Materials Overview

Aluminium

Designation	Material number	EN-Norm	American Designation	BS1490
G-AlSi5Cu3	EN AC-45400	EN 1706		
G-AlSi5Cu1Mg	EN AC-45300	EN 1706	C 355	LM16
G-AlSi5Cu3Mg	EN AC-45400	EN 1706		
G-AlSi5Mg				
G-AlSi6Cu4	EN AC-45000	EN 1706	A319	LM21
G-AlSi7Cu2	EN AC-46600	EN 1706		
G-AlSi7Cu3Mg	EN AC-46300	EN 1706	A320	
G-AlSi7Mg	EN AC-42000	EN 1706		
G-AlSi7Cu0,5Mg	EN AC-45500	EN 1706		
G-AlSi7Mg0,3	EN AC-42100	EN 1706	A356	LM25
G-AlSi7Mg0,6	EN AC-42200	EN 1706	A357	
G-AlSi8Cu3	EN AC-46200	EN 1706	A380	
G-AlSi9Cu1Mg	EN AC-46400	EN 1706		
G-AlSi9Mg	EN AC-43300	EN 1706		
G-AlSi10Mg(a)	EN-AC-43000	EN 1706	A360.2	
G-AlSi10Mg(Cu)	EN AC-43200	EN 1706	A360.1	
G-AlSi12(Cu)	EN AC-47000	EN 1706	A413.1	
G-AlSi12CuNiMg	EN AC-48000	EN 1706		
G-AlSi12(a)	EN AC-44200	EN 1706		
G-AlCu4Ti	EN AC-21100	EN 1706		

Iron

Designation	Material number

ductile cast iron	DIN EN 1563
EN-GJS-400-18 LT	5.3103
EN-GJS-400-18	5.3105
EN-GJS-400-15	5.3106
EN-GJS-450-10	5.3107
EN-GJS-500-7	5.3200
EN-GJS-600-3	5.3201
EN-GJS-700-2	5.3300
EN-GJS-800-2	5.3301

ferritic ductile cast iron	DIN EN 1563
EN-GJS-450-18	5.3108
EN-GJS-500-14	5.3109
EN-GJS-600-10	5.3110

ausferritic ductile cast iron (ADI)	DIN EN 1564
EN-GJS-800-10	5.3400
EN-GJS-900-8	5.3402
EN-GJS-1050-6	5.3403
EN-GJS-1200-3	5.3404
EN-GJS-1400-1	5.3405

ferritic ductile cast iron for applications at high temperatures	DIN EN 16124
GJS-SiMo 40-6	5.3114
GJS-SiMo 40-10	5.3115
GJS-SiMo 45-6	5.3116
GJS-SiMo 45-10	5.3117

ferritic cast iron with vermicular graphite for applications at high temperatures
GJV-SiMo 40-6
GJV-SiMo 45-6
GJV-XSiMoNi5-1-1

cast iron with vermicular graphite	DIN EN 1561
GJV-300	
GJV-350	
GJV-400	
GJV-450	

gray cast iron	DIN EN 1561	
GJL-100	5.1100	EN-JL1010
GJL-150	5.1200	EN-JL1020
GJL-200	5.1300	EN-JL1030
GJL-250	5.1301	EN-JL1040
GJL-300	5.1302	EN-JL1050
GJL-350	5.1303	

wear-resistant cast iron	DIN EN 12513		ASTM A 532
GJN-HV555	5.5605	(NiHard 4)	Class I Typ D Ni-HiCr
GJN-HV555 (XC18)	5.5609		Class II Typ D 20%MoCr
GJN-HV555 (XC23)	5.5610		Class III Typ A 25%Cr
G-X300NiMo3Mg	0.9610		

austenitic cast iron	DIN EN 13835		ASTM A439
GJSA-XNi35	5.3504	(Ni-resist)	D5
GJSA-XNiCr20-2	5.3500		D2
GJSA-XNiCr30-3	5.3507		D3
GJSA-XNiCr35-3	5.3509		D5B
GJSA-XNiSiCr35-5-2	5.3505		D5S

Stahl

Designation	Material number	EN-Norm	ASTM
Steel castings for pressure purposes		DIN EN 10213	ASTM 743
GP240GH	1.0619	GS-C25	
G20Mn5	1.6220		
GX5CrNi19-10	1.4308		CF8
GX4CrNi13-4	1.4317		CA6NM
GX5CrNiMo19-11-2	1.4408		CF8M
GX2CrNiMoN19-11-2	1.4409		CF3M
GX5CrNiNb19-11	1.4552		
GX5CrNiMoNb19-11-2	1.4581		
GX2CrNiMoN26-7-4	1.4469		5A
GX2CrNiMoN22-5-3	1.4470		
GX2CrNiMoCuN25-6-3-3	1.4517		
GX10NiCrSiNb32-20	1.4859		

