

101.4 - High Alloy Steels (chip form)

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

Description >>	126c High-Nickel Steel (Nominal Mass Fraction 36 % Ni) (chip form)	344 15 Chromium-7 Nickel Steel (Mo Precipitation Hardening)	345b Fe-Cr-Ni Alloy UNS J92180 (chip form)	346a Valve Steel	862 High-Temperature Alloy L 605	868 High-Temperature Alloy (Fe-Ni-Co)
Unit of Issue >>	150 g	150 g	150 g	150 g	100 g	100 g

Elemental Composition (mass fraction in %)

Al (total)		1.16	<i>0.013</i>	(0.001)	(0.01)	0.99
Antimony			(0.0008)			
Boron			(<0.001)	(<0.001)	(<0.0001)	0.0078
Carbon	0.02540	0.069	<i>0.043</i>	0.502	0.120	0.022
Chromium	<i>0.0625</i>	14.95	16.03	21.08	20.0	0.077
Cobalt	<i>0.0080</i>		0.0660	(0.05)	51.5	16.1
Copper	<i>0.0396</i>	0.106	3.000	0.375	0.0010	0.022
Iron			75.3		1.80	40.5
Lead			<i>0.002</i>			
Manganese	0.4684	0.57	0.4902	9.16	1.59	0.052
Molybdenum	<i>0.0110</i>	2.40	0.1541	0.237		0.014
Nickel	36.054	7.28	4.054	3.43	9.74	37.78
Niobium			0.2143	(0.01)	(<0.005)	2.99
Nitrogen			<i>0.013</i>	0.442	0.026	
Phosphorus	<i>0.00350</i>	0.018	0.0176	0.031	0.002	<0.003
S (Comb)	<i>0.0050</i>	0.019	<i>0.0008</i>	0.002	0.0008	0.0025
Silicon	0.1936	0.395	0.7821	0.219	0.017	0.097
Tantalum			(0.002)		(<0.01)	0.003
Tin			0.00568	(0.008)	(<0.001)	
Titanium		0.076	<i>0.007</i>	(<0.001)		1.48
Tungsten			0.0394		15.1	
Vanadium	(0.001)	0.040	0.0662	0.096	0.005	0.077
Zirconium			(<0.001)			

- Certified values are normal font

- Non-certified or reference values are italicized

- Non-certified values in parentheses are for information only