

Head (Deputy Head) of the  
Federal Accreditation Service

signature

initials, surname

Appendix  
to Accreditation Certificate

No. \_\_\_\_\_

dated “\_\_” \_\_\_\_\_ 20\_\_  
on 64 sheets, sheet 1

Accreditation Scope

Federal State Unitary Enterprise “I. P. Bardin Central Research Institute of Ferrous Metallurgy”

Testing Center “Metalltest”

testing laboratory (center) name

23/9, Radio Str., building 2, 105005 Moscow

place of business address

Item No.	Documents that determine rules and methods of researches (testings) and measurements	Object name	Code according to the All-Russian Classifier of Products by Economic Activity 2	Code according to the Commodity Nomenclature for Foreign Economic Activities of the Eurasian Economic Union	Determined parameter (indicator)	Determination diapason
1	2	3	4	5	6	7
Quantitative chemical analysis						
1	GOST 18895	Low-alloy, alloy and high-alloy carbon steel, mill prod-	—	—	Weight percentage, % C	0.01-2.0

1	2	3	4	5	6	7
		ucts and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)			S P Cr Si Mn Ni Al As Ti Mo W B Co Nb Zr	0.002-0.20 0.002-0.20 0.01-10.00 0.010-2.5 0.050-5.0 0.01-10.0 0.005-2.0 0.005-0.20 0.005-2.0 0.010-5.0 0.020-5.0 0.001-0.10 0.010- 5.0 0.010-2.0 0.005-0.50

1	2	3	4	5	6	7
2	GOST P 54153	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % C S P Si Mn Cr Ni Co Cu Al Al (roofing) As Mo W V Ti Nb Zr Pb Sn Zn Sb B Bi Ca N Mg Ce	0.002-3.0 0.001-0.20 0.001-0.20 0.002-5.0 0.0005-35.0 0.001-35.0 0.001-45.0 0.0005-20.0 0.001-5.0 0.001-10.0 0.002-0.20 0.0002-0.5 0.0002-10.0 0.002-20.0 0.001-10.0 0.001-5.0 0.001-3.0 0.001-0.5 0.001-0.5 0.0005-0.25 0.001-0.05 0.001-0.05 0.0001-0.10 0.001-0.05 0.0005-0.05 0.001-0.05 0.001-0.20 0.001-0.20

1	2	3	4	5	6	7
3	GOST P 55079	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % Si Mn Cr Ni Co Cu Al W Mo V Ni Zr	0.01-5.0 0.01-5.0 0.01-30 0.01-30 0.01-5.0 0.01-5.0 0.01-5.0 0.01-5.0 0.005-5.0 0.005-2.0 0.005-5.0 0.01-0.50
4	GOST 27611	Cast iron and castings, cast iron products	—	—	Weight percentage, % S P Si Mn Cr Ni Cu V Ti As	0.005-0.20 0.02-0.5 0.10-2.00 0.10-2.00 0.01-0.50 0.01-0.50 0.02-0.20 0.01-0.50 0.01-0.10 0.01-0.20
5	GOST 12344 GOST 22536.1	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % C	0.001-2.00 0.01-5.0

1	2	3	4	5	6	7
6	GOST 12345 GOST 22536.2	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % S	0.001-0.50 (cast iron 0.002-0.10) 0.002-0.40
7	GOST 12346 clause 2 GOST 22536.4 clause 3 GOST 2604.3 clause 2 GOST 16412.3 clause 3	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % Si	0.05-0.80 0.005-1.0 0.05-5.0 0.01-0.5
8	GOST 12346 clause 3 GOST 22536.4 clause 2 GOST 2604.3 clause 3 GOST 16412.3 clause 2	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % Si	0.10-7.0 0.10-4.0 0.10-20.0 0.20-2.0
9	GOST 12347 GOST 22536.3 clause 2 GOST 2604.4 GOST 16412.2 clause 2	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % P	0.002-0.25 0.005-0.25 0.02-2.00 0.005-0.05

1	2	3	4	5	6	7
10	GOST 22536.3-88 clause 3 GOST 16412.2 clause 3	Carbon steel, unalloyed cast iron, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % P	0.02-2.50 0.02-0.05
11	GOST 22536.3 clause 4	Carbon steel, unalloyed cast iron	—	—	Weight percentage, % P	0.01-2.00
12	GOST 12348 clause 2 GOST 22536.5 clause 4 GOST 2604.5 clause 2 GOST 16412.4 clause 3	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % Mn	0.005-10.0 0.05-2.0 0.10-2.00 0.02-0.8
13	GOST 12348 clause 3 GOST 22536.5 clause 2 GOST 2604.5 clause 3 GOST 16412.4 clause 2	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % Mn	0.3-10.0 0.30-3.0 0.20-5.0 0.1 and higher
14	GOST 12348 clause 4 GOST 22536.5 clause 3 GOST 2604.5 clause 4	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % Mn	4.0-40.0 0.5-3.0 2.0-25.0

