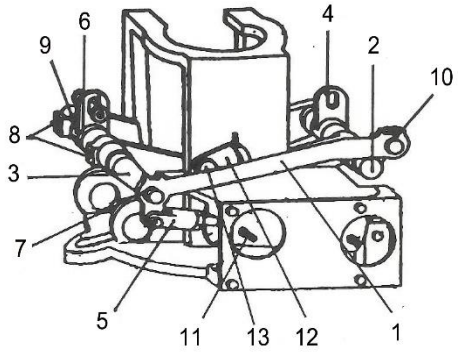
Tubing Spider

Costrength Models C, CHD and B tubing spiders can handle various tubing sizes and load ratings. The slip body is assembled in two halves with 4 slip body elements. The slip inserts fit into the slip body elements.

The spider and slip bodies are made from high strength alloy steel castings to provide the greatest strength and longest wear life with a minimum of weight. All shafts and links are made from hardened steel. All bearings and shafts are provided with grease fittings for lubrication. The slip assemblies are machined as matched sets and incorporate with inserts which provide full 360° of contact with the pipe.

A manually operated safety latch can be used to positively lock the slips in their set position, down and engaged, to prevent accidental release of the tubing string.



Features:

- Choices of models for varying size ranges and tonnage ratings for single string operations
- Interchangeable slip assemblies (within a model size)
- 360° replaceable inserts
- Air or hydraulic operation

Tubing Spider Specification

MODEL	B	C	CHD
CAPACITY	110,000 Lbs, 55 Ton, 50 MT	165,000 Lbs, 82.5 ton, 75 MT	250,000 Lbs, 125 ton, 113.5 MT
GATE OPENING	4-1/4"	5-3/4"	5-3/4"
BOWL OPENING	4-3/4" DIA.	6-1/2" DIA.	6-1/2" DIA.
TUBULAR RANGE	1.315" to 3-1/2"	1.315" to 5-1/2"	1.315" to 5-1/2"
PROVE LOAD TEST	75 MT @ 5 min.	115 MT @ 5 min.	175 MT @ 5 min.

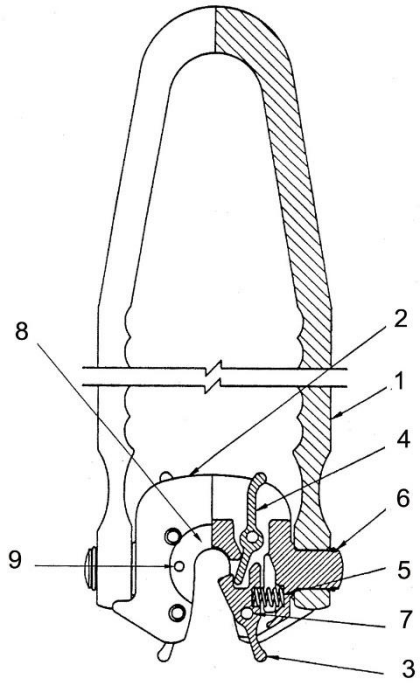
Note: Ton - US ton, MT - Metric Ton

Sucker Rod Elevators

Sucker Rod Elevators are carefully engineered and manufactured to provide maximum rod string protection, ease of handling and operation, and wear resistance. The seat for the rod upset radius is machined to produce a precision fit, thus preventing both tilting of the elevator body and local stressing or kinking of the rods.

The one-piece body is made of alloy steel, heat-treated for extra strength and wear resistance; the forged bail is stiffened at the bend with an “I” section to prevent binding under maximum loads.

Two pressure-sensitive latches close on the rod automatically, securely locking it in place. The rod can be released quickly and easily, by thumb and finger pressure alone, at either the front or rear of the body.

