

Metal and Quality, LLC
CERTIFICATE OF ANALYSIS
DSZU CA03
Stainless Steel



APPLICABILITY Reference material DSZU CA03 is intended for calibration of analytical instruments based on combustion and inert gas fusion methods

LABORATORY MEANS

Mass fraction in %			
n	C	S	N
1	0.0778	0.01050	0.00826
2	0.0790	0.01070	0.00830
3	0.0800	0.01100	0.00830
4	0.0807	0.01115	0.00830
5	0.0807	0.01120	0.00860
6	0.0815	0.01115	0.00888
7	0.0820	0.01160	0.00910
8	0.0830	0.01180	0.00940
9	0.0840	0.01180	
10	0.0851	0.01190	
11	0.0860	0.01190	
12	0.0875	0.01190	
M(M)	0.0823	0.01138	0.00864
s(M)	0.0029	0.00050	0.00044

M(M) - Mean of intralaboratory means

s(M) - Standard deviation of laboratory means

CERTIFIED VALUES (mass fraction in %)

	C	S	N
Certified, M(M)	0.082	0.0114	0.0086
Uncertainty, C(95%)	0.002	0.0003	0.0004

Uncertainty C(95%) estimated as the half-width confidence interval of Student's t-distribution, when n is the number of laboratory means

$$C(95\%) = \frac{t \cdot s(M)}{\sqrt{n}}$$

Indicative content, mass fraction in %

Si	Mn	P	Cr	Ni	Ti	Mo	Cu
0.6	1	0.03	18	10	0.6	0.1	0.2

SPECIFICATION

DSZU CA03 was selected from the [CRM DSZU CX06](#) batch as the material most suitable for use in combustion and inert gas fusion methods. DSZU CA03 consists of small steel pins with a diameter of 0.6 mm and an individual mass of approximately 1 mg.

The certification of DSZU CA03 was based on the analytical results obtained for CRM DSZU CX06, together with additional measurements performed by three independent laboratories

NOTES	Reference material should be stored in a tightly closed bottle in a dry place. When the bottle is opened for analysis, it should be sealed immediately after use
TRACEABILITY	The characterization of material has been achieved by means interlaboratory experiment. At analyses used standardized methods of analysis: Combustion coulometric and infrared (C, S), Titrimetric (S), Inert gas fusion with thermal conductivity (N). The following certified reference materials were used to validate the analytical data: ICRM UNL1b, ICRM UNL6v, ICRM UNL10v, ICRM C7g, ICRM C32a, ICRM C34b, ICRM U18
DELIVERY	100 grams in a glass bottle and a certificate of analysis
DATE OF ISSUE	May 2026
VALID	May 2036
SAFETY	A Safety Data Sheet (SDS) is not required for DSZU CA03. Reference material and packing does not contain hazardous chemical, explosives and radioactive substances and substances which might influence health and the environment
PARTICIPATING LABORATORIES	ArcelorMittal Krivy Rig OJSC, Ukraine Azovstal OJSC, Ukraine Ilyich Iron and Steel Works OJSC, Ukraine Zaporizhstal OJSC, Ukraine Dniprospetsstal PJSC, Ukraine Dneprovsk Metallurgical Plant PJSC, Ukraine Khartsyzsk Tube Works OJSC, Ukraine Ukrainian Special Steels Institute SE, Ukraine Scientific Research Tube Institute SE, Ukraine Vitkovice Testing Center s.r.o, Czech Republic
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