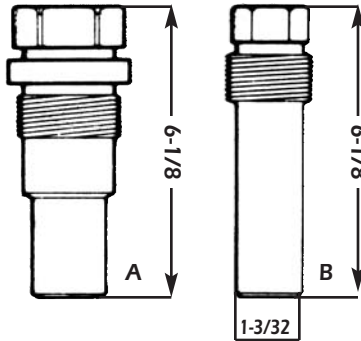
POSITIVE FLOW BEANS

Oil Center Tool



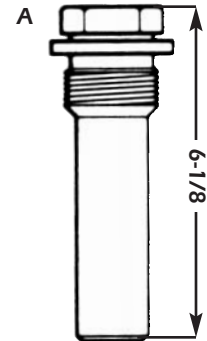
Alloy / Steel **PN-1SIZE**
 Alloy / Ceramic **PN-2SIZE**
 SSTC (PL) **PN-3SIZE**
 SSTC (FL) **PN-4SIZE**

Thornhill - Craver



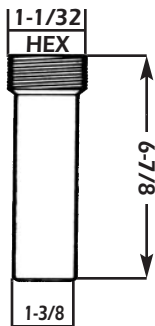
Alloy / Steel **PN-25 SIZE**
 Alloy / Ceramic **PN-27 SIZE**
 SSTC (FL) **PN-26 SIZE**

Cameron Iron Works



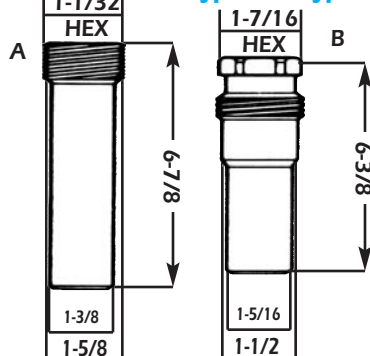
Alloy / Steel **PN-23 SIZE**
 Alloy / Ceramic **PN-20 SIZE**
 SSTC (FL) **PN-34 SIZE**

McEvoy & Hughs Atlas



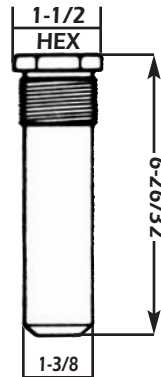
Alloy / Ceramic **PN-24 SIZE**

Gray Tool Type 60 Type 80



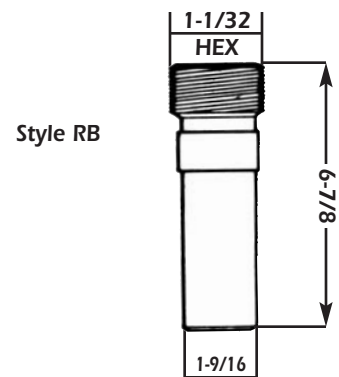
A. Alloy / Ceramic **PN-16 SIZE**
 B. Alloy / Ceramic **PN-18 SIZE**

Gulfco



Alloy / Steel **PN-1098**
 Alloy / Ceramic **PN-9 SIZE**

National Supply



Alloy / Steel **PN-35 SIZE**
 Alloy / Ceramic **PN-36 SIZE**

MISCELLANEOUS PARTS

CHOKE BEAN WRENCHES

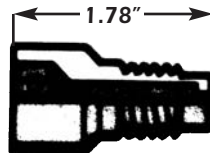


Type FC-140
 Bean & Seat Wrench
 Part No. 1050

Type FC-143
 Flow Bean Wrench
 Part No. 1122

All orifice sizes expressed in increments of 1/64" fractional sizes of 1/2 of 1/64" available from 2/64" to 20/64" hardened steel, ss.

Specify Orifice Size: **PN 39 SIZE**



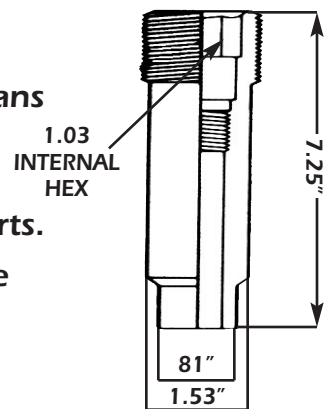
Master Bean: Oil Center Tool

For standard flow beans

For use with type FC-140 cage nipple and FC-142 flow inserts.

Also fits similar profile chokes supplied by other manufacturers.

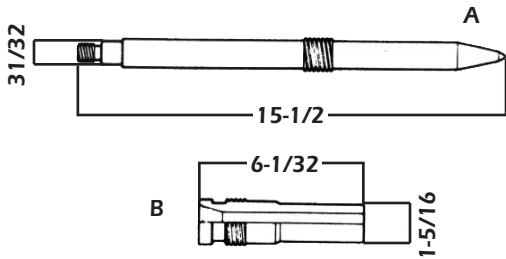
PN: 1419



TYPE FC-141

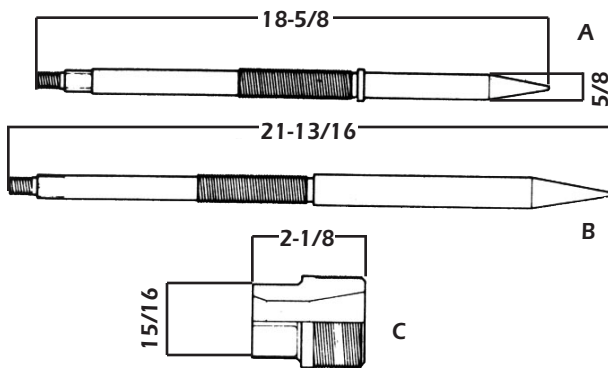
PARTS FOR ADJUSTABLE CHOKES

GRAY TOOL CO.



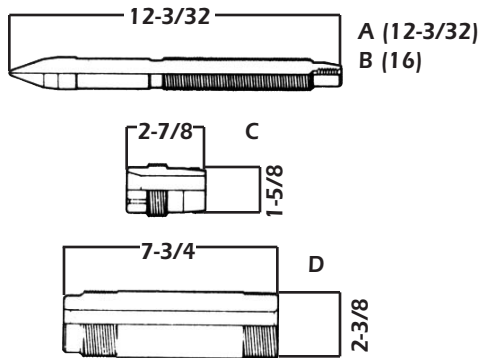
Description	Equivalent Part No.	Hardened Alloy Steel	Tungsten Carbide Stainless
A - Stem 8711, 8727 Adj. Choke	20-353/30702	1432	1433
B - Seat Type 80	91022/30716	1434	1435

McEVOY



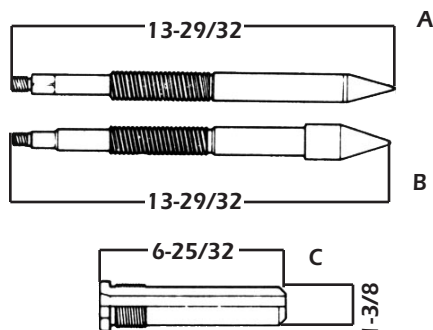
Description	Equivalent Part No.	Hardened Alloy Steel	Tungsten Carbide Stainless
A - Stem for Type A, B, and Dual	14715	1436	1437
B - Seat for A, B, and Dual	14288	1438	1439

