

Rm: [N /mm²]

1

Groupe ACIERS ALLIÉS ET NON ALLIÉS • UNLEGIERTE STÄHLE • NON-ALLOYED STEELS

1a	Rm < 450
1b	Rm 450 - 700
1c	Rm 700 - 900
1d	Rm 900 - 1200

N° Wsn	DIN	AFNOR	Gr.
1.0033	St33-1	C35	1a
1.0037	St37-2	E24-2	1a
1.0038	RSt37-2	E24-2NE	1a
1.0044	St44-2	E28-2	1a
1.0050	St50-2	A50-2	1b
1.0060	St60-2	A60-2	1b
1.0070	St70-2	A70-2	1c
1.0114	St37-3U	E24-3	1a
1.0116	St37-3	E24-4	1a
1.0143	St44-3U	E28-3	1a
1.0301	C10	AF34C10;XC10	1a
1.0401	C15	AF37C12;XC18	1a
1.0402	C22	AF42C20	1b
1.0406	C25	AF50C30	1a
1.0501	C35	AF55C35	1b
1.0503	C45	CC45 (AF65C45)	1c
1.0511	C40	AF60C40	1a
1.0553	Sr52-3U	E36-2	1c
1.0570	St52-3	E36-3;E36-4	1b
1.0601	C60	CC55	1c
1.0715	9SMn28	S250	1b
1.0718	9SMnPb28	S250Pb	1b
1.0721	10S20	10F1	1b
1.0722	10SPb20	10PbF2	1b
1.0726	35S20	35MF4	1b
1.0727	45S20	45MF4 / 45MF61	1b

N° Wsn	DIN	AFNOR	Gr.
1.0728	60S20	60MF4	1b
1.0736	9SMn36	S300	1b
1.0737	9SMnPb36	S300Pb	1b
1.0904	55Si7	55S7	1b
1.0961	60SiCr7	60SC7	1b
1.1121	CK10	XC10	1a
1.1133	20Mn5	20M5	1a
1.1141	Ck15	XC12	1a
1.1141	CK15	XC15;XC18	1a
1.1151	CK22	XC25;XC18	1b
1.1157	40Mn4	35M5	1b
1.1158	Ck22	2C25 (XC25)	1b
1.1160	22Mn6	20M5	1b
1.1165	30Mn5	35M5	1c
1.1167	36Mn5	35M5	1b
1.1170	28Mn6	20M5	1b
1.1178	CK30	(XC32)	1a
1.1179	Cm30	2C30 (XC32)	1c
1.1181	CK35	2C35 (XC38)	1b
1.1186	Ck40	XC42H1	1b
1.1189	Cm40	XC38	1b
1.1191	Ck45	2C45 (XC42)	1c
1.1193	Cf45	2C40TS (XC42TS)	1b
1.1203	Ck55	2C55 (XC55)	1b
1.1206	Ck50	XC50	1b
1.1221	Ck60	XC60	1c

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1c	Rm 700 - 900
1d	Rm 900 - 1200

N° Wsn	DIN	AFNOR	Gr.
1.1231	CK67	XC68	1b
1.1248	CK75	XC75	1b
1.1274	H1 dur	DYN 34CrAlNi7	1c
1.1525	C80W1	Y190;Y180	1c
1.1545	C105W1	Y1105	1c
1.1625	C80W2	Y180	1c
1.1645	C105W2	Y1105	1c
1.1663	C125W	Y2120	1c
1.1673	C135W	Y2140	1c
1.1730	C45W	Y342	1b
1.1740	C60W	Y355	1b
1.1830	C85W	Y390	1b
1.2067	100Cr6	Y100C6	1c
1.2080	X210Cr12	Z200C12	1d
1.2162	21MnCr5	20NC5	1c
1.2210	115CrV3	100C3	1c
1.2330	35CrMo4	34CD4	1c
1.2332	47CrMo4	42CD4	1c
1.2343	X38CrMoV51	Z38CDV5	1d
1.2344	X40CrMoV51	Z40CDV5	1d
1.2363	X100CrMoV51	Z100CDV5	1d
1.2365	X32CrMoV33	32DCV28	1d
1.2379	X155CrVMo121	Z160CDV12	1d
1.2419	105WCr6	105WC13	1c
1.2510	100MnCrW4	90MWCV5	1d
1.2516	120WV4	110WC20	1c

