

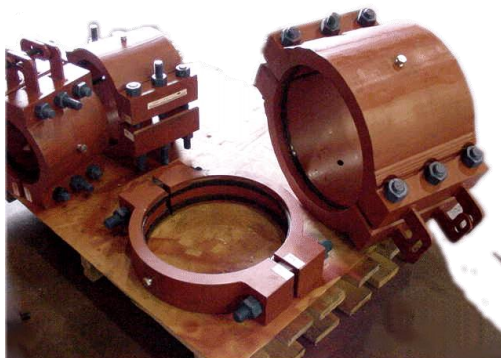
SSRC's Specialty Clamps

FROM PIPING REPAIR TECHNOLOGIES



STANDARD FEATURES

- Available in most ANSI and/or customer specified pressure ratings up to 5000 PSI
- Wide Seal Contact Area for maximum sealing reliability
- Fittings are fully weldable after installation
- Hinge plates provided on 8 Inch and larger sizes
- Readily modified for hot-tap or line-stop applications
- Advanced sealing body design reduce clamp weight and bending loads
- Field replaceable seals
- Xylan Coated Fasteners reduce friction and corrosion
- Vent / Injection ports standard on all sizes
- Designs based on materials and design requirements in API-6H and ASME Section 8, Divisions 1 and 2



**12 INCH ANSI 600
FLANGE LEAK REPAIR
CLAMP WITH VARIOUS
SSRC'S**

The PRT Split Sleeve Repair Clamps (SSRC) are a high integrity split pressure vessel utilizing a perimeter elastomer seal system, specifically engineered for long term repairs of pipelines, encapsulation of leaking valves, encapsulation of leaking flanges, and advance remediation of potential problem areas both onshore and offshore. Nominal sizes from 2 inch thru 54 inch are available in virtually every length and configuration, in working pressure ranges up to 5000 PSI. These devices are comparable or superior to all competitors' products on the market.



24 Inch Nom. X 88 Inch Subsea
SSRC with Hydraulic Controls 1500

The design criteria is taken directly from the *API-6H Specification for Clamps and Enclosures*, which incorporates all the engineering, design, material and testing requirements as set forth in the *ASME Pressure vessel codes* and *ANSI dimensional requirements*

A: All pressure containing components are designed utilizing the API-6H design safety factor based upon the Ultimate tensile strength of allowable pressure vessel quality carbon steels. All materials are furnished with complete traceability.

B. Where specified, fasteners are furnished with a Xylan (Teflon) coating for accuracy in torque procedures and for corrosion resistance. The fasteners designs are specified to only 50% of their certified yield strength.

C. All weldments, stress relief and non-destructive examination procedures are performed as specified in the appropriate specifications, and fully documented.

D. All manufacturing phases are followed by qualified quality assurance personnel, and documented as is required, or as the customer requests.

Mechanical Connectors
14 Inch
ANSI 600 Flanged End



E. The hydrostatic testing of the clamps is performed on a selective basis for standard commodity and/or inventory clamps, and is performed on 100% of special clamps, or as the customer specifies in the purchase documents. The standard test is performed at 1.3 times the rated design working pressure, with certificated and calibrated test equipment for a period of not less than 60 minutes duration for standard clamps, unless otherwise specified.

F. The design, material and test data is all supplied with the clamp at no extra cost and can be modified according to individual customer requirements. In addition, a certificate of compliance can be issued assuring compliance with all specifications set forth in the purchase documents.

