

Group	Grade	Type	Identification
1	H40	-	
	J55	-	
	K55	-	
	N80	1	
		Q	
	R95	-	
2	M65	-	
	L80	1	
		9Cr	
		13Cr	
	C90	1	
		T95	1
	C110	-	
3	P110	-	
4	Q125	1	

Evrax Proprietary	E80 ⁱ	
	E100 ⁱ	

Group	Grade	Type	Yield Strength ksi (MPa)		Min UTS ksi (MPa)	Total Elongation Under Load (%)	Manufacturing Process	Heat Treatment	Minimum Tempering Temperature (°C)	Specified Wall Thickness		Max Hardness ^g		Allowable Hardness Variation
			Min	Max						in	(mm)	HRC	HBW	
1	H40	-	40 (276)	80 (552)	60 (414)	0.5	S or EW	None	-	-	-	-	-	
	J55	-	55 (379)	80 (552)	75 (517)	0.5	S or EW	None ^a	-	-	-	-	-	
	K55	-	55 (379)	80 (552)	95 (655)	0.5	S or EW	None ^a	-	-	-	-	-	
	N80	1	80 (552)	110 (758)	100 (689)	0.5	S or EW	^b	-	-	-	-	-	
		Q						Q&T						
	R95	-	95 (655)	110 (758)	105 (724)	0.5	S or EW	Q&T	538	-	-	-	-	
2	M65	-	65 (448)	85 (586)	85 (586)	0.5	S or EW	^c	-	-	22	235	-	
	L80	1	80 (552)	95 (655)	95 (655)	0.5	S or EW	Q&T	566	-	23	241	-	
		9Cr & 13Cr					S	Q&T ^d	593					
	C90	1	90 (621)	110 (724)	100 (689)	0.5	S	Q&T	621	≤ 0.500 0.501 - 0.749 0.750 - 0.999 ≥ 1.000	(≤ 12.70 12.71 - 19.40 19.05 - 25.39 ≥ 25.4)	25.4	255	3.0 4.0 5.0 6.0
	T95	1	95 (655)	110 (758)	105 (724)	0.5	S	Q&T	649	≤ 0.500 0.501 - 0.749 0.750 - 0.999 ≥ 1.000	(≤ 12.70 12.71 - 19.40 19.05 - 25.39 ≥ 25.4)	25.4	255	3.0 4.0 5.0 6.0
	C110	-	110 (758)	120 (828)	115 (793)	0.5	S	Q&T	649	≤ 0.500 0.501 - 0.749 0.750 - 0.999 ≥ 1.000	(≤ 12.70 12.71 - 19.40 19.05 - 25.39 ≥ 25.4)	30	286	3.0 4.0 5.0 6.0
3	P110	-	110 (758)	140 (965)	125 (862)	0.6	S or EW ^{e,f}	Q&T	-	-	-	-	-	
4	Q125	1	125 (862)	150 (1034)	135 (931)	0.65	S or EW ^f	Q&T	-	≤ 0.500 0.501 - 0.749 ≥ 0.750	(≤ 12.70 12.71 - 19.40 ≥ 19.05)	^h	-	3.0 4.0 5.0

Evrax Proprietary	E80 ⁱ	-	80 (552)	-	90 (621)	-	EW	None ⁱ	-	-	-	-	-
	E100 ⁱ	-	100 (690)	-	110 (758)	-	EW	None ⁱ	-	-	-	-	-

S= Seamless; EW = Electric-Welded; Q&T = Quench and Tempered

^aPipe may be full length normalized, normalized and tempered or quenched and tempered at the manufactures option or as specified in the purchase agreement.

^bFull length normalized or normalized and tempered at manufactures option.

^cAll pipe shall be full body heat-treated. Full length normalized, normalized and tempered, or quenched and tempered at the manufactures option or as specified in the purchase agreement.

^dType 9Cr and 13Cr may be air-quenched.

^eSpecial chemical requirements unique to EW P110 casing are specified in API 5CT, Table C.5.

^fSpecial requirements unique to EW P110 and Q125 are specified in API 5CT A.6 (SR11).

^gIn case of dispute, Rockwell C hardness testing shall be used as the reference method.

^hNo Hardness Limits are specified but the maximum variation is restricted as a manufacturing control as outlined in API 5CT, 7.8 and 7.9.

ⁱNon API grade unique to Evraz Inc NA.

^jSeam normalized

Data taken from API 5CT 9th ed, July, 2011