N° Wsn	DIN	AFNOR	Gr.
1.2550	60WCrV7	55WC20	1c
1.2567	X30WCrV53	Z32WCV5	1d
1.2581	X30WCrV93	Z30WCV9	1d
1.2706	X3NiCrMo1885	E-Z2NKD18	1d
1.2711	54NiCrMoV6	55NCDV6	1d
1.2713	55NiCrMoV6	55NCDV7	1d
1.2735	15NiCr14	10CrNi12 (10CN12)	1d
1.2767	X45NiCrMo4	Y35NCD16	1c
1.2833	100V1	Y1105V	1c
1.2842	90MnCrV8	90MV8	1c
1.3207	S10-4-3-10	Z130WKCDV10-10-04	1d
1.3243	S6-5-2-5	Z85WDKCV06-05-05-	1d
1.3246	S7-4-2-5	Z110WKCDV07-05-04	1d
1.3247	S2-10-1-8	Z110DKCWV09-08-04	1d
1.3255	S18-1-2-5	Z80WKC18-05-04-0	1d
1.3342	SC6-5-2C	HS6-5-2HC	1d
1.3343	HS6-5-2	Z85WDCV06-05-04-0	1d
1.3344	S6-5-3	Z120WDCV06-05-04-	1d
1.3346	S2-9-1	Z85DCWV08-04-02-0	1d
1.3348	S2-9-2	Z100DCWV09-04-02-	1d
1.3355	S18-0-1	Z80WCV18-04-01	1d
1.4027	G-X20Cr14	Z20C13M	1c
1.4742	X10CrAl18	Z10CAS18	1c
1.4762	X10CrAl24	Z10CAS24	1c
1.4943	X4NiCrTi2515	Z6NCTDV25.15B	1d
1.5026	55Si7	55S7	1b

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1a	Rm < 450
1b	Rm 450 - 700
1c	Rm 700 - 900
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N° Wsn	DIN	AFNOR	Gr.
1.5415	15Mo3	15D3	1c
1.5680	12Ni19	Z18N5	1c
1.5710	36NiCr6	30NiCr6-35NiCr6	1c
1.5732	14NiCr10	14NiCr11 (14NC11)	1b
1.5736	36NiCr10	30NC11	1c
1.5736	31NiCr14	30NiCr11 (30NC11)	1b
1.5752	14NiCr14	12NiCr12 (12NC12)	1b
1.5755	31NiCr14	18NC13	1b
1.5919	15CrNi6	16NiCr6 (16NC6)	1b
1.5920	18CrNi8	20NiCr6 (20NC6)	1b
1.6511	36CrNiMo4	40NCD3	1c
1.6523	21NiCrMo2	20NiCr2 (20NCD2)	1b
1.6526	21NiCrMoS2	20NCD2	1b
1.6545	30NiCrMo22	30NiCrMo2 (30NCD2)	1b
1.6546	40NiCrMo22	40NCD2	1c
1.6580	30CrNiMo8	30CND8	1d
1.6582	34CrNiMo6	35NCD6	1d
1.6587	17CrNiMo7	18NiCrMo6 (18NCD6)	1b
1.6746	32NiCrMo145	35NCD14	1c
1.7003	38Cr2	38Cr2 (38C2)	1b
1.7006	46Cr2	41Cr4 (42C2)	1b
1.7033	34Cr4	34Cr4 (32C4)	1c
1.7034	37Cr4	37Cr4 (38C4)	1c
1.7035	41Cr4	41Cr4 (42C4)	1d
1.7039	41CrS4	(42C4)	1b
1.7045	42Cr4	41Cr4 (42C4TS)	1b

