

WELCOME TO TRUS GLOBAL CO.,LTD





TOTAL SOURCING SOLUTION COMPANY

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2. Introduction

TRUS Global is an international total solution provider for Pipe, Fitting, Steel Products, Marine Equipments.

To satisfy our customers needs, we are providing a **optimized delivery time**, **high quality, competitive price** which are our company's top priority strategies and endeavoring to develop network with our suppliers.

Please keep watching with deep concern about TRUS Global's amazing challenge in the various business field.



2. Introduction



TOP CLASS PLAYER IN THE PIPING MATERIAL

WE ARE PURSUING TO BE A TOTAL SERVICE SUPPLIER BASED ON TRUST AND COOPERATION WITH CUSTOMER.



- WIDE EXPERIENCE & KNOW-HOW ON FIELD
- POWERFUL PROCUREMENT SYSTEM BASED ON MARKET RESEARCH
- HIGH QUALITY MANAGEMENT SYSTEM
- CUSTOMER ORIENTED FULL SERVICE (BEFORE & AFTER SALES SERVICE)
- FULL RANGE OF ENGINEERING & PROCUREMENT SERVICE

3. Pipe Supply Service - Carbon Steel Pipe



CARBON STEEL AND HIGH YIELD ALLOY STEEL PIPE

OUR CONSTANT MARKET RESEARCH AND THE EXPERIENCE BY GLOBAL PROJECT WILL STRONGLY SUPPORT YOUR BUSINESS AND OUR ACCURATE MATERIAL MARKET FORECASTING IS THE FOUNDATION FOR BECOMING A GLOBAL PLAYER IN PIPE MARKET.



- CARBON STEEL PIPE (SEAMLESS / ERW)
- **▷** SPP, STPG370, A106 Gr.B, A335 P11,
- > A333 Gr.6, STH99, STB400, STKM 13A, STKR 400
- **** MORE INFORMATION WILL BE SHOWN ON OUR MAJOR SPECIFICATION**

3. Pipe Supply Service - SAW Pipe



SUBMERGED ARC WELDING (SAW) PIPE

OIL, GAS & PETROCHEMICAL WORLDWIDE INDUSTRIES, OUR OBSESSION WITH CUSTOMER SERVICE AND ENVIABLE TRACK RECORD OF FAST DELIVERY HAS ENABLED TO QUICKLY ESTABLISH AN INTERNATIONAL REPUTATION AS A LEADING SUPPLIER. WE WILL CERTAINLY PROVIDE PRODUCTS WITH OUR PRIDE



- A. PIPE LINES API5L
- **▶** B, X42, X46, X52, X56, X 60, X65, X70, X80
- **B. PROCESSING PIPE**
- **⊳** A671, A672, A691
- C. OFFSHORE STRUCTRES API 2W. API 2H, ASTM, EN GRADE
- > TMCP(2W-42, 50, 50T, 60), NOR(2H-42,50), AS ROLLED (A572), EN10225/10025/10210/10219) ETC

3. Pipe Supply Service – Major Specification

*** MAJOR SPECIFICATION**

SPECIFICATION				APPLICATION	SPECIFICATION	APPLICATION					
KS D3507	SPP	JIS G3452	SGP	Carbon steel pipes for ordinary piping	API 5L [PSL I,∏]	Line pipe					
KS D3537	SPPW	JIS G3442	SGPW	Galvanized steel pipes for water service	API 5CT	Casing Tubing					
STWW290)		ASTM A 53	Ordinary piping						
KS D3565	S D3565 STWW370		Coated steel pipes for water works	ASTM A135	Standard Specification for Electric-Resistance-Welded Steel Pipe						
		STWW400)		ASTM A 178	Electric resistance welded carbon steel boiler tubes					
KS D3583	SPW400	JIS G3457	STPY400	Arc welded carbon steel pipes	ASTM A214	Electric Resistance Welded Carbon Steel Heat Exchanger and Condenser Tubes					
KS D3562	SPPS38 & 42	JIS G3454	STPG370 & 410	Carbon Steel Pipes for pressure service	ASTM A252	Standard Specification for Welded and Seamless Steel Pipe Piles					
KS D3569	SPLT39	JIS G3460	SPLT380	Steel pipes for low temperature service	ASTM A 500	General structural purposes					
KS D3570	SPHT38& 42	JIS G3456	STPT370& 410	Carbon steel pipes for high temperature	ASTM A513	Electric resistance welded carbon and alloy steel mechanical tubing					
KS D3517	STKM	JIS G3445		Carbon steel tubes for machine structural	ASTM A589	Seamless and Welded Carbon Steel Water-Well Pipe					
KS D3566	STK290&400& 500&490&540	JIS G3444	STK290&400& 500&490&540	Carbon steel tubes for general structural purpose	ASTM A671	Standard Specification for Electric-Fusion-Welded Steel Pipe for Atmospheric and Lower Temperatures					
KS D3568	SPSR400& 490	JIS G3466	STKR400 & 490	Carbon steel square pipes for general structural purpose	ASTM A672	Standard Specification for Electric-Fusion-Welded Steel Pipe for High-Pressure Service at Moderate Temperatures					
KS F4602	SPS400& 490	JIS A5525	SKK400 & 490	Steel pipe piles							
KS D3780	STKT540& 590	JIS G3474	STKT540 & 590	High tensile strength steel tubes for tower structural purposes							