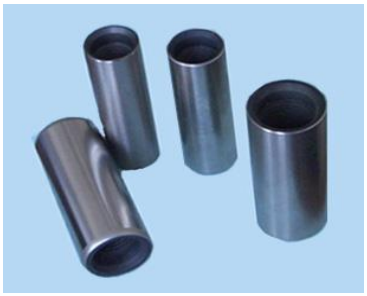


Solid Body Sucker Rod Elevator	
Size	Fit for Sucker Rod
SR58	5/8”- 3/4”
SR68	3/4”- 7/8”
SR88	1”
SR98	1- 1/8”

Plate Type Sucker Rod Elevator	
Size	Fit for Sucker Rod
SR100	5/8"，3/4"，7/8"，1"

Item	Description
1	Bail
2	Body
3	Latch-Front and Rear Release (2)
4	Lever
5	Spring
6	Ring, Trunnion (2)
7	Pin, Spring
8	Plate, 5/8”, 3/4”
	Plate, 3/4”, 7/8”
	Plate, 1”
9	Pin, Plate

Sucker Rod Couplings



Our Couplings are manufactured in compliance with API 11B. Both of the Class T and Class SM couplings combine top quality steel with a cold rolled threads that increases fatigue resistance.

A well-controlled and service proved Anti-galling treatment is applied to all the couplings.

We offer a complete line of API sucker rod couplings, including sucker rod couplings, sub couplings, and polished rod couplings, with full size and slim hole.

Ordering Information

Specifications	5/8”	3/4”	7/8”	1”	1 1/8”
Coupling Class	T / SM				
Base material	AISI 5140 or Chinese equivalent				
Size type	Full size, slim hole, crossover				
Mech. Property	Meet with API 11B requirement				

Note:
For detail sizes of Polished rod couplings and Sub Couplings, please refer to the API Specification 11B.

Sprayed Metal Sucker rod couplings, SM

The Sprayed Metal Rod Couplings are coated with nickel base metal material. Coating thickness is 0.01-0.02 in per side. Hardness is 595HV_{200} minimum.

The SM coupling features mirror like surface finish, low friction factor and high corrosion resistance property.

Spray Metal Sucker Rod Coupling Specification

Sucker Rod Coupling		
Size		P.N.
5/8"	Full Size	58MF
	Slim Hole	58MS
3/4"	Full Size	68MF
	Slim Hole	68MS
7/8"	Full Size	78MF
	Slim Hole	78MS
1"	Full Size	88MF
	Slim Hole	88MS
1.1/8"	Full Size	98MF
	Slim Hole	98MS

Polish Rod Coupling		
Size		P.N.
5/8"	Full Size	58MFP
	Slim Hole	58MSP
3/4"	Full Size	68MFP
	Slim Hole	68MSP
7/8"	Full Size	78MFP
	Slim Hole	78MSP
1"	Full Size	88MFP
	Slim Hole	88MSP
1.1/8"	Full Size	98MFP
	Slim Hole	98MSP

Sub Coupling		
Size		P.N.
5/8"*3/4"	Full Size	5868MF
	Slim Hole	5868MS
3/4"*7/8"	Full Size	6878MF
	Slim Hole	6878MS
7/8"*1"	Full Size	7888MF
	Slim Hole	7888MS
1"*1 1/8"	Full Size	8898MF
	Slim Hole	8898MS

Hammer Unions

Hammer Unions are designed and manufactured for the application of high pressure fluid transmission. They are popularly used in oilfield operation, such as fracturing, acidizing and cementing.

Hammer unions are made of high grade of materials, appropriate to specific pressure ratings. Precision forging and heat treatment ensure the desirable mechanical property. All connection threads and sealing surface are processed with numerical control machines, features reliable sealing and interchangeability.

Rigid quality inspection and pressure test are accomplished with related National and International standards. Complete records are well kept for products traceability.

Unions are available in all choices of end connections. API line pipe threads are as standard.

Fig. 602

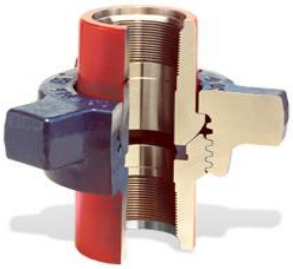
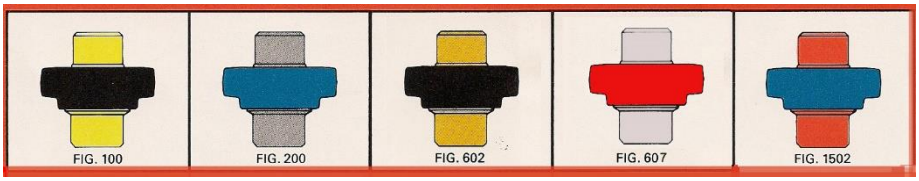


