TEAM®



Welded Pipeline Sleeves Catalog

Welded Pipeline Sleeves

Code Compliant Repairs to Damaged Pipeline Assets

Designed in accordance with ASME PCC-2 with ratings derived using ASME B31.8, TEAM's range of welded type B repair sleeves are designed and manufactured to provide cost effective code compliant repairs for a wide range of pipeline damage mechanisms. Including:

- Internal corrosion/erosion
- External corrosion
- Mechanical damage such as dents and gouges
- Cracking

Welded sleeves have long been the go-to technology for pipeline damage due to the wealth of positive operating history and well-codified design and installation guidance.

TEAM's range of Type B welded sleeve repairs provides the ultimate ordering flexibility with a wide range of pipeline diameters, location classes and repair lengths covered with a simple ordering system.

TEAM welded pipeline are designed and manufactured to the following standard specification and options:

- Materials of 50, 52, 65 and 70ksi yield stress
- Up to 10' length (3/4" thick and above available up to 5')
- Wide range of standard thicknesses
- 16ga backing strips
- Optional milled groove to accept backing strips
- 30º longitudinal bevel
- Flat end faces

TEAM's welded pipeline sleeves can be ordered directly if the required sleeve wall thickness is known. Otherwise, TEAM's standard rating tables can be used to evaluate the required thickness (tables available for review at back of catalog).

Integrated in-house capabilities enable TEAM to carry out turn-key installation of welded sleeves including in-service welding and non-destructive testing. This turn-key approach ensures that projects are executed to the highest safety and quality standards, with zero hand-offs and a single PO.





Scan or click on QR codes to receive a quotation:

Click or scan if sleeve thickness is known

Click or scan for TEAM to calculate sleeve thickness

For general inquiries or custom solutions, please contact pipelineproducts@teaminc.com

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Sleeve Ordering Information – By Part Number

TEAM's welded sleeves can be ordered using the below standard part numbering system. The standard, most cost-effective selection is highlighted in bold:

TWS-	65 -	8 -	0.375 -	6 -	NG -	P
TEAM Welded Sleeve						
Sleeve SMYS (ksi) 50, 52*, 65, 70*						
Pipeline Diameter 6 thru 36						
Welded Sleeve Thickness 0.25, 0.3125, 0.375, 0.5, 0.625, 0.75						
Full Encirclement Sleeve Length (feet, 1' Steps) For sleeves up to 5/8" thick 1' to 10' For sleeves 3/4" and above 1' to 5'						
Backing Strip Groove NG = No Groove, G = 1/16" milled groove						
Coating P = Red Oxide Primer, NC = No Coating						

*Sleeves with SMYS 52 and 70 ksi are supplied by selecting ASTM A572 Gr 50 & 65 materials with adequate tensile properties to meet the higher yield designation.

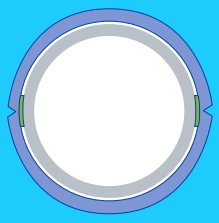
Specific material properties over standard ASTM A572 must be communicated including, carbon equivalent, impact test temperature and energy, hardness or any other specific requirements.

For practicality of manufacture, the below table provides guidance on the maximum sleeve thickness by pipeline diameter for TEAM's standard sleeves. Thicker sizes may be accommodated by special request:

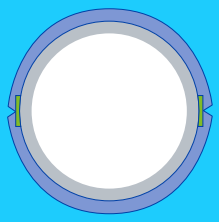
Nominal Pipeline Size	2"+	6" +	12"+	16"+	24"+
Maximum Sleeve Thickness	1/4"	3/8"	1/2"	5/8"	3/4"

Backing Strip Grooves:

TEAM's welded sleeves can be furnished with or without grooves to house the backing strips. Backing strip grooves may be a client preference and assist in installation. The groove reduces the effective wall thickness and hence the pressure capability of the sleeve a small amount. The diagrams bellow illustrate the backing strip groove options:



Sleeve with no backing strip groove



Sleeve with backing strip groove

Ordering Example:

TWS-65-16-0.625-8-G-NC represents 65ksi sleeve for a 16" pipeline that is 5/8" thick and 8' long with backing strip grooves and no coating.

