



2021/22 PRODUCT CATALOG

INDEX

American Completion Tools (ACT)	
• Choke & Kill Manifolds	2
• Choke Valve	2
• Standpipe Manifold	3
• Manual Gate Valve	3
• Hydraulic Gate Valve	4
• Relief Valve	4
• Mud Gate Valve	5
• Plug Valve	5
• Check Valve	6
• Hammer Unions	6
• Cementing & Circulating Hoses	7
• Swivel Joints	7
• Changeover/Crossover Adapters/Blast Joints	8
• Flanges	8
• Manual Gate Valve	9
• Cementing Head	10
Mud King	
• Gate Valve	11
• Butterfly Valve	11
M&M International	
• Canister Guard® Valves	12
• Inside Blowout Preventer ("IBOP") / Dart Valves	13
• Swivels	13
• Subs	14
Amphenol	
• Pyle Star-Line Ex® Connectors	16
• R49 Series	16
• Pyle Star-Line® Connectors	17
• Neptune	17
• Amphe-Ex Connectors	18
• Rig-Power® Inserts with Radsok®	18
Rig Tools	
• BHA Wash Tools	19
• Typhoon Wiper	19
• Cobra Wash & Dope Tool	20
• Speedy Gonzales Pin Cleaner	20
• FOSV Handling Tool	20
• BOP Drift Tool	21
• Rigtools Clamp	21
• Drift Safe	21
• Monsoon Shaker Screen Washer	22
• High Pressure Cleaners	22
• Hi-Hat Doper	22
• Horseshoe Flowline Magnets	23
• Boxing Ring Rotary Handrail	23
• Speed Cover	23
• Container Access Ramp	24

• Pitbull Torque Tool	24
• Roughneck Backsaver	24
• Elevator Handling Tool	25
• Standard Hole Cover	25
• Safelift	25
• Poncho Hole Cover	25
• Shale Shaker Replacement Screens	26
Tracerco	
• T202: Radiation Dose Rate Monitor	27
• Personal Electronic Dosimeters (PEDs)	28
• Norm Monitor - IS	29
Bestolife	
• BESTOLIFE® GGT-RSC-HT	30
Finger Shield	
• Fingershield Finger Safety Tools	31
Eaton	
• EC556 Blowout Preventer Hose System	32
Ega Master	
• Non-Sparking Tools	33
• ATEX Tools	33
• 1000V Insulated Non-Sparking Tools	33
• Pipe Tools	33
• Total Safety Slogging Wrenches	33
• Antidrop	34
• Industrial Tools	34
• Controlled Tightening	34
• Underwater use Aquamaster	34
• Foam Trays & Tools Personalisation	34
Offshore Handling Systems Ltd.	
• General Cargo Handling Tool	35
• Drill Pipe Handling Tool	35
• Drill Pipe Casing Tool	35
• Drill Pipe Set Back Tool	35
• Pro Pipe Gripper Tool	36
• Hands Free Working Starter Kit	36
• Hands Free Working Storage Station	36
• Rigger Assist	36
• Pipe Catcher	37
• Grading Lifter	37
• S Hook Hose & Cable Tidy	37
• Dynlce Tag Line	37
• Basket Access Platforms	37
• Lift Assist Handling Aids	38
• Handle-Tech	38
• Gas Grab Products	39
BPC	
• X-904 Offshore Transfer Device	40
• X-800 Series	40

INDEX

• Osha Man Basket (OMB)	41
• Work Vest	41
• Life Ring Buoy Brackets	41
• Wire Stretcher	41
• Rope Ladders	41
• Tag Line	41
• Swing Rope	41
• Rigid Tag Line	41
• Wind Sock	41
• Helicopter Stretcher	41
• Life Float	41
• Containerized Fast Throw Line	41
Quaker Houghton	
• Stack Magic	42
• Houghto-Safe 273CTF V2	42
• Aqualink 300F VER2	43
• Rust Veto AS	43
• QH FLUIDCARE	43
Fabenco Inc.	
• Safety Gate	44
• Safety Rails	44
• Dock Gate	44
• Pivot Gate	44
• Height Gate	44
• Custom Gate	44
TS Moly Lubricants Inc.	
• TS-210 SeaSafe™ Leg Dope & Cable Lube	45
• TS-70 Moly Paste with 70% MOS ₂	45
• TS-74 Stainless Antiseize	46
• TS-90 Moly Gear Concentrate	46
Morse-Starrett	
• Impact Cutters	47
• Double Acting Cutters	47
• Manual Cutters	47
• Power Cutters	47
• Chain Cutters	47
• Cable Cutters	47
OTECO	
• Pressure Relief Valves (PRV)	48
• Reset Relief Valves (RRV)	48
• Gate Valves	48
• Float Valves	48
• Pressure Gauges	48
Malin Company	
• Safety Wire / Lock Wire	49
• Marine & Fishing Wire	49
• Industrial Wire	49
• Twisted-in Wire Brushes	49

Cable Safe	
• Cable	50
Bullard	
• Bullard S61	51
• Bullard S71R	51
Safety Plus World	
• Safety Plus World Type 5/6 Coverall	52
• Arc Guard IFR Coverall	52
• Arc Guard IFR Coverall	52
• Safety Plus World Premium Eyewear	53
• Safety Plus World Ear Plugs	53
I Shield U	
• Rig-Shield Anti-Impact Gloves	54
• Oil-Shield Gloves	54
• Chem-Shield Gloves	54
Ringers Gloves	
• Ringers Flex Impact Nitrile	55
• Ringers Roughneck	55
Gaston Mille	
• Master Black S3 HI CI SRC	56
Giasco	
• Gulf S3	57
Progetti	
• Rescue Sam AED	58
• Rescue Life AED	58
IST	
• Combination Eyewash & Shower	59
Radians	
• Radian Eyewash Station	60
Plum	
• Plum Eyewash 500ML	61
Super Hydrate	62
Nightstick	63
MPower Electronics	
• UNI 321RT	64
• UNI MP100	64
• MP400/MP400P/MP400S	65
Industrial Scientific	
• Ventis MX4	66
Spencer	
• Spencer Shell Universal Basket Stretcher	67
• Spencer Scoop Stretcher	67
• Spencer Foldable Stretcher	68
• Spencer Total Recovery Stretcher	68
Miscellaneous	
• Explosion Proof Ventilation Fan ATEX	68



Introduction

Established in the year 1961, Raja Group has diversified into various verticals under the Oil & Gas industry and is today recognized as one of the leading solutions provider in the State of Kuwait for supply of quality Industrial products and services. The journey in the past 60 years has been one of tremendous growth with high levels of integrity and passion. In all these years, our footprints have led us to excellent relationships with mutual trust and respect with our customers. This has in turn strategically boosted our growth many fold in most, if not all our businesses. Since decades, we have been working closely with companies under Kuwait Petroleum Corporation from the Drilling & Refining industry such as Kuwait Oil Company, Kuwait National Petroleum Company and Kuwait Oil Tanker Company.

Furthermore, we have since 2017 supplying to all contractors on the Clean Fuel Project of KNPC and were also working on the new refinery project with Kuwait Integrated Petroleum Industries Company and their contractors, which is now under operation. At its peak we had over 70,000 people working around the clock to complete this project by 2020/21.

Needless to say, we have multiple 3 years Long term supply agreements for PPE, Shoes, Hand protection and other safety products with KNPC, KIPIC and KOC over the last 5 years.

Additionally, we are also working with leading drilling contractors in Kuwait providing solutions to all their industrial and Rig needs. Since 2018 awards for over 50+ new rigs given to existing and new companies which has made us prepare ourselves for ever increasing demand in rig requirements and supplies.

This gave the birth to **Gulf Rig Supplies division** which will enhance our thrust and offerings to the Rig and Drilling contractor segment.

Our Partnership with manufacturers and suppliers of Kuwait Oil Company approved Rigging equipment, products and services companies in the USA and from all over the world, enhances our thrust to work continuously to improve on our product offering and better our services to the Drilling companies and their urgent needs.

We welcome all your inquiries and invite you to experience the legacy of Raja Company's professional products and services. We encourage you to visit our website **www.rajatrading.com | www.gulfrigsupplies.com** to know more about who we are and what we do.

American Completion Tools

American Completion Tools (ACT) is a joint venture, started by acquiring Allco Services Inc., at Burleson, Texas, to manufacture high quality oilfield equipment in the USA. In 2010, American Completion Tools, Houston, was set up to serve customers more closely the complete line of American Completion Tools products for stock-n-sale. The Houston office with a warehouse helps in providing quality customer service to their clients by enabling prompt delivery, easy billing and after sales service. Since its inception, American Completion Tools has been providing high quality products worldwide to distributors and service companies.

CHOKE & KILL MANIFOLDS

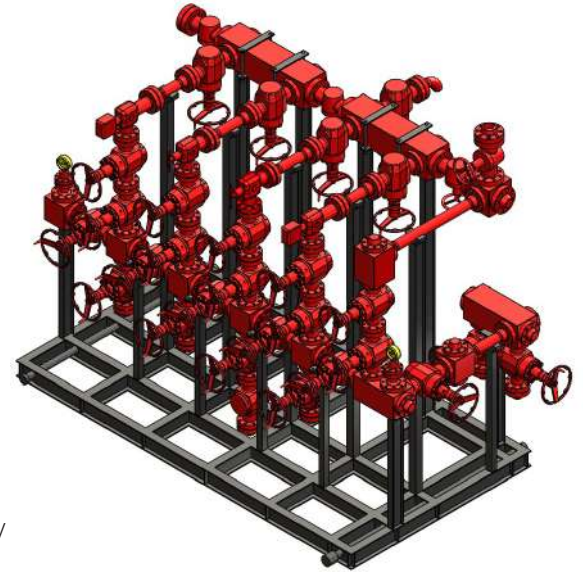
ACT fabricates custom designed Manifolds:

For Well Testing / Completion / Intervention, industry uses varies configuration of Manifold, as per requirement of Service / Operating Companies, ACT designs and fabricates custom made Manifold in sizes of 2" to 4" up to 15,000 PSI for standard and sour services for the following applications:

- Choke Manifold for flow back/work over
 - Production Manifold for diverting flow through test separator or vent or burner
 - Gas Manifold for diverting gas through orifice meter or burner
 - Data Recorder for recording flowing pressure and temperature
 - Stimulation/Treatment for Well stimulation / treatment service
- 2" / 3" / 4" / 5" / 6" 5000 PSI & 10000 PSI WP 3' to 8' Length

Material:

Suitable for H₂S Service as per NACE MR-01-75. With Union / Gray Lock End Connections. Supplied with multiple ports, Plugged or Flanged at specified intervals and degrees. Supplied with Thermowell, Pressure Gauges as required by customer.



CHOKE VALVE

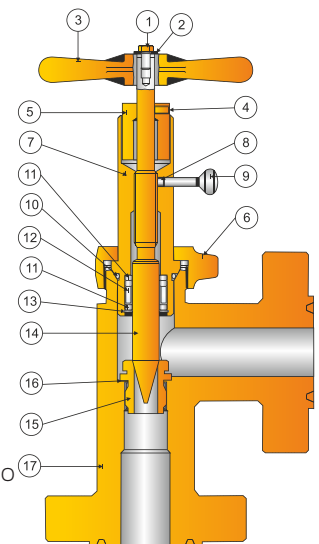
H2 Type Choke Valve

ACT manufactures both Positive and Adjustable Chokes in pressure rating up to 15,000 PSI WP., with different styles of end connection.

Adjustable Chokes are meant for variable flow. They have externally controlled indicator showing orifice size in the increment of 1/64th inch. The variation in choke size is achieved by rotating hand wheel to obtain desired flow rate at down stream side ACT Adjustable Chokes contain the following features:

- Interchangeability of parts to construct a positive, adjustable, or combination choke
- Bonnet nut has rugged, integrally forged lugs for hammering nut loose
- Built-in safety feature which releases residual pressure in the choke body before the nut is fully removed. The inside of the choke body is vented to atmosphere after the bonnet nut is partially removed
- Interchangeability of component parts for a particular pressure range. For example, the same blanking plugs and bonnet assemblies are used in nominal 2" 2000 through 10,000 PSI WP
- Stainless steel adjustable choke needle and seat (Tungsten Carbide/ Ceramic lining needle and seat also available for severe service applications)

Different end connections (API / ANSI, Flanged / Threaded) are available upon request.



Adjustable Choke

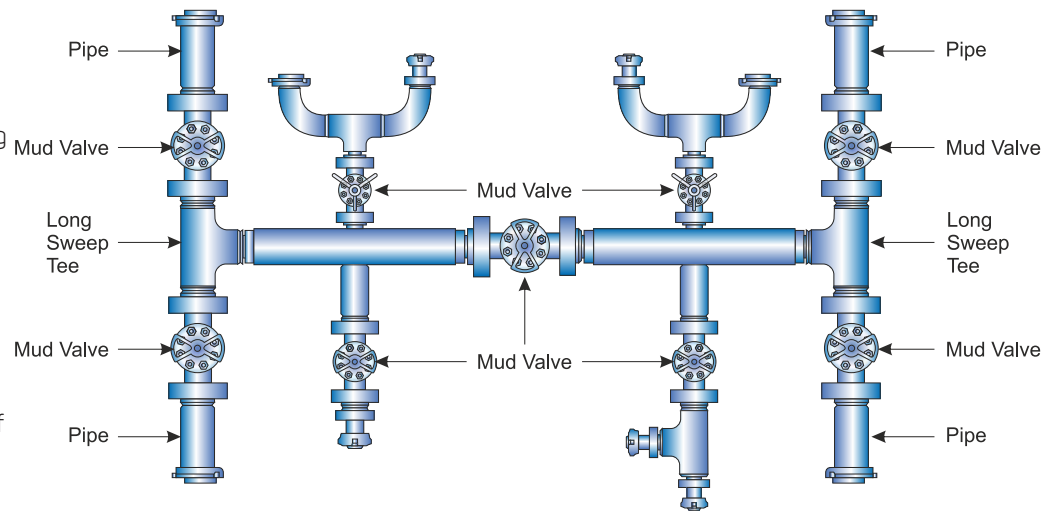
STANDPIPE MANIFOLD

ACT's Standpipe Manifold systems are used to conduct drilling fluid from the mud pumps with the purpose of diverting the flow of drilling fluids towards the drill line or dill string.

ACT's Standpipe Manifolds are designed and manufactured to customer requirements. An adjustable choke can be installed to bleed pressure off the drillpipe, to reduce shock when breaking circulation in wells where loss of circulation is problem, and to bleed off pressure between BOPs during stripping operations. Pressure Rating up to 7,500 PSI using standard mud valves can be accommodated. Welded, Flanged, hubbed or hammer union connection is available.

Specifications:

- PSL-2 (or better) (5,000 PSI and lower) or customer to specify • PR-1 (or better) or customer to specify
- Material: DD-NL (or better) or customer to specify
- Temperature Rating 'U' (5,000 PSI working pressure or lower) or customer to specify
- Alloy 625/ SS 316 Inlaid Ring Grooves or Customer to Specify • Gates and seats shall be hard-faced



Standpipe Manifold

MANUAL GATE VALVE

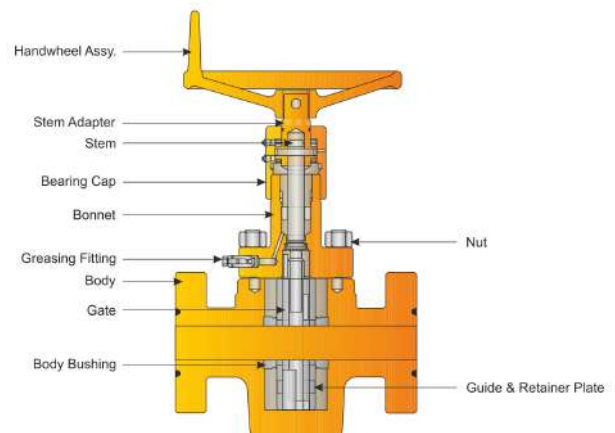
ACT's Gate Valves -FC Type are field proven valves which provides reliability and interchangeability. The valve is a new kind of non-rising stem valve (without lift stem), whole height will not Change during operation, and has integrated gate which can be used in bi-direction making it ideally suited for X-mas trees, Wellhead assembly, Choke manifolds and severe services. It is a forged valve available in pressure rating 2,000 to 15,000 psi and bore sizes from 1.13/16" to 4.1/16".

Features and Benefits:

- Full bore through conduit
- Block and Bleed Mechanism
- Floating Seat with self relief function
- Metal to metal seal is used between Bonnet and body, gate and seat rising
- Metal to metal stem back seat
- In-line maintenance
- Forged Body and Bonnet Construction
- The stem pin protects the stem internal parts from failure by shearing, if the handwheel is over torqued
- Single gate Slab and Seat
- Retainer plate fix seat ring insuring good stability

Specifications:

- PSL-2 (or better) (5,000 PSI and lower) or customer to specify
- PR-1 (or better) or customer to specify
- Material: DD-NL (or better) or customer to specify
- Alloy 625/ SS 316 Inlaid Ring Grooves or customer to specify
- Gates and seats shall be hard-faced or TC coated
- Temperature Rating U (5,000 PSI working pressure or lower) or customer to specify



Manual Gate Valve (Model: FC Type)

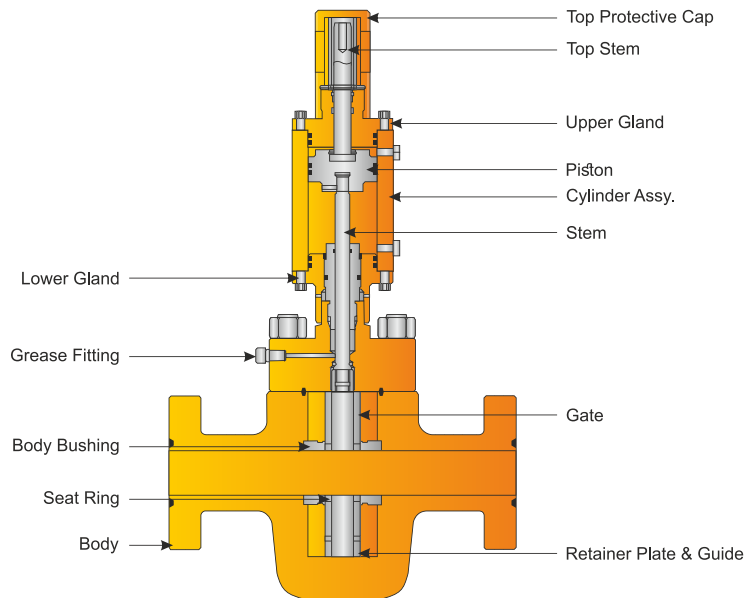
HYDRAULIC GATE VALVE

ACT's Gate Valves -FC Type are field proven valves which provides reliability and interchangeability. The valve is a new kind of non-rising stem valve (without lift stem), whole height will not change during operation, and has integrated gate which can be used in bi-direction making it ideally suited for X-mas trees, Wellhead assembly, Choke manifolds and severe services.

It is a forged valve available in pressure rating 2,000 to 15,000 psi and bore sizes from 1.13/16" to 4.1/16".