Fig. 1502

SPECIFICATION AND AVAILABILITY

Model	Cold Working Pressure		Size available			
	MPa	psi	1"	2"	3"	4"
100	7	1,000		√	√	√
200	14	2,000	√	√	√	√
206	14	2,000	√	√	√	√
602	42	6,000		√		
607	46	6,666		√		
1502	105	15,000		√		

Union Color Designation



Swivel Joint and Pup Joint

The Swivel Joints are supplied with the following features:

·Minimum flow restriction.
·Heavy duty hex head style ball loading plug.
·Grease retainer ring (insures clean ball race)
·Standard packing units (operating temperatures to 255°F)
·High temperature packing units (operating temperature to 450°F)
·Superior hardened ball races insure uniform surface hardness and depth for longer life under severe thrust and radial loading.

Standard swivel joints are provided with API line pipe threads. Other end connections are available on request.

The pup joint is the combination of the standard API tubing and Model 602 or Model 607 unions. The tubing is assembled with male sub on one end and female sub with nut on another end. All pup joints are 100% hydraulic pressure tested.

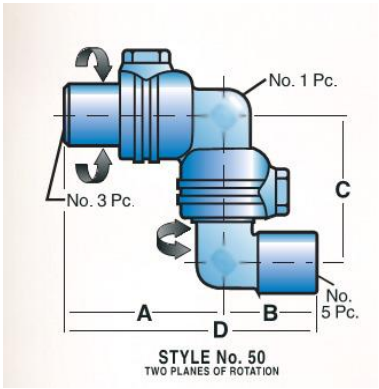
Integral Pup Joints are available in 2" and 3" sizes up to 12 feet.

Short Radius Swivel Joint

Specification

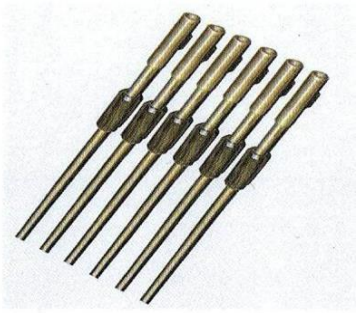
Style: No. 50
Working Pressure: 6,000 psi, NSCWP
Testing Pressure: 9,000 psi, NSCWP
Color Code: Silver
Thread: 2” API line pipe thread

Dimensions:



A	B	C	D
5 27/32	4 1/32	5 7/8	9 7/8

Rod Centralizer



The rod centralizers are widely used with drive rods for PC pump application and the sucker rods for production in deviation wells. The centralizers are combined with a variety of components: sucker rod, pony rod or a shaft, nylon or soft metal sleeves in the ways of molding, insert or snapped on.

Sizes Commonly Used

Description	Rod OD	Rod Length	Fit for Tubing
¾” x 2 7/8”	¾”	Per API 11B or As Request	2 7/8”
7/8” x 2 7/8”	7/8”		2 7/8”
1" X 2 7/8"	1"		2 7/8"
1" X 3 1/2"	1"		3 1/2"

Knuckle Joint Swab

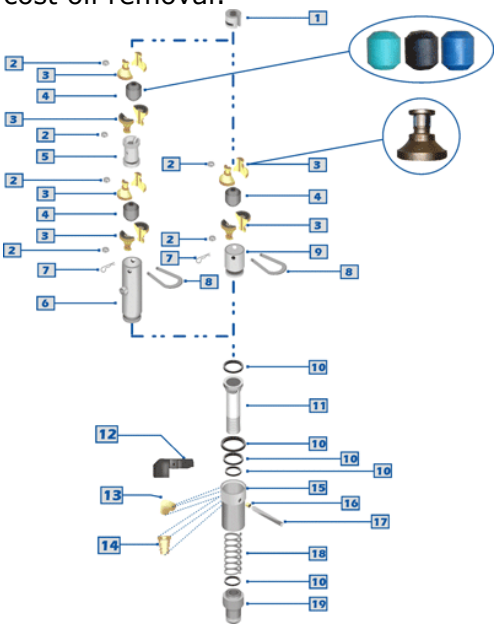
The Knuckle Joint Swab allows cups to be changed in just 10 seconds. To disassemble, the mandrel is lifted 90° and the two sections of the joint are separated. The old cup can then be removed rapidly and the new one dropped in place. There are no threads on the swab knuckles, no danger of damage and galling, and no tools needed to change cups.
Made of tough, cast, heat-treated steel, the Knuckle Joint swab provides a large external bypass for fast falling and uses the cup itself as a valve. As many mandrels and cups as desired may be run with the Knuckle Joint. Upper mandrels are keyed to hold the joint sockets in line, and square shoulders reinforce the joint, preventing spreading under load.
The rigidity of the joint absolutely prevents jackknifing and disassembly in the well. The lower mandrel allows a full 360° swivel action. Adapted as necessary, most tubing swab cups may be run on this swab.