3. Pipe Supply Service - Stainless Steel Pipe



STAINLESS STEEL, DUPLEX AND SUPER DUPLEX PIPE

THERE ARE MORE THAN 250 DIFFERENT STAINLESS STEELS. THESE VARIOUS GRADES OF STAINLESS ARE DIVIDED INTO FIVE MAJOR FAMILIES OR CLASSES. THE GENERAL CLASSES HAVE BEEN DEVELOPED TO CONSOLIDATE THE CHEMISTRIES AND MECHANICAL PROPERTIES REQUIRED TO MEET SPECIFIC CUSTOMER APPLICATION NEEDS.



- A. PRODUCTS
 - > STAINLESS STEEL FOLLOWING GRADES:
 - 304 / 304L / 304H / 312H
 - 316 / 316L / 316H/ 316TI
 - 317/ 317L
 - 321/ 347
 - **DUPLEX UNS 31803**
 - **▷ SUPER DUPLEX UNS 32750**

OTHER AUSTENITIC AND MARTENSITIC GRADES CAN BE SUPPLIED ON DEMAND. ALL THE ABOVE GRADES CAN BE SUPPLIED IN SEAMLESS OR WELDED CONDITIONS

4. Fitting Supply Service - Butt Welding Fittings



WROUGHT STELL BUTT WELDING FITTINGS

WE FURNISH A VARIETY OF FITTINGS WITH GLOBAL STANDARD WITH HIGH QUALITY AND HAVE SUPPLIED FOR SHIPBUILDING INDUSTRY, PLANT, CONSTRUCTION PROJECTS



BUTT WELD FITTING (CARBON, ALLOY, STAINLESS STEEL)
 ELBOW, TEE, REDUCER, CAP, STUB END

4. Fitting Supply Service - Butt Welding Fittings

A. MATERIAL & STANDARD

MATERIAL	ITEM	APPLICABLE STANDARD				
	ELBOW					
CARBON STEEL,	TEE					
ALLOY STEEL,	REDUCER	KS, JIS, ASTM, JPI, MSS, AWWA, DIN, BS, ANSI, API				
STAINLESS STEEL	CAP	7,000,000,000,000,000				
	STUD END(END JOINT)					

B. PRODUCTS











45° ELBOW

90° ELBOW (LONG / SHORT)

180° ELBOW (LONG / SHORT)

TEE (STRAIGHT/REDUCING)

CAP









REDUCER (CONCENTRIC)

REDUCER (ECCENTRIC)

REDUCER (CONCENTRIC)

REDUCER (ECCENTRIC)

4. Fitting Supply Service - Forged Steel Fittings



FORGED STEEL SOCKET WELDING & THREAD FITTINGS

PLEASE REFER TO THE PRODUCTS OF FORGED STEEL SOCKET WELDING & THREAD FITTINGS



■ FORGED FITTING (CARBON, ALLOY, STAINLESS STEEL)

⇒ ELBOW, TEE, REDUCER/INSESRT, CAP, COUPLING,
BOSS, UNION, OUTLET

A. MATERIAL & STANDARD

MATERIAL	ITEM	APPLICABLE STANDARD					
	ELBOW						
	TEE						
	REDUCER						
	CAP						
CARBONS STEEL,	COULPING	Ve lie Aeth in Mee					
ALLOY STEEL,	BOSS	KS, JIS, ASTM, JPI, MSS, AWWA, DIN, BS, ANSI, API					
STAINLESS STEEL	UNION	AWWA, DIN, BS, ANSI, AFT					
	NIPPLE						
	PLUG						
	CROSS						
	OUTLET						

4. Fitting Supply Service - Forged Fittings

B. PRODUCTS

▶ SOCKET WELDING TYPE FITTINGS















90° ELBOW

45° ELBOW

TEE

CROSS

COUPLING

REDUCER

UNION

▶ THREAD FITTINGS















90° ELBOW

45° ELBOW

TEE

CROSS

COUPLING

REDUCER

UNION















HEX HEAD PLUG

S.Q HEAD PLUG

ROUND HEAD PLUG

H/HEAD BUSH

NIPPLE

INSER'