Specifications:

- PSL-2 (or better) (5,000 PSI and lower) or customer to specify
- PR-1 (or better) or customer to specify
- Material: DD-NL (or better) or customer to specify
- Temperature Rating U (5,000 PSI working pressure or lower) or customer to specify
- Alloy 625/ SS 316 Inlaid Ring Grooves or customer to specify
- Gates and seats shall be hard-faced TC coated



Hyd. Gate Valve (HCR) (Model: FC Type)

RELIEF VALVE

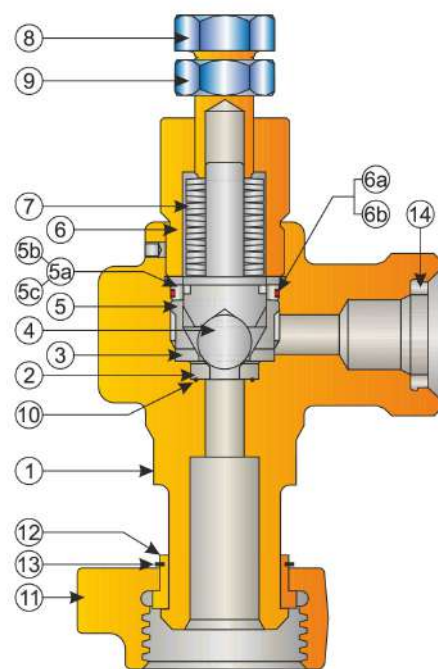
ACT relief valves are compact and simple to operate, providing over pressure protection for typical applications such as reciprocating pumps and treating lines. Compact and simple to operate, the valves are direct acting, relying on the system's hydraulic pressure to overcome a preset spring force to relieve. They are externally adjustable from zero pressure to maximum setting.

Manufactured to ACT Oil & Gas stringent Quality Assurance System, all pressure bearing components are made from high quality material. The forged body features an integral wing union male inlet, suitable for the pressure rating of the component.

The operation of the ACT's back pressure relief valve is a simple balance between the spring loaded keeper which holds the ball in the seat and the inlet liquid pressure acting on the ball. The spring pressure is set by tightening the hex bolt on top which pushes on the keeper. This in turn compresses the springs that forces the keeper on the Ball. When the inlet fluid pressure rises and overcomes the set spring pressure, the ball is lifted off its seat thereby discharging fluid to the outlet end. Once the pressure of the inlet fluid falls below the set spring pressure, the ball will be pushed back on to its seat and the fluid can pass downstream.

- End connections are standard Fig. 1502 union ends
- Opens when a pre-set pressure is exceeded and automatically snaps shut when pressure drops
- Comes standard with Material Test Reports (MTR)
- Suitable for standard service applications up to 15,000 psi working pressure and sour gas service up to 10,000 psi working pressure

Note: Valves are set at 15,000 psi unless otherwise specified by the customer



Relief Valve

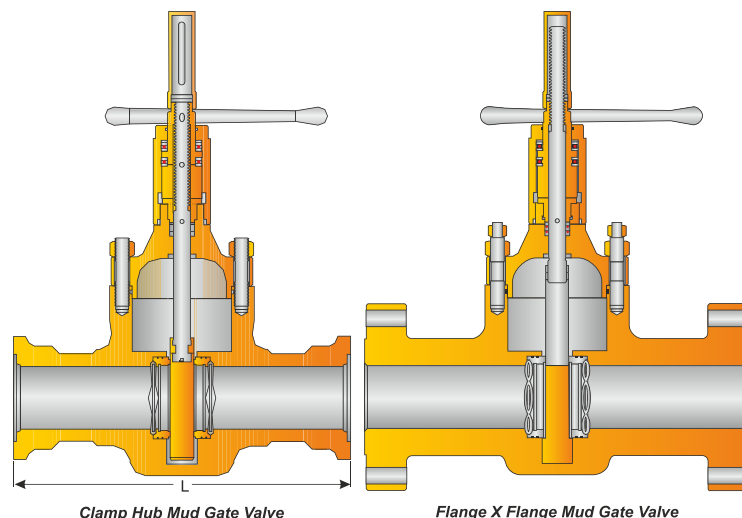
MUD GATE VALVES

ACT Mud Gate Valves are Forged exclusively made for mud, cement, fracturing, water & steam abrasive and shipyard applications. All valves are hydrostatic shell and seat tested in accordance with the API 6A specifications. Valves are specially designed for oil-field applications like Well heads, Manifolds, Pipe Line, Crude oil and Sour gas line, Well treating chemical, Drilling Chemical, Water flood lines, Abrasive drilling mud & shipyard etc. Valves are available up to 10,000 PSI WP.

These can be certified by ABS / DNV offshore or any other third party inspection.

Features:

- Designed specifically for abrasive and erosive use
- Positive sealing between gate and seat
- Easily replaceable parts without any use of accessories
- Can be supplied with Flanged End, Hammer Union End, Threaded, Butt Weld End & Gray Lock Hub / Clamp or API 16A Hub / Clamp Type end connection
- Protected rising stem
- Available from 2" to 6" with all temperature and pressure rating, service as per API 6A
- Single Gate Stem • Low Torque Bearing • Long Life Seat



Part No.					
	2"	3"	4"	5"	6"
PART NO.	412-1.5X85-GL	412-2X85-GL	412-3X85-GL	412-4X85-GL	412-5127-GL
LENGTH (L") (inch)	14,5"	15,5"	18,25"	21,75"	25,5"

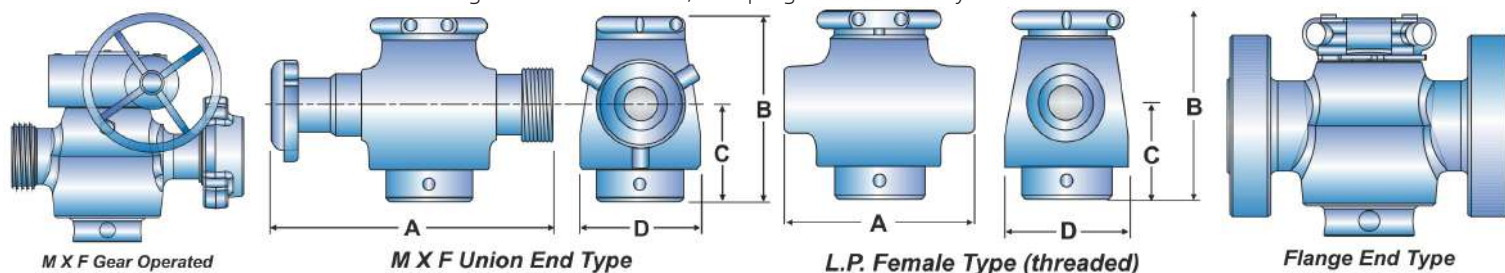
PLUG VALVE

Special Design Features

- ACT valve bodies are made from alloy steel forgings which are designed to variety of end connections to be integrally machined
- ACT plug and inserts are designed to resist abrasion and corrosion
- ACT valves can be easily adopted for hydraulic or pneumatic actuation. These configurations are designed for integration with complete manifold systems
- We manufacture in compliance with API-6A & API-Q1
- Our range is up to 15000 PSI WP
- 3" & 4" Fig-1502 Plug Valves can be supplied with gear operated handle LOW TORQUE

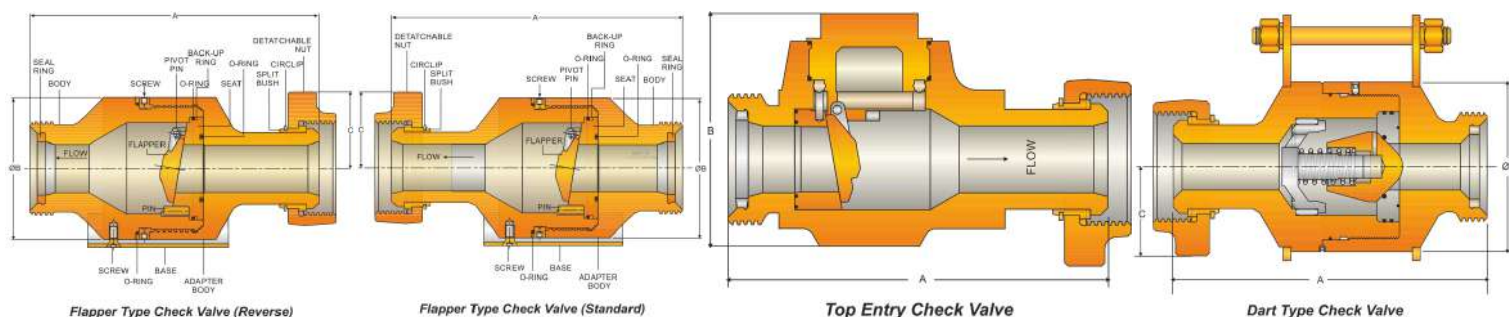
Operating Principle

- The plug rotates 90° (1/4 turn) for rapid full open or close operation. This reduces erosion due to throttling action
- To ensure a uniform clamping action for the initial pressure seal, the valve body is tapered
- To ensure a continuous seal becomes more effective as differential pressure increases, the plug and inserts float downstream with pressure differential caused by the initial seal
- The relationship between the seal and the bearing areas is such that the torque required to operate the valve is minimized
- To eliminate the need for thrust bearing to reduce friction, the plug is balanced by identical stem seals



CHECK VALVE

ACT Check Valves are flow control devices that permit flow in one direction, but stop flow in the opposite direction. These valves are used generally in well service applications and are placed in the treating line to allow flow to the well, but isolate any back flow.



HAMMER UNIONS

General

ACT manufactures Hammer Unions from raw materials in the form of forgings or castings, in accordance with service requirements in sizes 1 to 12", with ratings up to 20,000 psi cold working pressure. Unions for sour gas service are manufactured in accordance with NACE MR-01-75 & API RP-14E.

Interchangeability

ACT's Hammer Unions are interchangeable with WECO or other manufacturers adhering to the industry standards.

Thread Gauging

Acme thread and line pipe threads are gauged by standard plug & ring gauges.

Sealing Design

The conical and spherical surfaces of the female and male subs respectively; form an effective metal-to-metal seal in case of low pressure services.

For medium pressure mostly; an 'O' ring is provided in the male sub; in addition to the metal to metal seal. For high pressure, a lip type seal ring is provided for primary seal in the female sub.

The seal protects the secondary metal to metal seal from corrosion and limits fluid flow turbulence. For sour service applications, viton seals are provided.

Coating

As a special case ACT can also provide Unions with zinc galvanized coating.

Unions are also supplied with special materials such as stainless steel, SS-304, SS-316, Duplex etc.

Quality Control

ACT unions are manufactured using modern manufacturing techniques to attain first class workmanship and dimensional control. Correctly chosen raw materials for a particular service together with correct heat-treatment process are used to ensure better service and longer life in extreme conditions.

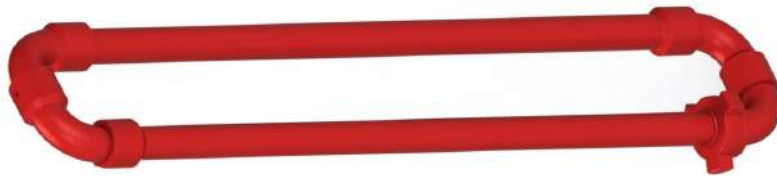


Hammer Union Chart with Pressure Ratings

Fig No.	Assly Colour Key Std. Service	Pressure Rating (PSI)				Normal Pipe size (inch)											
		Standard Service		Sour Service													
		CWP	TEST	CWP	TEST	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12
50		500	750	NA	NA								✓	✓			
100		1000	1500	1000	1500	✓			✓	✓	✓	✓	✓	✓	✓		
200		2000	3000	2000	3000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
206		2000	3000	2000	3000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
207		2000	3000	2000	3000							✓	✓		✓	✓	✓
211		2000	3000	2000	3000				✓								
400		4000	6000	4000	6000	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
600		6000	9000	NA	NA			✓	✓		✓						
602		6000	9000	6000	9000	✓	✓	✓	✓	✓	✓	✓					
1002		10000	15000	7500	11250	✓	✓	✓	✓	✓	✓	✓	✓	✓			
1003		10000	15000	7500	11250	✓			✓			✓	✓	✓			
1004		10000	15000	7500	11250									✓	✓		
1502		15000	22500	10000	15000	✓		✓	✓	✓	✓	✓	✓	✓			
2002		20000	30000	NA	NA				✓	✓	✓	✓	✓				
2202		NA	NA	15000	22500				✓	✓	✓	✓	✓				

CEMENTING & CIRCULATING HOSES

ACT's Cementing & Circulating Hoses are manufactured in various sizes (from 1" to 6") and in various configurations to meet virtually all the needs of the Oil Industry. These can handle a wide variety of fluids at cold working pressure up to 20,000 PSI. These hoses are made in steel to meet ASTM/AISI standards, are rugged, fold up easily and quickly for transportation. These are specially heat treated to get the desired hardness to suit various applications. Even sizes beyond 4" can be supplied to meet customer requirement.



CEMENTING & CIRCULATING HOSES SWIVEL JOINTS	COLOUR CODE	SERVICE	CONSTRUCTIONS DETAILS				NOMINAL SIZE (INCHES)								CWP (PSI)	UNION FIGURE
			THREADED	NPS	INTEGRAL	WELDED	1"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"		
SHORT SWEEP SWIVEL JOINT (1", 1 1/2", 2", 2 1/2", 3", 4", 5", 6")	OLIVE GREEN	SOUR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100 PSI TO 6000PSI	FIG-602
	YELLOW/ SILVER	STD	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100 PSI TO 6000PSI	FIG-602
	BLACK	STD	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10000 PSI	FIG-1002
	OLIVE GREEN	SOUR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10000 PSI	FIG-1502
	BROWN	STD	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	6000 PSI TO 7500 PSI	FIG-602 OR FIG-1002
LONG SWEEP SWIVEL JOINT (1", 1 1/2", 2", 2 1/2", 3", 4", 5", 6")	OLIVE GREEN	SOUR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	6000 PSI TO 7500 PSI	FIG-602 OR FIG-1002
	BLACK	STD	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	7500 PSI TO 10000 PSI	FIG-1002 OR FIG-1502
	OLIVE GREEN	SOUR	—	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	15000 PSI	FIG-2202 OR FIG-1502
	RED	STD	—	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	15000 PSI	FIG-1502
	LIGHT BLUE	STD	—	—	✓	—	—	—	✓	—	✓	—	—	—	20000 PSI	FIG-2002

SWIVEL JOINTS

Swivel Joints (1" to 6") are manufactured both for standard service & sour service. Long Sweep Swivel Joints are designed generally from 6,000 PSI CWP to 20,000 PSI CWP, both for standard and sour service, and ensure better flow characteristics. Smooth and round bore design keeps pressure drop low and minimizes turbulence. LONG SWEEP SOUR SERVICE SWIVEL JOINTS are manufactured in accordance with National Association of Corrosion Engineers (NACE) standard, MR-01-75 (Latest) and the American Petroleum Institute's (API) standard RP-14E.

ACT Swivel Joints have following features

- Swivel Joints are made from carbon steel and low alloy steel and are specially heat treated for controlled hardness
- All union ends are interchangeable with other manufacturers adhering to industry standards. All Long Sweep Swivel Joints-Jar- sour service have union ends of corresponding pressure rating
- Swivel Joints for sour service are provided with snap rings to assure high load bearing capacity
- These Swivel Joints are provided with dual packing arrangement. Primary seal with stainless steel anti-extrusion ring and an additional O-ring between ball races and primary seal is provided, which acts as a secondary seal. When leakage occurs, it is diverted through the leak detection port. A leak at this port indicates the necessity of primary seal replacement
- The grease retainer is self-relieving to prevent pressure accumulation in the ball race chamber if leakage occurs through the secondary packing

ACT's Swivel Joints bearings assure long and dependable service. These bearings are either dual race or tri race ball bearings and are matched to load capacity and service conditions. All ball races are either carbonized and hardened or use snap ring in stainless steel.



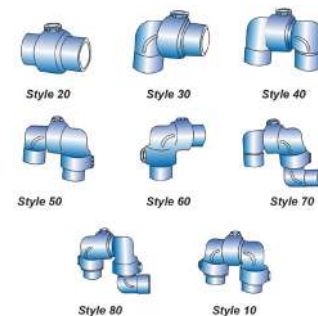
Style of Swivel Joints

ACT manufactures all styles of Swivel Joints to suit various service conditions and installations. These are style 10, 20, 30, 40, 50, 60, 70 and 80 as described below:

- **STYLE 10** - Three Swivels with two elbows
- **STYLE 20** - Single Swivel coupling
- **STYLE 30** - Single Swivel with one elbow
- **STYLE 40** - Single Swivel with two elbows
- **STYLE 50** - Two Swivels with two elbows
- **STYLE 60** - Two Swivels with one elbow
- **STYLE 70** - Two Swivels with three elbows
- **STYLE 80** - Three Swivels with three elbows

Sizes of Swivel Joints

ACT manufactures size 1" to 6" for normal application. ACT can also manufacture higher/lower sizes if required by customer



CHANGEOVER / CROSSOVER ADAPTERS / BLAST JOINTS

ACT's changeover/crossover adapters are manufactured in different sizes and threads, types male to male, female to female, female to male configurations with sizes varying from 1" to 4" and in pressure ratings from 1000 PSI to 20000 PSI CWP.

Swages

ACT manufactures Integral Swages with unions male and female to pipe and tubing threads, in different sizes 1" to 4" and thread configurations, in pressure ratings from 6000 PSI to 15000 PSI CWP. These are made to highest quality standards to provide trouble free service to users.

Precautions

- Do not expose standard service products to sour gas fluid
- Pressure ratings given are for temperatures between -20°F to 100°F. For services above 100°F consult factory
- Excessive hammering force should not be used for tightening Hammer Unions
- For using Hammer Unions below freezing temperatures, correct safety precautions should be taken
- Hammer Unions under pressure should not be struck otherwise failure may occur causing personnel injury or death

Integral Female Adapter Flanges

We manufacture these adapter flanges of various sizes commencing from 1 13/16" onwards and various flanges pressure ratings with Integral Hammer Union ends.



FLANGES

Flanges | Boltings | Gaskets | Flanged Fittings

ACT manufactures all types of Forged Flanges such as Weldneck, Slip-on, Socket Weld, Threaded, Lapped and Blind as per ANSI B-16.5 & ASA B-16.5, covering sizes from 1/2" to 24", pressure ratings from class 150 to 2,500 and temperature rating -200 F to 15000. Studs, Nuts and Gaskets for these Flanges are also provided. Flanges to API specifications 6A such as 6B and 6BX (Threaded, Weldneck, Blind, Test, Integral, Adapter & Companion Flanges) for any size & pressure ratings from 2,000 PSI to 20,000 PSI can be catered to. Large dia flanges to API 605, from size NPS 26" to 48" and ratings 150 to 900 are also manufactured and supplied. Slipon & Weld Neck Flanges as per BS 3293, of class 150, 300, 400, 600 from size NPS 26" to 48" can also be manufactured. Ring Joint Gaskets and Grooves are provided as per ASME B 16.20, ANSI B 16.5 & API-6A. Orifice Flanges/Meter Runs as per ANSI B-16.36, API 2530 and AGA-3 specifications with orifice plates can also be provided for any class and size. Flanges in other standards such as BIS, BS, DIN, ISO, JIS, can also be manufactured to meet the customer's requirements. ACT manufactures Studs & Nuts to API 6A & ANSI B 16.5, in various materials and sizes.