Pressure Rating Tables

Sleeve allowable pressure is evaluated using ASME B31.8 841.1.1 & ASME PCC-2 Article 206.

$$P = \frac{2St}{D} FET$$

Where:

D = Outside diameter of sleeve (in)

E = Longitudinal joint factor (1.0 for full volumetric inspection or 0.8 otherwise as per ASME PCC-2 206-3.2)

F = Design factor ASME B31.8 Table 841.1.6-1

P = Design pressure (psi)

S = Specified minimum yield stress of sleeve (psi)

T = Temperature derating factor (1.0 for design temperatures 250ºF or lower)

t = Sleeve thickness (for sleeves with backing strip grooves the section is reduced by the groove depth giving a lower allowable pressure)

The tables that follow at the back of this catalog illustrate the maximum allowable pressure for each option of TEAM's welded sleeve.

Rating Table for TEAM Type B Welded Sleeve

50ksi Material, 0.8 Longitudinal Weld Joint Efficiency (MT/PT), 250ºF Maximum Design Temperature

Pipe NPS	1/4										5/16										Sleeve Thickness (in)
	.04		.05		.06		.072		.08		.04		.05		.06		.072		.08		Design Factor
	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	Backing Strip Groove
4	1,499	287	1,873	359	2,248	431	2,697	517	2,997	574											Sleeve MAOP
6	1,059	383	1,324	479	1,589	575	1,907	690	2,119	766	1,313	716	1,641	894	1,969	1,073	2,363	1,288	2,625	1,431	
8	830	373	1,038	467	1,245	560	1,494	672	1,661	747	1,033	635	1,291	794	1,549	953	1,859	1,143	2,065	1,270	
10	675	344	844	430	1,013	516	1,215	619	1,350	688	842	557	1,052	697	1,263	836	1,515	1,003	1,683	1,115	
12	574	314	718	393	861	472	1,034	566	1,148	629	717	495	896	619	1,076	742	1,291	891	1,434	990	
14	525	297	656	372	788	446	945	535	1,050	595	656	453	820	566	984	679	1,181	815	1,313	906	
16	462	273	577	341	693	409	832	491	924	545	578	399	722	499	867	598	1,040	718	1,156	798	
18	412	251	515	314	619	377	742	452	825	502	516	356	645	445	774	534	929	641	1,033	713	
20	372	227	465	284	559	340	670	408	745	454	467	322	583	402	700	483	840	579	933	644	
22	339	207	424	259	509	310	611	372	679	414	425	294	532	367	638	440	766	529	851	587	
24	312	190	390	238	468	285	561	342	624	380	391	270	489	337	587	405	704	486	782	540	
26	288	176	361	220	433	264	519	316	577	352	362	250	452	312	543	375	651	449	724	499	
28	268	163	335	204	402	245	483	294	537	327	337	232	421	290	505	349	606	418	673	465	
30	251	153	313	191	376	229	451	275	502	306	315	217	393	272	472	326	567	391	630	434	
32	235	143	294	179	353	215	424	258	471	287	296	204	369	255	443	306	532	367	591	408	
34	222	135	277	169	333	203	399	243	444	270	279	192	348	240	418	288	501	346	557	384	
36	210	128	262	160	315	192	377	230	419	256	263	182	329	227	395	273	474	327	527	364	

Pipe NPS	3/8										1/2										Sleeve Thickness (in)
	.04		.05		.06		.072		.08		.04		.05		.06		.072		.08		Design Factor
	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	Backing Strip Groove
6	1,557	1,037	1,947	1,296	2,336	1,556	2,803	1,867	3,115	2,074											Sleeve MAOP
8	1,229	890	1,537	1,112	1,844	1,335	2,213	1,602	2,459	1,780											
10	1,005	747	1,256	933	1,507	1,120	1,809	1,344	2,009	1,493											
12	857	637	1,072	796	1,286	956	1,543	1,147	1,714	1,274	1,130	914	1,413	1,142	1,695	1,371	2,034	1,645	2,260	1,828	
14	785	584	982	729	1,178	875	1,413	1,050	1,570	1,167	1,037	838	1,296	1,048	1,555	1,258	1,866	1,509	2,073	1,677	
16	692	514	865	643	1,038	772	1,246	926	1,384	1,029	916	740	1,145	926	1,373	1,111	1,648	1,333	1,831	1,481	
18	619	460	774	575	928	690	1,114	828	1,238	920	820	663	1,025	829	1,230	995	1,476	1,193	1,640	1,326	
20	560	416	699	520	839	624	1,007	748	1,119	832	742	600	928	750	1,113	900	1,336	1,080	1,484	1,200	
22	511	379	638	474	766	569	919	683	1,021	759	678	548	848	685	1,017	822	1,220	987	1,356	1,097	
24	470	349	587	436	704	523	845	628	939	698	624	505	780	631	936	757	1,123	908	1,248	1,009	
26	435	323	543	404	652	484	782	581	869	646	578	467	723	584	867	701	1,041	841	1,156	935	
28	405	301	506	376	607	451	728	541	809	601	538	435	673	544	808	653	969	784	1,077	871	
30	378	281	473	351	567	422	681	506	757	562	504	407	630	509	756	611	907	733	1,008	815	
32	355	264	444	330	533	396	640	475	711	528	473	383	592	478	710	574	852	689	947	766	
34	335	249	419	311	502	373	603	448	670	498	446	361	558	451	670	541	804	650	893	722	
36	317	235	396	294	475	353	570	424	633	471	422	342	528	427	634	512	760	615	845	683	

