



Products – Seamless precision steel tube
DIN2391

Mechanical properties

Final supply condition	Cold finished (hard) (BK)		Cold finished (soft) (BKW)		Cold finished and stress-relieved (BKS)			Annealed (GBK)		Normalized (NBK)		
	Min. tensile strength N/MM2	Min. elongation A5 %	Min. tensile strength N/MM2	Min. elongation A5 %	Min. tensile strength N/MM2	Min. yield strength N/MM2	Min. elongation A5 %	Min. tensile strength N/MM2	Min. elongation A5 %	Min. tensile strength N/MM2	Min. yield strength N/MM2	Min. elongation A5 %
St30Si	430	8	380	12	380	280	16	280	30	290-420	215	30
St30Al	430	8	380	12	380	280	16	280	30	290-420	215	30
St35	480	6	420	10	420	315	14	315	25	340-470	235	25
St45	580	5	520	8	520	375	12	390	21	440-570	255	321
St52	640	4	580	7	580	420	10	490	22	490-630	355	22

1. The yield strength for the annealed (GBK) condition shall be equal to at least 50% of the tensile strength. Depending on the extent of deformation, the yield strength of tubes supplied in the cold finished (hard) (BK) and cold finished (soft) (BKW) conditions, may come close to reaching the tensile strength. Calculations should be based a minimum value of 80% of the tensile strength for the cold finished (hard) condition and of 70% for the cold finished (soft) condition.
2. For tubes with an outside diameter of up to 30mm and a wall thickness up to 3 mm, the minimum yield strength may be 10N/mm2 lower.