Steel castings for general purposes		DIN EN 10293	ASTM 743
GE200 (GS-38)	1.0420		
GE240 (GS-45)	1.0446		
GE300 (GS-60)	1.0558		
G20Mn5	1.6220		
G24Mn6	1.1118		
G35CrNiMo6-6	1.6579		
G20MnCr5	1.7150		
G26CrMo4	1.7221		
G42CrMo4	1.7225		
GX4CrNi13-4	1.4317		CA6NM
GX4CrNiMo16-5-1	1.4405		

Corrosion resistant steel castings		DIN EN 10283	ASTM 743
GX7CrNiMo12-1	1.4008		
GX5CrNi19-10	1.4308		CF8
GX4CrNi13-4	1.4317		CA6NM
GX4CrNiMo16-5-1	1.4405		
GX5CrNiMo19-11-2	1.4408		CF8M
GX2CrNiMoN19-11-2	1.4409		CF3M
GX5CrNiMo19-11-3	1.4412		
GX5CrNiCu16-4	1.4525		
GX4CrNiCuNb16-4	1.4540		
GX5CrNiNb19-11	1.4552		
GX7NiCrMoCuNb41-20	1.4559		
GX5CrNiMoNb19-11-2	1.4581		

Stainless steels		DIN EN 10088-1	
X3CrNiMo13-4	1.4313		
X5CrNi18-10	1.4301		
X2CrNiMo17-12-2	1.4404		AISI 316L
X3CrNiMo17-13-3	1.4436		
X2CrNiMoN17-13-5	1.4439		
X2CrTiNb18	1.4509		
X3CrNb17	1.4511		
X6CrNiTi18-10	1.4541		SS 321
X5CrNiCuNb16-4	1.4542		17-4PH

duplex stainless steels		DIN EN 10283	ASTM A890/A995
GX2CrNiMoN25-6-3	1.4468		
GX2CrNiMoN26-7-4	1.4469		5A
GX2CrNiMoN22-5-3	1.4470		
GX2CrNiMoCuN25-6-3-3	1.4517		
X2CrNiMoCuWN25-7-4	1.4501		
X3CrNiMoN27-5-2	1.4460		
X2CrNiMoN22-5-3	1.4462		

Heat resistant steel castings		DIN EN 10295	ASTM A297
GX40CrNiSi27-4	1.4823		HD
GX40CrNiSi22-10	1.4826		
GX25CrNiSi20-14	1.4832		
GX40CrNiSi25-12	1.4837		HH
GX40CrNiSi25-20	1.4848		HK40
GX30CrNiSi25-20			HK30
GX40NiCrSiNb38-19	1.4849		HU
GX40NiCrSi35-26	1.4857		HP
GX10NiCrSiNb32-20	1.4859		

GX40NiCrNb45-35	1.4889	
X15CrNiSi20-12	1.4828	(DIN EN 10095 / SEW 470
X7CrNi23-13	1.4833	hitzebeständige Walz- und Schmiedestähle)
X15CrNiSi25-20	1.4841	
X8CrNi25-21	1.4845	

High strength cast steel with improved weldability		**SEW 520**
G24Mn6	1.1118	
GX4CrNi13-4	1.4317	
G22NiMoCr5-5	1.6760	
G14NiCrMo10-6	1.6779	

Steel castings for oil and gas installations		**SEW 595**
GX40NiCrSi35-26	1.4857	
GX10NiCrSiNb32-20	1.4859	
GX50CrNi30-30	1.4868	
GNiCr28W	2.4879	

Steel castings for flame or induction		**SEW 835**
G C45	1.1196	
G42CrMo4	1.7225	

Non-magnetizable steel castings		**SEW 395**
GX2CrNiMnMoNNb21-16-5-3	1.3967	

treatable steels		**DIN EN 10083**
C22	1.0402	
36 CrNiMo 4	1.6511	
20 NiCrMo 2-2	1.6523	

hardening steels		**DIN EN 10084**
16 NiCr 4	1.5714	
16MnCr5	1.7131	

The materials marked in bleu are not standardized as cast steel. The values given in the standard mechanical characteristics do not apply to castings.

Other

Designation	**Material number**	
Nickel alloys		
NiCr21Fe18Mo9	2.4665	Hastelloy X
NiCr22Mo9Nb	2.4856	Inconell 625
G-NiCr 28W	2.4879	

Copper alloys on request
Brass
Bronze