NATIONAL SUPPLY



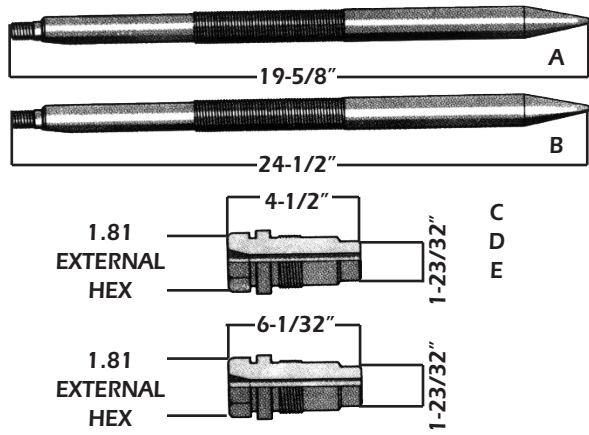
Description	Equivalent Part No.	Hardened Alloy Steel	Tungsten Carbide Stainless
A - Stem for 2" Type F, G and GR Chokes	522114	1440	1441
B - Stem for 2" Type F 2900 Series	522164	1442	1443
C - Seat for Type F, GR	522105	1444	1445
D - Choke Nipple Seat Type G	522113	1446	N/A

GULFCO



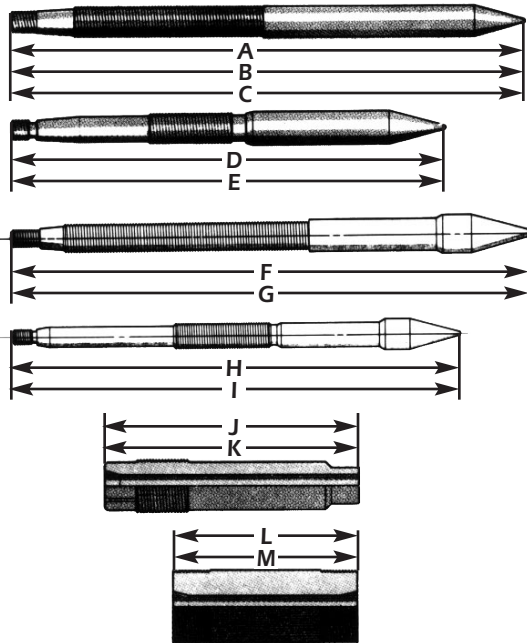
Description	Equivalent Part No.	Hardened Alloy Steel	Tungsten Carbide Stainless
A - Stem for AB - 75 Choke	AB - 2	1447	1448
B - Stem for for AB - 100 Choke	AB - 2A	1449	1221
C - Seat for AB - 75 Choke	AB - 3	1450	1451
D - Seat for AB - Choke	AB - 3A	1452	1210

PARTS FOR ADJUSTABLE CHOKES



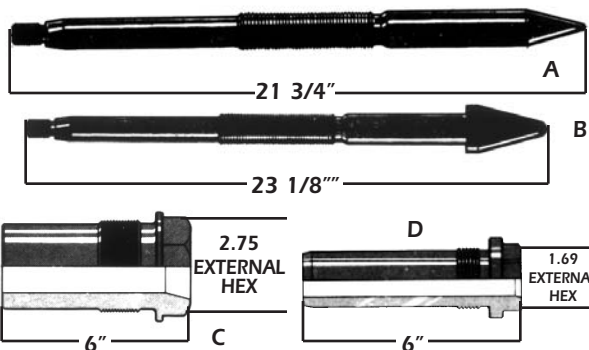
THORNHILL-CRAVER TYPE

Description	Hardened Alloy Steel	Tungsten Carbide Stainless
A- Stem - Adjustable Wing Valve Choke	1100	1099
B- Stem - Long Nose Heater Choke	1102	1101
C- Seat - 3,000 & 5,000 PSI CWP Chokes, 1/2" Orifice	1106	1103
D- Seat - 3,000 & 5,000 PSI CWP Chokes 3/4" Orifice	1107	1104
E- Seat - 3,000 & 5,000 PSI CWP Chokes 1" Orifice	1108	1105
F- Seat - 10,000 PSI CWP Choke, 1/2" Orifice	1125	1112
G- Seat - 10,000 PSI CWP Choke, 3/4" Orifice	1116	1113
H- Seat - 10,000 PSI CWP Choke, 1" Orifice	1117	1114



OIL CENTER TOOL TYPE THREADED & FLANGED BODY CHOKES

Description	Over All Length	Orifice Size	Hardened Alloy Steel	Tungsten Carbide Stainless
A- Stem HO-60, HN-60, HT-116-F 3-5,000 CWP	16 3/4"	3/4"	1018	1028
B- Stem H-N-62, 2-5,000 CWP	18"	3/4"	1059	1061
C- Stem H-29 2,000 CWP	14 3/32"	3/4"	1002	N/A
D- Stem H-JWA 5-10,000 CWP	14 15/32"	3/4"	1068	1070
E- Stem H-JWA 15,000 CWP	19 1/8"	3/4"	1455	1456
F- Stem H-O-60, HN-60, HFT-116F 3-5,000 CWP	16 3/4"	1"	1027	1029
G- Stem H-N-62 2-5,000 CWP	18"	1"	1060	1062
H- Stem H-JWA 5-10,000 CWP	14 15/16"	1"	1068	1070
I- Stem H-JWA 15,000 CWP	19 1/8"	1"	1457	1458
J- Seat Type N & H-JWA	8 1/4"	3/4"	1030	1032
K- Seat Type N & H-JWA	8 1/4"	1"	1031	1033
L- Seat Nipple H-O-60	6"	3/4"	1025	N/A
M- Seat Nipple H-29	4"	3/4"	1014	N/A



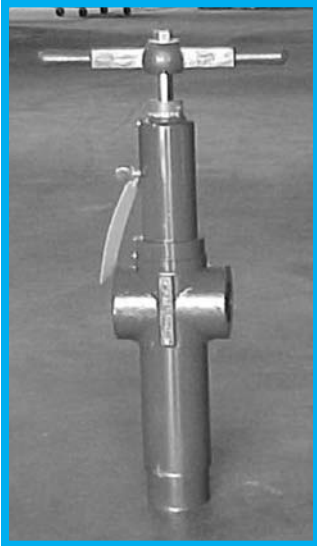
H2 CAMERON TYPE

Description	Stainless Steel	Tungsten Carbide Stainless
A - Stem - 1" f/3" H2	2034	1460
B - Stem - 2" F/3" H2	1509	1427
C - Seat - 1" F/3" H2 Long	2035	1459
*D - Seat - 1" F/2" H2	1655	1203
Seat - 2" F/3" H2 Long	2028	1594
Seat 2" F/3" H2 Short (3.30" Length)	1514	1429

*Requires adapter for use in 3" & 4" H2

HEATER CHOKE

The low cost HEATER CHOKE with quality and a time proven design.