N° Wsn	DIN	AFNOR	Gr.
1.7131	16MnCr5	16MC5	1c
1.7139	16MnCrS5	16MC5	1c
1.7139Pb	16MnCrS5Pb	16MC5+Pb	1c
1.7147	20MnCr5	20MC5	1c
1.7176	55Cr3	55C3	1b
1.7213	25CrMoS4	25CD4	1c
1.7218	25CrMo4	25CrMo4 (25CD4)	1c
1.7220	35CrMo4	35CrMo4 (35CD4)	1c
1.7223	41CrMo4	42CD4TS	1c
1.7225	42CrMo4	42CrMo4 (42CD4)	1d
1.7226	34CrMoS4	35CD4	1c
1.7227	42CrMoS4	(42CD4)	1c
1.7262	15CrMo5	12CD4	1c
1.7264	20CrMo5	18CD4	1c
1.7335	13CrMo44	15CD3.5	1c
1.7337	16CrMo44	15CD4.5	1c
1.7361	32CrMo12	30CD12	1c
1.7380	10CrMo9.10	10CD9.10	1c
1.7709	21CrMoV5.7	20CrMoV5.7	1c
1.7711	40CrMoV4.7	42CrMoV4 (42CDV4)	1c
1.7735	14CrMoV69	15CDV6	1c
1.8159	50CrV4	50CrV4 (50CV4)	1d
1.8507	34CrAlMo5	30CAD6.12	1c
1.8509	41CrAlMo7	40CAD6.12	1c
1.8515	31CrMo12	30CD12	1c
1.8523	39CrMoV13.9	40CrMoV12	1d

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1a	Rm < 450
1b	Rm 450 - 700
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		Gr.
Böhler	E110	1b
Böhler	E200	1b
Böhler	E410	1b
Böhler	F550	1d
Böhler	K100	1d
Böhler	K105	1d
Böhler	K107	1d
Böhler	K110	1d
Böhler	K190	1d
Böhler	K245	1c
Böhler	K305	1d
Böhler	K455	1c
Böhler	K460	1d
Böhler	K510	1c
Böhler	K600	1c
Böhler	K720	1c

		Gr.
Böhler	M100	1c
Böhler	M130	1c
Böhler	M200	1c
Böhler	M238	1c
Böhler	Resist440	1c
Böhler	S600	1d
Böhler	V155	1d
Böhler	V320	1d
Böhler	V930	1c
Böhler	V945	1c
Böhler	W300	1d
Böhler	W302	1d
Böhler	W720	1c
Haba	EC80	1c
Matthey	H1 dur	1c

Rm: [N /mm²]

2

ACIERS INOX • ROSTFREIE STÄHLE • STAINLESS STEELS

2a	Rm < 650
2b	Rm 650 - 950
2c	Rm > 950

N° Wsn	DIN	AFNOR	Gr.
1.2083	X42Cr13	Z40C14	2b
1.4000	X6Cr13	Z6C13	2c
1.4002	X6CrAl13	Z6CA13	2b
1.4005	X12CrS13	Z12CF13	2a
1.4006	X10Cr13	Z12C13	2a
1.4016	X8Cr17	Z8C17	2a
1.4021	X20Cr13	Z20C13	2c
1.4028	X30Cr13	Z33C13	2c
1.4031	X38Cr13	Z40C14	2c
1.4034	X46Cr13	Z40C14	2c
1.4057	X22CrNi17	Z15CN16.02	2c
1.4104	X12CrMoS17	Z10CF17	2a
1.4113	X8CrMo17	Z8CD17.01	2a
1.4125	X105CrMo17	Z100CD17	2c
1.4301	X5CrNi18-10	Z7CN18-09	2b
1.4301	X5CrNi18.09	Z6CN18.09	2b
1.4303	X5CrNi1812	Z8CN18.12	2b
1.4305	X10CrNiS18-9	Z8CNF18-09	2b
1.4305	X12CrNiS18.08	Z10CNF18.09	2b
1.4306	X2CrNi19-11	Z3CN19-11	2b
1.4306	X2CrNi18.09	Z2CN18.10	2b
1.4308	G-X6CrNi189	Z6CN18.10M	2b
1.4310	X12CrNi177	Z12CN17.07	2a
1.4311	X2CrNi1810	Z2CN18.10	2b
1.4313	X5CrNi134	Z5CN13.4	2b
1.4401	X5CrNiMo17-12-2	Z7CND17-12-2	2b

