

DUCTILE IRON/SPHEROIDAL GRAPHITE IRON MATERIAL GRADES

Country	Standard	Comparison - Equivalent Grades of Grey Iron (Grey Cast Iron)								
ISO(2004)	ISO 185/JL/	100	150	200	225	225	275	300	300	-
Australia(2007)	AS 1830	100	150	200	225	250	275	300	350	400
USA*	ASTM A48a	-	150(NO.20/25)	200(NO.30)		250(NO.35)		300(NO.45)	350(NO.50)	400(NO.55/60)
	ASTM A126a	-	CLASS A	CLASS B				CLASS C		
Germany Austria	DIN 1691	GG10	GG15	GG20		GG25		GG30	GG35	GG40
European	EN 1561	EN-GL-100	EN-GJL-150	EN-GJL-200/225		EN-GJL-250		EN-GL-300	EN-GL-300	
China	GB 9439	HT100	HT150	HT200		HT250		HT300	HT350	-
Japan	JIS G5501	FC100	FC150	FC200		FC250		FC300	FC350	-
Italy	UNI 5007	G10	G15	G15		G25		G30	G35	-
France	NG A32-101	-	FGL150	FGL200		FGL250		FGL300	FGL350	FGL400
UKb	BS 1452a	100	150	200		250		300	350	-
India	IS 210	-	FG150	FG200		FG260		FG300	FG350	FG400
Spain	UNF	-	FG15	FG200		FG25		FG30	FG35	-
Belgium	NBN 830-01	FGG10	FGG15	FGG20		FGG25		FGG30	FGG35	FGG40
Sweden	SS 14 01	O110	O115	O120		O125		O130	O135	O140
Norway	N11 100	SJG100	SJG150	SJG200		SJG250		SJG300	SJG350	-
SAEc	J431a	-	G9H12	G10H18	G12H21	G11H18	G12H21	G13H22	G13H24	-
							G13H19			

S.G IRON MATERIAL GRADES

Country	Standard	Comparison - Equivalent Grades of Ductile Iron (SG Iron, Nodular Graphite Iron)								
ISO	ISO 1083/JS/	400-15/S	400-18/S	450-10/S	500-7S	500-10/S	600-3/S	700-2/S	800-2/S	900-2/S
Australia(2007)	AS 1831	400-15	400-18	450-10	500-7		600-3	700-2	800-2	900-2
USA*	ASTM A395		60-40-18	200(NO.30)				300(NO.45)	350(NO.50)	
	ASTM A536			60-42-10/65-45-12	70-50-05		80-60-03/80-55-06	100-70-03	120-90-02	-
Germany Austria	DIN 1693	GGG40		-	GGG50		GGG60	GGG70	GGG80	-
European	EN 1563	EN-GJS-400-15	EN-GJS-400-18	EN-GJS-450-10	EN-GJS-500-7		EN-GJS-600-3	EN-GJS-700-2	EN-GJS-800-2	EN-GJS-900-2
China	GB 1348		QT400-18	QT450-10	QT500-7		QT600-3	QT700-2	QT800-2	QT900-2
Japan	JIS G5502	FCD400		FCD450	FCD500		FCD600	FCD700	FCD800	-
Italy	UNI 4544	GS370-17		GS400-12	GS500-7		GS600-2	GS700-2	GS800-2	-
France	NF A32-201	FGS370-17		FGS400-12	FGS500-7		FGS600-2	FGS700-2	FGS800-2	-
UK	BS 2789d	400/17		400/12	500/7		600/7	700/2	800/2	900/2
India	IS 1865	SG370/17		SG400/12	SG500/7		SG600/3	SG700/2	SG800/2	-
Spain	UNF	FGE38-17		FGE42-12	FGE50-7		FGE60-2	FGE70-2	FGE80-2	-
Belgium	NBN 830-02	FNG38-17		FNG42-12	FNG50-7		FNG60-2	FNG70-2	FNG80-2	-
Sweden	SS 14 07	0717-02		-	0727-02	SS 140725	0732-03	0737-01	0864-03	-
Norway	NS11 301	SJK-400.3 / SJK-400		-	SJK-500		SJK-600	SJK-700	SJK-800	-

AUSTEMPERED DUCTILE IRON MATERIAL GRADES

Mechanical Properties measured on test pieces from separately cast samples.

Material Symbol	Number	Tensile Strength N/mm2 (min)	0.2% Proof Stress N/mm2 (min)	Elongation % (min)
EN-GJS-800-8	EN-JS1100	800	500	8
EN-GJS-1000-5	EN-JS1110	1000	700	5
EN-GJS-1200-2	EN-JS1120	1200	850	2
EN-GJS-1400-1	EN-JS1130	1400	1100	1