

**Reference Material Tool Steel, CRM, 32CrMoV12-10, Grade 1.7765, Disc approx. Ø 31 mm x 20 mm**

Art. ID                      HRT-FE2022-N  
Unit                            disc  
Deliverydetails            No Dangerous Good /not restricted

**Description**

This Reference Material is intended for use in spark atomic emission and x-ray spectrometric methods of analysis. The entire depth of the disc may be used.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
	Carbon (C)	[7440-44-0]	0,319 ± 0,003	%		
	Silicon (Si)	[7440-21-3]	0,256 ± 0,003	%		
	Manganese (Mn)	[7439-96-5]	0,447 ± 0,003	%		
	Phosphorus (P)	[7723-14-0]	0,0058 ± 0,0003	%		
	Sulfur (S)	[7704-34-9]	0,0011 ± 0,0003	%		
	Chromium (Cr)	[7440-47-3]	2,97 ± 0,02	%		
	Molybdenum (Mo)	[7439-98-7]	0,93 ± 0,01	%		
	Nickel (Ni)	[7440-02-0]	0,17 ± 0,002	%		
	Copper (Cu)	[7440-50-8]	0,029 ± 0,001	%		
	Niobium (Nb)	[7440-03-1]	0,0034 ± 0,0006	%		
	Vanadium (V)	[7440-62-2]	0,279 ± 0,003	%		
	Titanium (Ti)	[7440-32-6]	0,0015 ± 0,0002	%		
	Aluminium (Al)	[7429-90-5]	0,0134 ± 0,0009	%		
	Nitrogen (N)	[7727-37-9]	0,006 ± 0,0004	%		
	Tungsten (W)	[7440-33-7]	0,005 ± 0,0019	%		
	Boron (B)	[7440-42-8]	0,0004 ± 0,0001	%		
	Cobalt (Co)	[7440-48-4]	0,0084 ± 0,0003	%		
	Tin (Sn)	[7440-31-5]	0,0029 ± 0,0003	%		
	Antimony (Sb)	[7440-36-0]	0,0012 ± 0,0004	%		
	Arsenic (As)	[7440-38-2]	0,0025 ± 0,0005	%		
	Tantalum (Ta)	[7440-25-7]	0,0028 ± 0,0007	%		
	Zirconium (Zr)	[7440-67-7]	0,001 ± 0,0002	%		
	Zinc (Zn)	[7440-66-6]	0,0028 ± 0,0009	%		
	Cerium (Ce)	[7440-45-1]	0,003 ± 0,0013	%		