N° Wsn	DIN	AFNOR	Gr.
1.4401	X5CrNiMo18.10	Z6CND17.11	2b
1.4404	X2CrNiMo17-13-2	Z3CND18-11-2	2b
1.4404	X2CrNiMo18.10	Z2CND17.12	2b
1.4406	X2CrNiMoN17122	Z2CND17.12Az	2c
1.4429	X2CrNiMo18.12	Z2CND17.13	2b
1.4429	X2CrNiMoN17133	Z2CND17.13Az	2c
1.4435	X2CrNiMo18143	Z2CND17.13	2b
1.4436	X2CrNiMo18.12	Z6CND17.12	2b
1.4438	X2CrNiMo18164	Z2CND19.15	2b
1.4462	X2CrNiMoN225	Z2CND225Az	2c
1.4510	X8CrTi17	Z8CT17	2b
1.4511	X8CrNb17	Z8CNb17	2b
1.4512	X5CrTi12	Z6CT12	2b
1.4539	X2NiCrMoCu25205	Z1CNDU2520	2c
1.4541	X10CrNiTi18.09	Z6CNT18.10	2b
1.4541	X6CrNiTi18-10	Z6CNT18-10	2b
1.4542	X5CrNiCuNb1714	Z5CNU17.4	2c
1.4550	X10CrNiNb18.09	Z6CNNb18.10	2b
1.4571	X6CrNiMoTi17122	Z6CNT17.12	2b
1.4571	X6CrNiMoTi17-12-2	Z6CNDT17-12	2c
1.4571	X10CrNiMoTi18.10	Z6CNDT17.12	2c
1.4580	X10CrNiMoNb18.10	Z6CNDNb17.12	2b
1.4581	X5CrNiMoNb1810	Z4CNDNb18.12M	2b
1.4718	X45CrSi93	Z45CS9	2b
1.4724	X10CrAl13	Z10C13	2c
1.4747	X80CrNiSi20	Z80CSN20.02	2b

Rm: [N /mm²]

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Groupe ACIERS INOX • ROSTFREIE STÄHLE • STAINLESS STEELS

2a	Rm < 650
2b	Rm 650 - 950
2c	Rm > 950

N° Wsn	DIN	AFNOR	Gr.
1.4828	X15CrNiSi2012	Z15CNS20.12	2b
1.4841	X15CrNiSi2520	Z15CNS25.20	2c
1.4845	X12CrNi2521	Z12CN25.20	2b
1.4864	X12NiCrSi3616	Z12NCS37.18	2c
1.4871	X53CrMnNiN219	Z52CMN21.09	2c

N° Wsn	DIN	AFNOR	Gr.
1.4873	X45CrNiW189	Z35CNWS20.09	2c
1.4876	X10NiCrAlTi3320	Z8NC32.21	2c
1.4876	X10NiCrAlTi3220	Incoloy800	2c
1.4878	X12CrNiTi189	Z6CNT18.12 (B)	2b