SPECIFICATIONS

End Connections: 2" threaded
Socket Weld
Butt-Weld

Trim Sizes: 1/2", 3/4", 1"

Body Design: Angle Type, Long Nose

Trim Materials: Alloy Steel
SS Tungsten Carbide

Design Pressure: 6500 psi cwp
7800 psi cwp
10,000 psi cwp

NOTE: STEM SEATS AVAILABLE W/.500, .750,
1.00 DIAMETER BORES

.500 DIAMETER - PART NO. 1106

.750 DIAMETER - PART NO. 1107

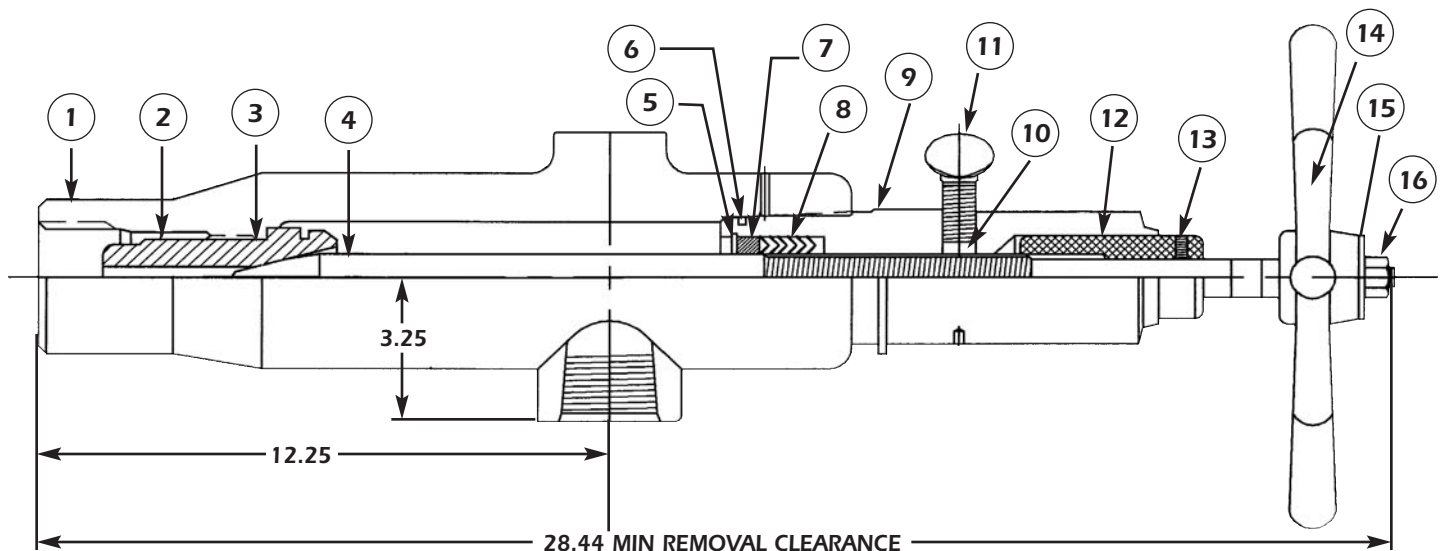
1.00 DIAMETER - PART NO. 1108

FEATURES AND BENEFITS

- Threaded bonnet with O-ring
- Available in NACE (MR-01-75)
- Safety pressure relief vent in body
- Choice of end connections
- Body A-487-4A with high tensile and yield strengths
- Interchangeable with Thornhill Craver Economy Heater Choke
- Upgradeable to 7800 psi cwp

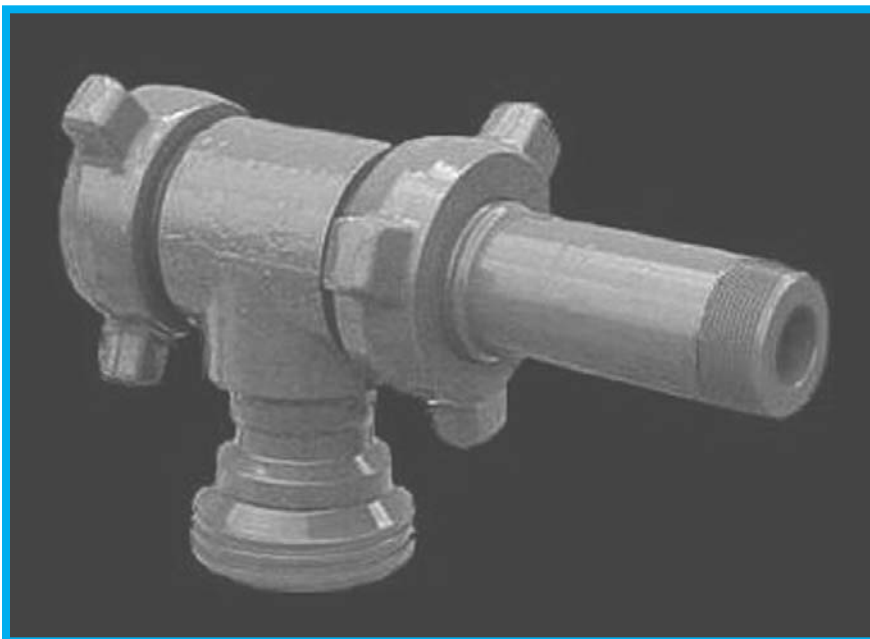
- When you select a 6500 psi **ECONOMY HEATER CHOKE** from **Houston Oilfield Equipment, Inc.** you can be assured of high quality at a very competitive price. Our long nose Heater Choke is manufactured to the most rigid specifications with special emphasis on safety and reliability. It is built upon a time proven design that has been employed by both end users and fabricators in countless trouble-free installations.
- The function of a **Heater Choke** is to expand the high pressure gas within the tubing coils of an indirect fired heater. The coil attaches to the choke at its outlet end which is immersed in the water bath of the heater. The resultant generation of heat minimizes the extreme refrigerating action which will occur as the high pressure gas expands.
- Get more value for your dollar when you specify the 6500 psi **ECONOMY HEATER CHOKE** from **Houston Oilfield Equipment, Inc.**