SWAGE NIPPLE

4. Fitting Supply Service - Tube Fittings



HIGH QUALITY TUBE FITTINGS

TUBE FITTING







- TUBE TO TUBE UNION
 - ▶ UNION (ELBOW, TEE, CROSS) BULKHEAD (UNION, RETAINER, ELBOW) REDUCING (UNION, ELBOW, TEE, CROSS)
- **TUBE TO MALE PIPE**
 - ▶ MALE CONNECTOR, THERMOCOUPLE CONNECTOR BULK HEAD MALE CONNECTOR, 45° MALE ELBOW, MALE (ELBOW, TEE)
- TUBE TO FEMALE PIPE

 ▷ FEMALE CONNECTOR, GAUGE CONNECTOR, BULKHEAD
 FEMALE CONNECTOR, FEBALE ELBOW, FEMALE TEE
- TUBE STUB CONNECTOR

 > REDUCER, ADAPTER (BULKHEAD, MALE, FEMALE)

4. Fitting Supply Service - Tube Fittings

B. PRODUCTS















UNION

UNION ELBOW

UNION TEE

UNION CROSS

B/H UNION

REDUCING UNION

▶ TUBE TO MALE/FEMALE PIPE













MALE CONNECTOR

MALE TEE

MALE ELBOW

FEMALE CONNECTOR

FEMALE RUN TEE

B/H FEMALE CONNECTOR

▶ TUBE STUB CONNECTOR













REDUCER

B/H ADAPTER

FEMALE ADAPTER

TEE ADAPTER

ELBOW ADAPTER

FEMALE GAUGE ADAPTER

5. Flange Supply Service - KS / JIS / DIN / ANSI Standard



FLANGE

A. STANDARD AND SPECIFICAION

STANDARD	SPECIFICATION								
KS/ JIS	2K, 5K, 10K, 16K, 20K, 30K								
ANSI	CLASS (150, 300, 400, 600, 900, 1500, 2500)								
DIN	6BAR, 10BAR, 16BAR, 25BAR, 40BAR								

B. FLANGE PRODUCTS













SLIP ON

BLIND

LAP JOINT

SCREWED

SOCKET WELDING

WELDING NECK

5. Flange Supply Service – Square Flange



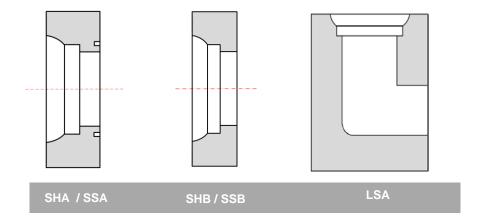
SQUARE FLANGE



■ SQUARE FLANGE FOR OIL PRESSURE

> TYPE: 210 KG/ cm², 280 KG/ cm², 350 KG/ cm²

■ SQUARE FLANGE PRODUCTS



5. Flange Supply Service – SAE Flange



SAE FLANGE

SAE FLANGES ARE USED AS A RELIABLE ALTERNATIVE TO REGULAR PIPE AND TUBE CONNECTORS. THEIR BIGGEST ADVANTAGE IS THE CONSIDERABLY HIGHER PRESSURE RESISTANCE FOR MOST SIZES AND THE CONTINUOUS PRESSURE LEVEL OF THE 6.000 PSI HIGH-PRESSURE SERIES WHICH CAN RESIST MAXIMUM WORKING PRESSURES OF UP TO 400 BAR.



- SAE SPLIT FLANGE HALVES
- SAE FLANGE CLAMPS / SAE FLANGE ADAPTERS
- SAE THREADED FLANGE / SAE BUTT WELD FLANGE
- SAE SOCKET WELD FLANGE / SAE BLANKING FLANGE
- BLOCK CONNECTION

5. Flange Supply Service – SAE Flange

B.SAE FLANGE PRODUCTS









SPLIT FLANGE HALVES

FLANGE CLAMP

FLANGE ADAPTOR

S/WELDING FLANGE ADAPTOR









THREADED TYPE

BUTT WELDING TYPE

SOCKET WELDING TYPE

BLANKING TYPE

6. Hammer Wing Union



HAMMER WING UNION

THERE ARE A VARIETY OF OILFIELD AND INDUSTRIAL APPLICATIONS FOR HAMMER UNIONS. WECO-STYLE HAMMER UNIONS ARE COMMONLY USED ON HOSES AND PIPES FOR EASY CONNECTION AND RECONNECTION ON WORK OVER RIGS AND DRILLING RIGS AND ALSO OTHER INDUSTRIAL USES. HAMMER UNIONS ARE CONNECTED EITHER BY THREADING ON TO N.P.T. THREADS OR BY WELDING DIRECTLY TO PIPE.