AISI / SAE	Gr.	AISI / SAE	Gr.	AISI / SAE	Gr.	AISI / SAE	Gr.
301	2a	304 L	2b	316 Cb	2b	321	2b
302	2b	305	2b	316 L	2b	329	2c
303	2a	309	2b	316 LN	2c	330	2c
304	2b	310 S	2b	316 Ti	2c	347	2b
304 L	2b	314	2c	317 L	2b	348	2a
304 LN	2b	316	2b	318	2b		

		Gr.
Böhler	A205	2c
Böhler	A500	2b
Böhler	A506	2a
Böhler	H160	2a
Böhler	H525	2c
Böhler	M310	2c

		Gr.
Böhler	M333	2c
Böhler	N350	2c
Böhler	N540	2b
Böhler	N685	2c
Böhler	N700	2c
Matthey	Durnico	2c

Rm: [N /mm²]

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Groupe ACIERS TREMPÉS • GEHÄRTETE STÄHLE • HARDENED STEELS

3a	44 – 56 HRC
3b	57 – 67 HRC

Rm: [N /mm²]

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Groupe MATÉRIAUX EXOTIQUES • EXOTISCHE WERKSTOFFE • EXOTIC MATERIALS

4a	< 32 HRC
4b	> 32 HRC

	Gr.
MP35N (Timken Latrobe)	4b
159ALY (Timken Latrobe)	4a
Stellite	4b
Tantale	4b

	Gr.
X120MN12	4b
Molybdène, TZM	4a
Biodur 108	4b
Böhler P558	4b

5

Groupe GRAPHITE

Rm: [N/mm²]

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Groupe

FONTES • GUSS • CAST IRON

6a	Rm 100 - 400
6b	Rm 400 - 800

N° Wsn	DIN	AFNOR	Gr.
0.6010	GG10	FT10D	6a
0.6015	GG15	FT15D	6a
0.6020	GG20	FT20D	6a
0.6025	GG25	FT25D	6a
0.6030	GG30	FT30D	6a
0.6035	GG35	FT35D	6a
0.6040	GG-40	FT40D	6b
0.6652	GGL-NiMn137	L-NM137	6b
0.6655	GGL-NiCuCr1562	L-NUC1562	6b
0.6656	GGL-NiCuCr1563	L-NUC1563	6b
0.6660	GGL-NiCr202	L-NC202	6b
0.6661	GGL-NiCr203	L-NC203	6b
0.6667	GGL-NiSiCr2053	L-NSC2053	6b
0.6676	GGL-NiCr303	L-NC303	6b
0.6680	GGL-NiSiCr3055	L-NSC3055	6b
0.7033	GGG35.3	FGS370-17	6b
0.7040	GGG-40	FGS400-12	6b
0.7043	GGG-40.3	FGS370-17	6b
0.7044	GGG40	FGS400-12	6b
0.7050	GGG50	FGS500-7	6b
0.7060	GGG60	FGS600-3	6b
0.7070	GGG70	FGS700-2	6b
0.7080	GGG80	FGS800-2	6b

N° Wsn	DIN	AFNOR	Gr.
0.7652	GGG-NiMn137	S-NM137	6b
0.7660	GGG-NiCr202	S-NC202	6b
0.7661	GGG-NiCr203	S-NC203	6b
0.7665	GGG-NiSiCr2052	S-NSC2052	6b
0.7670	GGG-Ni22	S-N22	6b
0.7673	GGG-NiMn234	S-NM234	6b
0.7676	GGG-NiCr303	S-NC303	6b
0.7677	GGG-NiCr301	S-NC301	6b
0.7680	GGG-NiSiCr3055	S-NSC3055	6b
0.7683	GGG-Ni35	S-N35	6b
0.7685	GGG-NiCr353	S-NC353	6b
0.8038	GTWS3812	MB38012	6a
0.8040	GTW40-05	MB400-5	6a
0.8045	GTW45-07	MB450-7	6a
0.8135	GTS35-10	MN350-10	6a
0.8135	GTS-35-10	MN35-10	6b
0.8145	GTS45-06	MN450-6	6a
0.8155	GTS55-04	MN550-4	6a
0.8155	GTS-55-04	MP50-5	6b
0.8165	GTS65-02	MN650-3	6a
0.8165	GTS-65-02	MP60-3	6b
0.8170	GTS70-02	MN700-2	6a
0.8170	GTS-70-02	IP70-2	6b