DIMENSIONAL TABLE

API Size (In.)	Seal Lenght (In.)	Max. I.D. (In.)	Max. O.D. (In.)	O.A. Width (In.)	O.A. Lenght (In.)	Ship Wt. (Lbs.)	Ship Wt. (Kgs)	Ship Vol. (Cu.Ft.)	Min. Cir. (In.)
1.5	5.23	3.70	4.02	5.88	8.88	26	12	0.1	0.50
2	5.23	3.70	4.02	5.88	8.88	26	12	0.1	0.50
2.5	5.38	4.79	5.19	7.38	9.13	34	15.5	0.15	0.50
3	5.38	4.79	5.19	7.38	9.13	38	16	0.2	0.50
4	5.25	5.86	6.36	8.38	9.00	48	19	0.5	0.50
5	5.25	6.98	7.66	9.57	9.00	51	23	0.5	0.50
6	5.25	8.10	8.78	10.75	9.00	75	28	0.5	0.50
7	5.25	9.40	10.19	12.32	9.50	125	57	0.9	0.50
8	5.25	10.70	11.60	13.88	9.50	131	63	0.9	0.50
10	5.25	12.82	13.90	16.25	9.50	170	67	1.3	0.50
12	5.25	14.88	16.16	18.25	9.50	207	105	1.7	0.50
14	8.25	16.37	17.75	20.13	13.00	346	175	2.8	0.50
16	8.25	18.34	19.90	22.50	13.00	412	191	3.5	0.50
18	8.25	20.36	22.08	24.38	13.00	469	253	4.3	0.50
20	8.25	22.76	24.66	27.63	13.25	616	264	5.5	0.50
22	8.25	24.79	26.87	29.63	13.25	692	289	6.4	0.50
24	8.25	26.79	29.03	31.50	13.25	755	309	7.4	0.56
26	8.25	28.97	31.39	34.25	13.25	916	394	8.7	0.63
28	8.25	30.93	33.51	36.15	13.35	989	423	9.7	0.63
30	8.25	33.52	36.32	39.13	14.00	1231	450	12.1	0.69
32	8.25	35.17	38.11	41.75	14.38	1407	480	13.9	0.75
34	8.25	37.15	40.25	43.75	14.38	1520	550	15.4	0.75
36	8.25	39.15	42.45	45.75	14.38	1628	690	17.0	0.81
38	8.25	41.14	44.58	47.63	14.38	1721	740	18.5	0.88
40	8.25	43.16	46.76	49.63	14.38	1841	805	20.3	0.88
42	8.25	44.76	48.50	52.25	15.63	2178	920	24.1	0.88
48	9.00	50.90	55.14	58.25	15.63	2602	1120	30.5	0.88

All data subject to change without notice.

All weights and materials subject to change based on material availability and utilization.

Other lengths and bores available upon request. Standard body material is A-216 Gr. WCC cast carbon steel or plate and/or tubing equivalent. Other materials available as required. Standard seal material is BUNA-Nitrile. Other seal materials available upon request. Other ANSI and API class pressure ratings available.



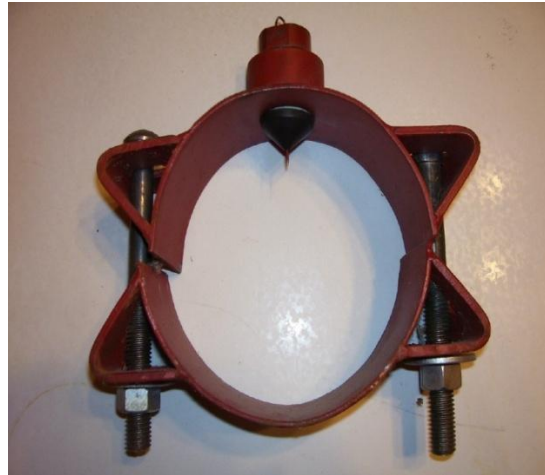
**6 inch X 2 Inch ANSI
Class 600 Structural,
Mechanical Bolt-On Hot
Tap Fitting**

