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AUSTENITIC STEELS – MATERIAL DATA SHEET

SCHOELLER | NOV 2024

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Austenitic Steels

The specified mechanical properties refer to an annealed tube version. Other comparable materials are available upon request.

Steel grade	Standard	Descr.	C max. [%]	Cr [%]	Mo [%]	Ni [%]	Others [%]	Rp0,2 min. [MPa]	Rm min. [MPa]	A5/A ^{***} min. [%]
1.4301	EN 10217-7		0.045**	17.50 - 19.50	-	8.00 - 10.50	N to 0.10	210	520 - 750	40
TP 304	ASTM A 249		0.045**	18.00 - 20.00	-	8.00 - 11.00	-	205	515	35*
1.4306	EN 10217-7		0.030	18.00 - 20.00	-	10.00 - 12.00	N to 0.10	180	460 - 680	40
TP 304 L	ASTM A 249		0.030	18.00 - 20.00	-	8.00 - 12.00	-	170	485	35*
1.4307	EN 10217-7		0.030	17.50 - 19.50	-	8.00 - 10.50	N to 0.10	200	500 - 700	40
1.4376	EN 10088-2	H 400	0.100	17.00 - 20.50	-	2.00 - 4.50	Mn 5.00 - 8.00 / N to 0.30	400	600 - 900	40
1.4401	EN 10217-7		0.045**	16.50 - 18.50	2.00 - 2.50	10.00 - 13.00	N to 0.10	205	510 - 710	40
TP 316	ASTM A 249		0.045**	16.00 - 18.00	2.00 - 3.00	10.00 - 14.00	-	205	515	35*
1.4404	EN 10217-7		0.030	16.50 - 18.50	2.00 - 2.50	10.00 - 13.00	N to 0.10	190	490 - 690	40
TP 316 L	ASTM A 249		0.030	16.00 - 18.00	2.00 - 3.00	10.00 - 14.00	-	170	485	35*

** Analysis Limitation

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1.4432	EN 10217-7		0.030	16.50 - 18.50	2.50 - 3.00	10.50 - 13.00	N to 0.10	190	490 - 690	40
1.4435	EN 10217-7		0.030	17.00 - 19.00	2.50 - 3.00	12.50 - 15.00	N to 0.10	190	490 - 690	40
1.4436	EN 10217-7		0.050	16.50 - 18.50	2.50 - 3.00	10.50 - 13.00	N to 0.10	205	510 - 710	40
1.4529	EN 10217-7		0.020	19.00 - 21.00	6.00 - 7.00	24.00 - 26.00	N 0.15 - 0.25 / Cu 0.50 - 1.50	300	600 - 800	40
Alloy 926	ASTM A 249		0.020	19.00 - 21.00	6.00 - 7.00	24.00 - 26.00	N 0.15 - 0.25 / Cu 0.50 - 1.50	295	650	35*
1.4539	EN 10217-7		0.020	19.00 - 21.00	4.00 - 5.00	24.00 - 26.00	N to 0.15 / Cu 1.20 - 2.00	220	520 - 720	35
1.4541	EN 10217-7		0.050**	17.00 - 19.00	-	9.00 - 12.00	Ti 5xC to 0.70	200	500 - 730	35
TP 321	ASTM A 249		0.050**	17.00 - 19.00	-	9.00 - 12.00	Ti 5(C+N) to 0.70 / N bis 0.10	205	515	35*
1.4547	EN 10217-7	254 SMO	0.020	19.50 - 20.50	6.00 - 7.00	17.50 - 18.50	N 0.18 - 0.25	300	650 - 850	35

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1.4550	EN 10217-7		0.050**	17.00 – 19.00	-	9.00 – 12.00	Nb 10xC to 1.00	205	510 - 740	35
1.4562	VdTÜV – Wb509/2	Alloy 31	0.015	26.00 – 28.00	6.00 – 7.00	30.00 – 32.00	Cu 1.00 – 1.40 / N 0.15 – 0.25 / Fe Rest	280	650 - 850	40
1.4571	EN 10217-7		0.050**	16.50 – 18.50	2.00 – 2.50	10.50 – 13.50	Ti 5xC to 0.70	210	500 - 730	35
TP 316 Ti	ASTM A 312		0.050**	16.00 – 18.00	2.00 – 3.00	10.00 – 14.00	5x(C+N) to 0.70 / N to 0.10	205	515	20*
1.4580	EN 10088-2		0.050**	16.50 – 18.50	2.00 – 2.50	10.50 – 13.50	Nb 10xC to 1.00	220	520 - 720	40
1.4591	VdTÜV – Wb516	Alloy 33	0.015	31.00 – 35.00	0.50 – 2.00	30.00 – 33.00	Cu 0.30 – 1.20 / N 0.35 – 0.60 / Fe Rest	380	720 - 920	40
1.4828	EN 10296-2		0.200	19.00 – 21.00	-	11.00 – 13.00	Si 1.50 – 2.50 / N to 0.11	230	550	30
1.4835	EN 10296-2		0.050 - 0.120	20.00 – 22.00	-	10.00 – 12.00	Si 1.40 – 2.50 / N 0.12 – 0.20 / Ce 0.03 – 0.08	310	650	40
1.4845	EN 10296-2		0.100	24.00 – 26.00	-	19.00 – 22.00	N to 0.11	210	500	35

** Analysis Limitation

Austenitic Steels

Die angegebenen mechanischen Eigenschaften beziehen sich auf eine gegläute Rohrausführung. Andere, vergleichbare Werkstoffe auf Anfrage.

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1.4876	VdTÜV - Wb412	Alloy 800	0.040 - 0.100	19.00 - 23.00	-	30.00 - 34.00	Al 0.15 - 0.60 / Ti 0.15 - 0.60	170	450 - 700	35
1.4878	SEW 470		0.120	17.00 - 19.00	-	9.00 - 12.00	Ti 4xC to 0.80	210	500 - 750	40

** Analysis Limitation