

Mechanical properties

Mechanical properties according to EN

EN grade	Proof strength		Tensile strength R_m^c Mpa	Elongation A min(%)		Imp. properties ^b Min. Average absorv. Energy KV		
	$R_{p0.2}$ min Mpa	$R_{p1.0}$ min Mpa		l	t	at RT		at -196°C
			l			t		
1,4307	180	215	470-670	40	35	100	60	60
1,4306	180	215	460-680	40	35	100	60	60
1,4311	270	305	550-760	35	30	100	60	60
1,4301	195	230	500-700	40	35	100	60	60
1,4541	200	235	500-730	35	30	100	60	60
1,4550	205	240	510-740	35	30	100	60	60
1,4404	190	225	490-690	40	30	100	60	60
1,4401	205	240	510-710	40	30	100	60	60
1,4571	210	245	500-730	35	30	100	60	60
1,4432	190	225	490-690	40	30	100	60	60
1,4429	295	330	580-800	35	30	100	60	60
1,4436	205	240	510-710	40	30	100	60	60
1,4435	190	225	490-690	40	30	100	60	60
1,4439	285	315	580-800	35	30	100	60	60
1,4438	220	250	490-690	35	30	100	60	60
1,4438	220	250	490-690	35	30	100	60	60
1,4563	215	245	500-750	40	35	120	90	60
1,4539	220	250	520-720	35	30	120	90	60
1,4547	300	340	650-850	35	30	100	60	60
1,4529	300	340	600-800	40	40	120	90	60

Mechanical properties according to ASTM

ASTM grade	$R_{p0.2}$ min Mpa min	$R_{p1.0}$ min Mpa min	Tensile strength N/mm ²	Elongation Lo = 2" t A min(%)
S31500	440	-	630	30
S32900	485	-	620	20
S31803	450	-	620	25
304	205	-	515	35
304L	170	-	485	35
304LN	205	-	515	35
316	205	-	515	35
316L	170	-	485	35
316LN	300	-	650	35
317L	205	-	515	35
N08904	220	-	490	35
321	205	-	515	35
347	205	-	515	35
310	205	-	515	35