



SPL-LABMAT s.r.o.

1.máje 432, CZ-735 31 Bohumín, Czech Republic
e-mail: info@spl-labmat.cz, www.spl-labmat.cz, phone: +420 596 014 627

CERTIFICATE No 04 – 18

**REFERENCE MATERIAL OF FREE-CUTTING STAINLESS STEEL
for solid sample spectrometry, combustion and wet-way methods**

SPL SP-1B

Grade 1.4305 (AISI 303)

Certified fully compliant with the ISO Guide 35 definition of Reference Material – with the characterization for determining the property values and their associated uncertainties.

Intended for calibration, matrix-match verification and statistical process control of low alloy steel spectrometric analysis from a plane of solid sample. They may not substitute CRM in a statement of metrological traceability, method validation. A single analysis area of at least 4 mm in diameter defines the minimum sample intake. They may be used for combustion and wet-way methods too.

Manufactured from cylindrical rod 38mm in diameter.

Supplied as discs 37 mm in diameter and 25 mm of standard height, as option is possible up to 50 mm height and on request steel chips for combustion and wet-way methods.

Homogeneity (random and trend, within- and between- samples) was tested by various analytical techniques of adequate repeatability. Its uncertainty contribution, when statistically significant, was combined to the ultimate uncertainty statement. The RM are stable by a nature of material.

Characterised by inter-laboratory study of the expert laboratories listed below by various spectrometric methods (AES spark, glow discharge, XRF) and alternative methods (combustion, thermoevolution, wet-way) standard methods, with measurements metrological **traceabled** to adequate CRM (CZ 2001, 2003 - 2008, BAS, Brammer Standard).

ARCELORMITTAL, Ostrava, Czech Republic

ENVIFORM, Třinec, Czech Republic

FYZIKÁLNÍ ÚSTAV AVČR, Praha, Czech Republic

U. S. STEEL KOŠICE – LABORTEST, Košice, Slovakia

VÍTKOVICE TESTING CENTER, Ostrava, Czech Republic

ZPS-SLÉVÁRNA, Zlín, Czech Republic

ŽĎAS, Žďár nad Sázavou, Czech Republic