Gaskets

ACT manufactures Ring Joint Gaskets in all sizes and materials to ASME B-16.20 & API6A.

Flanged Fittings

Flanged, Studded Crosses and Tees from sizes 1.13/16" to 4.1/16" and for pressure ratings from 2000 PSI to 20000 PSI are manufactured and supplied.

Pipe Fittings (Butt Welded)

ACT manufactures Pipe Fittings, Butt-Welded, such as Elbows, Returns, Tees, Reducers etc. as per ASME B-16.9. The Butt -Welded Ends are prepared as per ANSI B-16.25.

Forged Socket Welded & Threaded Fittings

Forged, Socket Welded & Threaded Fittings can also be supplied to specifications ASME B-16.11 in pressure ratings of 2000, 3000 & 6000 PSI.

Steel Pipe Fittings, Screwed and Socket Welded Fittings as per BS 3799 for pressure rating of 3000 PSI and 6000 PSI and as per IS:1239, and Bends to BS 534 & IS:1239 are also manufactured and supplied.

Seamless Pipes

ACT can also supply Line Pipes as per AP 5L, Seamless Tubings and Casings as per API 5CT and also Pipes as per ASTM standard in Carbon Steel, Alloy Steel and Stainless Steel.

Specially Forged Products

Following forged products can also be supplied in machined / un-machined condition:

- Any closed die forging to single piece weight upto 200 Kg. and open forging to single piece weight upto 2000 kg.
- Forgings for oil field products, automobile products, piping products, products for nuclear applications and special engineering products

Material

The above items can be supplied in Carbon Steel, Low Alloy Steel, Alloy Steel, Super Alloys as 17-4 PH, MONEL, INCONEL etc., meeting any International Standards e.g. ASTM, API, BIS, JIS, DIN, AISI, ISO, BS & IS etc.

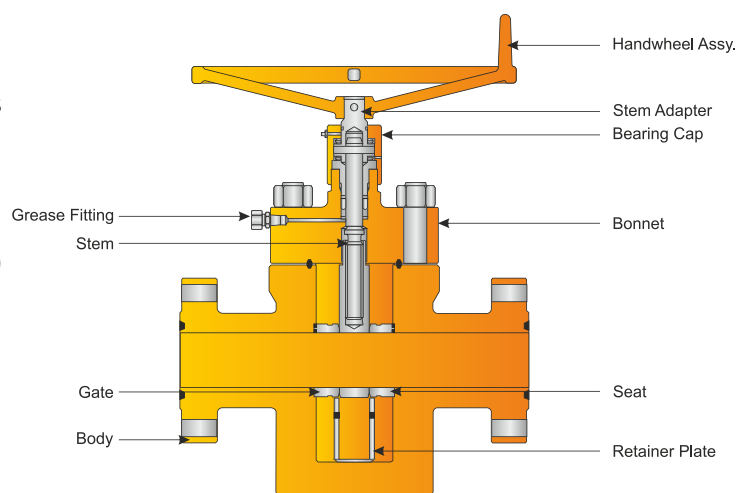
MANUAL GATE VALVE

Parveen's FLS type gate valve is all forged valve and developed to provide wide range of sizes with Manual & Hydraulic Actuators. It's unique metal to metal sealing technology and dual ring pre-energized seal makes this our standard valve for critical applications such as Choke and Kill Manifolds & FRAC Equipments. In addition it can be fitted with a wide range of our actuators.

The FLS type is a full-bore, through-conduit valve available in standard double-flange, threaded end, and special block configurations. It is a forged valve available in pressure rating 2,000 to 20,000 psi and bore sizes from 1.13/16" to 11".

Specifications:

- PSL-2 (or better) (5,000 PSI and lower) or customer to specify
- PR-1 (or better) or customer to specify
- Material: DD-NL (or better) or customer to specify
- Temperature Rating U (5,000 PSI working pressure or lower) or customer to specify
- Alloy 625/ SS 316 Inlaid Ring Grooves or Customer to Specify
- Gates and seats shall be hard-faced or TC coated



Manual Gate Valve (Model: FLS Type)

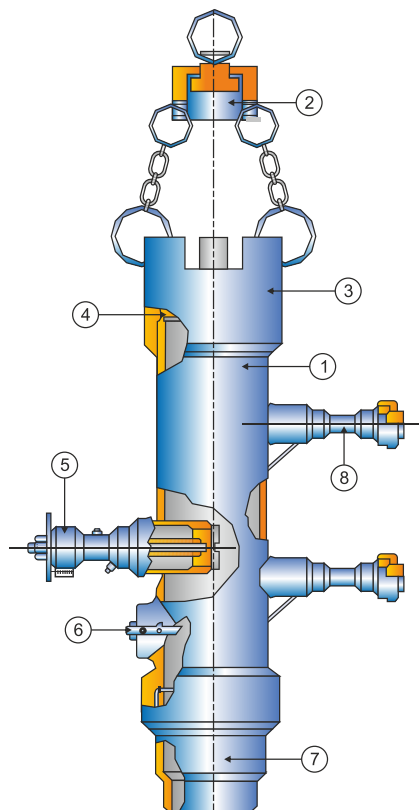
CEMENTING HEAD

PARVEEN Cementing Head is used for cementing the annular space between casing and bore hole during 2nd stage of well construction cycle. The Cementing Head is employed to connect the pumps of the cementing trucks to the casing string and provides access for insertion of the cementing plugs. PARVEEN's Cementing Heads are available in sizes 4 1/2 " to 20", for working pressure of 2,000 to 10,000 PSI. Cementing Head sizes & working pressures are inversely related.

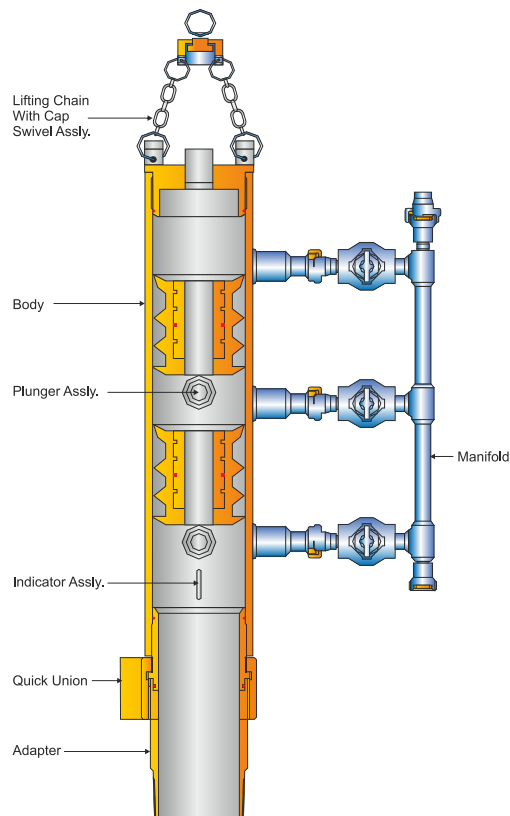
Cementing Operations

PARVEEN Cementing Head is suitable for carrying out single stage as well as double stage cementing operations. It is provided with the following features:

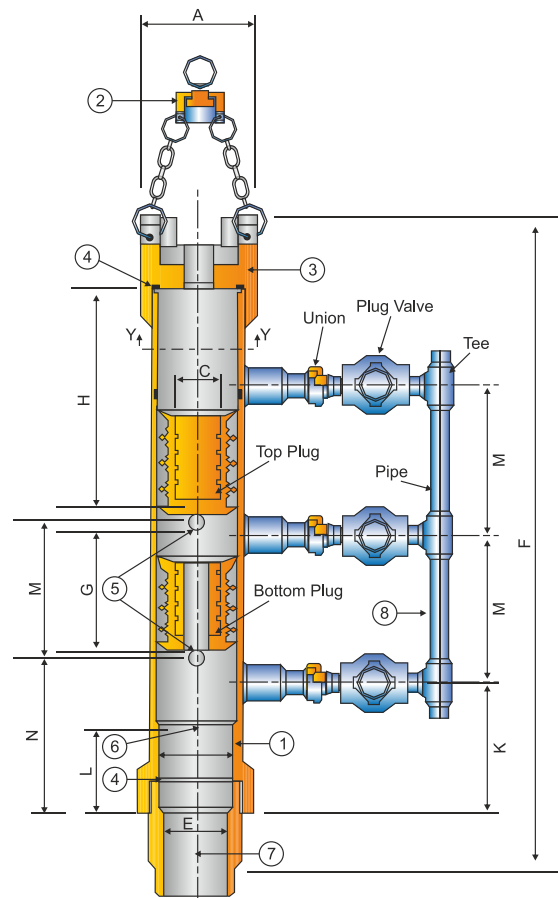
- Indicators that show when the top plug passes into the casing
- Simple in operation and provides easy loading of plugs
- Having manifold with low-torque plug valve
- Provides continuous operation
- The plug container holds one or two plugs, the top plug and the bottom plug. The double plug container has a three in-torque valve manifold and a two plunger assembly
- The length of plug containers are made to accommodate the standard length of plugs
- The cap is available with ACME thread and with lifting chain for lifting the plug container
- Adapters are available with all casing threads and buttress threads
- The standard adapters have a 6 inch tong space with thread protectors
- The Hammer Unions used in manifolds are PARVEEN's make



**Cementing Head
(Single Plug)
Horizontal Inlet**



**Cementing Head
(Double Plug)
Quick Union Type**





Mudking, centrally located in Houston, TX have the following products within their range

Products

Pump Parts & Expendables - Fully interchangeable parts for Emsco, Gardner Denver, National, Oilwell, Ideco, Bomco

Handling Tools - Drill Pipe Slips, Drill Collar Slips, Casing Slips, Manual Tongs, Power Tongs, Elevators, Master Bushings, Casing Bushings, Kelly Bushings, Insert Bowls, Spider/Elevators, Safety Clamps, Tubing Spiders, Rod Elevators, Rod Hooks Demco Style 5000/7500 PSI & Oteco Style 5000 PSI

Butterfly Valves - Demco Style

Cartridge Assemblies - Fully interchangeable for Emsco, Gardner Denver, Ideco, National, Oilwell, Top Drive Style for Varco TDS Tesco 200T/250T and Canrig 1250AC

Capital Equipment - Triplex Mud Pumps 165HP - 1600HP, Rotary Tables, Block Hooks, Swivels, BOP's

GATE VALVE

Product Description

The Mud King DM & Model 72 style Gate Valves, with superior design features precision workmanship and a proven principle are engineered to meet the harsh drilling requirements in today's oilfield. The MKP Valve conforms to the standard flange dimensions and pressure rating of 5000 and 7500 PSI working pressure and temperature service up to 400°F.

Construction

MKP Valves conform to API flange dimensions in all pressure class ratings. The valves have rising stems that are driven by a double threaded hub for quick opening and closing with minimum turning effort. The permanently lubricated stems and stem screws are fully sealed assembly consisting of homogeneous and fabric backed rings for high and low pressure sealings.

Application

- Drilling and well-treating chemicals
- Sour gas and crude oil
- Abrasive drilling mud • Pipelines and Manifolds
- Wellheads • Water, Oil and Gas lines
- Cements and slurries • Corrosive water flood lines
- Up to 7500 psi and 400° F services

Testing

MKP Gate Valves are hydrostatically tested at assembly. Stem seal, body, and seat are inspected for zero leakage under pressure, before acceptance.



BUTTERFLY VALVE

The MUD KING wafer and lug type butterfly valves are designed to meet the stringent requirements of chemical plants, processing plants, power plants, refineries, shipbuilding, pulp and paper mills, and wherever positive shut-off is required for liquids, oil, gas, and gas slurries. They are also the ideal choice for heating, ventilation and air conditioning applications.

NE BUTTERFLY VALVES 2" - 12"

14" - 24" AVAILABLE ON REQUEST

TWO SELF-LUBRICATING BRONZE BEARINGS PROVIDE LOAD SUPPORT AND SMOOTH OPERATING

DOUBLE DRIVE GIVES POSITIVE STEM & DISC CONNECTION

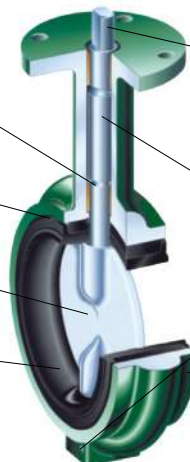
MAXIMUM FLOW DISC

PROVEN PHENOLIC BONDED CARTRIDGE SEAT

STEM FLATS INDICATOR POSITION OF DISC

STEM RETAINER PINS ENSURING A BLOW OUT PROOF DESIGN

ONE PIECE RIBBED WAFER OR LUG BODY





For decades, M&M International has supplied the top oil and gas drilling contractors with upper remote and lower manual top drive valves, specifically engineered and manufactured for use with the TDS-11 top drive system. And, year after year these TDS-11 valves continue to perform with consistent success for drilling contractors that use them in the field.

Our TDS-11 upper and lower top drive valves feature a patented Canister Guard™ valve technology. The M&M International Canister Guard™ is a unique oil and gas drilling product distinguished from other valve designs by its patented modular construction, field-proven reliability, and unrivaled failsafe assembly features. The TDS-11 is one of the most widely used top drives for drilling and the M&M upper and lower Canister Guard™ valves add an even higher level of reliability to the system when complemented with them.

CANISTER GUARD® VALVES

ONE-PIECE KELLY VALVES WITH CANISTER GUARD®

Our One-Piece CANISTER GUARD Kelly Valves are extremely versatile and can be utilized in multiple drill string applications. Depending on the customer's desired configuration, they can be used as upper/lower kelly cocks, stabbing valves, or as mud saver valves.



TWO-PIECE KELLY VALVES WITH CANISTER GUARD®

Our Two-Piece CANISTER GUARD Kelly Valves include the features of our one-piece valves while also allowing for larger inside diameters than are possible in one-piece configurations. Along with allowing a more expanded range of capabilities through the larger inside diameter, the two-piece design can also add ample length for connection recuts. Two-piece kelly valves can be manufactured to all of the same standards as one-piece kelly valves and include all of the same patented technologies.



TWO-PIECE SAFETY VALVES WITH CANISTER GUARD®

Our Two-Piece Safety Valves also incorporate our CANISTER GUARD technology and can be designed and manufactured with any tubing, casing, or drill pipe connection(s). When workover and/or completion activities call for a full-bore opening safety valve, this valve will ensure safety and peace of mind during your operations.



TOP DRIVE SAFETY VALVES WITH BOTTOM LOAD™ SYSTEM & CANISTER GUARD®

M&M's Top Drive Safety Valve Bottom Load™ lower valves have an extended pin nose profile that matches the mating ID profile of M&M's Top Drive Safety Valve Bottom Load™ upper valves. These valve systems have the all-important, rig downtime saving, Bottom Load™ feature. When the time comes for scheduled routine maintenance, the lower valve only needs to be removed to allow quick and easy access to the upper valve's internal components. Along with its innovative design features and our CANISTER GUARD technology, the Top Drive Safety Valve Bottom Load™ system allows for the quickest possible inspection and/or redress procedure. Since its inception over 20 years ago, M&M's Top Drive Safety Valve Bottom Load™ system has saved countless hours of rig downtime.



THREE-PIECE SAFETY VALVES WITH CANISTER GUARD®

Our innovative Three-Piece Safety Valve ("3PV") with CANISTER GUARD design is a proven winner when it comes to how versatile a larger more expensive valve can be. One, or both, of the end pieces of the 3PV can be removed and easily switched out in the event of connection damage or if a connection change is required. Spare end pieces can be kept on the rig floor for easy replacement should the need arise. Further, end pieces with different connections can be kept on the shelf by the customer allowing the same 3PV to be used on another job requiring different connections.



TOP DRIVE SAFETY VALVES WITH CANISTER GUARD®

We manufacture valves and saver subs that are specially designed to operate in conjunction with various makes and models of top drive. Our upper and lower top drive valves incorporate all the CANISTER GUARD technologies that make M&M International valves superior to other designs.



INSIDE BLOWOUT PREVENTER ("IBOP")/DART VALVES

ONE-PIECE IBOP

M&M's One-Piece IBOP offers all the same functionality of a traditional two-piece design, but with the addition of several key benefits. A one-piece design allows the IBOP to be shorter in length while also creating the possibility for smaller outside diameters. The one-piece design also eliminates the service break, which removes the need to torque a connection after assembly and allows for quicker disassembly, as there is no connection to break out. One-piece IBOPs also require less manufacturing time than two-piece, allowing for a faster lead time offering to the customer. Our IBOPs can be designed and manufactured to meet any applicable industry standard.



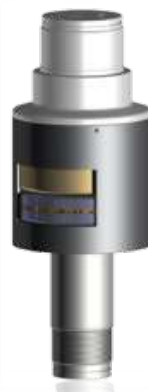
TWO-PIECE IBOP

M&M's Two-Piece IBOP is our improved version of the long-time standard for dart valves in the industry. We make it our own by manufacturing our IBOPs out of superior materials and with our best in class engineering and attention to detail. That is why M&M IBOPs are well known in the industry as time tested and reliable performers. Our IBOPs can be designed and manufactured to meet any applicable industry standard.