Rm: [N /mm²]

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Groupe

TITANE

7a	Rm < 800
7b	Rm > 800, titane médicaux

N° Wsn	DIN	Gr.
Grades	1,2,3,4,7,11,12,13,14,15,16,17,26,27,30	7a
Grades	5,6,9,10,18,19,20,21,22,23,24,25,28,29	7b
3.7024	Ti99.8	7a
3.7112	Ti5Al2,5Sn	7a
3.7114	TiAl5Sn2	7b
3.7124	TiCu2	7b

N° Wsn	DIN	Gr.
3.7154	TiAl6Zr5	7b
3.7165	TiAl6V4 (TA6V)	7b
3.7174	TiAl6V6Sn2	7b
3.7184	TiAl4Mo4Sn2	7b
3.7144	TiAl6Sn2Zr4Mo2	7b

Rm: [N /mm²]

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Groupe

ALLIAGES NICKEL • NICKEL • NICKEL ALLOYS

8a	Rm < 1000
8b	Rm > 1000

N° Wsn	DIN	AFNOR		Gr.
1.4878	X10NiCrAlTi3220	Z5 NC 35–20	Incoloy 800	8b
2.4360	NiCu30Fe	-	Monel 400	8a
2.4375	NiCu30Al	-	Monel K 500	8a
2.4603	NiCr30FeMo	NC22FeD	Hastelloy X	8a
2.4630	NiCr20Ti	NC 20T	Nimonic 75	8a

Rm: [N /mm²]

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Groupe

ALLIAGES NICKEL • NICKEL • NICKEL ALLOYS

8a	Rm < 1000
8b	Rm > 1000

N° Wsn	DIN	AFNOR		Gr.
2.4631	NiCr20TiAl	NC 20TA	Nimonic 80A	8b
2.4632	NiCr20Co18Ti	NCK 20 D	Nimonic 90	8b
2.4634	NiCo20Cr15MoAlTi	NK 20 CDA	Nimonic 105	8b
2.4658	NiCr7030			8a
2.4662	NiCr13Mo6Ti3	Z8 NC DT42	Nimonic 901	8b
2.4668	NiCr19Fe18Nb5Mg	Nc19FeNb	Inconel 718	8b
2.4668	NiCr19Fe19NbMo	NC20K14	Waspaloy	8b
2.4670			Nimocast 713	8b
2.4674			Nimocast PK 24	8b
2.4711	CoCr20Ni15Mo		Phynox (Matthey)	8b
2.4812			Hastelloy C	8a
2.4816	NiCr15Fe	NC 15 Fe	Inconel 600	8a
2.4819	NoMo16Cr15W			8a
2.4856	NiCr22Mo9Nb	NC 22 D Nb	Inconel 625	8b
2.4858	NiCr21Mo	Nfe 32 C20DU	Incoloy 825	8b
2.4964	CoCr20W15Ni			8b
2.4973	NiCr19Co11MoTi	NC19KDT	René 41	8b
2.4983		NCK19DAT	Udimet 500	8b
		NC22FeD	Hastelloy	8b

Rm: [N /mm²]

