

Metal and Quality, LLC
CERTIFICATE OF ANALYSIS
RM C011a
High Manganese Steel



INFORMATION

Reference Material C011a is intended for calibration of measuring instruments at determination of chemical composition of High Manganese Steel using Optical Emission and X-Ray Spectrometry

DEVELOPER AND MANUFACTURER

Metal and Quality, LLC

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

C011a	C	Si	Mn	P	S	Cr	Ni	Cu	Al	Mo
	<i>0.45</i>	<i>0.43</i>	<i>17.4</i>	<i>0.042</i>	<i>0.008</i>	<i>0.36</i>	<i>0.11</i>	<i>0.089</i>	2.8	<i>0.014</i>
SD	<i>0.01</i>	<i>0.01</i>	<i>0.1</i>	<i>0.003</i>	<i>0.001</i>	<i>0.01</i>	<i>0.01</i>	<i>0.01</i>	-	-

SD - Standard deviation of intralaboratory data. Italics - indicative value

SPECIFICATION

Reference material C011a made as cylinders 40 mm diameter and 20 mm thick

Metrological characteristics of RM C011a were obtained on the basis multiple comparative measurements with CRM C010-C013 (DSZU 083.27-2010) using OES and XRF (for Mn) methods in one laboratory

HOMOGENEITY

The homogeneity was evaluated according to ISO Guide 35:2006 (7.7. Evaluating a homogeneity study) using OES method

RM VALIDITY

Term of fitness RMs: unlimited

The working surface of the sample should be purified before use

Reference material will remain stable provided that it is not subjected to excessive heat (e.g. during preparation of the working surface)

DATE OF ISSUE

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DELIVERY

CRM packed into box and Certificate

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