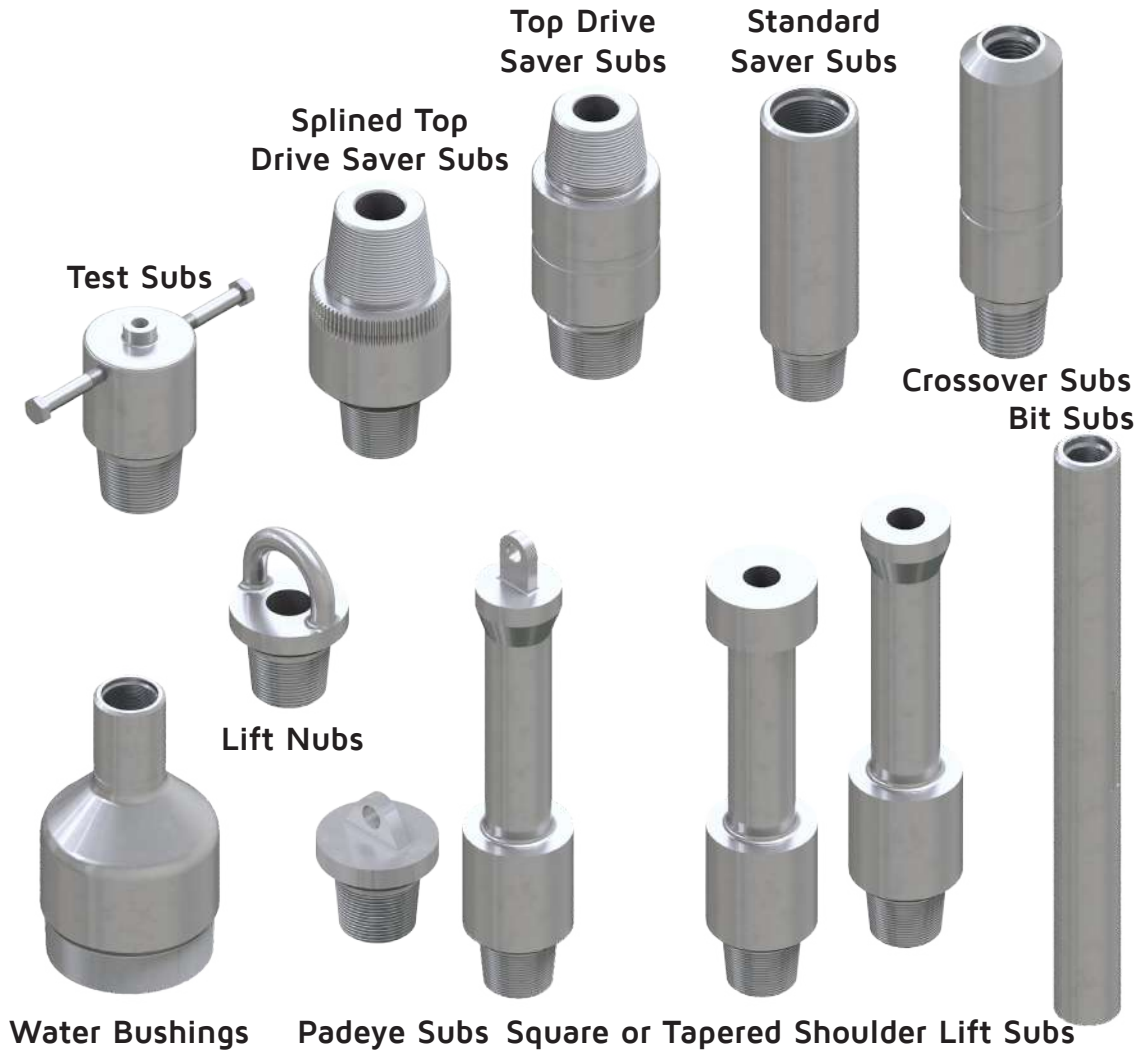
SWIVELS

M&M manufactures swivels with inside diameters ranging from under 2.00" to 6.50" at working pressures up to 15,000 psi. M&M assures the integrity of all swivel designs by utilizing the highest quality components and raw materials. Some common applications for our swivels are small bore pipe recovery and low RPM large bore high load capacity positioning swivels.



SUBS

M&M International offers a wide variety of drill stem subs to suit the needs of our customers. Our subs are designed and manufactured to meet API 7-1, unless individual customer specifications are required. Subs are available in all thread and end connection types



INTEGRAL SINGLE & DOUBLE SIDE entry SUBS

M&M’s Integral Side Entry Subs offer numerous advantages over standard, multi-piece, welded or flanged designs. Additional hammer union hang-off strength, increased body tensile capacity, and the elimination of welds or flanges are just a few of the benefits created by a single body design. We start with high quality forged materials when manufacturing our integral subs. Through proven shaping and heat treatment methodologies, we can ensure proper strength at all critical cross sections. This results in a much stronger product than normal hot-rolled bar. Making side entry subs from forgings also often allows for shorter lead times because manufacturing can begin with the material closer to its finished size, while at the same time removing the need for a post-machining heat treat process. Further, M&M stocks common forgings that are used to make our integral subs, which reduces lead times dramatically. With ample room for recuts, and your choice of hammer union, these subs are built for many years of service. Numerous custom options are possible.



PUMP IN SUBS & CIRCULATING SWAGES

M&M offers pump in subs and circulating swages made to order with your choice of hammer union and end connection.



Seat Elastomers

Buna N (nitrile) is the basic seat elastomer. It is excellent for petroleum oil and gases, fuel oils and alcohols from -10° F to +200°F. Hypalon is optionally offered compounded for maximum chemical resistance. Particularly suited for oxidizing acids, it resists hydrocarbon oils and fuels from -10° F to +250° F. Viton is highly resistant to mineral acids and hydrocarbons and resists moderate concentrations of hydrogen sulphide. Serviceable from -10° F to +400° F (Not suitable for steam).

Pressure Ratings

MKP Gate Valves are designed for the maximum working pressure and test pressure tabulated below:

Gate Valve rating must be selected to match the piping system in which the valve will be installed. Tabulated below are working pressures at 100° F for ASTM A-106 Grade B pipe in sizes corresponding to MKP gate valves.

Size	SCH. 40	SCH. 80	SCH. 160	XXH
2"	1260	2220	4300	5970
3"	1460	2370	3930	5880
4"	1300	2130	3830	5150
5"	***	1970	3730	4650
6"	1100	1970	3650	4724

Plastic Coating

Internally plastic-coated valve bodies and bonnet

7500	5000
7500 WP	5000 WP
11,250 PSI Test	7500 PSI Test

PYLE STAR-LINE EX® CONNECTORS

Application

Heavy duty, environmental cylindrical for high power applications with harsh/potentially explosive environments. Rugged, double lead threaded. EX designations.

Standards/Requirements

Hybrid form of the Star-Line series with higher temperature ranges. Cenelec Certified for use in Zone 1-IIc hazardous environment.

Coupling/Mounting

Double lead Acme threads provide complete coupling in one turn of the coupling nut, and do not clog under adverse weather conditions. Large wiring space provided in cable housings and conduit fitting bodies.

Contact Termination

Solder, crimp and pressure terminals. Circuit breaking power and control types.

Performance Environment/Elect.

Operating temp. from -65°C to +257°C. IP67 rating for environmental sealing. Hard anodic coating provides dielectric strength with heat and corrosion resistance. Up to high amperage of 1135 amps at 1000VAC or DC rating available.

Optional Features

- 5 shell styles with same insert patterns of Star-Line series
- Special arrangements with RADSOK® high amperage contacts are available. Standard Star-line EX inserts are not interchangeable with new RADSOK insert arrangements
- Variety of backend accessories including basketweave cable grips, straight or angled adapters, and receptacles mounted to junction boxes
- Can be terminated onto unarmored or armored and sheathed cables built to several popular standards

Markets

- Mass Transportation • Aircraft Refueling Pits • Pharmaceutical Mfg. Equip.
- Off-shore Oil Drilling • Automotive Paint Booths • Petro-Chemical



R49 SERIES

Application

R49 series connectors can be used wherever high amperage connection of AC or DC power is required. Typical applications are the connection of power from generator sets to Switchgear or SCR houses. Traction motors, mud pumps, drawworks, rotary tables, cement pumps and top drives.

Standards/Requirements

Cable types include IEEE Type P drilling cable and offshore rated cables. Standard AC/DC color coding options available. Multiple keyway options available offer prevention from cross mating separate circuits.

Coupling/Mounting

Connector series offers reverse bayonet type coupling, with ruggedized and overmolded coupling nut for ease of mating/unmating.

Contact Termination

Inline connectors offer crimp type; panel mount receptacles offer busbars for lug bolt terminations

Performance Environment/Elect.

Radsok contacts offer higher amperage rating, and reduced mating forces than similar style connectors/contacts. Radsok contact design features allow for significantly reduced mounting footprint compared to competitive products.

Markets

Industrial



PYLE STAR-LINE® CONNECTORS

Application

Heavy duty, environmental cylindrical for high amperage and high density control and instrumentation applications. Rugged, double lead threaded. ZP/ZR designations.

Standards/Requirements

Equals or exceeds MIL-C-5015 E and R specifications. UL listed and CSA listed for circuit breaking capability.

Coupling/Mounting

Double lead Acme threads provide complete coupling in one turn of the coupling nut, and do not clog under adverse weather conditions. Large wiring space provided in cable housings and conduit fitting bodies.

Contact Termination

Solder, crimp and pressure terminals. Circuit breaking power and control types.

Performance Environment/Elect.

Operating temp. from -67°F to +257°F. IP67 rating for environmental sealing. Hard anodic coating provides dielectric strength with heat and corrosion resistance. Up to high amperage of 1135 amps at 1000VAC or DC rating available.

Optional Features

- 5 shell styles with over 150 insert patterns
- 3 retention styles with captive contacts or insertable/removable contacts
- Contact inserts and adapters are interchangeable and reversible to suit special needs
- Thermocouple contacts available
- Special arrangements with RADSOK® high amperage contacts are available. Standard Star-line inserts are not interchangeable with new RADSOK insert arrangements
- Variety of backend accessories including basketweave cable grips, straight or angled adapters, and receptacle mounted to junction boxes

Markets

• Mass Transportation • Oil Exploration & Production Equip. • Automotive Tooling • Motor Operated Valves • Co Generation Equip.



NEPTUNE

Application

Heavy duty, environmental cylindrical connectors for high amperage applications. Straight plugs, inline and panel mount receptacles and angle mounting boxes available.

Standards/Requirements

UL listed to UL 1682 for power connectors. Amperage ratings include: 30, 60, 100, 150 and 200 amps. CE and CSA pending.

Coupling/Mounting

Double lead Acme threads provide complete coupling in one turn of the coupling nut, and do not clog under adverse weather conditions. Large wiring space provided in cable housings.

Contact Termination

Pressure terminated contacts for tool-less terminations.

Performance Environment/Elect.

Operating temp. from -67°F to +257°F. IP68 rating for environmental sealing. Hard anodic coating provides dielectric strength with heat and corrosion resistance. Amperages range from 30 through 200 amps at 600V, with various wire/ground configurations that include 2/3, 3/3, 3/4, 4/4 & 4/5.

Optional Features

- Inserts available with reverse service • Numerous wire & pole combinations available
- 3 key design to prevent miss-mating • Machined environmental caps available

Markets

• Oil Exploration Equip. • Portable Power Distribution Equip. • Convention Center Power Distribution
• Geophysical Trucks and Skids • Communication Shelters • Production Platforms



AMPHE-EX CONNECTORS

Application

Heavy duty, environmental power and signal connector. De-signed to meet the ATEX directive for explosion resistance. Smaller package than other EX proof connectors. Utilizes 38999 type insert arrangements which provides proven performance and can incorporate multiple contact types.

Standards/Requirements

ATEX certified to the Zone 1, Div. II Eexde for receptacles and Eexd for plugs.

Coupling/Mounting

Double lead Acme threads allow for complete coupling in one turn of the coupling nut. Will not clog under adverse weather conditions. Self cleaning coupling feature assists in mating. Adapters provide ample wire termination spacing.

Contact Termination

Multiple contact types can be used. Copper contacts and high speed coax contacts in the same arrangement. Fiber optics can also be incorporated using industry proven epoxy/polish method.

Performance Environment/Elect.

Operating temp. from -65°C to $+257^{\circ}\text{C}$. IP67 rating for environmental sealing. Hard anodic coating provides dielectric strength with heat and corrosion resistance. Standard inserts available for up to 600 VAC, 850 VDC.

Optional Features

- 3 shell styles available
- Most of the insert patterns that are available within the Amphe-Lite Series
- Design flexibility with signal, power, RF or fiber available in the same package

Markets

- Oil Exploration and Production Equipment • Data Acquisition & Transmission in EX Areas
- Robotics, Process and Motion Control • Chemical, Paint & Pharmaceutical Facilities, Fuel Storage Areas



RIG-POWER® INSERTS WITH RADSOK®

Application

Single pole power inserts with increased amperage and voltage capability within the heavy duty Star-Line connector. Designed to perform in the harshest environments. 1000v AC/DC capability.

Standards/Requirements

In Star-Line EX connectors: ATEX certified to the Zone 1, Div. II; Eexde for receptacles and Eexd for plugs. In Star-Line connectors: UL and CSA rated.

Coupling/Mounting

Incorporated into the Star-Line shell which provides all the advantages for heavy duty industrial usage, in a single pole interconnect. Double lead Acme threads. Cable adapters provide ample wire termination spacing.

Contact Termination

313 MCM through 777 MCM size cable for RADSOK® sockets and mating pins. Pressure or crimp termination available.

Performance Environment/Elect.

RIG Power inserts with RADSOK provide significantly reduced insertion forces vs. competitive product. Lower temp. rise allows for higher current in a smaller package. Star-Line anodic hardcoat plating provides corrosion resistance as well as dielectric strength.

Optional Features

- Several styles available for dead front pin (line side) or socket contact (load side). Plugs, cable receptacles, panel mount receptacles • Field repairability reduces equipment downtime
- RIG-Power inserts are available with standard contacts

Markets

- Oil Exploration and Production Equipment • Power Generation Applications, Co-Generation Equip.
- Offshore Drilling Platforms • Chemical, Paint & Pharmaceutical Facilities, Fuel Storage Areas



BHA WASH TOOL

The high level of safety in today's drilling operations around the world require special attention to equipment. Most drilling rigs have fully automated derrick and pipe handling systems. In certain regions the legislation prohibits personnel to work on the drill floor while the automatic pipe handling machines are in use. But still we experience personnel using HP cleaners when BHA is pulled through rotary.



Facts

The tool is tailor-made to fit on top of the diverter or bell nipple. It connects to the rig's HP system or a special HP unit fit for purpose. Actuation of HP water can be done locally on the drill floor or remotely from driller's cabin. BHA Wash Tool is welded in heavy stainless steel and in compliance with "Dropped Object Prevention Handbook". CE certification. Welding certificate.

Advantages

Easy to install on top of diverter or bell nipple. Improves safety on drill floor. No risk of dropped objects. No debris on drill floor or windows from using manual HP cleaning. All debris will be kept below rotary. Clean and tidy. BHA will be pulled faster out of hole, no stops for manual HP cleaning. Clean BHA when racking back or laying down on deck.

Benefits

BHA Wash Tool eliminates personnel using manual HP cleaners in Red Zone when BHA etc. is pulled through rotary. No exposure to the danger of dropped objects or working close to remote operated machines on drill floor. The tool only uses very limited water volume when HP cleaning the BHA. Less time spent on housekeeping after tripping, fast moving to next operation, less flat spots on operational trends.

TYPHOON WIPER

The high level of safety at modern drilling operations require special attention to equipment. Most drilling rigs have fully automated derrick and pipe handling systems. In certain regions the legislation prohibits personnel to work on the drill floor while the automatic pipe handling machines are in use. But still we experience personnel using HP cleaners when BHA is pulled through rotary and rubber wipers to clean DP string.

Facts

The TYPHOON Wiper is tailor-made to fit on top of the diverter or bell nipple. It connects to the rig's HP water system or a special HP unit fit for purpose. In addition HP air is connected. Actuation of water/air can be done locally on the drill floor or remotely from driller's cabin TYPHOON Wiper is welded in heavy stainless steel and in compliance with "Dropped Object Prevention Handbook". CE certification. Welding certificate.

Benefits

TYPHOON Wiper eliminates personnel performing manual cleaning in Red Zone when BHA and DP is pulled through rotary. No exposure to the danger of dropped objects or working close to remote operated machines on drill floor. The tool only uses very limited water volume when HP cleaning the BHA. Less time spent on housekeeping after tripping, fast moving to next operation, less flat spots on operational trends.

Advantages

Easy to install on top of diverter or bell nipple. Improves safety on drill floor. No risk of dropped objects. No debris on drill floor or windows from using manual HP cleaning. All debris will be kept below rotary. Clean and tidy. BHA and DP string will be pulled faster out of hole, no stops for manual cleaning. Clean BHA when racking back or laying down on deck.



COBRA WASH & DOPE TOOL

Most drilling rigs have fully automated derrick and pipe handling systems. In certain regions the legislation prohibits personnel to work on the drill floor while the automatic pipe handling machines are in use. But still we experience personnel using HP cleaners and manual dope brushes when drill pipe and other tubulars are cleaned and doped prior to connection.

Facts

The COBRA can be installed in two different ways – stand alone or integrated with the pipe handling system. It can be tailor-made to fit most drill floor applications and to be used with most types of pipe handling equipment. The COBRA require power, HP water, air and dope to operate. It is ATEX certified, Zone 1, CE certification, etc. Optional choices are:

- Dope pump stand alone. Data tracker and heat tracing available
- HP Wash Down Unit, integration available.
- Supply station. Dope pump and HP Cleaner build into cabinet



Advantages

Easy to install on the drill floor or pipe handler. The COBRA will wash and dope the DP tool joints automatically and ensure clean threads before applying correct amount of dope. Air-driven cylinder ensures gentle tool interaction with DP. Self-cleaning interior wash/flush sequence. Drain hose connection, no spill on drill floor. No personnel in drop zone while tripping in hole.

Benefits

Releases human resources. Personnel avoid the danger of dropped objects or working close to remote operated machines on drill floor (Red Zone). No over torqued connections. Not taking up iron roughneck time (as when pipe doper is installed on iron roughneck).

SPEEDY GONZALES PIN CLEANER

SPEEDY Gonzales Cleaner cleans tubular pin end threads prior to applying dope.

Facts

Stainless steel. Depending on preference the tool can be used with HP water or air. Ensures pin ends are properly cleaned prior to applying dope

Advantages

The operator using SPEEDY Gonzales Cleaner spends only a few seconds to clean the threads 360 degrees – in one workflow

Benefits

Increased efficiency and reduces exposure of personnel in Red Zone. The operator works in a safe distance and is protected by the spray shield



FOSV HANDLING TOOL

The handling tool is installed in the Fully Open Safety Valve/Kelly Valve in advance.

Facts

If the well flows through the drill pipe the FOSV with pre- installed FOSV Handling Tool can instantly be lifted by tugger and installed. Delivered with full certification and SWL. We can deliver for all safety valve thread types.

Advantages

No manual chain tongs are required. When using FOSV Handling Tool, safety valves can easily be stabbed and screwed in.

Benefits

The design contributes to fastest possible action and thereby reduces the risk of delays. The circular handle creates sufficient torque enabling one man to tighten the FOSV by hand. Operator works in a safe distance and is protected by the spray shield.



BOP DRIFT TOOL

Drilling operations worldwide experience problems after subsea BOP testing if the annular packer elements fail to fully retract. This potentially fatal situation often occurs in deep and cold waters. To increase efficiency and prevent pulling the BOP we offer the BOP Drift as a solution to this problem. The BOP Drift was developed in close cooperation between RIGTOOLS' design team and a worldwide leading drilling contractor.



Facts

The BOP Drift will be designed and tailor-made to fit the rigs setup. It will be an integrated part of the BOP test string to allow for quick and safe drifting of BOP's. After testing rams and annular preventer, the test string is pulled out of the BOP. Drilling fluids can circulate freely through 8 channels with no flow restrictions in the annulus.

API 7K certified.

Advantages

The tapered shape on the BOP Drift assists the annular packer element to retract to original setting if the annular packers are reluctant to retract fully prior to "drifting". Pulling the BOP stack is no longer the only solution.

Benefits

With the possibility of using the BOP Drift you prevent damaging the annular BOP and prevent retrieval of the marine riser and BOP. Generally the option of using the BOP Drift will eliminate annular failures and potential downtime, thus saving time and money.

RIGTOOLS CLAMP

When handling lifting subs homemade tools or straps are often used. Handling lifting subs in various ways have caused many incidents and pinched fingers.

Facts

Made of stainless steel. We supply Rigtools Clamp in following standard sizes:

- 3 1/2" • 4" • 5" • 5 1/2"
- 5 7/8" • 6 5/8" • 7"

Two-legged lifting sling and full certification for offshore use is included.