9

Groupe CUIVRE, LAITON, BRONZE • KUPFER, MESSING, BRONZE • COPPER, BRASS, BRONZE

9a Rm < 850

9b Rm > 850

N° Wsn	DIN	AFNOR	Gr.
2.0025	CuZn20		9a
2.0205	CuZn0.5		9a
2.0220	CuZn5		9a
2.0230	CuZn10		9a
2.0240	CuZn15		9a
2.0250	CuZn20		9a
2.0261	CuZn28		9a
2.0265	CuZn30	CuZn30 (UZ30)	9a
2.0280	CuZn33		9a
2.0321	CuZn37		9a
2.033	CuZn36Pb1		9a
2.0331	CuZn36Pb0,5		9a
2.0332	CuZn37Pb0,5		9a
2.0335	CuZn36	Ms63	9a
2.0360	CuZn40	Ms60	9a
2.0371	CuZn38Pb1.5		9a
2.0372	CuZn39Pb0.5		9a
2.0375	CuZn36Pb3	CuZn36Pb3	9a
2.0380	CuZn39Pb2		9a
2.0401	CuZn39Pb3		9a
2.0402	CuZn40Pb2	CuZn40Pb3	9a
2.0410	CuZn44Pb2		9a
2.0460	CuZn20Al2		9a
2.0470	CuZn28Sn1		9a
2.0490	CuZn31Si1		9a
2.0500	CuZn23Al6Mn4Fe3		9a

N° Wsn	DIN	AFNOR	Gr.
2.0510	CuZn37Al1		9a
2.0525	CuZn38SnAl		9a
2.0530	CuZn38Sn1		9a
2.0540	CuZn35Ni2		9a
2.0550	CuZn40Al2		9a
2.0561	CuZn40Al1		9a
2.0572	CuZn40Mn1		9a
2.0580	CuZn40Mn1Pb		9a
2.0730	CuNi12Zn24	Maillechort	9b
2.0740	CuNi18Zn20	Maillechort	9b
2.0742	CuNi18Zn27	Maillechort	9b
2.0771	CuNi7Zn39Mn5Pb3		9b
2.0780	CuNi12Zn30Pb1		9b
2.0790	CuNi18Zn19Pb1		9b
2.0830	CuNi25		9b
2.0842	CuNi44Mn1		9b
2.0850	CuNi2Be		9b
2.0853	CuNi1.5Si		9b
2.0855	CuNi2Si		9b
2.0857	CuNi3Si		9b
2.0872	CuNi10Fe1Mn		9b
2.0875	CuNi9Sn2		9b
2.0882	CuNi30Mn1Fe		9b
2.0883	CuNi30Fe2Mn2		9b
2.0918	CuAl5As		9a
2.0920	CuAl8		9a

Rm: [N /mm²]

9

Groupe

CUIVRE, LAITON, BRONZE • KUPFER, MESSING, BRONZE • COPPER, BRASS, BRONZE

9a

Rm < 850

9b

Rm > 850

N° Wsn	DIN	AFNOR	Gr.
2.0932	CuAl8Fe3		9b
2.0936	CuAl10Fe3Mn2		9b
2.0960	CuAl9Mn2		9b
2.0966	CuAl10Ni5Fe4		9b
2.0971	CuAl9Ni3Fe2		9b
2.0978	CuAl11Ni6Fe5		9b
2.1016	CuSn4		9b
2.1020	CuSn6	CuSn6P	9b
2.1030	CuSn8	CuSn8P	9b
2.1080	CuSn6Zn6		9b
2.1160	CuPb1P		9a
2.1191	CuAg0.1P		9a
2.1203	CuAg0.1		9a
2.1245	CuBe1.7		9b
2.1247	CuBe2		9b
2.1248	CuBe2Pb		9b
2.1265	CuCd0.5		9a

N° Wsn	DIN	AFNOR	Gr.
2.1266	CuCd1		9a
2.1285	CuCo2Be		9b
2.1293	CuCrZr		9b
2.1310	CuFe2P		9b
2.1322	CuMg0.4		9a
2.1323	CuMg0.7		9a
2.1356	CuMn3		9a
2.1363	CuMn2		9a
2.1366	CuMn5		9a
2.1491	CuAsP		9a
2.1498	CuSP		9a
2.1522	CuSuMnF34		9a
2.1522	CuSi2Mn		9a
2.1525	CuSi3Mn		9a
2.1546	CuTeP		9a
2.1580	CuZr		9b

