Wilfley

Material Data Sheet

Alloys in common use - Chemicals

Alloy	Code	C	Cr	Ni	Mo	Cu	Mn	P	S	Si	Fe
Alloy 20	A743 / CN7M	.07% max	19-22	27.5-30.5	2-3 max	3-4	2.00 max	.045 max	.035 max	1.5 max	Balance
CD4MCu	A351	.04 max	24.5-26.5	4.75-6.00	1.75-2.25	2.75-3.25		.04 max	.04 max	1.5 max	Balance
WCD4	A351 similar	.04 max	24.5-26.5	4.75-6.00	1.75-2.25	2.75-3.25		.04 max	.04 max	1.5 max	Balance
304L	A743 / CF-3	.03 max	17-21	8-12			1.5 max	.04 max	.04 max	2.0 max	Balance
316L	A743 / CF3M	.03 max	17-22	9-13	2.0-3.0		1.5 max	.04 max	.04 max	1.5 max	Balance
H B-2 #	N /A	.03 max	1.0 max	65.0 min	27.5-33.0		0.8 max	.04 max	.03 max	0.8 max	
H CW-2M#	N / A	.020 max	15-17.5	60.0 min	15.0-17.0		1.0 max	.03 max	.03 max	0.8 max	
H G30 #	N / A	.03 max	28-31.5	32.0 min	4.0-6.0	1.0-2.4	1.5 max	.04 max	.025 max	0.8 max	13-17.0
Nihard 4	A532, cl I, tp D	2.5-3.6	7-11	4.5-7.0	1.5 max		2.0 max	0.3 max	0.15 max	2.0 max	Balance
WI	A532 similar	3.1-3.4	1.75-2.25	trace	1.0 max		0.60-0.90	0.10 max	0.10 max	0.2-0.50	Balance
Max 2	A532, cl II, tp B	2.0-3.3	14-18	2.5 max	3.0 max	1.2 max	2.0 max	0.25 max	0.10 max	1.50 max	Balance
Max 5	A532, cl III tp A	2.0-3.3	23-30	2.5 max	3.0 max	1.2 max	2.0 max	0.10 max	0.06 max	1.5 max	Balance
Max 10	Proprietary		>35								
DI (1)	A536 65-45-12	3.4-3.9	.30 max	1.00 max	1.0 max	.30 max	.40 max	.08 max	.02 max	2.4-2.9	Balance
Grey Iron (1)	A48, class 30B	3.2-3.5			0.15 max		.50-.90	.25 max	0.10 max	2.25-2.85	Balance
WMS	AISI 4140	.35-.45	.80-1.10	.5 max	.15-.25		.70-1.0	.04 max	.045 max	.20-.80	Balance
WMS	AISI 4340	.35-.45	.70-.90	1.65-2.0	.20-.30	.5 max	.7-1.0	.04 max	.045 max	.20-.80	Balance

Other materials contained in Hastelloys are not shown.

(1) Typical chemistry shown, castings are classified on the basis of the tensile strength, the ASTM specification subordinates chemical composition to tensile strength.