



# THE ALLIED FOUNDERS PVT. LTD.

An ISO 9001:2015 certified Company, Manufacturers & Exporters of Cast Iron Castings, Ductile Iron Castings, Machined Components & Assemblies

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## INTERNATIONAL SPECIFICATIONS FOR STEEL CASTINGS STANDARDS

COUNTRY	GRADES OF STEEL CASTINGS								
	CF8/SS304	CF8M/SS316	WCA	WCB	WCC	LCC	LCB	A487 4C	A487 4D
India	IS 7806	IS 7806	IS 2856 : 1999	IS 2856 : 1999	IS 2856 : 1999	IS 1030 : 1998	-	-	-
	GRADE 3	GRADE 5	GRADE 1	GRADE 2	GRADE 3	280-520W	-	-	-
USA	ASTM A351/A 351M-06	ASTM A351/A 351M-06	ASTM A216/A 216M-04	ASTM A216/A 216M-04	ASTM A216/A 216M-04	ASTM A352/A 352M-06	ASTM A352/A 352M-06	ASTM A487	ASTM A487
	CF8	CF8M	WCA	WCB	WCC	LCC	LCB	Grade 4 Class C	Grade 4 Class D
Germany	DIN 1.4308	DIN 1.4408	-	-	-	-	-	-	-
Japan	JIS G5121	G5121	G5151	G5151	-	-	-	-	-
	SCS13A	SCS14A	SCPH1	SCPH2	-	-	-	-	-
International	J92600	J92900	UNS J02502	UNS J03002	UNS J02503	UNS J02505	UNS J03003	-	UNS J13047
	-	-	-	-	-	-	-	-	-
Hardness range BHN	145-165	145-165	124 - 176	145 - 197	145 - 197	145 to 197	135 - 186	187 to 237	197 to 237
Tensile Strength,min(Mpa)	485	485	415 - 585	485 - 655	485 to 655	485-655	450 - 620	620	690
Yield Strength,min(Mpa)	205	205	205	250	275	275	240	415	517
Elongation in 2in,%	35	30	24	22	22	22	24	18	17
Reduction of Area,min %	-	-	35	35	35	35	35	35	35
Energy value Joules impact	-	-	-	-	-	20	14	20	20
Testing Temperature	-	-	-	-	-	-46°C	-46°C	-46°C	-46°C
Carbon %	0.08 Max	0.08 Max	0.25 Max	0.3 Max	0.25 Max	0.25 Max	0.30Max	0.30Max	0.30Max
Silicon %	2.0 Max	1.5 Max	0.60 Max	0.6 Max	0.6 Max	0.6 Max	0.60 Max	0.80 Max	0.80 Max
Mangenes %	1.5 Max	1.5 Max	0.70 Max	1.0 Max	1.20 Max	1.20 Max	1.00Max	1.00Max	1.00Max
Sulphur %	0.04 Max	0.04 Max	0.045 Max	0.045 Max	0.045 Max	0.045 Max	0.045 Max	0.04 Max	0.04 Max
Phosphorous %	0.04 Max	0.04 Max	0.04 Max	0.04 Max	0.04 Max	0.04 Max	0.04 Max	0.04 Max	0.04 Max
Copper %	0	0	0.30 Max	0.30 Max	0.30 Max	0.30 Max	0.30 Max	0.50 Max	0.50 Max
Nickel %	8.0-11.0	9.0-12.0	0.50 Max	0.50 Max	0.50 Max	0.50 Max	0.50 Max	0.40 -0.80	0.40 -0.80
Chromium %	18.0-21.0	18.0-21.0	0.50 Max	0.50 Max	0.50 Max	0.50 Max	0.50 Max	0.40 -0.80	0.40 -0.80
Molybdenum %	0.50 Max	2.0-3.0	0.20 Max	0.20 Max	0.20 Max	0.20 Max	0.20 Max	0.15 - 0.35	0.15 - 0.35
Vanadium %	-	-	0.03 Max	0.03 Max	0.03 Max	0.03 Max	0.03 Max	0.03 Max	0.03 Max
Total of these specified residual elements, max	-	-	1	1	1	1	1	0.6	0.6

NOTE: The above standards for ordering reference only the customer can specify any special requirement. All specifications are subject to change without prior notice.