Pipe NPS	5/8										3/4										Sleeve Thickness (in)
	.04		.05		.06		.072		.08		.04		.05		.06		.072		.08		Design Factor
	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	Backing Strip Groove
16	1,133	960	1,416	1,200	1,699	1,440	2,039	1,728	2,265	1,920											Sleeve MAOP
18	1,016	861	1,270	1,076	1,524	1,291	1,828	1,550	2,031	1,722											
20	921	780	1,151	975	1,381	1,171	1,657	1,405	1,841	1,561											
22	842	714	1,052	892	1,263	1,070	1,515	1,284	1,684	1,427											
24	776	657	969	822	1,163	986	1,396	1,183	1,551	1,315	924	807	1,155	1,009	1,386	1,211	1,663	1,453	1,848	1,614	
26	719	609	899	762	1,078	914	1,294	1,097	1,438	1,219	857	749	1,071	936	1,286	1,123	1,543	1,347	1,714	1,497	
28	670	568	837	710	1,005	852	1,206	1,022	1,340	1,136	799	698	999	873	1,199	1,047	1,439	1,257	1,599	1,396	
30	627	532	784	665	941	797	1,129	957	1,255	1,063	749	654	936	817	1,123	981	1,348	1,177	1,498	1,308	
32	590	500	737	625	884	750	1,061	900	1,179	1,000	704	615	880	769	1,056	923	1,268	1,107	1,408	1,230	
34	556	472	695	589	834	707	1,001	849	1,113	943	665	580	831	726	997	871	1,196	1,045	1,329	1,161	
36	527	446	658	558	790	669	948	803	1,053	893	629	550	787	687	944	824	1,133	989	1,259	1,099	

Rating Table for TEAM Type B Welded Sleeve

52ksi Material, 0.8 Longitudinal Weld Joint Efficiency (MT/PT), 250ºF Maximum Design Temperature

Pipe NPS	1/4										5/16										Sleeve Thickness (in)
	.04		.05		.06		.072		.08		.04		.05		.06		.072		.08		Design Factor
	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	Backing Strip Groove
4	1,558	299	1,948	373	2,338	448	2,805	537	3,117	597											Sleeve MAOP
6	1,102	398	1,377	498	1,653	598	1,983	717	2,203	797	1,365	744	1,706	930	2,048	1,116	2,457	1,340	2,730	1,488	
8	863	388	1,079	486	1,295	583	1,554	699	1,727	777	1,074	661	1,342	826	1,611	991	1,933	1,189	2,148	1,321	
10	702	358	878	447	1,053	536	1,264	644	1,404	715	875	580	1,094	725	1,313	870	1,576	1,043	1,751	1,159	
12	597	327	746	409	896	490	1,075	589	1,194	654	746	515	932	643	1,119	772	1,342	926	1,491	1,029	
14	546	309	683	387	819	464	983	557	1,092	618	683	471	853	589	1,024	706	1,229	848	1,365	942	
16	480	283	601	354	721	425	865	510	961	567	601	415	751	518	902	622	1,082	747	1,202	830	
18	429	261	536	326	643	392	772	470	858	522	537	371	671	463	805	556	966	667	1,074	741	
20	387	236	484	295	581	354	697	425	775	472	485	335	606	419	728	502	873	603	970	670	
22	353	215	441	269	530	323	635	387	706	430	443	305	553	382	664	458	797	550	885	611	
24	324	198	405	247	487	296	584	356	649	395	407	281	508	351	610	421	732	505	814	561	
26	300	183	375	229	450	274	540	329	600	366	376	260	470	325	565	390	677	467	753	519	
28	279	170	349	213	419	255	502	306	558	340	350	242	438	302	525	362	630	435	700	483	
30	261	159	326	199	391	238	469	286	522	318	327	226	409	282	491	339	589	407	655	452	
32	245	149	306	186	367	224	441	269	490	298	307	212	384	265	461	318	553	382	615	424	
34	231	141	288	176	346	211	415	253	461	281	290	200	362	250	435	300	521	360	579	400	
36	218	133	273	166	327	199	393	239	436	266	274	189	342	236	411	284	493	340	548	378	