Advantages

RIGTOOLS Clamp is clamped directly around the lifting subs when installing or removing them from BHA components. The safety hooks keep the RIGTOOLS Clamp securely locked while in operation. No loose bolts or shackles required, no need of slings for handling lifting subs.

Benefits

RIGTOOLS Clamps makes operation more safe and efficient when handling lift subs in vertical and especially horizontal position. The handling is in control and keeps hands and fingers free from danger. The risk of hanging up in threads when removing lifting subs in vertical position is reduced.

DRIFT SAFE

To have a set of drifts in various sizes is convenient when verifying the ID of your tubulars. However, it can be demanding to keep track of all your drifts. The DRIFT SAFE from RIGTOOLS provides a nice and organized solution to keep that overview at all times.

Facts

Stainless steel cabinet with key lock containing 20 stainless steel drifts for DP, HWDP, DC and other tubulars. Other setups and combinations such as teflon drifts can be supplied on request



Advantages

Inventory list with drift specifications does follow the DRIFT SAFE. Each drift has a designated and marked place on the cabinet's rack system. Always correct size of drift available. No flow restriction due to large ID on drifts.

Benefits

Less risk of dropping wrong drift because size is stamped into each drift. The driller holds the DRIFT SAFE key and has full control of where the drifts are located. Storing each drift in the rack system will give full overview of how many & which drifts sizes are available - & which sizes that may be out and operational. Long lifetime because drifts do not disappear. No time wasting search for drifts.

MONSOON SHAKER SCREEN WASHER

The high level of safety in today's drilling operations requires special attention to clean work areas and mud exposures. To increase safety and prevent personnel being exposed to mud and chemicals, we have introduced the automatic MONSOON Shaker Screen Washer.



Facts

- Made of stainless steel and quality components
- Fast efficient cleaning of multi-size screens. MONSOON is fully certified for offshore conditions; ATEX Zone 1, NORSOK and CE certification
- It requires sufficient supply of HP Water, air and power

Advantages

- Special nozzle system creates dynamic impact
- Small footprint
- The machine has isolating inner and outer housing
- 100% control with critical substances
- Mud and cuttings will be drained
- Vapors will leave through exhaust pipe

Benefits

- Consistent and gentle wash sequence will prolong screen lifetime significantly and reduce your cost
- Crew will not be exposed to mud and noise level is reduced
- The risk of exposure to hot water and hot surfaces fusing hot water is eliminated
- Work area is always clean and tidy
- Easily installed in shaker room

HIGH PRESSURE CLEANERS

RIGTOOLS provide a range of High Pressure Cleaners. The machines are designed by RIGTOOLS using the best and most reliable components available on today's market.

Facts

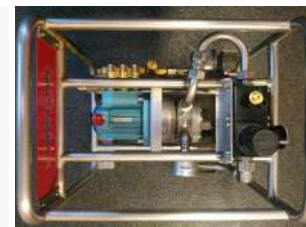
The units are tailor-made to match the end users specific requirements. Capacity is typically from 100 Bar to 500 Bar. Non Ex as well as Ex rated. Non heated, heated or winterized. Mobile units or stationary, perhaps installed in an offshore cage. The units can also be designed to supply the distribution network or ring lines on rigs or ships. The High Pressure Cleaners comply with all current regulations and requirements in the oilfield and for ships.

Advantages

RIGTOOLS have developed High Pressure Cleaners specially designed to deliver required water flow and pressure to RIGTOOLS BHA Wash Tool, TYPHOON Wiper, COBRA DP Pipe Wash & Dope Tool and the MONSOON Shaker Screen Washer.

Benefits

- Highly reliable quality units will prevent downtime
- Service and maintenance is reduced to a minimum
- Using tailor-made HP Cleaners units always ensures the ideal capacity & results



HI-HAT DOPER

HI-HAT Doper is a lightweight raised frame for buckets. The integrated lid keeps water and debris out of the expensive dope.

Facts

Frame and lid made of galvanized steel. 1 meter high and weighing 10 kg. Two brackets on the sides for holding dope brushes.

Advantages

The pedestal with brush brackets and foot operated lid improves ergonomics. Fast and efficient to use. Furthermore the lid will keep the dope clean.

Benefits

Personnel will not get exposed to dope. Keeping the dope clean will extend the lifetime and reduce the amount of discarded half full buckets due to contaminated dope. No contaminated dope will be applied on threads.



HORSESHOE FLOWLINE MAGNETS

HORSESHOE Flowline Magnets are positioned in a tailor-made frame, which fits the header box or flowline (or both). This provides a complete magnetic barrier across the full width and depth of the fluid path.

Benefits

- Eliminates or reduces metal in mud pumps
- Scrap the conventional heavy block magnet full of muddy metal swarf having to be lifted and mechanically cleaned
- Reduces risk of finger cuts and back injuries
- Crew will not be exposed to mud
- No time wasted on cleaning magnets

Facts

- Made of stainless steel with a retractable magnetic piston
- Each magnet weighing only 4 kg.
- The kit will be designed to fit into your flowline

Advantages

Easy to install and retrieve in the flowline or ditch. When collection of swarf is needed

each lightweight magnet is pulled one at a time. When retracting the magnetic piston the demagnetization and stopper plate will make the swarf fall off without touching it.



BOXING RING ROTARY HANDRAIL

After removing master bushings you install the BOXING RING Rotary Handrail in rotary table to reduce potential hazards when working on, through and below rotary.

Facts

- The handrail consists of two half-moon parts kept together when installed in the rotary table
- Tailor-made diameter to fit any rotary
- Lightweight

Advantages

- Special locking system with no loose bolts required to keep the handrail locked together
- One person can lift and move the lightweight handrail
- High kick plates

Benefits

The easy and simple design makes it safe and fast to install without using bolts or tools. It reduces risk of dropped objects through rotary table due to the high kick plates. No risk of hanging up with wires when running through rotary table. The BOXING RING is very compact when dismantled and stored away.



SPEED COVER

SPEED Cover for fast installation around tubulars to avoid dropped objects into the well.

Facts

- Metal frame with flexible rubber opening and durable high visibility tarpaulin
- OD is 41" and ID varies depending on DP size
- Customized covers can be made on request
- API 7K certified

Advantages

- The SPEED Cover is lightweight alloy yet durable. Velcro. No loose metal items are used
- Fastest possible way to seal the opening effectively

Benefits

SPEED Covers are easy and fast to install and remove. With the use of dedicated size the cover fits tightly around tubulars and thereby prevent smaller items from dropping into the well.



CONTAINER ACCESS RAMP

The ideal solution to provide fast and safe access to containers when and where you need it.

Facts

Made of aluminium with anti-slip surface.

Model	Width
B800	800 mm
B1000	1000 mm

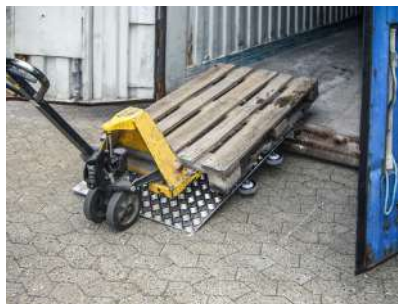
Benefits

One person can easily transport, handle and position the Container Access Ramp due to the lightweight, the built-in handles and transport wheels. Ensures a safe and even floor, e.g. when moving goods with trolleys, etc.

Advantages

The ramp is lightweight and has transport wheels and built-in handles.

Available in standard measurements or tailor-made to your specific requirements.



PITBULL TORQUE TOOL

Many rigs are still equipped with manual mud pump fluid end caps. These caps are usually tightened and loosened by use of sledgehammer.

Facts

Made of stainless steel. Tailor-made to fit any fluid end caps. RIGTOOLS can also provide a hydraulic or pneumatic torque wrench fit for purpose

Advantages

The PITBULL Torque Tool eliminates use of sledgehammer. Correct and controlled torque is applied when making up end caps.



Benefits

Use of sledgehammer is a potential hazard to personnel and causes accidents while handling mud pump fluid end caps. This hazard is eliminated by using PITBULL Torque Tool. In addition it is more gentle to the equipment.

ROUGHNECK BACKSAVER

The ROUGHNECK BACKSAVER is a power slips lifter which eliminates the need of manual handling of heavy slips. It can be operated from the driller's console or at a safe distance.

Facts

The ROUGHNECK BACKSAVER can be hydraulic or pneumatic operated as per customer requirements. Retractable functionality is optional. During normal tripping the retractable function is not required.

Advantages

Easy and quick to install. The optional retractable feature eliminate the need of removing the conventional slips lifter while drilling or tripping in open hole sections where rotating of the string is required. No need of removing rotary insert bowls or master bushing like other type of automatic slips or slips lifter.



Benefits

With the retractable function the slips retracts from the pipe & will in a few seconds be extended towards the pipe when required so the slips can set into the rotary. The need of removing the conventional slips-lifter is eliminated. Personnel is kept out of Red Zone. Personnel will not have to lift heavy slips which is safer & more efficient. The no. of personnel required on the rig floor is reduced.

ELEVATOR HANDLING TOOL

When auto or manual elevator is hanging on the bails, then simply pick up the Elevator Handling Tool with a winch and close the elevator around the Elevator Handling Tool. Now the elevator can safely be lifted out of the bails.

Benefits

- Elevator Handling Tool improves safety and efficiency when handling any size manual and auto elevators
- No risk of dropping the elevator

Advantages

Slings are no longer required

Facts

- Made of stainless steel
- Weight only 11 kg
- Delivered with full lifting certification



STANDARD HOLE COVER

Standard Hole Cover made of aluminium to prevent objects from falling down the well.

Facts

- Made of aluminium
- OD is 30" with pins to fit in holes in rotary table
- Customized metal covers can be made on request

Advantages

- The Standard Hole Cover is lightweight yet durable quality
- No loose metal items are used

Benefits

Hole Covers are easy and fast to install and remove from rotary table. They fit tightly into rotary table and thereby prevent smaller items dropping into the well



SAFELIFT

The SAFELIFT is mounted directly on plug valves for a safer lifting and handling of plug valves.

Facts

- Lightweight aluminium design weighing only 2 kg
- Tailor-made to fit Anson, FMC and SPM-valves
- API 7K Certified

Advantages

- Easy opening and closing of valves. No handling bars required
- SAFELIFT ensures firm and secure grip when lifting plug valves and can stay on while the valve while is in use

Benefits

Improves ergonomics when two people sharing the load while handling valves. When two people use the SAFELIFT on staircases they can carry the load with one hand and keep the other hand on the handrail. SAFELIFT makes it easier to see whether the valve is in open or closed position.



PONCHO HOLE COVER

PONCHO Hole Cover made of tarpaulin to avoid dropped objects into the well doing completion jobs.

Facts

- Made of durable high visibility tarpaulin
- OD is 75" with flexible Velcro collar
- Customized tarpaulin or alloy covers can be made on request

Benefits

PONCHO's are easy and fast to attach and detach. They fit tightly around a wide range of tubulars and thereby prevent smaller items dropping into the well.

Advantages

The PONCHO is lightweight yet durable quality and using only Velcro. No metal items are used.



SHALE SHAKER REPLACEMENT SCREENS

Our replacement screens are currently on over 250 rigs in the USA and on 300+ rigs on the international platform. More than 2.000 shakers running our quality screens.

Facts

RIGTOOLS supply affordable quality shale shaker replacement screens for the majority of shale shakers such as:

- BRANDT[®]™ KING COBRA[™]
- BRANDT[®]™ KING COBRA VENOM[™]
- BRANDT[®]™ KING COBRA HYBRID[™]
- BRANDT[®]™ LCM Series
- NATIONAL 285p
- BRANDT[®]™ VSM 300[™], Scalper & Primary
- BRANDT[®]™ VSM[™] Multi-Sizer, Scalper & Primary
- FLUID SYSTEMS[®]™ Fluid Systems 20L, 50/500 B (5000B)
- M-I SWACO[®]™ MONGOOSE PRO
- M-I SWACO[®]™ MEERKAT PT
- M-I SWACO[®]™ MONGOOSE PT
- VORTEX FLUID SYSTEMS ORBITAL 3000[®] Series
- Derrick Equipment Co.[®]™ 500 Series

Advantages

With replacement screens supplied by RIGTOOLS you will find unmatched value for money. Outstanding quality, durability, supply and service at affordable prices. Our screens can easily stand – and beat – OEM screens in comparative tests. Rigs are currently using our screens because we do not over-inflate our prices, our screens are API certified and our screens are of great quality.

Benefits

We are confident that you will find that your screen consumption will decrease because of the wear resistance of our screens. We have been credited with lowering mud bills due to less dilution, lowering haul off bills because of less fluids loss and better solids separation which is beneficial to pumps, pump parts, etc.



Tracerco started as a small research team in 1958 and now they have enhanced expertise in radiation handling and functional safety, including chemical tracer and scanning technology. They provide devices for various measurement solutions from level measurement, density measurement and phase measurement, to portable radiation monitors.

TRACERCO™ T202: RADIATION DOSE RATE MONITOR

- Intrinsically safe so no need for a hot work permit to operate in a hazardous area †
- Reads and records peak measurement so you can measure radiation levels remotely
- Use in all weathers and shock proof
- Alerts you when it needs to be calibrated
- Adjust your own alarms
- Lightweight, making it easy to carry and manoeuvre
- Easy to read display
- Easy to decontaminate

Accessories available with the monitor:

- Robust weatherproof transit case
- Extension clamp kit
- Protective leather holder
- Safety signs and labels



Radiation Detected
X-rays & gamma rays in range 59 keV to 1332 keV
Detector
Single Halogen, Energy compensated Geiger Muller Tube
Dose Rate Range
Bar Graph Display 0-1000 µSv/h
Digital Numeric Display, 0-10,000 µSv/h
USA Version: Bar Graph Display 0-100 mRem/h
Digital numeric display 0-1000 mRem/h
Accumulated Dose Range
Digital numeric display 0-10,000 µSv. USA version: Digital numeric display 0-1,000 mRem.
Peak Radiation Dose Rate
Digital numeric display 0-10,000 µSv/h. USA version: Digital numeric display 0-1,000 mRem/h
Case Material
Static dissipative nylon body with ABS window
Hazardous Area Certification
Equipment code Ex ia IIC T4 (-20°C ≤ Ta ≤ + 50°C) Gā. ATEX code II 1G. Suitable for hazardous area zones 0, 1 and 2
Variation with Battery Voltage
Less than 2%
Battery Life
100 hours typically with background radiation
Low Battery Indication
On 4 hours available life left
Battery
Alkaline Manganese MN1604 or MX1604
Ingress Protection Rating
Rated IP65 (dust tight and will withstand water jets)
Humidity Range
0 to 95%
Weight
500 grammes
Variation with Temperature
Less than 15% over operating temperature range
Standard Compliance
The monitor meets the following EU directives: 2004/108/EC Electromagnetic Compatibility Directive 94/9/EC ATEX Directive

TRACERCO™ PERSONAL ELECTRONIC DOSIMETERS (PEDs)

- Dose rate range of upto 1Sv/h, 100 R/h (PED-ER and PED-ER+)
- Energy range of up to 3 MeV
- Intrinsically safe - no need for a hot work permit (PED-IS)
- Large, clear, easy to read display with one button operation
- Audio and visual alarms with vibration functionality
- IP67 rated
- Can be used as a handheld survey meter with GPS & Bluetooth features (PED+ and PED-ER+)
- Easy dose management with free DoseVision software

Radiation Detected	
X-rays and gamma rays in range (33 KeV to 3 MeV PED-IS, PED Blue, PED+), (48 KeV to 3 MeV PED-ER, PED-ER+)*	
Detector	
Single energy compensated Geiger Muller tube	
Units	
Sieverts or Rem (may be 0-100 R/h (PED-ER, PED-ER+) selected in DoseVision™ software)	
Memory	
125,000 data point capacity. Serial non-volatile memory 10 year data retention	
Accumulated Dose Range	
Dose "Man" display 0-10Sv, 0-1000 rem Digital numeric display 0-10Sv, 0-1000 rem	
Peak Radiation Dose Rate	
Digital numeric display 0-100mSv/h, 0-10 R/h (PED-IS, PED Blue, PED+) Digital numeric display 0-1 Sv/h, 0-100 R/h (PED-ER, PED-ER+)	
Dose Rate Range	
Bar graph display 0-100 mSv/h, 0-10 R/h (PED-IS, PED Blue, PED+), 0-1 Sv/h, 0-100 R/h (PED-ER, PED-ER+) Digital numeric display 0-100 mSv/h, 0-10 R/h (PED-IS, PED Blue, PED+), 0-1 Sv/h, 0-100 R/h (PED-ER, PED-ER+)	
Battery	
Rechargeable lithium Ion. Recharge via standard 5V micro USB connection. Can be charged from PC	
Battery Life	Low Battery Indication
300 hours typically with background radiation**	On 8 hours battery life remaining
Size	Weight
104mm x 64mm x 24mm	190g including belt clip
Ingress Protection Rating	Case Material
IP67 (dust tight and can withstand immersion in water at depth of 1m)	Shock, vibration and drop resistant polymers Antistatic surface properties (PED-IS only)
Humidity Range	Operating Temperature Range
Up to 95%	-20°C to 50°C
Hazardous area classification code (PED-IS only)	
ATEX & IECEx: Zone 0, 1, 2 gas group IIA, IIB, IIC, FMC: Class I, Zone 0, Group IIA, IIB, IIC FMUS: Class I, Division 1, Gps A, B, C and D, Class I, Zone 0, Group IIA, IIB, IIC	
Hazardous area classification code (PED-IS only)	
BSEN 61526, EN55011, IEC60079-0, IEC60079-11, IEC61010-1, FM Class 3600, FM Class 3610, FM Class 3810, ANSI/IEC 60529, CSA-C22.2 No. 60079-0, CSA-C22.2 - E60079-11, CSA-C22.2 No. 60529, CSA C22.2 No. 1010.1	
Hazardous area classification code (PED-IS only)	
ATEX: Certification No. Baseefa11ATEX0045: Marking - II 1G Ex ia IIC T4 Ga (-20°C ≤ Ta ≤ +50°C) IECEx: Certification No. IECEx BAS11.0027: Marking - Ex ia IIC T4 Ga (-20°C ≤ Ta ≤ +50°C) FMC: Marking - CI I, ZONE 0, Ex ia IIC T3 (-20°C ≤ Ta ≤ +50°C) FMUS: Marking - CI I, ZONE 0, AEx ia IIC T3 (-20°C ≤ Ta ≤ +50°C) Marking - IS CI I, DIV 1, GPS ABCD T3 (-20°C ≤ Ta ≤ +50°C)	



PED-IS



PED Blue
& PED-ER



PED+ &
PED-ER+

Accessories

- Transit Cases (PED-IS)
- Lanyards
- Desktop and Portable Dock (PED-IS)
- Travel Adapters
- Leather / Fabric Holders

TRACERCO™ NORM MONITOR -IS

- Intrinsically safe – no need for a hot work permit
- ATEX or CSA approved
- Easy to clean and decontaminate
- Digital display and live background subtraction
- Multiple measurement modes
- Bq/cm2 output for NORM Isotopes
- Adjustable and audible alarm thresholds for improved safety
- Two detachable probes (GM and Scint) with in built calibration data

