

Metal and Quality, LLC
CERTIFICATE OF ANALYSIS
RM C51–C55
High-Temperature (Maraging) Steel



INFORMATION

Reference Materials of High-Temperature Steel **C51 – C55 - Set for Spectral Analysis** is intended for calibration of measuring instruments at definition of elements in high-temperature steels using Optical Emission and X-ray Spectrometry

DEVELOPER AND MANUFACTURER

Metal and Quality, LLC

METROLOGICAL CHARACTERISTICS, mass fraction and measurement error in % (*bold Italic*)

No.	Mn	Si	Cr	Ni	V	Mo	Co	Nb	W	C	P	N
C51	0.40	0.25	10.8	1.67	0.15	0.68	4.07	0.10	<i>0.32</i>	<i>0.16</i>	<i>0.019</i>	<i>0.09</i>
	<i>0.02</i>	<i>0.02</i>	<i>0.2</i>	<i>0.04</i>	<i>0.01</i>	<i>0.03</i>	<i>0.10</i>	<i>0.02</i>	-	-	-	-
C52	0.24	0.12	11.0	1.68	0.10	1.08	3.35	0.15	<i>0.91</i>	<i>0.17</i>	<i>0.018</i>	-
	<i>0.02</i>	<i>0.01</i>	<i>0.2</i>	<i>0.04</i>	<i>0.01</i>	<i>0.04</i>	<i>0.08</i>	<i>0.02</i>	-	-	-	-
C53	0.82	0.29	14.8	1.47	0.33	1.71	5.20	0.13	<i>0.59</i>	<i>0.26</i>	<i>0.036</i>	-
	<i>0.03</i>	<i>0.02</i>	<i>0.2</i>	<i>0.04</i>	<i>0.02</i>	<i>0.04</i>	<i>0.12</i>	<i>0.02</i>	-	-	-	-
C54	0.60	0.56	18.5	1.88	0.47	1.47	5.19	0.40	<i>0.71</i>	<i>0.06</i>	<i>0.036</i>	<i>0.13</i>
	<i>0.03</i>	<i>0.03</i>	<i>0.2</i>	<i>0.04</i>	<i>0.02</i>	<i>0.04</i>	<i>0.12</i>	<i>0.03</i>	-	-	-	-
C55	0.73	0.68	14.9	2.24	0.29	1.32	5.75	0.27	<i>1.17</i>	<i>0.19</i>	<i>0.042</i>	<i>0.11</i>
	<i>0.03</i>	<i>0.03</i>	<i>0.4</i>	<i>0.06</i>	<i>0.02</i>	<i>0.04</i>	<i>0.12</i>	<i>0.03</i>	-	-	-	-

Italics - indicative values

The data were obtained using standard wet chemical analysis methods in one laboratory and by OES testing in another laboratory

SPECIFICATION

RMs are made from forged metal of induction melting as cylinders 40-42 mm diameter and 20-25 mm thick

DATE OF ISSUE

January 2015

DELIVERY

RM, packed into a box and the Certificate

SAFETY

Reference materials C51 - C55 and packing does not contain explosives and radioactive substances and substances which might influence health and the environment

PARTICIPATING LABORATORIES

Dneprospetsstal (DSS) PJSC, Metal and Quality LLC

CONTACTS

37 Nezalezhnoi Ukrain Street, Zaporozhye city 69019, Ukraine

Tel/fax: +380 61 7171800

rm@rm.co.ua

<https://rm.co.ua>

Revised in February 2016