

MECHANICAL REQUIREMENTS										
ALLOY AND STAINLESS STEEL ASTM A193 FOR HIGH TEMPERATURE SERVICE										
ALLOY	UNS	W.Nr	ASTM	AISI	DIA	Tensile Strength min. Mpa	Yield Strength min,0.2% Mpa	Elongation in 4 D, MIN %	Reduction of area min %	Hardness HB
B5	S50100	17362	A193	51	up to 4,incl	690	550	16	50	-
B6	S41000	14006	A193	410	up to 4,incl	760	585	15	50	-
B7	G41400	17225	A193	4140	21/2 and under	860	720	16	50	<321
					over 21/2 to 4	795	655	16	50	<320
					over 4 to 7	690	515	18	50	<277
B7M	G41400	17225	A193	4140	21/2 and under	690	550	18	50	<235
					over 21/2 to 4	690	550	18	50	<235
					over 4 to 7	690	515	18	50	<235
B16	K14072	17711	A193	-	21/2 and under	860	725	18	50	<321
					over 21/2 to 4	760	655	17	45	<302
					over 4 to 7	690	585	16	45	<277
B8	S30400	14301	A193	304	all size	515	205	30	50	<223
B8A	S30400	14301	A193	304	all size	515	205	30	50	<192
B8T	S32100	14541	A193	321	all size	515	205	30	50	<223
B8TA	S32100	14541	A193	321	all size	515	205	30	50	<192
B8C	S34700	14550	A193	347	all size	515	205	30	50	<223
B8CA	S34700	14550	A193	347	all size	515	205	30	50	<192
B8M	S31600	14401	A193	316	all size	515	205	30	50	<223
B8MA	S31600	14401	A193	316	all size	515	205	30	50	<192
B8cl2	S30400	14301	A193	304	3/4 and under	860	690	12	35	<321
B8Tcl2	S32100	14541	A193	321	over 3/4 to 1	795	550	15	35	<321
B8Ccl2	S34700	14550	A193	347	over 1 to 11/4	725	450	20	35	<321
					over 11/4 to 11/2	690	345	28	45	<321
					3/4 and under	760	665	15	45	<321
B8Mcl2	S31600	14401	A193	316	over 3/4 to 1	690	550	20	45	<321
					over 1 to 11/4	655	450	25	45	<321
					over 11/4 to 11/2	620	345	30	45	<321
B8Mcl2B	S31600	14401		316	2 and under	655	616	25	40	<321
		14401			over 2 to 21/2	620	450	30	40	<321
					over 21/2 to 3	550	380	30	40	<321
B8Mcl2C	S31600			316	2 and under	585	450	30	60	
					over 2	585	415	30	60	

MECHANICAL REQUIREMENTS										
ALLOY AND STAINLESS STEEL ASTM A320 FOR LOW TEMPERATURE SERVICE										
ALLOY	UNS	W.Nr	ASTM	AISI	DIA	Tensile Strength min. Mpa	Yield Strength min,0.2% Mpa	Elongation in 4 D, MIN %	Reduction of area min %	Hardness HB
L7*	G41400	1.7225	A320	4140	21/2 and under	860	725	16	50	
L7M**	G41400	1.7225	A320	4140	all size	690	550	18	50	<235
L43*	G43400	1.6565	A320	4340	4 and under	860	725	16	50	
B8	S30400	1.4301	A320	304	all size	515	205	35	50	<223
B8A	S30400	1.4301	A320	304	all size	515	205	35	50	<192
B8T	S32100	1.4541	A320	321	all size	515	205	35	50	<223
B8TA	S32100	1.4541	A320	321	all size	515	205	35	50	<192
B8C	S34700	1.455	A320	347	all size	515	205	35	50	<223
B8A CA	S34700	1.455	A320	347	all size	515	205	35	50	<192
B8M	S31600	1.4401	A320	316	all size	515	205	35	50	<223
B8MA	S31600	1.4401	A320	316	all size	515	205	35	50	<192
B8cl2	S30400	1.4301	A320	304	3/4 and under	860	690	12	35	<321
B8Tcl2	S32100	1.4541	A320	321	over 3/4 to 1	725	450	20	35	<321
B8Ccl2	S34700	1.455	A320	347	over 1 to 11/4	795	550	15	35	<321
					over 11/4 to 11/2	690	345	28	45	<321
					3/4 and under	760	655	15	45	<321
B8Mcl2	S31600	1.4401	A320	316	over 3/4 to 1	690	550	20	45	<321
					over 1 to 11/4	655	450	25	45	<321
					over 11/4 to 11/2	620	345	30	45	<321

*L7/L43 IMPACT TEST -101°C MIN AVG 27(20) JOULES

**L7M IMPACT TEST -73°C MIN AVG 27(20) JOULES