Radiation Detected	
Scint: Gamma, high energy beta GM: Alpha, beta, gamma Automatic direct translation to Bq/cm2 for Pb-210 (wet or dry), Ra-226 (wet or dry), Sr-90, Am-241, C-14, Cl-36	
Scintillator detector	GM Detector
Nal crystal in metal/polymer enclosure	Single halogen thin window Geiger Muller Tube
Count range	
Scint: 0 – 200,000 cps (1.2 million cpm) GM: Bar graph display (0-1000 CPS). Digital numeric display in CPS or Bq/cm2	
Over-range response	
Scint: Bar graph display will read full scale. Digital numeric display will read "OUEr" GM: Bar graphic display will read full scale. Digital numeric display will show OUEr (over) above 4000 CPS	
Integrate period	
Auto = 60 seconds or 1000 counts User defined = 5 – 600 seconds	
Measurement modes	
Scint: CPS, µSv/h GM: CPS, bq/cm2All modes have a background subtraction options CPM and µR/h available	
Dose rate range (Scint only)	
0.000 to 50µSv/h (Cs137 only) (0.0 – 5000 µR/h). Dose rate function only to be used in accordance with North American guidance for NORM monitoring – not recommended for general dose rate measurement	
Battery	Battery Life
Varta Energy 6LP3146	Scint: Scintillator: 55 hours typically with background radiation GM: 190 hours typically with background radiation
Battery life	Variation with battery voltage
Scint: Scintillator: 55 hours typically with background radiation GM: 190 hours typically with background radiation	Scint: +/-2% GM: < 2%
Case Material	Weight
Static dissipative nylon body with ABS window	Scint: Handset: 500g Scintillator probe: 700g GM: Handset: 500g GM probe: 500g (approx.)
Variation with temperature	Humidity range
<10%	0 – 95%
Ingress protection rating	Standard compliance
Scint: Handset: IP65, Scintillator probe: IP67 GM: Handset: IP65, GM probe: IP34	BSEN 61526, EN55011, IEC60079-0, IEC60079-11, IEC61010-1, UL 913, UL 60079-0, UL 60079-11, CSA C22.2 No. 0-10, CSA C22.2 No 157-92, CSA 60079-0:07, CSA 60079-11:02
Hazardous area classification code (PED-IS only)	
ATEX & IECEx: Zone 0, 1, 2 gas group IIA, IIB, IIC CSAC & US: Division 1 & 2, Groups A, B, C and D Zone 0, 1, 2 gas group IIA, IIB, IIC	
Hazardous area classification code (PED-IS only)	
ATEX: Certification No. Baseefa12ATEX0209X Marking – II 1G Ex ia IIC T4 Ga (-20°C ≤ Ta ≤ +50°C) IECEx: Certification No. IECEx BAS 12.0114X Marking – Ex ia IIC T4 Ga (-20°C ≤ Ta ≤ +50°C) CSAC: Marking – Class I, Div 1, Gps A,B,C, D T4 (-20°C ≤ Ta ≤ +50°C) Marking – Ex ia, IIC T4 (-20°C ≤ Ta ≤ +50°C) CSAUS: Marking – Class I, Div 1, Gps A,B,C, D T4 (-20°C ≤ Ta ≤ +50°C) Marking – Class I, Zone 0, AEx ia, IIC T4 (-20°C ≤ Ta ≤ +50°C)	



Accessories

- Robust, weatherproof transit case & holster
- Extension pole kit
- Check source



BESTOLIFE®

PREMIUM COMPOUNDS

BESTOLIFE® compounds come in a wide array of lab-tested and field-proven formulations for drilling, production, and industrial purposes. BESTOLIFE® compounds can be used in a variety of applications and tailored to meet specific needs. They are available in a range of container sizes from plastic or metal pails in 3.5 and 5 gallon sizes to 55 gallon drums.



BESTOLIFE® GGT-RSC-HT

BESTOLIFE® GGT-RSC-HT is an economical non metallic thread compound for rotary-shouldered connections. Recommended for medium to heavy duty drilling, the compound applies easily in a range of temperatures and conditions. GGT-RSC-HT is resistant to washout and will not harden or bleed excessively in storage. NSF H2 registered. BESTOLIFE® GGT-RSC-HT contains a high percentage of amorphous and synthetic graphite, as well as other inert solids, in a high-temperature base grease. In addition to the galling & seizing protection provided by the solids, GGT-RSC-HT also contains a soluble extreme pressure package that is surface active (adheres to metal surfaces) & helps to provide the load-carrying capability required by the high-bearing stresses present in rotary-shouldered connections. It is recommended for medium to heavy duty drilling.

Product Number	Container Size	Container Weight
652251	5 gallon	50 pounds metal



5 Gallon Metal Pail
Packaging

Product Characteristics

Color	Penetration (ASTM D217)	NLGI Grade	Weight/Gallon	Thickener	Fluid Type	Dropping Point (ASTM D2265)	Flash Point	Brushable to	Service Rating	Friction Factor	Shelf Life (Unopened container)
Black	300-320	1	10.7 pounds/gallon	Lithium Complex	Petroleum	≥500°F (≥260°C)	≥392°F (≥200°C)	15°F (-9°C)	600°F (316°C)	1.0*	4 years



FINGER SHIELD FINGER SAFETY TOOL

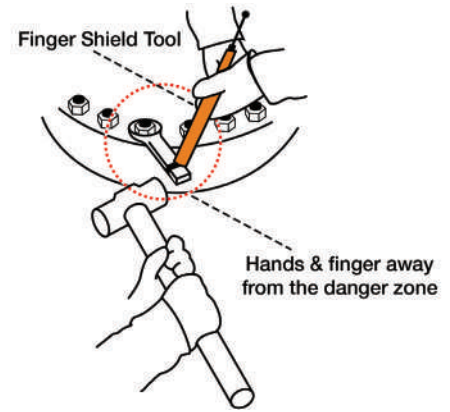
The Finger Shields are designed to hold / support large spanners / wrench in place during the removal of bolts and nuts.

Size / Diameter / Weight

- 850mm / 33.5mm / 680 grams
- 375mm / 33.5mm / 230 grams
- 295mm / 33.5mm / 194 grams

Material

- Body: High-impact Poly Propylene
- Internal Strap: Nitrile (Black) / Poly Propylene webbing (Black)





Powering Business Worldwide

EATON EC556 BLOWOUT PREVENTER HOSE SYSTEM

The Eaton EC556 blowout preventer hose system is a critical part of oil & gas drilling and exploration equipment, where reliability and safety are of utmost importance.

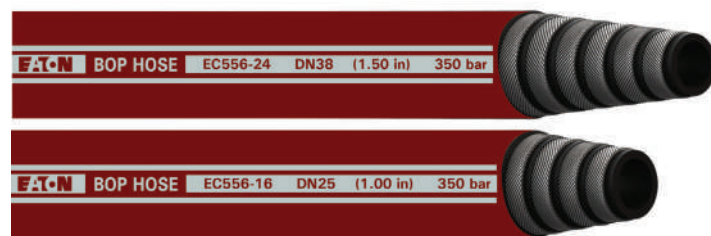
The EC556 combines high-performing spiral-reinforced hose with special flame-resistant rubber and is qualified with our reliable 1W-ISC fittings (carbon steel and stainless steel).

Eaton EC556 is rated for 350 bar (5000 psi) constant working pressure in all sizes 1/2" through 1 1/2", meets or exceeds the requirements of API 16D – minimum of 700°C (1300°F) for 5 minutes – and is certified by Lloyd's Registry.

The specially-designed cover is abrasion-resistant and allows for greater flexibility and is easier to route than steel-armored offerings.

Technical Highlights

- Available in sizes from -12 to -24
- Rated for 350 bar (5000 psi) constant working pressure
- Specially designed fire resistant red color cover
- Stainless steel highly flexible protection sleeve available on request
- Qualified with Eaton 1W-ISC fittings (carbon steel and stainless steel)
- Assembled by Eaton certified partners based on your demands
- **Certified in accordance with Lloyd's Register Fire Tests OD/100/499 Rev. 1 and API 16D Sect. 10.1.2**



Part No.	Hose I.D.			Hose O.D.		Max. Operating Pressure		Burst Pressure		Min. Bend Radius		Weight	
	DN	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	Lb/ft
EC556-12	19	19	0.75	32	1.26	350	5000	1400	20000	280	11	1.58	11.4
EC556-16	25	25.4	1	38.3	1.5	350	5000	1400	20000	340	13.4	2	14.6
EC556-20	32	31.7	1.25	45.1	1.77	350	5000	1400	20000	460	18.1	2.47	17.8
EC556-24	38	38	1.5	56.4	2.12	350	5000	1400	20000	500	19.6	4.64	33.5

Construction

- Black, oil resistant synthetic rubber tube
- Multiple high tensile wire spiral reinforcement layers
- Red, specially compounded, flame resistant cover

Agency Listings

- Lloyd's Certified
- API 16D flame resistant

Fittings

Internal Skive Crimp (ISC) 1W series fitting for all sizes -12, -16, -20, -24

Operating Temperature

-40°C to +100°C
(-40°F to +212°F)

Application

- For prevention of pressure escape at the wellhead during drilling-completion operations
- Critical component of blowout preventer system
- On-shore oil and gas exploration

YOUR ONE-STOP SOLUTION FOR PREMIUM INDUSTRIAL TOOLS

12 Ranges - 20,000 References in stock

In all the operations of the Oil & Gas industry (EPC projects, MRO, Technical shutdowns), it is essential to have a manufacturer that ensures the immediate supply of premium certified tools when and where they are needed.

As a recognized specialist in this field, EGA Master allows O&G companies to operate and maintain their assets without compromising the safety and efficiency of its workforce.

NON-SPARKING

The widest range of certified industrial tools for working in explosive environments due to the presence of gases or dust.

The entire range is available in both Copper-Beryllium and Aluminium-Bronze. We also manufacture products in Brass, Copper and Acetilex® Industrial tools with BAM certificate, German laboratory accredited by the EU.



ATEX

ATEX certified instruments for a safe work in explosive environments.

A wide range of telephones, radios, torches, hydraulic and pneumatic tools, as well as other measuring instruments with the latest technological innovations.



1000V INSULATED NON-SPARKING

Specially designed for work under electrical tension in explosive environments.

They comply with the IEC 60900 International Standard. Tested at 10.000V (10 times the Certified Intensity).



PIPE TOOLS

The widest range of pipe tools and machines designed for use in demanding and heavy industrial environments.

Our innovations and patented pipe tools such as our Mastergrip make your work more efficient than ever.



TOTAL SAFETY SLOGGING WRENCHES

Specially designed to avoid injuries on fingers and hands thanks to its innovative removable shackle that dispenses with having to hold the wrench.

Antidrop® system included.



ANTIDROP

The widest range of industrial tools to work safely at heights.
Innovative heat-shrink system that allows adapting any of our tools.



INDUSTRIAL TOOLS

The widest range of tools and sizes in the market, from the smallest to the biggest ones, including non-standard sizes.
The range includes from pliers, screwdrivers or combination wrenches, to controlled tightening tools such as digital and analogic torque wrenches, hydraulic and pneumatic tools.



CONTROLLED TIGHTENING

The widest range of tools for controlled tightening. Advice and customized developments.
The range includes from digital torque wrenches (torque checking QC, mini, interchangeable heads torque wrenches...) analogic torque wrenches (mini, interchangeable heads, preset torque, dial, 1000V insulated torque wrenches...) hydraulic and battery-powered torque wrenches, to torque multipliers and calibration and control tools.



UNDERWATER USE AQUAMASTER

Hydraulic and pneumatic equipment designed for underwater use and to work at any depth achievable for divers.
The range includes grinders, impact wrenches, drills and saws among others.



FOAM TRAYS AND TOOLS PERSONALIZATION

For a better tool control.
We personalize the design of each Foam tray for roller cabinets, tool boxes, suitcases or tool sets.
100% personalized and tailor-made!



WHY DOES THE OIL AND GAS SECTOR TRUST EGA MASTER?

12
RANGES

THE WIDEST PRODUCT RANGE.

We are the only manufacturer that offers a one-stop solution to reduce the administrative and logistic costs of procurement processes. We manufacture 12 ranges and 23,000 references!



FLEXIBILITY AND PERSONALIZATION

We offer solutions to meet the specific needs of each customer, either by personalizing solutions or manufacturing tools according to the customer requirements.



PREMIUM TOOLS FOR INDUSTRIAL USE

We offer premium quality solutions for industrial use. All our tools include an unlimited lifetime warranty (*).
*Excluding non-sparking tools.



IMMEDIATE AVAILABILITY

Our products are in stock for immediate delivery. We have a 98% availability rate and a 99% on-time delivery rate.



OFFSHORE HANDLING SYSTEMS LTD

Placing Your People in Safe Hands

GENERAL CARGO HANDLING TOOL

The key to your Hands Free Solution, the General Cargo Handling Tool is designed as a multifunctional push/pull pole that allows your user to safely control the guiding and landing of deck cargo from containers to tubulars by creating a safe distance and buffer area between the user and the load.

Enclosed Handle	Open Handle
GCHT18001 1300mm	GCHT19002 1500mm
GCHT18002 1500mm	



DRILL PIPE HANDLING TOOL

The movement of suspended drill pipe is a high risk area. The Drill Pipe Handling Tool perfectly complements the use of taglines by providing exceptional control of the load and flexibility to the user with combined push / pull capability. It can also handle bulk hoses and BOP lines with ease and is an essential tool for the management of risk in this area.

Enclosed Handle
DPHT18003 1200mm
DPHT18004 1500mm
Open Handle
DPHT19004 1500mm



DRILL PIPE CASING TOOL

Your solution to the movement of larger drill pipe and bundles of drill pipes, the Casing Tool's multifunctional ability makes it a critical addition to your Hands Free toolkit.

Enclosed Handle
DPCT18007 1200mm
DPCT18008 1500mm
Open Handle
DPCT19008 1500mm



DRILL PIPE SET BACK TOOL

For use on the drill floor, this tool allows drill stands to be safely handled in the setback area providing maximum protection to the user while retaining maximum control and flexibility. It not only mitigates the risk of hand injuries, but it also keeps the users feet at a safe distance from the setback area while landing pipe in the vertical stored position.

DPST18005 1200mm
DPST18006 1500mm



PRO PIPE GRIPPER TOOL

The PRO Pipe Gripper Tool is designed to enable the operator to achieve push/pull capabilities for a wide range of suspended drill pipe (BHA) and large diameter pipes such as casing joints and hoses ranging from 4 " up to 13".

This is the only product on the market that has been developed for the handling of these high risk activities involving large diameter tubing.

Enclosed Handle	Open Handle
PPGT18020 850mm	PPGT19022 1500mm
PPGT18021 1200mm	
PPGT18022 1500mm	



HANDS FREE WORKING STARTER KIT

An ideal starter solution, the Starter Kit comes with a Storage Station and a default set of tools designed to meet your initial needs. This set can be customised to your own requirements, please contact us for further details.

HFTWS002

- 2 x GCHT18002 General Cargo Handling Tool
- 1 x DPHT18004 Drill Pipe Handling Tool
- 1 x DPST18006 Drill Pipe Setback Tool
- 1 x DPCT18008 Drill Pipe Casing Tool
- 1 x HFTWS01 Hands Free Tools Storage Station

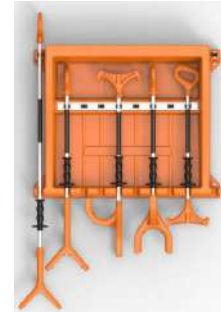


HANDS FREE WORKING STORAGE STATION

The ideal storage HFTWS01 solution for your Hands Free range of products, the Storage Station is designed to hold up to ten handling products, manufactured from robust medium density polyethylene with an open design for ease of access and an over canopy to protect your products from the elements. It helps to promote organisation and good housekeeping on the rig floor and main deck area.



HFTWS01



RIGGER ASSIST

Due the growing demand for products that provide for industries implementation of a Hands-Free work environment the Rigger assist has been brought online to meet these demands.

The complex nature of today's rigging activities has introduced an alarming list of hazards. Most prevalent of these has been the rise in hand and finger injuries.



- Short (Non-Extendable) - OHS-RA-440-0000
- Long (Extendable Pole) - OHS-RA-100-1500

PIPE CATCHER

Ideal for the movement of drill pipe of various sizes in both vertical and horizontal positions, this product has all the features you demand including lightweight and robust, swivel head, automatic locking mechanism, instant release, protective sleeve, non-slip rubber grips and vinyl coated noose.

Pipe Catcher 920mm
OHSPC92
Pipe Catcher 1220mm
OHSPC122
Pipe Catcher 1520mm
OHSPC152



GRADING LIFTER

Introducing Offshore Handling Systems new ergonomic safety solution to the removal and lifting of machinery space floor grating. Grating lifter allows machinery space operators to safely access under floor hatches and pipework / valves by controlling the removal of heavy duty grating from a safe standing position. Thus, removing risk of back and finger injuries.



P/N OHSGSL1200
1200mm

S HOOK HOSE & CABLE TIDY

The S Hook Hose & Cable Tidy can be used to eliminate the number of slip and trip accidents you experience by keeping unwanted messy hoses and cables off the floor in congested areas.



OHS-SH

DYNLCE TAG LINE

Uniquely designed with a rigid core and a stiff overbraiding, this tag line is tangle resistant and its spiral effect dramatically increases the users grip in wet and slippery conditions. Manufactured from Dynlce SK 75 synthetic rope giving exceptional strength in a lightweight product for ease of use. A similar technology is used in tow lines that gives the product its tangle free properties. There are four lengths available at present, 15ft., 25ft., 35ft. and 45ft. each easily identifiable by a colour coded eye. Each Tag Line is fitted with a double action karabiner with captive pin.

OHSTL-15 Dynlce Tag Line 15ft. • OHSTL-25 Dynlce Tag Line 25ft.
OHSTL-35 Dynlce Tag Line 35ft. • OHSTL-45 Dynlce Tag Line 45ft.



BASKET ACCESS PLATFORMS

The Basket Access platforms were designed as a long term solution to allow users to safely enter half height baskets and waste skips. Instead of using unstable step ladders and hop ups, the Basket Access Platforms mitigate inevitable entry hazards. They are robustly manufactured from box iron with adjustable legs to accommodate various basket heights and locking clamps to secure the Access Platform to the basket. Available in Large or Mini options for maximum flexibility of use.

OHSAC01 Basket Access Platform
OHSAC02 Mini Basket Access Platform



LIFT ASSIST HANDLING AIDS

Essential to your manual handling policy, the Lift Assist range of products equips your team with tools to carry out manual handling activities in a consistently safe way, reducing the risk associated with day to day manual handling activities. The Single and Double handled Lift Assists allow safer handling of pipe, ironwork and tubing sections among others. They reduce unnecessary bending and encourage good manual handling practice to reduce injuries. The Lift Assist Choke Valve is specifically designed to safely handle chocks and BOP choke valves, protecting both the user from injury and the valve itself from potential damage through a controlled lifting method during assembly.

OHS-D100
Double
Handle
OHS-C100
Choke Valve
OHS-S100
Single Handle



HANDLE-TECH

Handle-Tech have designed a ground breaking hand tool designed to improve safety and efficiency for manual handling of many types of industrial flexible hose and solid pipes. You no longer have to worry about pipe cleanliness, mud or frost build up affecting your grip or impacting on your skin, with these tools your hands never touch the hose/pipe. The main handle can operate in a standalone configuration or you can install a dual handle grip for better load management and control of the pipe when tightening or binding joints.