MARK	NAME OF PART	PART NO
1	BODY 2" LPT (TC-4373)	1163
2	SEAT, 3/4 HS	1107
3	SEAT GASKET (TC-1016)	1165
4	STEM, HS (TC-899)	1102
5	RETAINER RING (TC-959)	1161
6	O-RING, BUNA	1160
7	JUNK RING (TC-895)	1144
8	STEM PACKING (TC-896)	1143
9	BONNET, ALLOY STEEL	1158
10	NYLON BALL	1004
11	THUMB SCREW (TC-529)	1162
12	INDICATOR 3/4" (TC-530)	1417
13	SET SCREW F/INDICATOR	1007
14	HANDWHEEL	9000
15	WASHER, FLAT 5/8"	1023
16	HEX NUT 5/8"	1043



POSITIVE AND ADJUSTABLE CHOKES WITH REMOVABLE HAMMER WING UNION CAGE NIPPLE ASSEMBLY

HOE, Inc. is pleased to announce the arrival of its removable wing union cage nipple assembly. This assembly may be fitted to any existing HN-60 adjustable choke or HFT-108 positive choke assembly. It employs the same time proven hammer nut design which is used extensively throughout the oil and gas industry. In fact, the hammer nut is interchangeable with the ones currently being used to secure the bonnet and blanking cap. On the removable wing union assembly the hammer nut secures the cage nipple to the body outlet end. This allows the cage nipple to be changed in a minimal amount of time with only the use of a simple shop hammer. Say farewell to the often tedious job of removing a threaded type cage nipple and re-installing with a new one. Choke beans and seats can now be changed much quicker which means less down time and increased production. Consider this on your next requirement for an HN-60 adjustable choke or HFT-108 positive choke assembly. You will be glad you did.

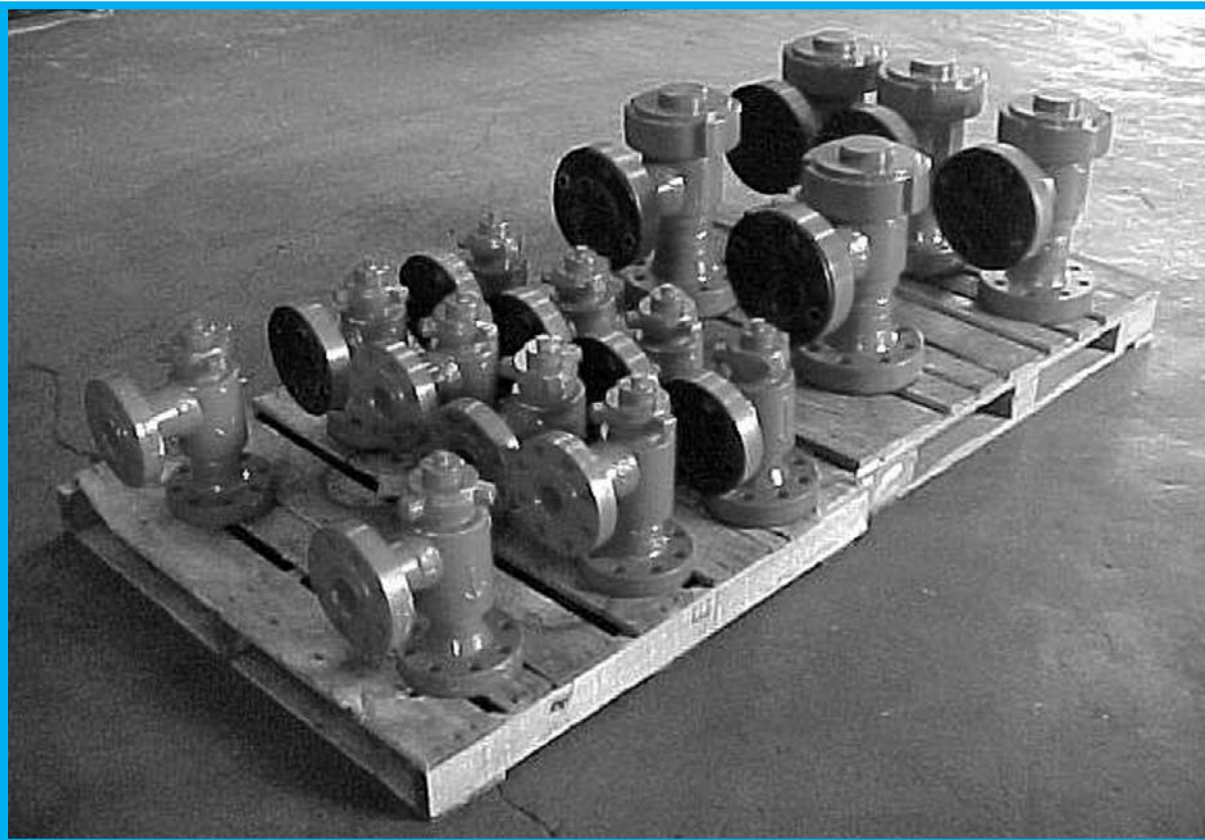


SPECIFICATIONS

Type: Positive and Adjustable
 End Connections: Threaded, Butt Weld
 Design Pressure: 5M CWP
 Service Type: H2S or Standard
 Materials: Alloy, Stainless Steel
 Trim Sizes: 3/4", 1"

FEATURES AND BENEFITS

- Uses standard HN-60 Hammer Nut Forged Steel
- Minimal down time for change-out
- Simple conversion from conventional assembly
- No special tools needed
- Field weldable materials
- Readily available spare parts
- Forged steel tee body

-TYPE H-H2 POSITIVE AND ADJUSTABLE CHOKES-

The type H H2 Choke from Houston Oilfield Equipment features the needle and seat design to allow fully adjustable flow. The adjustable choke is operated by rotating the hand-wheel in order to obtain a desired flow rate, or a specified downstream pressure. The H H2 is also available in a positive or fixed orifice design. In this model a flow bean is installed in the choke to achieve the desired flowing conditions.

SPECIFICATIONS

Type: Positive and Adjustable

Body Design: Angle Type

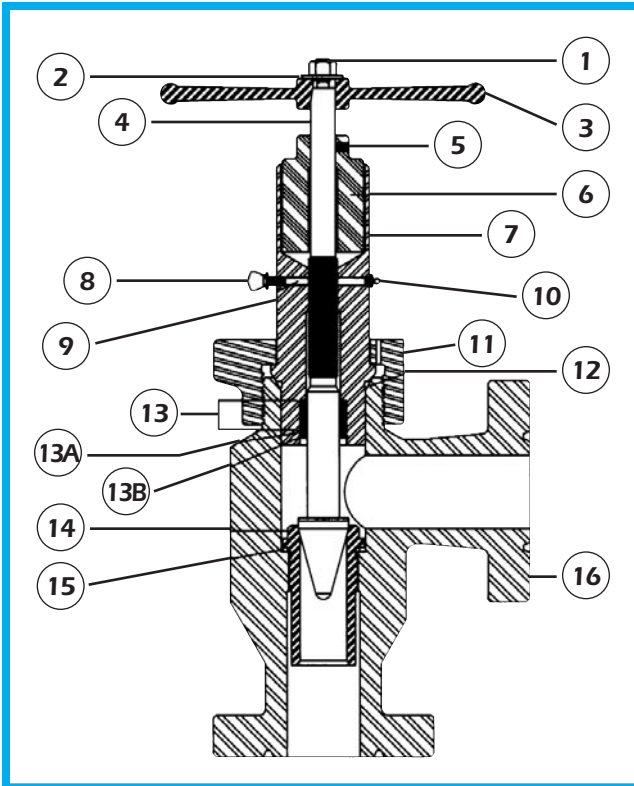
End Connections: Flanged RTJ and RF
Threaded
Union Ends