G. Design Advantages:

1. The unique, advanced seal retention designs allow the seals to be easily and quickly replaced in the field with simple tools and minimally skilled labor, eliminating the costly need to return the clamp to the factory to install new seals.
2. All fasteners are Xylan (Teflon) coated for lubricity, thus providing an easier and more accurate torque or tensioning procedure, and providing added corrosion resistance.
3. Standard seal material is Buna-Nitrile, with many other special purpose seal materials available upon requirement.
4. All clamps are furnished with preparations along all split lines and around the ends to accommodate permanent weldment to the pipeline should that procedure be required.
5. Many PRT clamps are designed with an integrated “Nut Stop Ridge” on one half to eliminate the requirement to use a back-up wrench or a second person for installation. Certain clamp configurations will not allow this feature.
6. All PRT clamps are furnished with a minimum of one-1/2 Inch NPT vent/injection port on each half of each clamp.
7. All PRT clamps, 8 inch and larger are furnished with hinge plates. In addition, hydraulically actuated hinge opening and closure options are available where required at additional cost.
8. All PRT SSRC’s designated for underwater installation are furnished with a Subsea Marine Epoxy coating and sacrificial anodes, both designed for a 20 year life.
9. All PRT clamps are furnished with an enlarged annulus (Belly) dimension to allow installation over most cap welds, small dents, gouges or other allowable misshapen anomalies.

EMERGENCY INTERVENTION

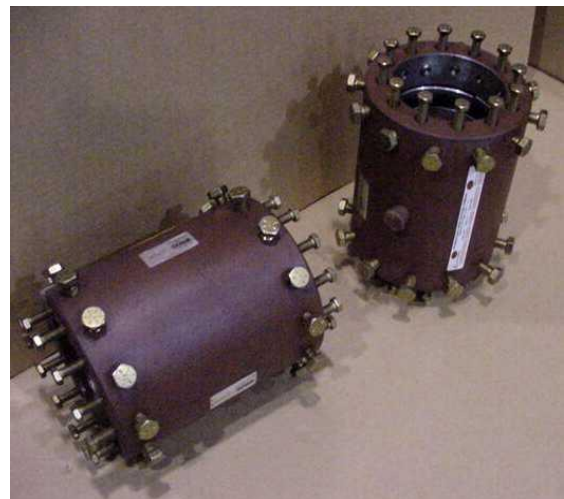
PINHOLE CLAMP



**SIZE UP TO 36" AT 2000 PSIG
LARGER SIZE OR LOWER PRESSURE STYLE
AVAILABLE ON REQUEST.**



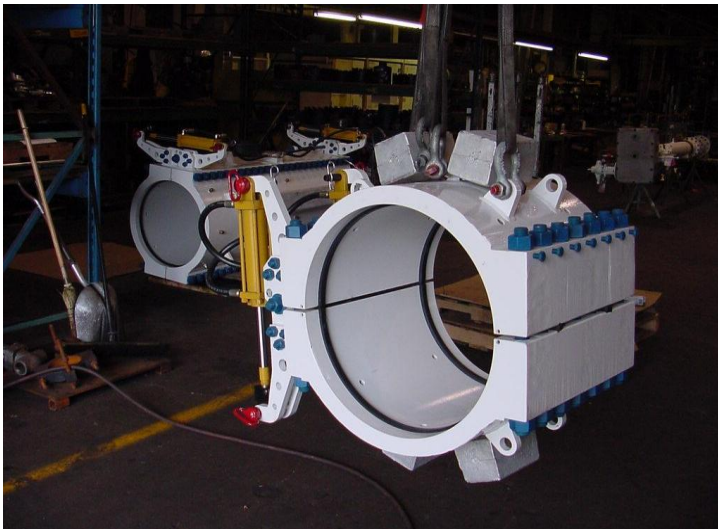
**20 inch – 1500 PSI 90° Elbow
Encapsulation Clamp**



**4 inch 1500 PSI
Pipe End Connectors**



12" ANSI Class 600 - Flanged End Connector. Dual Seals, Sub-sea Crude Oil Service located at Gulf of Mexico.



48" Sub-sea Clamp ANSI Class 600 – 4ft long Oil line – with hydraulic activation and sub-sea anodes located at Nigeria

12" ANSI Class 600 – Sub-sea clamp – 10ft long for gas line repair - located at Gulf of Mexico





48" Weld-On Live stop fitting ANSI Class 600 located at Venezuela for Lagoven



24" ANSI Class 600 Sub-sea Clamp – 8t long for oil line with hydraulic activation and sub-sea anodes located at Gulf of Mexico, USA

For Information and/or Technical Assistance:



**SSRC- Extra Long 6 Inch Nom.
24 Inch Seal Length
1500 PSI MAOP**

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Technologies**