OHS-D100
Double
Handle
OHS-C100
Choke Valve
OHS-S100
Single Handle



PIPE	OD	kg
OHSPI200	1.5" - 2.5"	1.4
OHSPI300	2.5" - 3.5"	1.5
OHSPI400	3.5" - 4.5"	1.5
OHSPI500	4.5" - 5.5"	1.6
OHSPI600	5.5" - 6.5"	1.7

SUCTION HOSE	OD	kg
OHSSU300	3" - 3.75"	1.4
OHSSU400	4" - 4.75"	1.5
OHSSU600	6" - 6.75"	1.7

GAS GRAB PRODUCTS

Simple and versatile, GasGrab™ is ideal for every industry where high-pressure gas cylinders (gas bottles) are used, for instance:

- Hospitals and other Health • Welding & Fabrication
- Building & Demolition • General Engineering
- Pharmaceutical Industry • Oil and Gas Industry
- Brewing Industry

How it Works

GasGrab™'s unique, patented scissor action clamps around the body of the cylinder, allowing the operator to safely lift or move it a short distance. If moving the cylinder a longer distance, it is recommended two operatives share the load as a team lift.

Oil & Gas Industry

Gas Grab product range can now offer a safe and reliable solution to the handling and movement of pressurised vessels on offshore installations. Movement of pressurised vessels are carried out on a daily basis on both operational and maintenance activities.

Offshore Gas/Air Vessel Activities

- Welding operations
- Maintenance and change out of BOP accumulators' bottles
- Mud pump pulsation dampers nitrogen charge
- Fire suppressant systems maintenance and change out
- Top drive nitrogen brake charge
- Air Start Systems
- Life boat air systems maintenance & change out



GasGrab™ 4"
(100mm)
Gloss White (PAIR)
OHS GG100



GasGrab™ 5.5"
(140mm)
Navy Gloss (PAIR)
OHS GG140



GasGrab™ 7"
(178mm)
Light Grey Gloss
OHS GG178



GasGrab™ 8"
(203mm)
Light Blue Gloss
OHS GG203



GasGrab™ 8.5"
(215mm)
Yellow Gloss
OHS GG215



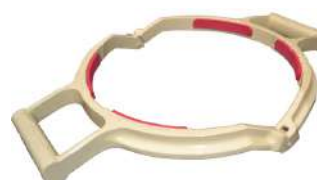
GasGrab™ 9"
(230mm)
Green Gloss
OHS GG230



GasGrab™ 9.25"
(235mm)
Purple Gloss
OHS GG235



GasGrab™ 10"
(254mm)
Orange Gloss
OHS GG254



GasGrab™ 12.5"
(320mm)
Beige Gloss
OHS GG320



Wall Bracket
OHSWB



- The Billy Pugh personnel net has become the industry standard all over the world
- It has safely transferred millions of riders over the years and is a symbol of the offshore industry. Many offshore employees remember his or her first ride on a Billy Pugh transfer net. It is almost a rite of passage. There have been many attempts to improve or even replace the personnel net, but the basic idea and design is still in use around the world
- Billy Pugh Company's 4-to-12-person transfer device is used to quickly and effectively transport personnel on and off platforms and drilling rigs
- All X-904's are made of a sturdy and very durable aluminium skeleton that encompasses the rider to protect them from falling objects and any side impact that may occur
- All models are equipped with quick release safety lanyards to provide safety and give the rider confidence while in transit
- The X-904 is built above and beyond standard safety rules and regulations to provide a superior product

X-904 OFFSHORE TRANSFER DEVICE (PERSONNEL BASKETS)

Model No.	Description	Weight	Dimensions
X-904-4	4 person transfer device	655 LBS (297.1 kg.)	90" X 90" X 34"
X-904-6	6 person transfer device	700 LBS (317.5 kg.)	102" X 102" X 36"
X-904-8	8 person transfer device	900 LBS (408.2 kg.)	102" X 102" X 36"
X-904-10	10 person transfer device	1000 LBS (453.6 kg.)	112" X 112" X 36"
X-904-12	12 person transfer device	1200 LBS (544.3 kg.)	120" X 120" X 54"



X-800 SERIES

Model No.	Description	Weight	Dimensions
X-870	Standard 4 person net	256 LBS (116.1 kg.)	72" X 72" X 16"
X-871	4 person net for rough seas	270 LBS (122.5 kg.)	72" X 72" X 16"
X-871-6	6 person net	350 LBS (158.8 kg.)	84" X 84" X 16"
X-871-8	8 person net	400 LBS (181.4 kg.)	94" X 94" X 18"
X-871-10	10 person net	500 LBS (226.3 kg.)	94" X 94" X 22"
X-871-12	12 person net	580 LBS (263.1 kg.)	126" X 126" X 22"
X-816	4 person net W/13" load line	240 LBS (108.9 kg.)	72" X 72" X 16"
X-840	4 person net W/60" bottom ring	245 LBS (111.1 kg.)	60" X 60" X 16"



OSHA MAN BASKET (OMB)

- Billy Pugh Company's OSHA Man Basket (OMB) is a crane suspended basket used to lift workers into the air
- Our baskets provide sufficient room for workers and tools, a safety handrail, and an access gate that opens inwardly. The OSHA man baskets are built to OSHA standards and are heavy duty steel
- These man baskets are used for a variety of applications both on and offshore when a heavy OSHA spec man rider is necessary. Baskets are available in 1, 2 or 4 person models. The baskets are equipped

Model No.	Description	Weight	Dimensions
OMB-2	2 person basket 4' X 4' X 7'	550 LBS (249.5 kg)	48"X 48"X 84"
OMB-4	4 person basket 4' X 6' X 7'	750 LBS (340.2 kg)	48"X 66"X 84"
OMB-S	Sling	58 LBS (26.3 kg)	48"X 40"X 11"
OMB-TW2	Test weight for OMB-2	1250 LBS (567.0 kg)	48"X 48"X 72"



WORK VEST



LIFE RING BUOY BRACKETS



WIRE STRETCHER



TAG LINE



SWING ROPE



RIGID TAG LINE



ROPE LADDERS



WIND SOCK



HELICOPTER STRETCHER



LIFE FLOAT

CONTAINERIZED FAST THROW LINE



With over 150 years of expertise and leadership in performance fluids, Houghton International remains the largest and fastest growing company to serve the metalworking, industrial and offshore speciality fluids markets. Houghton International is able to assess needs and provide the advanced chemical technology required to stay in front of changing demands – both within the industries we serve and in response to changes in government and environmental standards.

STACK MAGIC

BOP wellhead control fluid providing optimum performance characteristics in all global locations

Houghton Offshore have stamped their mark of authority on the subsea BOP fluid market with the early development and introduction of the “Stack Magic” BOP fluid brand name. Major drilling rig operators, who demand the most environmentally and technologically advanced products available in the market, have used stack-Magic BOP fluid concentrates successfully for many years. As a result this high quality product backed by attentive customer support laboratories is now specified worldwide. Houghton Offshore is a major supplier of water-based technology to the Offshore Industry and we recognize and continue to respond to the ever-increasing demands to maximize environmental acceptability with optimum performance in safety critical equipment. Stack Magic ECO-F v2 has been formulated to meet the current CEFAS and OSPAR requirements and falls into the “yellow” zone for use in Norway and is classified as an “D” within the UK chemical notification scheme with no substitutions.

Features / Benefits

- Environmentally Acceptable for maximum discharge
- Excellent corrosion resistance in the presence of sea water
- High level of lubricity
- Low temperature stability
- For use with potable waters up to 250ppm CaCO₃
- Can be mixed with Monoethylene Glycol for freeze protection
- Excellent filterability
- Excellent resistance to microbial infection
- Typical concentration of use 3-5%



HOUGHTON-SAFE 273CTF V2

Water-glycol fire resistant hydraulic fluid for offshore motion compensation applications

Houghton-Safe 273CTF V2 is a fire resistant non-explosive water glycol hydraulic fluid which incorporates additives to ensure long fluid life and good lubrication performance in Wireline Tensioners and other motion compensation systems used on Offshore drilling rigs. It provides protection against corrosion in liquid and vapor phase and excellent resistance to microbiological infection. It meets a 50:1 Compression ignition ratio by MIL-H-22072C, making it safe to use in systems where high pressure air accumulators are used. It has an OCNS rating of D, with Cefas, ensuring a low environmental impact in the event of accidental discharge.

Features / Benefits

- Formulated to meet 50:1 compression ignition ratio as specified in the US Navy Specification Mil-H-22072C
- Inherently Biodegradable
- Non Sheening
- Low Pour Point
- Avoid PU and FPM/FKM
- Compatible with most commonly used elastomers.
- Corrosion Resistant in liquid and vapor phase
- Approved and/or accepted by OEMs
- Compliant with Global environmental regulations

AQUALINK 300F VER2

Aqualink 300F VER2, Biodegradable water glycol hydraulic control fluid, 205 Ltrs/drum

Aqualink 300F Ver2 is a ready-to-use biodegradable water glycol hydraulic control fluid specially designed to meet the requirements of closed loop hydraulic systems as found on Jack-up rigs and direct or multiplexed electro hydraulic subsea systems, providing optimum reliability, improved lubricity and fast hydraulic response times.

Features / Benefits

- Fluorescent leak trace detection dye
- Compatible with down hole chemicals
- Inhibited to prevent corrosion of ferrous and non ferrous materials
- Resistant to bacterial & fungal growth
- High degree of stability in the presence of sea water contamination
- Coefficient of thermal expansion (volumetric) 0.0005PC
- Thermal conductivity 0.0042 W/M/C • Excellent lubricity characteristics
- Cefas rating D (UK) and Yellow with Add Novatech (Norway)

RUST VETO AS

Capped thread protecting compound

Rust Veto AS is a grease type rust preventive containing high quality corrosion inhibitors & formulated for use in extremes of climatic conditions. It may be applied easily by stiff brush at -10° but when in place it sets to a soft greasy film which will not melt or run off at temperatures up to 120°C. Rust Veto AS was particularly designed for the long term protection of capped threads on offshore tubular goods, stored in hostile outdoor environments. Rust Veto AS is designed specifically for the protection of drill pipe & capped casing threads, & it will protect against corrosion for up to 12 months during outdoor storage in hostile environments. Indoors, it will provide protection for two (2) years or more.

Features / Benefits

- Soft grease - Easy to apply down to -10°C
- Outdoor protection up to 12 months - Preserves value of tubes
- Resistant to melting and run off up to 120°C - Stays put in hot weather
- Easy to remove when required - Does not interfere with subsequent processes
- Compatible with lubricating greases - Light residuals don't harm lubrication

QH FLUIDCARE

Providing innovative & sustainable fluid solutions designed to improve our customers' profitability and product quality while minimising risks

With over 250 global product support engineers, more than 1800 customer/industry approvals, & a deep understanding of metalworking processes & applications, Quaker Houghton is a leader in fluid management solutions.

QH FLUIDCARE™ is Quaker Houghton's Fluid Management Services division. Through an intimate understanding of your manufacturing operations & alignment with your corporate objectives, QH FLUIDCARE™ teams deliver on-site, sustainable fluid solutions.

Features / Benefits

- Environmental Compliance
- Increased Productivity
- Reduced Total Cost of Ownership
- Innovative Chemistry
- Sustainable Solutions
- Continuous Improvement
- Increased Product Quality



As the world's leading manufacturer of adjustable, self-closing industrial safety gates, Fabenco has been the "one-stop shop" for high-quality, American-made safety gates & we've been providing fall protection equipment to our industrial clients for over 45 years. are easy-to-install and save our customers the time & expense of fabricating gates for OSHA fall protection compliance, access control, security, pedestrian traffic management & machine guarding at ladders, platforms, stairs, catwalks & mezzanines.



Safety Gate



Safety Rails



Dock Gate



Pivot Gate



Height Gate



Custom Gate





TS Moly is a manufacturer & supplier of industrial lubricants. Products sold include greases, oils, antiseize compounds, aerosols, & additives.

TS-210 SEASAFE LEG DOPE AND CABLE LUBE

Application

TS-210 SeaSafe™ Leg Dope & Cable Lube is a high performance open gear and cable lubricant designed for use in an environmentally sensitive area.

Benefits

As an open gear lubricant, TS-210 has excellent extreme pressure and anti-wear properties for the lubrication of heavily loaded sliding surfaces. TS-210 is environmentally and hygienically safe. (It is not biodegradable). It is completely water proof and has an extremely effective adhesion to metal surfaces. As a cable lubricant, it "works" its way into the cable upon application by the Powerlube wire rope lubricator. TS-210 contains no solvent carrier. When injected into new cable, it is unlikely that re-lubrication will ever be needed. TS-210 will absolutely not wash off or out, run off, blow off, dry out, or melt away. When used on higher speed gears, it will not "sling" off.



TS-70 MOLY PASTE WITH 70% MOS₂

Application

TS-70 is a general purpose moly paste with many uses. It has proven to be an outstanding lubricant for a saltwater environment, above and below the surface: subsea riser, BOP, flange equipment & structural bolts. Other applications are components for press fittings, threads in tapping, boundary lubricating of parts in assembly and make-up, bushings of heavily loaded slow moving bearings, & many more. Apply by brushing or burnishing.

Benefits

TS-70, with 70% by weight of molybdenum disulfide, provides uniform and durable boundary lubrication under extreme pressure, in wet or corrosive environments, & over a wide temperature range. Its coefficient of friction nearly approaches that of pure MoS₂, and superior wear protection is assured. TS-70 does not contain metals.



TS-74 STAINLESS ANTISEIZE

Application

TS-74 Stainless Antiseize is a new thread lubricant designed for stainless, titanium, and other gall-prone threaded connections. It is highly recommended where water washout is a concern, and in sub-sea applications, it is unaffected by marine micro-organisms.

Benefits

TS-74 Stainless Antiseize eliminates wear and galling. TS-74 adheres to heavily loaded rotating, reciprocating or sliding parts. It may be used on any heavily loaded equipment that would normally be lubricated with an extreme pressure grease. TS-74 is a film forming lubricant having a strong polar attraction to metal. During use, a chemical reaction occurs on areas subjected to heavy loading and frictional heat. This reaction creates a resilient, self-lubricating layer in the metal surface that helps prevent further abrasive contact. NPT & all certain other connections can be tightened until a metal-to-metal seal is achieved, but without galling.



TS-90 MOLY GEAR CONCENTRATE

Application

TS-90 is an additive designed to impart high performance benefits to finished enclosed gear oils. It is added to gear oils at a mixture ratio of 1:9 (10% treatment); that is 1 part of TS-90 to 9 parts of gear oil. A ratio slightly more or less is acceptable. (TS90, TS 90)

Benefits

TS-90 is made from a blend of high-quality polymers and moly. When added to finished oil, it coats all surfaces with a tough, slippery film. The polymers help the oil to withstand higher loads than normal. Friction is reduced, allowing moving surfaces to operate smoother and quieter under varying load conditions. Lower friction reduces operating temperatures. TS-90 Moly Gear Concentrate is very resistant to degradation by high shear. The moly also substantially reduces friction and improves the extreme pressure, load carrying and antiwear capabilities of gear oils.

Advantages

- Greater energy efficiency
- Reduced gear wear
- Better gear performance through reduced friction
- Protection during intermittent, extreme operating conditions
- Improved gear noise levels



IMPACT, MANUAL & POWER OPERATED WIRE ROPE CUTTERS

In the fields, out on a rig, & miles from nowhere, you need tools that work that last & are worry free. Morse-Starrett Products Co. tools have been on these remote job sites for years & we continue to be the trusted industry standard tool for safe & efficient wire rope cutting. All Morse-Starrett and Pell Hydrashear wire rope cutters are designed for new and unused wire rope.



Impact Cutters



Chain Cutters



Power Cutters



Double Acting Cutters



Manual Cutters



OTECO, Inc. has been a leading manufacturer of high quality oilfield equipment and accessories since 1948. Our product offering is extensive, including: Gate Valves, Relief Valves, Pressure Gauges, Float Valves and Rig Hardware of all kinds.



PRESSURE RELIEF VALVES (PRV)

- Sizes: 2 Inch and 3 Inch
- Pressures: Ranging from 125 to 10,000 psi
- Flow Area: 1.3 to 4.2 sq. in.
- Service Types: Standard, Sour Gas and Waterflood
- Temp. Rating: -20° F to 250° F
- Connections: Threaded, Union and Flanged
- **Certifications: Det Norske Veritas (DNV) Type Approval**



RESET RELIEF VALVES (RRV)

- Sizes: 2 Inch and 3 Inch
- Pressures: Ranging from 125 to 10,000 psi
- Service Types: Standard, Sour Gas and Waterflood
- Temp. Rating: -20° F to 250° F
- Connections: Threaded, Union and Flanged
- **Certifications: DNV Type Approval (individual unit upon request) & ABS certificate of design assessment**



GATE VALVES

- Sizes: 2 Inch, 3 Inch, 4 Inch and 5 Inch
- Pressures: 2,000, 3,000, & 5,000 psi
- Service Types: Standard, Sour Gas, Waterflood
- Temp. Rating: -20° F to 250° F
- Connections: Threaded, Butt weld, Flanged, Union & OTECO Connector



PRESSURE GAUGES

- Pressures: Ranged from 0 to 20,000 psi
- Dial Face Units: PSI, kPa, Bar, kg/cm²
- Service Types: Standard, Sour Gas, Oil & Waterflood
- Temp. Rating: -20° F / 180° F
- Connections: Threaded, Union and Flanged
- **Certifications: American Bureau of Shipping (ABS)**

FLOAT VALVES

Models: F, FA, FC, G, GA, GC & GCA

- Valve Sizes: Range from 1-21/32 to 5-11/16 Inches
- Service Types: Standard & Sour Gas
- Temp. Rating: 0° F to 450° F



Malin co.

The Malin Company has supplied high-quality stainless-steel wire, safety wire/lock wire, twisted-in-wire brushes and other alloys and wire products to many industries including aerospace, medical, hardware supply, mill supply, catalog houses and more. The Malin line of fishing wire products has earned a reputation for reliability and success with tough large, toothy catches.



Safety Wire / Lock Wire



Marine & Fishing Wire



Industrial Wire



Twisted-in Wire Brushes



The Company is specialized in Cable Safety, Cable Management, Confined Space Safety & Dropped Object Prevention. Our safety products are engineered in North America & Europe, guaranteeing reliability & quality. Manufactured in Netherlands, UK, Germany & USA.