Design Pressure: 2000 PSI CWP
3000 PSI CWP
5000 PSI CWP
10,000 PSI CWP
15,000 PSI CWP

TRIM SIZES: 3/4", 1, 1 1/2", 2"

TRIM MATERIALS: Alloy Steel, Stellite
Stainless Steel, Inconel
Stainless Steel Tungsten Carbide

**TYPE H-H2 ADJUSTABLE CHOKES
MAX 2" ORIFICE**



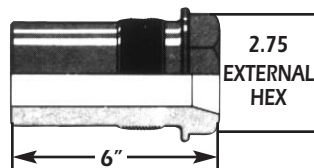
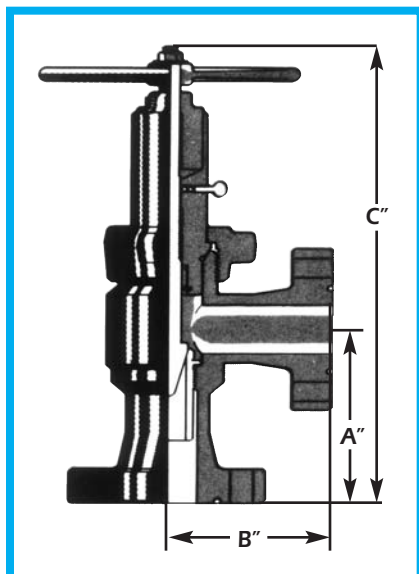
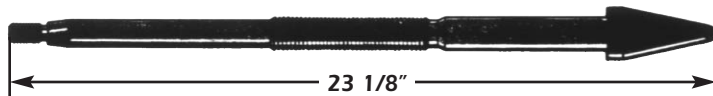
**TYPE H-H2
ADJUSTABLE CHOKES
MAX 2" ORIFICE**

FLANGE SIZE	CWP	A"	B"	C"
3"	3,000 API	11.38	8.88	30.00
3"	5,000 API	11.38	8.88	30.00
3 1/16"	10,000 API	11.75	10.38	30.25
4 1/16"	10,000 API	11.50	9.94	30.12
3"	600 ANSI RTJ	11.38	8.88	30.00

**PARTS H-H2
ADJUSTABLE CHOKES
MAX 2" ORIFICE**

ITEM	DESCRIPTION	QTY.	PART NUMBER
1	Hex Nut	1	1024
2	Flat Washer	1	1023
3	Handwheel	1	1521
4	Stem HS 2"	1	1530
	Stem SS 2"	1	1590
	Stem SSTC 2"	1	1427
5	Set Screw	1	1535
6	Indicator 2"	1	1483
7	Bonnet	1	1510
8	Thumbscrew	1	1529
9	Nylon Ball	1	1004
10	Grease Fitting	1	1013
11	Hammer Nut 5M	1	1511
	Hammer Nut 10M	1	1512
12	O-Ring	1	1528
13	Packing	1	1505
13A	Junk Ring	1	1614
13B	Retaining Ring	1	1484
14	Seat HS 2"	1	1513
	Seat SS 2"	1	1514
	Seat SSTC 2"	1	1429
15	Seat Gasket	1	1464
16	Body, Flanged 3" 5M	1	1516
	Body, Flanged 3" 10M	1	1517
*17	Seat Wrench	1	1474

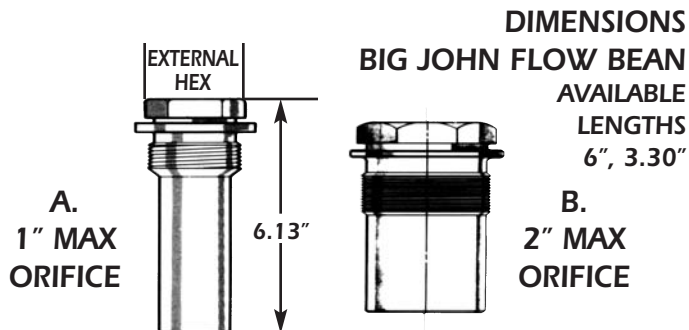
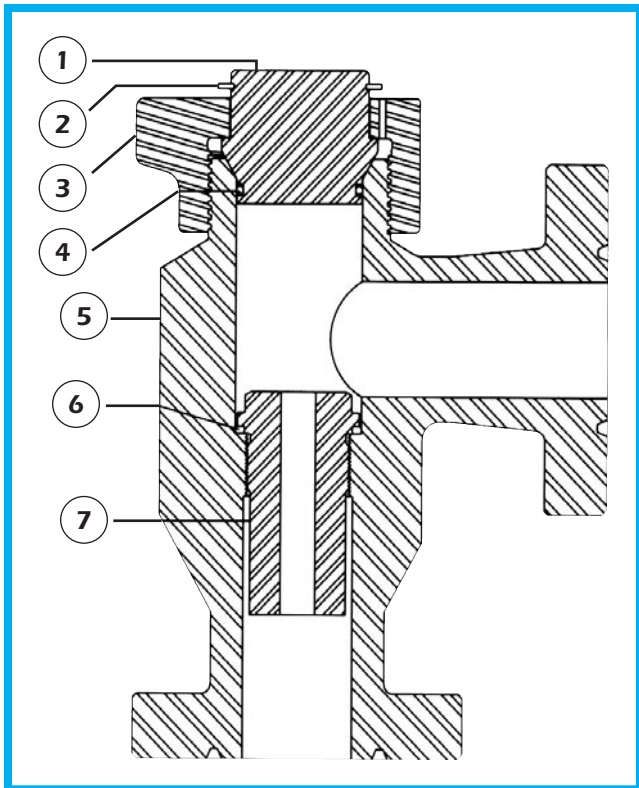
STEM 2" ORIFICE