Pipe NPS	3/8										1/2										Sleeve Thickness (in)
	.04		.05		.06		.072		.08		.04		.05		.06		.072		.08		Design Factor
	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	Backing Strip Groove
6	1,620	1,078	2,025	1,348	2,429	1,618	2,915	1,941	3,239	2,157											Sleeve MAOP
8	1,279	926	1,598	1,157	1,918	1,388	2,302	1,666	2,557	1,851											
10	1,045	777	1,306	971	1,567	1,165	1,881	1,398	2,090	1,553											
12	892	663	1,114	828	1,337	994	1,605	1,193	1,783	1,325	1,175	950	1,469	1,188	1,763	1,426	2,116	1,711	2,351	1,901	
14	817	607	1,021	759	1,225	910	1,470	1,092	1,633	1,214	1,078	872	1,348	1,090	1,617	1,308	1,941	1,569	2,156	1,744	
16	720	535	900	669	1,080	802	1,296	963	1,440	1,070	952	770	1,190	963	1,428	1,155	1,714	1,386	1,904	1,540	
18	644	478	804	598	965	717	1,158	861	1,287	957	853	690	1,066	862	1,279	1,034	1,535	1,241	1,705	1,379	
20	582	432	727	541	873	649	1,047	778	1,164	865	772	624	965	780	1,158	936	1,389	1,124	1,544	1,248	
22	531	395	664	493	797	592	956	710	1,062	789	705	570	881	713	1,058	855	1,269	1,026	1,410	1,141	
24	488	363	610	454	732	544	879	653	977	726	649	525	811	656	974	787	1,168	945	1,298	1,050	
26	452	336	565	420	678	504	814	605	904	672	601	486	751	608	902	729	1,082	875	1,202	972	
28	421	313	526	391	631	469	757	563	841	625	560	453	700	566	840	679	1,008	815	1,120	906	
30	393	292	492	365	590	439	708	526	787	585	524	424	655	530	786	636	943	763	1,048	847	
32	369	275	462	343	554	412	665	494	739	549	492	398	615	498	738	597	886	717	985	796	
34	348	259	435	324	522	388	627	466	697	518	464	375	580	469	696	563	836	676	929	751	
36	329	245	412	306	494	367	593	441	659	490	439	355	549	444	659	533	791	639	879	710	

Pipe NPS	5/8										3/4										Sleeve Thickness (in)
	.04		.05		.06		.072		.08		.04		.05		.06		.072		.08		Design Factor
	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	Backing Strip Groove
16	1,178	998	1,472	1,248	1,767	1,498	2,120	1,797	2,356	1,997											Sleeve MAOP
18	1,056	895	1,320	1,119	1,585	1,343	1,901	1,612	2,113	1,791											
20	958	812	1,197	1,014	1,436	1,217	1,724	1,461	1,915	1,623											
22	876	742	1,095	928	1,313	1,113	1,576	1,336	1,751	1,484											
24	807	684	1,008	855	1,210	1,025	1,452	1,231	1,613	1,367	961	839	1,201	1,049	1,442	1,259	1,730	1,511	1,922	1,679	
26	748	634	935	792	1,121	951	1,346	1,141	1,495	1,267	891	779	1,114	973	1,337	1,168	1,605	1,401	1,783	1,557	
28	697	591	871	738	1,045	886	1,254	1,063	1,394	1,181	831	726	1,039	907	1,247	1,089	1,496	1,307	1,663	1,452	
30	652	553	815	691	979	829	1,174	995	1,305	1,106	779	680	973	850	1,168	1,020	1,402	1,224	1,557	1,360	
32	613	520	767	650	920	780	1,104	936	1,226	1,040	732	640	916	800	1,099	959	1,318	1,151	1,465	1,279	
34	579	490	723	613	868	736	1,041	883	1,157	981	691	604	864	755	1,037	906	1,244	1,087	1,383	1,207	
36	548	464	685	580	821	696	986	835	1,095	928	655	572	818	715	982	857	1,178	1,029	1,309	1,143	

Rating Table for TEAM Type B Welded Sleeve

65ksi Material, 0.8 Longitudinal Weld Joint Efficiency (MT/PT), 250ºF Maximum Design Temperature

