

## Low and Medium Alloy Steel

№	Detectable Element	Symbol	Mass Fraction Measurement Ranges, %	Relative Standard Deviation, %
				LEA-S500
1	Carbon	C	0.001 - 0.2	2.0 - 0.95
			0.2 - 2.0	0.95 - 0.5
2	Phosphorus	P	0.003 - 0.15	10.0
3	Manganese	Mn	0.003 - 1.0	1.0
			1.0 - 2.0	0.5
4	Chromium	Cr	0.005 - 0.3	1.0
			0.3 - 2.0	1.0
5	Silicon	Si	0.005 - 0.5	15.0 - 4.0
			0.5 - 2.0	4.0 - 3.0
6	Nickel	Ni	0.001 - 2.0	5.0 - 3.5
			2.0 - 5.0	3.5 - 1.0
7	Cobalt	Co	0.001 - 1.0	5.0 - 0.6
8	Copper	Cu	0.001 - 2.0	6.0 - 1.8
9	Aluminium	Al	0.001 - 0.5	15.0 - 4.0
			0.5 - 2.0	4.0 - 3.0
10	Molybdenum	Mo	0.005 - 1.0	3.0 - 1.5
			1.0 - 5.0	1.5 - 0.7
11	Arsenic	As	0.001 - 0.2	15.0 - 3.0
12	Tungsten	W	0.01 - 1.0	3.0 - 1.0
			1.0 - 5.0	1.0 - 0.6
13	Vanadium	V	0.001 - 0.5	3.0 - 1.5
			0.5 - 2.0	1.5 - 0.5
14	Titanium	Ti	0.001 - 0.5	3.0 - 1.5
			0.5 - 1.0	1.5 - 0.8
15	Niobium	Nb	0.003 - 1.0	10.0 - 5.0
			1.0 - 2.0	5.0 - 2.0
16	Boron	B	0.001 - 0.5	10.0 - 3.0
17	Zirconium	Zr	0.005 - 0.5	10.0 - 3.0
18	Sulphur	S	0.005 - 0.35	15.0 - 6.0

### Note:

1. The following CRM sets (icrm-ekb.ru) have been used for construction of calibration curves and RSD determination:

CRM 4165-91P, 2489-91P - 2497-91P;

CRM 2717-93P - 2721-93P;

CRM 10117-2012, etc.