SEAT 2" ORIFICE

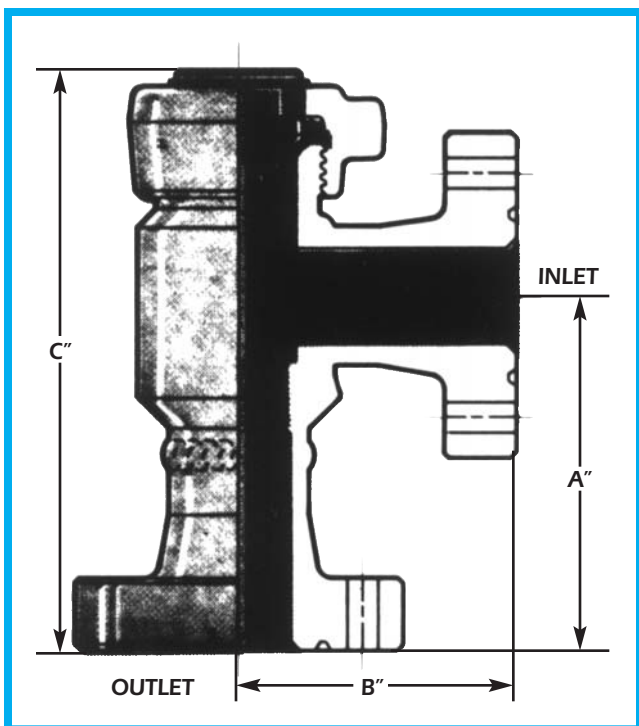
*Sold Separately - Not Pictured

**TYPE H-H2 POSITIVE CHOKES
MAX 2" ORIFICE**



**TYPE H-H2
POSITIVE CHOKES
MAX 2" ORIFICE**

FLANGE SIZE	CWP	A"	B"	C"
3"	3,000 API	11.38	8.88	18.50
3"	5,000 API	11.38	8.88	18.50
3 1/16"	10,000 API	11.75	10.38	18.75
4 1/16"	10,000 API	11.50	9.94	18.69
3"	600 ANSI RTJ	10.00	7.50	17.12



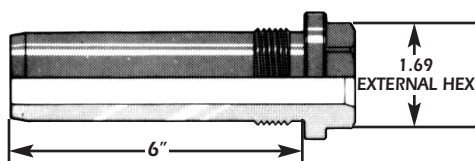
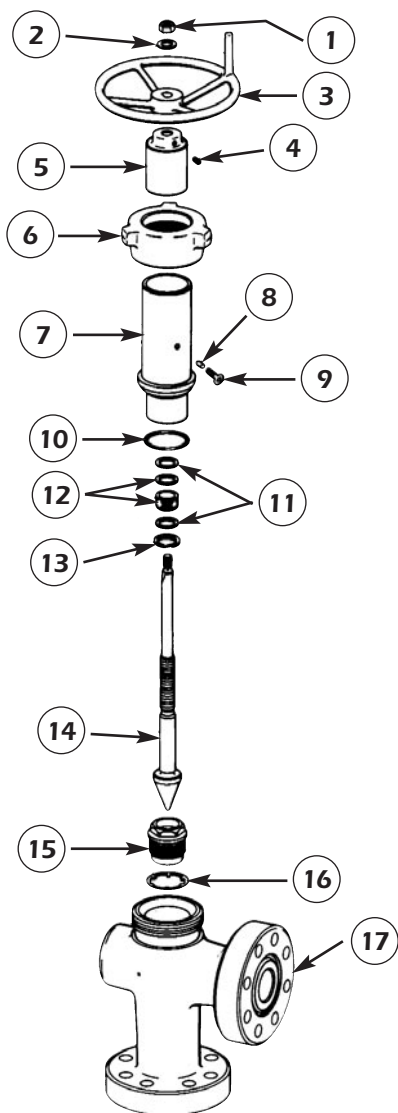
**PARTS H-H2
POSITIVE CHOKES
MAX 2" ORIFICE**

ITEM	DESCRIPTION	QTY.	PART NUMBER
1	Blanking Cap	1	1475
2	Retaining Ring	1	1562
3	Hammer Nut 5M	1	1511
	Hammer Nut 10M	1	1512
4	O-Ring, Nitrile	1	1462
5	Body, Flanged 3" 5M	1	1516
	Body, Flanged 3" 10M	1	1517
6	Seat Gasket	1	1464
*7	Flow Bean HS	1	41 <small>SIZE</small>
	Flow Bean SSTC	1	40 <small>SIZE</small>
*8	Bean Wrench	1	1474

*Items 7 and 8 are sold separately.

TYPE H-H2 ADJUSTABLE CHOKES
MAX 1" ORIFICE

TYPICAL 2000 THROUGH 10,000 PSI ADJUSTABLE CHOKES



PARTS H-H2 ADJUSTABLE CHOKES
MAX 1" ORIFICE

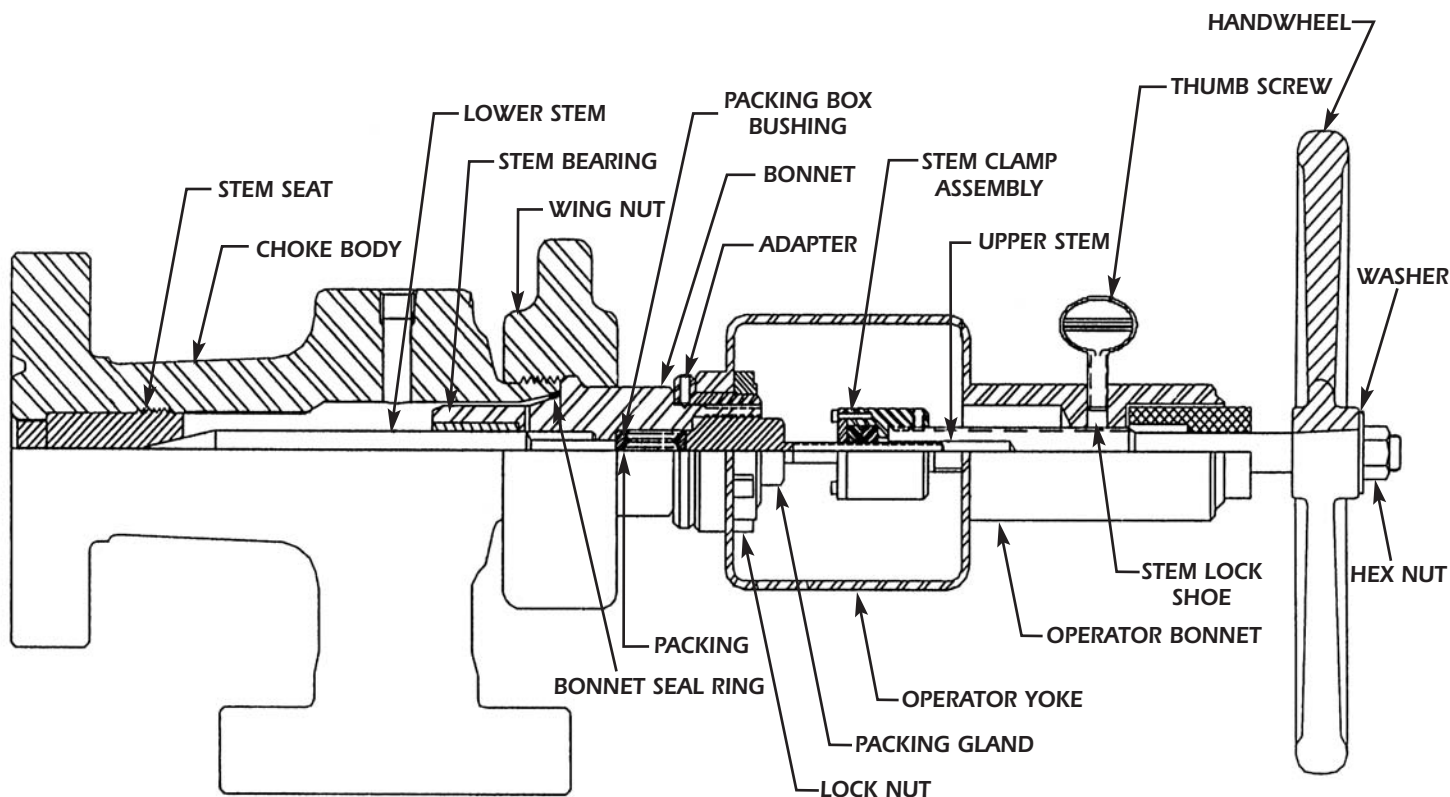
ITEM NO.	DESCRIPTION	1" MAXIMUM ORIFICE	
		5M CWP	10M CWP
1	Hex Bolt	1542	1542
2	Washer	1011	1011
3	Handwheel	1522	1522
4	Set Screw	1007	1007
5	Indicator 1"	1207	1207
6	Wing Nut	1536	1536
7	Bonnet	1538	1538
8	Nylon Ball (Plug)	1004	1004
9	Thumb Screw	1003	1003
10	O-Ring	1205	1205
11	Junk Ring	1206	1206
12	Packing w/BU	1202	1202
13	Retainer Ring	1590	1590
14	Stem HS	1208	1208
	Stem HSS	1656	1656
	Stem SSTC	1209	1209
15	Seat HS	1415	1415
	Seat HSS	1655	1655
	Seat SSTC	1204	1204
16	Gasket	1541	1541
17	Body, Flanged	1539	1539
*18	Wrench	1465	1465