Pipe NPS	1/4										5/16										Sleeve Thickness (in)
	.04		.05		.06		.072		.08		.04		.05		.06		.072		.08		Design Factor
	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	Backing Strip Groove
4	1,948	373	2,435	467	2,922	560	3,507	672	3,896	746											
6	1,377	498	1,721	623	2,066	747	2,479	896	2,754	996	1,706	930	2,133	1,163	2,559	1,395	3,071	1,675	3,413	1,861	
8	1,079	486	1,349	607	1,619	728	1,943	874	2,159	971	1,342	826	1,678	1,032	2,013	1,239	2,416	1,486	2,685	1,651	
10	878	447	1,097	559	1,317	670	1,580	804	1,755	894	1,094	725	1,368	906	1,641	1,087	1,970	1,304	2,189	1,449	
12	746	409	933	511	1,120	613	1,344	736	1,493	817	932	643	1,165	804	1,398	965	1,678	1,158	1,864	1,287	
14	683	387	853	483	1,024	580	1,229	696	1,365	773	853	589	1,066	736	1,280	883	1,536	1,060	1,706	1,177	
16	601	354	751	443	901	532	1,081	638	1,201	709	751	518	939	648	1,127	778	1,352	933	1,503	1,037	
18	536	326	670	408	804	489	965	587	1,072	653	671	463	839	579	1,007	695	1,208	834	1,342	926	
20	484	295	605	369	726	442	871	531	968	590	606	419	758	523	910	628	1,092	753	1,213	837	**Sleeve MAOP**
22	441	269	552	336	662	403	794	484	883	538	553	382	691	477	830	573	996	687	1,106	763	
24	405	247	507	309	608	371	730	445	811	494	508	351	636	439	763	526	915	632	1,017	702	
26	375	229	469	286	562	343	675	411	750	457	470	325	588	406	706	487	847	584	941	649	
28	349	213	436	266	523	319	628	383	698	425	438	302	547	378	657	453	788	544	875	604	
30	326	199	408	248	489	298	587	358	652	397	409	282	512	353	614	424	737	508	818	565	
32	306	186	383	233	459	280	551	336	612	373	384	265	480	331	576	398	692	477	768	530	
34	288	176	360	220	433	264	519	316	577	351	362	250	453	312	543	375	652	450	724	500	
36	273	166	341	208	409	249	491	299	545	332	342	236	428	295	514	354	616	425	685	473	

Pipe NPS	3/8										1/2										Sleeve Thickness (in)
	.04		.05		.06		.072		.08		.04		.05		.06		.072		.08		Design Factor
	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	Backing Strip Groove
6	2,025	1,348	2,531	1,685	3,037	2,022	3,644	2,427	4,049	2,696											
8	1,598	1,157	1,998	1,446	2,397	1,735	2,877	2,083	3,197	2,314											
10	1,306	971	1,633	1,213	1,959	1,456	2,351	1,747	2,612	1,941											
12	1,114	828	1,393	1,035	1,672	1,242	2,006	1,491	2,229	1,656	1,469	1,188	1,836	1,485	2,204	1,782	2,644	2,138	2,938	2,376	
14	1,021	759	1,276	948	1,531	1,138	1,837	1,365	2,042	1,517	1,348	1,090	1,685	1,362	2,022	1,635	2,426	1,962	2,695	2,180	
16	900	669	1,125	836	1,350	1,003	1,620	1,204	1,800	1,337	1,190	963	1,488	1,203	1,785	1,444	2,143	1,733	2,381	1,925	
18	804	598	1,006	747	1,207	897	1,448	1,076	1,609	1,196	1,066	862	1,332	1,077	1,599	1,293	1,918	1,551	2,132	1,724	
20	727	541	909	676	1,091	811	1,309	973	1,455	1,081	965	780	1,206	975	1,447	1,170	1,737	1,405	1,930	1,561	
22	664	493	830	617	996	740	1,195	888	1,328	987	881	713	1,102	891	1,322	1,069	1,587	1,283	1,763	1,426	**Sleeve MAOP**
24	610	454	763	567	916	680	1,099	817	1,221	907	811	656	1,014	820	1,217	984	1,460	1,181	1,623	1,312	
26	565	420	706	525	847	630	1,017	756	1,130	840	751	608	939	760	1,127	912	1,353	1,094	1,503	1,215	
28	526	391	657	488	789	586	947	703	1,052	782	700	566	875	707	1,050	849	1,260	1,019	1,400	1,132	
30	492	365	615	457	738	548	885	658	984	731	655	530	819	662	982	794	1,179	953	1,310	1,059	
32	462	343	577	429	693	515	831	618	924	686	615	498	769	622	923	746	1,108	896	1,231	995	
34	435	324	544	404	653	485	784	582	871	647	580	469	725	587	870	704	1,045	845	1,161	939	
36	412	306	515	383	618	459	741	551	824	612	549	444	686	555	824	666	988	799	1,098	888	