BULLARD HALF BRIM WITH RATCHET

Model No. : S61

- The S61 hard hat line from Bullard is sport style shell design hard hat with upgraded features & benefits
- Available with 4-point suspension system and the Ratchet suspensions can be adjusted between hat sizes 6 1/2" - 8"
- The Helmet is ideal for everyday work Environment
- **Meets ANSI Z89.1-2014, Type I, Class E & G Requirements**
- **Made in USA**



BULLARD FULL BRIM WITH RATCHET

Model No. : S71

- The Bullard Model S71 is a full-brim hard hat style which helps protect against splash, glare and sun exposure, and features a permanent under-brim glare guard
- Four-point suspension has a Flex-Gear® ratchet suspension with a ratchet sizing knob and flex points for a personal fit
- **Meets ANSI Z89.1-2003, Type I, Class E & G Requirements**
- **Made in USA**





SAFETY PLUS WORLD TYPE 5/6 CHEMICAL DISPOSABLE COVERALL

Model No.: SP700CP

- Comes with elasticated hood, wrist/ankle & waist for a perfect
- Zipper with flap over
- Weight/gsm: 63 gsm
- **Certified:** EN ISO 13688:2013, EN ISO 1149-5:2018, EN ISO 14325:2004, EN ISO 13982-1:2004+A1:2010, EN 13034:2005+A1:2009, EN ISO 13982-1, EN 1303



ARC GUARD IFR COVERALL

Model No.: GDI32

- 180 g/m2
- 50% Modacrylic, 10% Para-Aramid, 38% Cotton & 2% Antistatic
- Inherent Fire Retardant Woven Millmade Fabric
- **Certified:** EN 11612, EN 1149, EN 61482, NFPA 2112



ARC GUARD IFR COVERALL

Model No.: GDI49

- 230 g/m2
- 39% Modacrylic, 12% Para-Aramid, 48% FR Viscose & 1% Antistatic
- Inherent Fire Retardant Woven Millmade Fabric
- **Certified:** EN 11612, EN 1149, EN 61482, NFPA 2112, HRC 2

SAFETY PLUS WORLD PREMIUM EYEWEAR

Model No. : S-801CLAF Clear

Model No. : S-801SMAF Grey

- Poly Carbonate lens w/grip nose pads
- 8 Based curvature standard Hard coated
- Angle adjustment for universal fitting
- Arm grips for extra comfort and secure
- **Certified as per ANSI Z 87.1-2015**



SAFETY PLUS WORLD EAR PLUGS

Model No. : SP201-EPC (with cord)

- PU Foam Bullet shape Earplugs
- Comfortable for wide range of ear sizes
- Bright fluorescent yellow for visibility
- Can be used with other personal protective equipment
- **Standard: ANSI S3.19-1974 & EN 352-2**
- **SNR 36dB | NRR 33dB | Class 5**





RIG-SHIELD ANTI-IMPACT GLOVES

Model No.: ISU4544EP

- Sandy Nitrile finish with extra padding for Excellent grip in wet, dry & oily condition
- Black TPR chips on back for super anti impact protection
- Velcro hook & loop closure at the wrist to provide a snug custom fit
- Reinforced thumb crotch for extended glove life, EN388:2016 enhanced comfort, increased abrasion resistance
- High Visibility for increased safety
- Touchscreen compatible fingertips



OIL-SHIELD GLOVES

Model No.: ISU4X43C

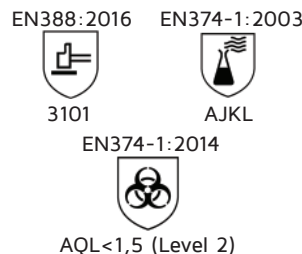
- Super strong liner provides high cut resistant level
- Fully nitrile dipping resists water & oil
- Sandy foam nitrile palm coating provides superior grip & abrasion resistance
- Special knitted provides high wearer comfort
- High flexibility



CHEM-SHIELD GLOVES

Model No.: ISU3101CM

- Nitrile compound provides an outstanding combination of chemical resistance and strength
- Heavy duty chemical resistant flock lined nitrile butadiene glove for chemical and heavy duty applications





RINGERS FLEX IMPACT NITRILE

Model No.: R-065

- Breathable knit shell with excellent dexterity for all working conditions
- Half-dipped nitrile in sandy finish for enhanced grip
- TPR impact protection on top of hand and full length of fingers and thumb
- Certified and rated for CE EN388 level 5 cut resistance and EN ISO13997 level C cut resistance
- Tested and rated for ANSI/ISEA 105-2016 level A3 cut resistance
- High visibility colors for increased safety awareness
- Touchscreen compatible



4X43DP



RINGERS ROUGHNECK

Model No.: R-267

- TPR impact protection on top of hand and full length of fingers
- High Visibility for Increased Safety
- CE Rated for EN388 Level 2 Cut and Puncture Resistance
- TefLoc Grip System on Palm & Fingers Resists Oil & Enhances Grip
- Kevlar Stitched Palm



4232BP



GASTON MILLE MASTER BLACK S3 HI CI SRC

Model No.: MTAA3

- Full grain leather, water & oil resistant (2-2, 2mm thickness)
- Reinforced padding protection of Achilles tendon
- Waterproof tongue & gusset
- Side Zip: Easy slip on/off
- Non metallic 240J safety toe (fiberglass)
- Textile anti-perforation midsole 1 430N
- Extra light PU dual density
- High performance grip: SRC rating
- Auto-cleaning studs
- **Conformity: EN ISO 20345:2011**
- **Made in France**





GIASCO GULF S3

Model No.: AC011A

- Calf boot, WRU back leather thickness 1.8-2.0 mm
- Perspiring and abrasion resistant fabric lining
- Completely Metal Free Boot
- Toecap 200J polymeric composite non-thermic according to EN 12568
- Midsole flexible anti-perforation composite fabric according to EN 12568
- Sole Action bi-density polyurethane antistatic, resistant to hydrolysis ISO 5423:92, to hydrocarbons and to abrasion, anti-shock and anti-slipping SRC
- Insole 4000, removable, anatomic, absorbing, antistatic and perspiring
- Boot height sole included 29 cm
- **Conformity: CE UNI EN ISO 20345:2012 S3 SRC**
- **Made in Italy**



PROGETTI RESCUE SAM AED

RESCUE SAM is a semi-automatic external defibrillator designed for providing simple and direct voice prompts and indications for a straightforward rescue operation. It is lightweight and battery powered for maximum portability. RESCUE SAM is designed to treat Ventricular Fibrillation (VF) and Fast Ventricular Tachycardia (VT).



PROGETTI RESCUE LIFE AED

Rescue Life is the first professional defibrillator totally MADE IN ITALY that respects the traditions of elegance and comfort. Quality and safety is the mix of our expertise, applied to Rescue Life as well to all our products line. The IPX4 standard permits the operation under adverse climatic situations.

- Capacity: 150 shocks at 230J with battery fully charged
- Software: Voice and texts multi language
- Memory: Internal flash 4 Gb up to 300 hrs of ECG data, events and usage review
- Review & printing database: Review and printing of archived events
- Battery Operation Time: >5 hours
- Battery Charge Time: Max. 3 hours
- Electrical: AC 100-240 VAC, 50/60 Hz- inverter 12V car adapter (optional)
Rechargeable 15.0 V – 3.2 Ah Lithium-ion battery
- **Standard: IEC 60601-2-4; IEC 60601-1; IEC 60601-1-2**
ANSI/AAMI 60601-2-4; ANSI/AAMI 60601-1; ANSI/AAMI 60601-1-2





COMBINATION EYEWASH & SHOWER

Model No.: 15031500

- Suitable for mounting on floor by its own base
- Shower bowl, head & pipes are produces from galvanized steel material
- Body shower activation: Pull rod & push handle
- Eye/Face wash activation: Pull rod
- Water Inlet: 1"
- Water Outlet: 1"
- Body: 1¼"
- **Standards:** EN 15154-1, EN 15154-2, EN 15154-5, ANSI/ISEA Z358.12014 Certified
- **Made in Turkey**





RADIANS EYEWASH STATION

To effectively and quickly clean debris from the eye, the Radians® 16 gallon REW01116 gravity fed Eyewash Station has a one second, one-step activation to deliver up to 15 minutes of non-injurious flow. It complies with ANSI Z358.1-2014 standards for portable eyewash stations.

- Wall mounted 16 gallon gravity fed eyewash station
- Quick one-step activation for instantaneous flow
- Delivers at least 15 minutes of non-injurious flow
- High visibility green color is easily recognizable if an injury occurs
- Includes an easy-to-mount wall bracket, portable water preservative, test log card and drainage hose
- **Meets ANSI Z358.1 standard**



NEW & IMPROVED 16 GALLON EMERGENCY EYEWASH

PLUM EYE WASH 500 ML

Model No. : 4604

- Bottle containing a 0.9% sterile sodium chloride solution
- Complete with an ergonomic eye cup, a dust cap and clear instructions
- For filling stations or for use alone
- Durability: 3 years
- Storage temperature: 5-35 °C





SUPER HYDRATE

Super Hydrate is the world's first Hydration Drink that has been developed especially for Industry. It contains the right balance of electrolytes and carbohydrates to ensure your workers are optimally hydrated throughout the day and helps avoid cases of Heat Stress and Heat Related accidents. It tastes great too and only contains 1% sugar when mixed so its safe to be consumed throughout the day over a prolonged period. In extensive trials, more than 95% of participants preferred Super Hydrate over other hydration products.

Available Sizes

- 345 gm Bag Orange & Lemon
- 17 gm Sachet Orange & Lemon



INTRINSICALLY SAFE FLASHLIGHT

Model No.: XPP-5420G • XPP-5420GX

This flashlight is cETLus, ATEX, IECEX, INMETRO listed Intrinsically Safe Permissible.

- Momentary or constant-on flashlight
- Sharp focused beam for distance illumination
- Engineered polymer housing
- Dustproof / Waterproof
- Impact & chemical resistant
- Built-in pocket/belt clip
- Includes removable lanyard



INTRINSICALLY SAFE RECHARGEABLE DUAL-LIGHT™ FLASHLIGHT W/DUAL MAGNETS

Model No.: XPR-5522GMX

The XPR-5522GMX Rechargeable Dual-Light™ Flashlight w/Dual Magnets is cETLus, ATEX, IECEX, and MSHA listed Intrinsically Safe Permissible.

- Momentary or constant-on flashlight
- Sharp focused flashlight beam for distance illumination
- High-efficiency deep parabolic reflector
- Effective beam distance of 178 meters
- Unfocused wide-beam floodlight for close-up illumination
- Dual-Light (flashlight & floodlight on at the same time) for maximum versatility & user safety
- Powerful integrated magnets built into the base and pocket clip for multiple hands-free options
- Engineered polymer housing • Non-slip grip
- Dual body switches • Built-in pocket/belt clip
- IP-67 Dustproof / Waterproof
- Impact & chemical resistant
- Includes wall/vehicle mountable charger, AC/DC power supplies & removable lanyard
- Integrated Lithium-ion rechargeable battery (included)



UNI 321RT

3, 2 and 1-Year Maintenance-Free Single Gas Detector

- Real-time Readings
- Hibernation Mode up to 1 year for 1 & 2 years detectors
- Weight: 4.4 oz. & size: 3.46 x 2.44 x 1.30 in
- Gases: 3 Selections (H₂S, CO & O₂)
- Display: Large LCD
- Protection: IP 67
- Battery: Replaceable (3.6V, 2700mAh, AA Lithium)
- Event log: Up to 50 alarm events
- Docking Station for calibration and event download
- **Manufactured by Mpower Electronics (USA)**

Safety Certifications:

Class I, Div 1, Group ABCD

 Class II, Div 1, Group EFG

Class III, Div 1

T4, -20°C ≤ T_{amb} ≤ +50°C

 Ex ia IIC T4

ATEX  Ex ia IIC T4

 European Conformity



UNI MP100

Reusable Single Gas Detector

- Real-time Readings
- Weight: 4.4 oz.
- Widest choice of sensors in the market
- Smart Sensor
- Size: 3.46 x 2.44 x 1.30 in
- Gases: 19 Selections (H₂S, CO, O₂, NH₃, Cl₂, ClO₂, H₂, HCl, HF, HCN, NO, NO₂, O₃, PH₃, SO₂, C₂H₄O, ETO, CH₃SH, THT)
- Display: Large LCD
- Battery: Replaceable, AA size Lithium battery, 3 years typical operation
- Event Log: Up to 50 alarm events
- Low, High, TWA & STEL Alarms
- Protection: IP 67
- Docking Station for calibration and event download
- Warranty:
- 3 years on CO, H₂S, & SO₂ including sensors
- 2 years on O₂, HCN, NO₂, PH₃. 1 year on all other gases
- 5-years warranty option available for H₂S
- **Manufactured by Mpower Electronics (USA)**

Safety Certifications:

Class I, Div 1, Group ABCD

 Class II, Div 1, Group EFG

Class III, Div 1

T4, -20°C ≤ T_{amb} ≤ +50°C

 Ex ia IIC T4 Ga

ATEX  IIC T4

 Ex ia IIC T4 Ga



POLI Multi-Gas Detector

The POLI multi-gas detectors (MP400/MP400P/MP400S) offer 4- or 5-gas monitoring of oxygen (O₂), combustibles (LEL), toxic gases, carbon dioxide (CO₂), and volatile organic compounds (VOCs). The MP400 and MP400P are basic models with O₂, LEL, carbon monoxide (CO) and hydrogen sulfide (H₂S) configuration in both diffusion or pumped versions, for confined space entry compliance. The MP400S adopts a full range of sensor selection, e.g. electrochemical (EC), pellistor, non-dispersive infrared (NDIR) and photo-ionization detector (PID) in a pumped model. Use of a combined CO/H₂S sensor in the MP400S allows up to five gases to be monitored. An option of wireless communication enables real-time monitoring of gas readings and alarm status including man down alarm from remote locations for better visibility and faster response.

MP400/MP400P/MP400S

- Available in diffusion or pump version
- Man Down Alarm with real-time remote wireless notification
- IP-65/67 water and dust resistant case
- Real-time gas concentration readings and alarm status enabled by state-of-the-art wireless technology
- Large graphical display icon-driven user interface through intuitive, simple-to-operate two-button user interface
- Easy access to pump, sensor, filter and battery
- Over 30 interchangeable sensor options, including PID for VOC, NDIR and catalytic for combustibles, and NDIR for CO₂
- Intelligent sensors store calibration data, so they can be swapped in the field
- Warranty: 2 years including sensors
- **Manufactured by Mpower Electronics (USA)**

**Safety Certifications:**

Class I, Div 1, Group ABCD
T4, -20°C ≤ T_{amb} ≤ +50°C



Ex ia IIC T4 Ga



II 1G Ex ia IIC T4 Ga



European Conformity



INDUSTRIAL SCIENTIFIC

VENTIS® MX4

- Detect up to four gases with a wide range of sensor options
- Select alarm set points, set latch alarms, disable instrument shutdown while in alarm, and more
- Save time and reduce human error with maintenance and usage data available from iNet Control software
- Available with or without an integral pump, or with the Ventis Slide-on Pump for ultimate flexibility
- Non-pumped instruments compatible with 12-hour, 18-hour, or 20-hour batteries
- Warranty: 4 years

Safety Certifications:

 Ex ia IIC T4 Ga and Ex ia I Ma; Equipment Group and Category II 1G/I M1

 CI I, Div 1, Groups A-D, T4; Zone 0, AEx ia IIC T4; CI II, Gr F-G (Carbonaceous and Grain dust)

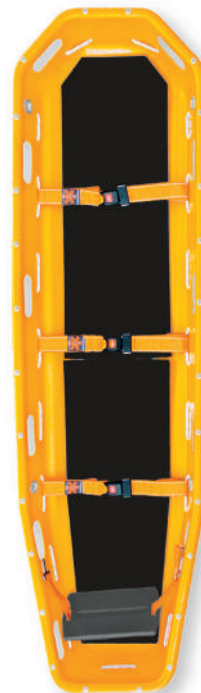


SPENCER SHELL UNIVERSAL BASKET STRETCHER

Model No.: ST04000A

Spencer Shell is a basket stretcher intended for recovery of patients where other devices would be difficult to use. Typical uses are water rescue, recovery by ground hoisting, fast recoveries and transfers that require side impact protection.

- The single shell body makes it extremely safe and easy to handle
- The perimetral frame provides rigidity and allows to have a firm grip on the handles
- Equipped with rings for hooks fixing
- Perimetral rope to fix belts or accessories
- The shape of the inferior part reduces friction during ground dragging procedures
- Mattress to increase patient comfort
- Dimensions: 2150 x 650 x 200 ± 10 mm
- Materials: PE, PP, Al
- Weight (without standard equipment): 12.5 ± 0.5 kg
- Loading capacity: 280 kg
- **Standards: Class I Med. Dev. according to Dir. 93/42/CEE**



SPENCER SCOOP STRETCHER

Model No.: ST05001

Spencer SX is a pickup stretcher with three blades for lifting and loading of patients on immobilizing or transport devices such as spinal boards, vacuum mattresses or transport stretchers.

- Extremely light and resistant structure
- The possibility to adjust the length confers high versatility
- Smooth surfaces easy to clean
- Foldable to save space when stored
- The numerous handles make the transport easier
- Aluminium joints for maximum resistance
- Adjustable lengths: 1660 mm, 1780 mm, 1900 mm, 2050 mm
- Weight: 7.9 kg
- Load capacity: 170 kg
- **Standards: Class I Med. Dev. according to Dir. 93/42/CEE**



SPENCER FOLDABLE STRETCHER

Model No.: ST30100A

Foldable stretcher with ground supports for patient recovery and transfer to a main stretcher or other transport device.

- Extremely lightweight and durable structure
- Very low storage space required
- Lengthwise foldable
- Easy to clean sheet
- The handles offer a firm grip
- Load capacity: 170 kg
- Dimensions: 2010 x 480 x 140 mm
- **Standards: Class I Med. Dev. according to Dir. 93/42/CEE**



SPENCER TOTAL RECOVERY STRETCHER

Model No.: ST04090

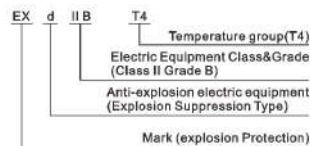
Total is the strongest versatile and compact rescue stretcher on the market. It is made with a particularly robust and durable plastic on which has undergone a special thermal treatment that improves the elastic memory feature.

- Belts for towing and lifting
- A system of belts for the assembling of the stretcher and subsequently folding before replacing it in the bag
- A system of additional handles for the transport of heavy patients by four or eight operators
- Aluminium hook to allow for lifting
- Transport bag in nylon Ripstop
- Hoisting harness in nylon
- Dimensions: 2430 x 920 x 3 mm
- Material: Polyethylene
- Weight: 6 Kg +/- 0.5 kg
- Load capacity: 200 kg
- **Standards: Class I Med. Dev. according to Dir. 93/42/CEE**



EXPLOSION PROOF VENTILATION FAN ATEX

- The explosion proof industrial fan applies in the explosion proof gas compound with factory II type grade A, B and the temperature TI-T4
- It widely used for ventilation & sunstroke in office, oil, military industry, chemical industry, medicine, metallurgy, etc.





CELEBRATING
60⁺
YEARS

an enterprise of



RAJA GROUP

Raja Gen. Trad. Co. W.L.L. - Kuwait

P. O. Box: 4121, Safat 13042, Kuwait

Mobile: +965 6632 3117

Tel: +965 - 24844696 / 799 | Fax: 24844798

rs@gulfrigsupplies.com

www.gulfrigsupplies.com

Raja International Gen. Trad. (FZE) - UAE

P.O. Box: 123618, Sharjah, UAE

Mobile: +971 50 760 4307

Tel: +971 65 244 667

rm@gulfrigsupplies.com

www.gulfrigsupplies.com