Rm: [N /mm²]

10

Groupe

ALUMINIUM

10a	Aluminium Si < 0.5%
10b	Aluminium 0.5% < Si < 8%
10c	Aluminium Si > 8%

N° Wsn	DIN	AFNOR	Gr.
2.1504	NiAlBz		10b
3.0205	Al99		10a
3.0205	Al99.0	1200 (A4)	10a
3.0255	Al99.5	1050 (A5)	10a
3.0257	EAl99.0		10a
3.0275	Al99.7		10a
3.0285	Al99.8		10a
3.0305	Al99.9		10a
3.0505	AlMn0.5Mg0.5		10a
3.0506	AlMn0.6		10a
3.0515	AlMn1		10a
3.0517	AlMnCu		10a
3.0524	AlMn1Mg0.5	3003 (A-M1)	10a
3.0526	AlMn1Mg1	3004 (A-M1G)	10a
3.0615	AlMgSiPb		10a
3.1255	AlCuSiMn	2014 (A-U4SG)	10b
3.1305	AlCu2.5Mg0.5	2117 (A-U2G)	10b
3.1325	AlCuMg1		10a
3.1355	AlCuMg2	2017A (A-U4G)	10b
3.1355	AlCuMg2	2024 (A-U4G1)	10b
3.1645	AlCuMgPb		10a
3.1655	AlCuBiPb	2011 (A-U5PbBi)	10b
3.2131	AlSi5Cu1	A-S7GY	10b
3.2134	G-AlSi5Cu1Mg		10b
3.2151	AlSi6Cu4	A-S5U3	10b
3.2245	SAISI5	A-S5	10a

N° Wsn	DIN	AFNOR	Gr.
3.2307	Al99.85MgSi		10a
3.2315	AlMgSi1	A-SGM0.7 (anticor. 110)	10a
3.2371	AlSi7Mg		10b
3.2381	AlSi10Mg	A-S10G	10c
3.2525	SAISI12	A-S12	10c
3.2581	G-AlSi12		10c
3.2581	AlSi12	A-S12Y4	10c
3.2583	G-AlSi12(Cu)		10c
3.3206	AlMgSi0.5	A-GS	10b
3.3210	AlMgSi0.7		10b
3.3292	GD-AlMg9		10a
3.3307	Al99.85Mg0.5		10a
3.3308	Al99.5Mg0.5		10a
3.3315	AlMg1		10a
3.3316	AlMg1.5		10a
3.3317	Al99.85Mg1		10a
3.3326	AlMg1.8		10a
3.3345	AlMg4.5		10a
3.3523	AlMg2.5		10a
3.3525	AlMg2Mn0.3	5052 (A-G3)	10a
3.3535	AlMg3	A-G3C	10a
3.3543	G-AlMg3(Cu)		10a
3.3547	AlMg4.5Mn	A-G4.5MC	10a
3.3555	AlMg5		10a
3.3561	G-AlMg5		10a
3.4365	AlZn6MgCu1.5	7075 (A-Z5GU)	10b

Rm: [N/mm²]

11

Groupe MATIÈRES SYNTHÉTIQUES • KUNSTOFFE • SYNTHETIC MATERIALS

11a	Thermoplastiques - Thermoplast
11b	Thermodurcissable - Duroplast
11b	(Plexidur, bakelite, Supradur , etc)

Rm: [N/mm²]

12

Groupe MATIÈRES COMPOSITES • FASERVERST. MATERIALEN • COMPOSITE MATERIALS

12a	Fibre de verre • GFK • Carbon fibers reinforced
12b	Fibre de carbone • KFK • Aramid fibers reinforced

Rm: [N/mm²]

13

Groupe MÉTAUX PRÉCIEUX • EDELMETALLE • PRECIOUS MATERIALS

13a	Or • Gold • Argent
13b	Platine • Palladium