* Wrench sold separately – Not Pictured

MISCELLANEOUS PARTS FOR H-H2 POSITIVE AND ADJUSTABLE CHOKES

▪ Indicator 3 x 1 PVC	PN1550
▪ Ditto Aluminum	PN1715
▪ Ditto 3 x 1 1/2 PVC	PN1864
▪ Ditto 3 x 2 Aluminum	PN2088
▪ Ditto 2 x 3/4 PVC	PN1916
▪ Adapter Bean/Seat 3 x 1 H2 Alloy	PN1525
▪ Ditto SS	PN2089
▪ Adapter 3 x 1 H2 F/FC-140 Alloy	PN1593
▪ Ditto SS	PN1790
▪ Stem H2 15M 1" SSTC	PN1543
▪ Seat 3 x 1 SSTC Short FL	PN1899
▪ Ditto 3 x 1 1/2	PN1863
▪ Ditto 3 x 2 SSTC Short FL	PN1745
▪ Ditto 3 x 2 SSTC 6" Long PL	PN1925
▪ Ditto 3 x 2 SSTC 10" OAL FL	PN1624
▪ Ditto 2 x 1 SSTC 12" OAL FL	PN1985

STEAM CHOKE ASSEMBLY 3000 LBS. CWP



The Houston Oilfield Equipment, Inc. Steam Choke uses a non rotating stem with linear motion that won't grab the packing and pull it out of place. When packing needs adjustment simply tighten the choke packing gland as required. The gland is easily accessible as it is externally located. This means minimal time and simple maintenance.

SPECIFICATIONS

- 3000 LBS. CWP
- Max 1" Orifice
- Alloy or SS Body
- Flanged, Butt Weld, Socket Weld or Threaded End Connections
- Manual Type or Actuated Operation
- Temperature Range -32°F to 850°F
- Angle Body with Vent Port
- Trim Stainless Steel

FEATURES AND BENEFITS

- Uses FMC Type Standard JWA Body
- Aluminum Indicator
- External Packing Adjustment
- Field Repairable
- Metal to Metal Taper Seal
- Parts Interchangability
- No Special Tools Required

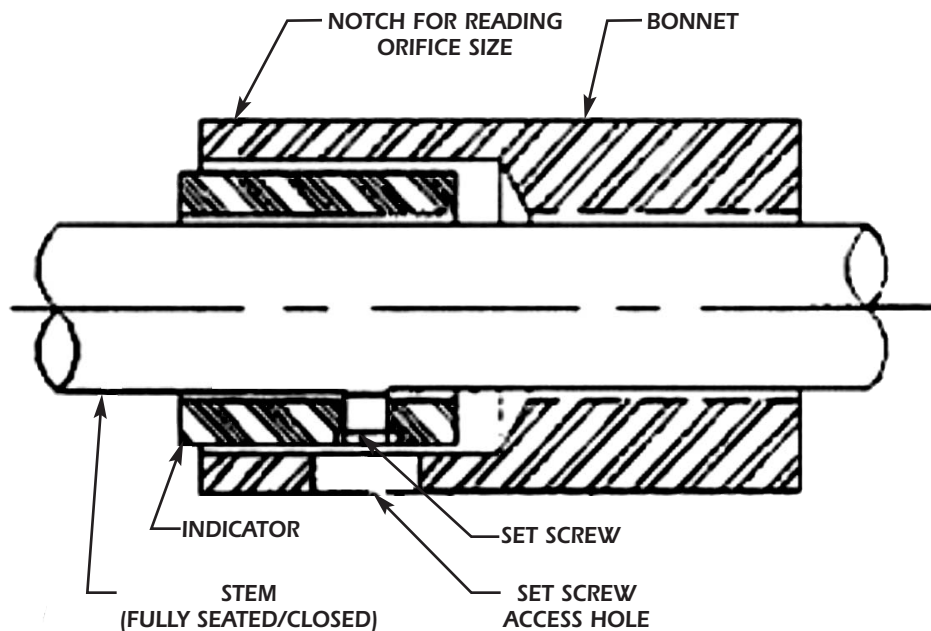
INDICATOR DETAIL/PROCEDURES FMC H2 ADJUSTABLE CHOKES

PROCEDURE:

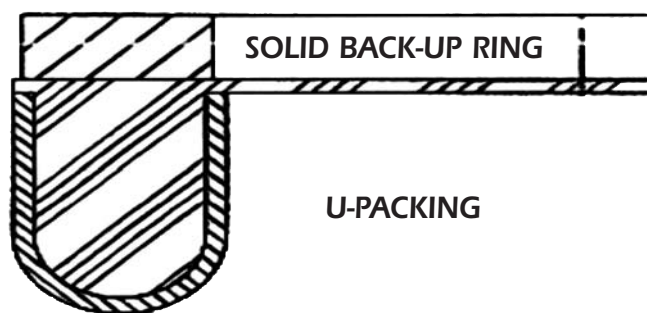
With choke in fully closed position align mark (64ths increments) on indicator with notch on bonnet. Tighten set screw. Indicator is now set in proper calibration.