Pipe NPS	5/8										3/4										Sleeve Thickness (in)
	.04		.05		.06		.072		.08		.04		.05		.06		.072		.08		Design Factor
	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	Backing Strip Groove
16	1,472	1,248	1,841	1,560	2,209	1,872	2,650	2,246	2,945	2,496											
18	1,320	1,119	1,651	1,399	1,981	1,679	2,377	2,015	2,641	2,238											
20	1,197	1,014	1,496	1,268	1,795	1,522	2,154	1,826	2,394	2,029											
22	1,095	928	1,368	1,160	1,642	1,391	1,970	1,670	2,189	1,855											
24	1,008	855	1,260	1,068	1,512	1,282	1,815	1,538	2,016	1,709	1,201	1,049	1,502	1,311	1,802	1,574	2,162	1,888	2,403	2,098	
26	935	792	1,168	990	1,402	1,188	1,682	1,426	1,869	1,584	1,114	973	1,393	1,216	1,672	1,460	2,006	1,752	2,229	1,946	
28	871	738	1,089	923	1,306	1,107	1,568	1,329	1,742	1,476	1,039	907	1,299	1,134	1,559	1,361	1,870	1,633	2,078	1,815	
30	815	691	1,019	864	1,223	1,037	1,468	1,244	1,631	1,382	973	850	1,217	1,063	1,460	1,275	1,752	1,530	1,947	1,700	
32	767	650	958	812	1,150	975	1,380	1,169	1,533	1,299	916	800	1,144	999	1,373	1,199	1,648	1,439	1,831	1,599	
34	723	613	904	766	1,085	919	1,302	1,103	1,446	1,226	864	755	1,080	943	1,296	1,132	1,555	1,358	1,728	1,509	
36	685	580	856	725	1,027	870	1,232	1,044	1,369	1,160	818	715	1,023	893	1,227	1,072	1,473	1,286	1,636	1,429	**Sleeve MAOP**

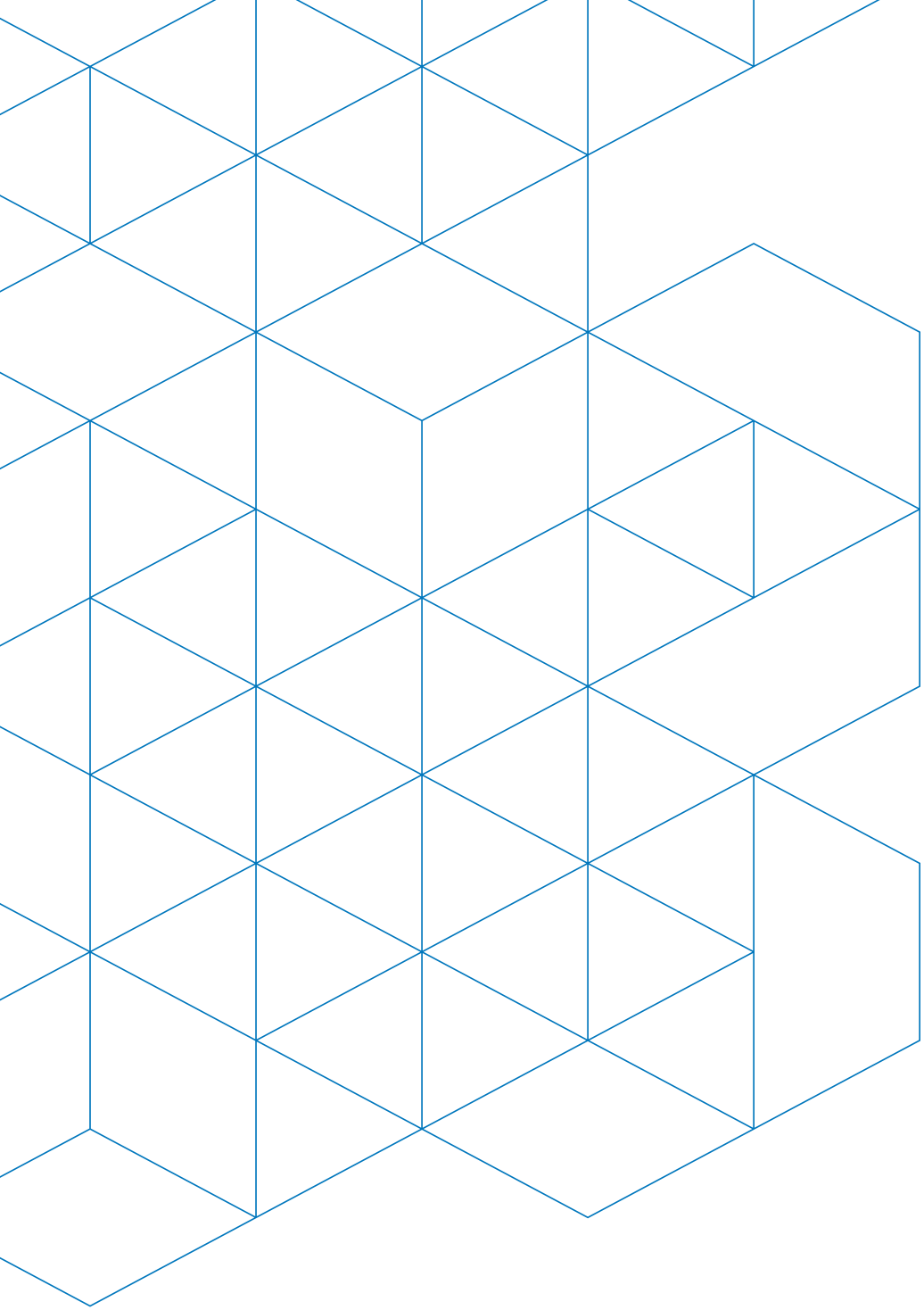
Rating Table for TEAM Type B Welded Sleeve