Double Pack Stuffing Box Complete (51 LBS)

- Cone Hi-Temp or Gold Flake split packings for extended packing life.
- designed fitting for easy on-site lubrication without disassembly reduces costly maintenance time.
- Lower compression bolts allow replacement of upper primary packings while still under pressure.

Type HD Oil Saver

Type HD Oil Saver with Stainless Steel Body offers double line stripping. It has two complete sets of stripper rubbers and brass bushings and a 1" NPT drain connection between the rubbers and is rated at 1500 psi working pressure. The hydraulic oil savers strip fluids from the wireline, cut costs by saving valuable oil, and promote safety by minimizing danger of explosion or fire at the well site. Hydraulic Oil Savers are available in several types to meet every stripping requirement. The oil savers use a special oil, gas, and abrasion resistant, one piece rubber for efficient, low-cost oil removal.



Replacement Parts For Oil Saver			
Item #	**Part Number**	**Description**	**Number Required**
1	E618	Gate	1
2	E5203	Clip for Brass Bushing	4
3	E5203	3/8” to 5/8” Brass Bushing (39 – 3619: 3/4” to 1” Brass Bushing)	4 Sets
4	0S-2	Replacement Rubber	2
5	E625	Bushing Spacer	1
6	E274B	Double Brass Body	1
6	E274SS	Double Stainless Steel Body	1
7	E801	Yoke Retainer Pin	1
8	E800	Yoke	1
9	E273B	Single Brass Body	
9	E273S	Single Stainless Steel Body	
10	E728	‘O’ Ring(Part of Repair Kit Number E728)	1
11	E623	Ram	1
12	E802	Fitting Guard	1
13	WS-40639	Housing Elbow	1
14	WS-40629	Housing Nose	1
15	E617	Housing	1
16	E6MP	Housing Plug	1
17	E900	Redress Tool	1
18	E630	Spring	1
19	E620	2-3/8” EUE Base	1
19	E621	2-7/8” EUE Base	1
19	E624	3” LP Base	1

The Rod Back-Off Tool

The Rod Back Off Tool includes a vise anvil and a vise block so that a sucker rod may be securely, rigidly fastened by a vise bolt moving the vise block so that the sucker rod is between the vise block and the vise anvil. This provides a tong capable of breaking a sucker rod joint when the pump attached to the bottom of the sucker rod is stuck. Our Rod back off tool can be mounted into the 2-7/8" Jaws on any common Power Tong these Rod Back off Tools fit rods from 5/8" – 1-1/8"

Sucker Rod Rotator

Partial abrasion between sucker rod string and tubing string is a common problem of the sucker rod pumping system. It reduces the working life of the rods and tubing, increases the cost of well service, even causes rod/coupling break in severe situations. Equip with the Sucker Rod Rotator can provide a significant improvement for the pumping system. The rotator actuates the sucker rod string to rotate to a certain degree while the polished rod moves up and down. It changes the wearing area between rod string and tubing string intermittently and continuously, so wearing is distributed evenly. The process helps to prolong the operation circle of the system. Rod rotation is also an effective means of removing paraffin from inside the Tubing. This process also protects against severe rod and tubing wear when used in conjunction with rod guides.

Specifications	Max. recommended load	Polished rod sizes	Shipping weight	Rotation type	Body material
	33,000 lbs	1 ⅛" - 1 ½	35 lbs	Ratchet Table	Ductile Iron