NOTE:

Remember to open choke prior to shipment or final disposition.



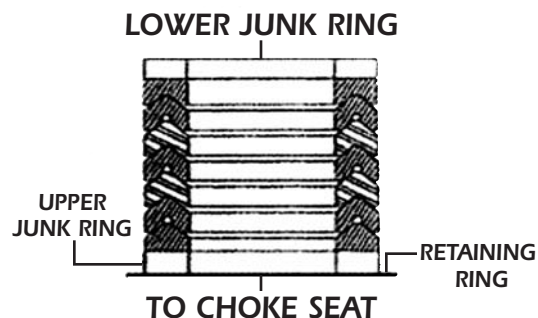
PACKING TYPE U W/BACK-UP RING PN: 1505 H2S/CO2 SERVICE



INSTRUCTIONS

1. Slide back-up ring to bottom of packing gland.
2. Install packing into bonnet with radius end up and flat against junk ring.
3. Place upper junk ring on top of packing.
4. Install retaining ring in groove.

PACKING CHEVRON TYPE TYPICAL FOR H2/FMC ADJUSTABLE CHOKES



1. Slide lower junk ring to bottom of packing gland.
2. Install packing rings into bonnet with flat adapter first. **NOTE:** V shape of packing rings must be positioned with open (lip end) toward pressure.
3. Place upper junk ring on top of packing and install retaining ring.

HOUSTON OILFIELD EQUIPMENT, INC.

TERMS AND CONDITIONS

Standard terms are net 30 days, unless otherwise agreed by Houston Oilfield Equipment, Inc. in writing. Boxing, freight, cartage and like charges, where applicable, are net. All weights are approximate.

All sales are F.O.B. Factory, unless otherwise expressly stipulated. Our responsibility ceases upon delivery of goods and bill of lading or dock receipt, invoice and supplementary documents to the customer or his agent, or upon delivery of the shipment to the carrier.

All price quotations are F.O.B. Factory, are subject to change without notice, and are for immediate acceptance unless otherwise specified. Delivery dates promised will be kept to the best of our ability, but cannot be guaranteed, and Houston Oilfield Equipment, Inc., (hereafter referred to as HOE, Inc.), will assume no liability for damages arising out of failure to keep delivery date, irrespective of the delay. Purchase orders placed and accepted may be cancelled with HOE, Inc.'s consent and upon terms which will indemnify HOE, Inc. against loss. All invoices are due and payable at our offices, located in Houston, Harris County Texas.

PRODUCT WARRANTY

We warrant products of our manufacture one year from date of shipment to the extent that HOE, Inc. will repair or replace any products of defective workmanship proven under normal use and service. No other warranty is expressed or implied. We specifically are not responsible for damages or injury, direct or indirect, or for damages or failures caused by improper installation, operation or misuse.

Goods or parts thereof, not manufactured by us are guaranteed only in accordance with the manufacturer's guarantee and only to the extent that we are able to enforce it.

All claims for in-transit shortages, damages or erroneous charges must be made within thirty (30) days from receipt of shipment and must be accompanied by the packing lists covering shipment.

We strive to pack and prepare all shipments so that they will not break, rust or deteriorate in transit, but do not guarantee against such damage.

Upon request, HOE, Inc. will provide engineering and/or technical information regarding its products and their uses and, if feasible, will provide personnel to assist purchasers in effecting field installations and/or field service. Any such information, service, advice or assistance when provided, whether with or without charge, shall be advisory only. It is expressly understood that HOE, Inc. assumes no liability for damage or loss arising out of, resulting from, or caused in whole or in part by such information, service, advice or assistance so provided.

We reserve the right to change or modify the design and/or construction of any HOE, Inc. product in due course of manufacturing procedure without notice, and without incurring any obligation to furnish or install such changes or modifications on products previously or subsequently sold. Any other representations, warranties or conditions, expressed or implied, relating to material, equipment or services provided by HOE, Inc. are excluded, unless specifically agreed in writing, by HOE, Inc.

All sales made by us, unless otherwise agreed to in writing by an executive officer of the Company, are made subject to each and all of the foregoing conditions and the placing of an order, or the acceptance by the customer of the above said conditions.

UNUSED PRODUCT RETURN POLICY

New, unused products of our current manufacture may be returned for credit, provided written request is received within eighteen (18) months after the purchase date. Special or discontinued and/or obsolete products are not returnable for credit. Restocking charges may apply and will be determined at time of request.

Requests for the return of material should show original purchase order number, invoice number, description of material and date of purchase. All requests should be mailed to: HOUSTON OILFIELD EQUIPMENT, INC., 11320 FM 529, BUILDING D, HOUSTON, TEXAS 77041.

Material returned for credit shall be shipped via prepaid freight to our specified destination.

The credit allowed on returned goods is a merchandise credit and applicable only against purchases of our products. Credit will be allowed under the above conditions at the original price, or at a subsequently adjusted price.

HOUSTON OILFIELD EQUIPMENT, INC.

COMPANY HISTORY

Houston Oilfield Equipment, Inc. (HOE, Inc.) is recognized throughout the world as a manufacturer of quality choke products. Our company was formed in 1993 and is headquartered in Houston, Texas, which is considered to be a major hub within the oil and gas industry. Houston was a natural choice, as this location ideally serves both domestic and international markets. The president and founder of HOUSTON OILFIELD is Tom Bowers. Mr. Bowers has 30 years experience in the oil and gas industry, has attained a vast knowledge of chokes and related products and possesses an impeccable reputation with customers, colleagues and competitors alike.

HOE, Inc. markets its products through a network of distributors and sales representatives, both domestic and foreign. Our company takes pride in being able to respond to its customers in minimal time, whether the task be providing a quote, shipping a product or assisting in customer service. We have maintained excellent customer relationships by providing unsurpassed service. This everyday challenge is the basis of operation by which our company operates. HOE, Inc. specializes in chokes of the FMC and Cameron type H2 and Thornhill-Craver profile, which are fully interchangeable with those manufacturers of the same product style. These designs are time proven and have been employed in many different types of service. In addition to the choke assemblies, parts for the above mentioned and various other types of chokes are also available.

HOE, Inc.'s line of chokes is ideally suited for a broad range of applications. These include well heads, production manifold, well testing, steam injection, choke and kill manifolds, indirect fired heaters and well clean up operations. Should your choke require the API 6A monogram, Houston Oilfield is a current license holder of API 6A certificate 6A-0487. We welcome the opportunity to address your choke needs. As our reputation has shown for the past 10 years, we will make every effort to provide timely and professional service to your organization. Providing a quality product with outstanding customer service has and will continue to be, our benchmark in the oil and gas industry.



HOUSTON OILFIELD EQUIPMENT, INC.

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