70ksi Material, 0.8 Longitudinal Weld Joint Efficiency (MT/PT), 250ºF Maximum Design Temperature

Pipe NPS	1/4										5/16										Sleeve Thickness (in)
	.04		.05		.06		.072		.08		.04		.05		.06		.072		.08		Design Factor
	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	Backing Strip Groove
4	2,098	402	2,622	502	3,147	603	3,776	724	4,196	804											
6	1,483	536	1,854	670	2,225	805	2,669	965	2,966	1,073	1,838	1,002	2,297	1,252	2,756	1,503	3,308	1,803	3,675	2,004	
8	1,162	523	1,453	654	1,744	784	2,092	941	2,325	1,046	1,446	889	1,807	1,112	2,168	1,334	2,602	1,601	2,891	1,778	
10	945	481	1,182	602	1,418	722	1,701	866	1,890	963	1,178	780	1,473	975	1,768	1,171	2,121	1,405	2,357	1,561	
12	804	440	1,005	550	1,206	660	1,447	792	1,608	880	1,004	693	1,255	866	1,506	1,039	1,807	1,247	2,008	1,385	
14	735	416	919	520	1,103	624	1,323	749	1,470	832	919	634	1,148	793	1,378	951	1,654	1,141	1,838	1,268	
16	647	382	808	477	970	572	1,164	687	1,293	763	809	558	1,011	698	1,214	837	1,456	1,005	1,618	1,117	
18	577	351	722	439	866	527	1,039	633	1,155	703	723	499	903	623	1,084	748	1,301	898	1,446	998	
20	521	318	652	397	782	477	938	572	1,043	635	653	451	816	563	980	676	1,176	811	1,306	901	**Sleeve MAOP**
22	475	290	594	362	713	434	855	521	950	579	596	411	745	514	894	617	1,072	740	1,191	822	
24	437	266	546	333	655	399	786	479	873	532	548	378	684	472	821	567	986	680	1,095	756	
26	404	246	505	308	606	369	727	443	808	492	507	350	633	437	760	524	912	629	1,013	699	
28	376	229	470	286	563	343	676	412	751	458	471	325	589	407	707	488	848	586	943	651	
30	351	214	439	267	527	321	632	385	702	428	441	304	551	380	661	456	793	547	881	608	
32	330	201	412	251	494	301	593	361	659	402	414	286	517	357	621	428	745	514	828	571	
34	311	189	388	237	466	284	559	341	621	378	390	269	487	336	585	404	702	484	780	538	
36	294	179	367	224	440	268	528	322	587	358	369	254	461	318	553	382	664	458	738	509	