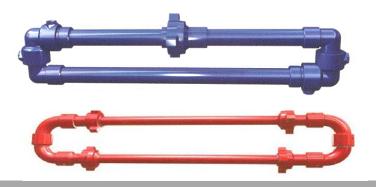


- HAMMER UNION
- SWIEVEL JOINT
- **HOSE LOOP**
- PLUG VALVE
- INTEGRAL FITTINGS (ELBOW, TEE, REDUCER)

6. Hammer Wing Union

A. HAMMER UNION PRODUCTS







PLUG VALVE HOSE LOOP SWIEVEL JOINT







PUP JOINT HAMMER UNION

INTEGRAL FITTINGS (ELBOW, TEE, REDUCER)

6. Hammer Wing Union

B. QUICK REFERENCE CHART

	Standard Service			Sour Gas	Service	Nominal Pipe Size												
Fig. No	Assembly	Cold	Test	Cold	Test	1	1_1/4	1_1/2	2	2_1/2	3	4	5	6	8	10	12	Notes
1 lg. 140	Color Key	Working	king	Working	Working	25A	32A	40A	50A	65A	80A	100A	125A	150A	200A	250A	300A	
100		1000	1500	NA	NA													
200		2000	3000	2000	3000													1
206		2000	3000	2000	3000													1
207		2000	3000	2000	3000													1
211		2000	3000	NA	NA													
400		4000	6000	4000	6000													1,5,6
602		6000	9000	6000	9000													1,2
1002		10000	15000	7500	12000													1,2,3,7, 13
1003		10000	12000	5000	7500													1,3,10, 14
1502		15000	22500	10000	15000													1,2,3, 8

Notes:

- NA Not Available
- All end connections are line pipe threads unless otherwise noted.
- 1. Butt-weld available. Consult factory for wall thickness.
- 2. Nonpressure seal configurations available.
- 3. Power make-up must be used for line pipe threaded connections to achieve rated cold working pressure.
- 4. Line pipe threads are not offered for sour gas service in this figure number.
- 5. Line pipe threads are not recommended for sour gas service above 4-inches nominal pipe diameter.
- 6. Figure 400 available in 5 1/2- to 7-inch OD with casing threads.
- 7. Figure 1002 also available in 2 1/2-inch EUE: 5- and $\tilde{6}$ -inch sizes available with butt-weld ends only.

- 8. Figure 1502 in 4-inch size available for 3 1/2-inch ID tubing, butt weld or non pressure seal configuration only.
- 9. Figure 2002 in 3-inch size available for 3-inch ID tubing.
- 10. Figure 1003 in 5-inch size available with butt-weld ends only.
- 11. Available with butt weld ends only.
- 12. All unions for sour gas service are painted olive green, stamped "SOUR GAS" or NACE MR-01-75 and have specially modified material properties.
- 13. 5- and 6-inch sizes rated at 7,500 psi CWP and 11,250 psi test; 5- and 6-inch unions for sour gas service rated at 5,000 psi CWP and 7,500 psi test.
- 14. 4- and 5-inch sizes rated at 7,500 psi CWP and 11,250 psi test; 4- and 5-inch unions for sour gas service rated at 5,000 psi CWP and 7,500 psi test.

7. Bolt Nut Supply Service



BOLT & NUT SUPPLY SERVICE

WE ARE COMMITTED TO THE DISTRIBUTION OF QUALITY INDUSTRIAL FASTENERS, PRODUCTS AND SERVICES THAT MEET OR EXCEED THE REQUIREMENTS AND EXPECTATIONS OF OUR VALUED CUSTOMERS.)



- STUD BOLTS, HEXAGON BOLTS
- WRENCH BOLT, SPECIAL HEAD BOLTS
- EYE BOLTS, ANCHOR BOLTS SPECIAL NUTS
- HEXAGON NUTS
- U BOLTS NUTS

8. Gasket Supply Service



GASKET SUPPLY SERVICE

AS EACH GASKET IS ESSENTIALLY A MECHANICAL SEAL DESIGNED TO PREVENT LEAKAGE OF LIQUID OR AIR UNDER VARYING DEGREES OF COMPRESSION, IT IS IMPORTANT THAT PRECISE APPLICATION SPECIFICATIONS ARE PROVIDED WITH THE REQUEST.PRESSURE, CHEMICAL RESISTANCE, TEMPERATURE TOLERANCES (HOT AND COLD)



A. PRODUCTS

- > NBR (Nitrile Butadiene Rubber)
- > CR (Chloroprene Rubber)
- > SILICONE
- **▶ URETHANE**
- ▶ EPDM(Ethylene Propylene Dine Methylene)
- ▶ NR (Natural Rubber)
- > SBR(Styrene Butadiene Rubber)
- ▷ IIR(Isobutylene Isoprene Rubber)