Pipe NPS	3/8										1/2										Sleeve Thickness (in)
	.04		.05		.06		.072		.08		.04		.05		.06		.072		.08		Design Factor
	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	Backing Strip Groove
6	2,180	1,452	2,725	1,815	3,270	2,178	3,924	2,613	4,361	2,904											
8	1,721	1,246	2,152	1,557	2,582	1,869	3,098	2,243	3,443	2,492											
10	1,407	1,045	1,758	1,307	2,110	1,568	2,532	1,882	2,813	2,091											
12	1,200	892	1,500	1,115	1,800	1,338	2,160	1,605	2,400	1,784	1,582	1,279	1,978	1,599	2,373	1,919	2,848	2,303	3,164	2,559	
14	1,099	817	1,374	1,021	1,649	1,225	1,979	1,470	2,199	1,634	1,451	1,174	1,814	1,467	2,177	1,761	2,612	2,113	2,903	2,347	
16	969	720	1,211	900	1,454	1,080	1,744	1,296	1,938	1,440	1,282	1,037	1,602	1,296	1,923	1,555	2,307	1,866	2,564	2,073	
18	866	644	1,083	805	1,299	966	1,559	1,159	1,733	1,288	1,148	928	1,435	1,160	1,722	1,392	2,066	1,671	2,296	1,856	
20	783	582	979	728	1,175	873	1,410	1,048	1,567	1,164	1,039	840	1,299	1,050	1,559	1,260	1,870	1,513	2,078	1,681	
22	715	531	894	664	1,072	797	1,287	956	1,430	1,062	949	768	1,187	960	1,424	1,151	1,709	1,382	1,899	1,535	**Sleeve MAOP**
24	657	489	822	611	986	733	1,183	879	1,315	977	874	707	1,092	883	1,311	1,060	1,573	1,272	1,747	1,413	
26	608	452	761	565	913	678	1,095	814	1,217	904	809	654	1,012	818	1,214	982	1,457	1,178	1,619	1,309	
28	566	421	708	526	849	631	1,019	758	1,133	842	754	610	942	762	1,131	914	1,357	1,097	1,507	1,219	
30	530	394	662	492	794	590	953	708	1,059	787	705	570	882	713	1,058	856	1,270	1,027	1,411	1,141	
32	497	370	622	462	746	554	895	665	995	739	663	536	828	670	994	804	1,193	965	1,325	1,072	
34	469	348	586	436	703	523	844	627	938	697	625	505	781	632	937	758	1,125	910	1,250	1,011	
36	443	330	554	412	665	494	798	593	887	659	591	478	739	598	887	717	1,064	861	1,183	956	

Pipe NPS	5/8										3/4										Sleeve Thickness (in)
	.04		.05		.06		.072		.08		.04		.05		.06		.072		.08		Design Factor
	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	NG	G	Backing Strip Groove
16	1,586	1,344	1,982	1,680	2,379	2,016	2,854	2,419	3,171	2,688											
18	1,422	1,205	1,778	1,507	2,133	1,808	2,560	2,169	2,844	2,411											
20	1,289	1,092	1,611	1,366	1,933	1,639	2,320	1,966	2,578	2,185											
22	1,179	999	1,473	1,249	1,768	1,499	2,122	1,798	2,357	1,998											
24	1,086	920	1,357	1,150	1,629	1,380	1,954	1,656	2,172	1,841	1,294	1,130	1,617	1,412	1,941	1,695	2,329	2,034	2,587	2,260	
26	1,006	853	1,258	1,066	1,510	1,280	1,812	1,535	2,013	1,706	1,200	1,048	1,500	1,310	1,800	1,572	2,160	1,886	2,400	2,096	
28	938	795	1,172	994	1,407	1,192	1,688	1,431	1,876	1,590	1,119	977	1,399	1,222	1,679	1,466	2,014	1,759	2,238	1,955	
30	878	744	1,098	930	1,317	1,116	1,581	1,340	1,756	1,489	1,048	915	1,310	1,144	1,572	1,373	1,887	1,648	2,097	1,831	
32	826	700	1,032	875	1,238	1,050	1,486	1,259	1,651	1,399	986	861	1,232	1,076	1,479	1,292	1,775	1,550	1,972	1,722	
34	779	660	974	825	1,168	990	1,402	1,188	1,558	1,320	931	813	1,163	1,016	1,396	1,219	1,675	1,463	1,861	1,625	
36	737	625	921	781	1,106	937	1,327	1,125	1,474	1,250	881	769	1,101	962	1,322	1,154	1,586	1,385	1,762	1,539	**Sleeve MAOP**



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