1	2	3	4	5	6	7
15	GOST 12348 clause 5 GOST 22536.5 clause 5 GOST 2604.5 clause 5	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, etc.), alloy cast iron and unalloyed cast iron	—	—	Weight percentage, % Mn	0.01-5.0 0.10-3.0 0.10-5.0
16	GOST 12349 clause 2 GOST 12349 clause 3 GOST 12349 clause 3a GOST 12349 clause 4	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % W	0.002-0.50 0.10-6.0 0.30-18.0 3.0-20.0
17	GOST R 51056	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % W	0.01-5.0
18	GOST 12350 clause 2 GOST 22536.7 clause 2 GOST 2604.6 clause 2	Alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron and unalloyed cast iron	—	—	Weight percentage, % Cr	0.01-0.50 0.01-0.50 0.01-0.50

1	2	3	4	5	6	7
19	GOST 12350 clause 3 GOST 22536.7 clause 3 GOST 2604.6 clause 3	Alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron and unalloyed cast iron	—	—	Weight percentage, % Cr	0.20-35.0 0.10-0.50 0.50-35.0
20	GOST 22536.7 clause 4	Carbon steel and unalloyed cast iron	—	—	Weight percentage, % Cr	0.01-0.50
21	GOST 12351 GOST 22536.12 clause 3 GOST 2604.7 clause 3	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron and unalloyed cast iron	—	—	Weight percentage, % V	0.005-10.0 0.02-0.25 0.05-1.00
22	GOST 22536.12 clause 2	Carbon steel and unalloyed cast iron	—	—	Weight percentage, % V	0.05-0.25
23	GOST 12352 clause 2 GOST 22536.9 clause 2 GOST 2604.8 clause 2	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron and unalloyed cast iron	—	—	Weight percentage, % Ni	0.01-4.0 0.01-0.50 0.10-1.0



1	2	3	4	5	6	7
24	GOST 12352 clause 3 GOST 22536.9 clause 3 GOST 2604.8 clause 3	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron and unalloyed cast iron	—	—	Weight percentage, % Ni	0.50-45.0 0.10-0.50 0.10-25.0
25	GOST 12352 clause 4 GOST 22536.9 clause 4 GOST 2604.8 clause 4	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron and unalloyed cast iron	—	—	Weight percentage, % Ni	0.10-15.0 0.02-0.50 0.10-15.0
26	GOST 12353 clause 4 GOST 2604.14 clause 2, clause 3	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron	—	—	Weight percentage, % Co	0.0005-3.0 0.02-3.0
27	GOST 12353 clause 6 GOST 2604.14 clause 4	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron	—	—	Weight percentage, % Co	0.005-25.0 0.005-5.0

1	2	3	4	5	6	7
28	GOST 12354 clause 2 GOST 12354 clause 3 GOST 12354 clause 4 GOST 12354 clause 5	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % Mo	0.01 -3.0 0.10-10.0 3.0-10.0 0.01-5.00
29	GOST R 51056	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % Mo	0.01-5.0
30	GOST 12355 clause 3 GOST 22536.8 clause 3 GOST 2604.9 clause 2	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron and unalloyed cast iron	—	—	Weight percentage, % Cu	0.10-1.00 0.01-0.50 0.05-1.0
31	GOST 12355 clause 7 GOST 22536.8 clause 4 GOST 2604.9 clause 4	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron and unalloyed cast iron	—	—	Weight percentage, % Cu	0.10-4.0 0.010-0.50 0.10-4.0

1	2	3	4	5	6	7
32	GOST 12355 clause 5 GOST 2604.9 clause 3	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron	—	—	Weight percentage, % Cu	1.00-4.00 1.00-4.0
33	GOST 12356 clause 2 GOST 22536.11 clause 3	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), unalloyed cast iron	—	—	Weight percentage, % Ti	0.005-0.3 0.005-0.10
34	GOST 12356 clause 3 GOST 22536.11 clause 2 GOST 2604.10	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron and unalloyed cast iron	—	—	Weight percentage, % Ti	0.01-3.50 0.01-0.10 0.01-1.5
35	GOST 12357 clause 2. clause 3 GOST 22536.10 clause 2. clause 3 GOST 2604.13 clause 5	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron and unalloyed cast iron	—	—	Weight percentage, % Al	0.01-0.20 0.005-0.12 0.01-0.20

1	2	3	4	5	6	7
36	GOST 12357 clause 4. clause 6 GOST 22536.10 clause 4	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), unalloyed cast iron	—	—	Weight percentage, % Al	0.01-0.20 0.05-0.12
37	GOST 12357 clause 7 GOST 2604.13 clause 2	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron	—	—	Weight percentage, % Al	0.20-7.0 0.10-40.0
38	GOST 12357 clause 5	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % Al	0.20-7.0
39	GOST 12358 clause 4	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % As	0.0002-0.01

1	2	3	4	5	6	7
40	GOST 12358 clause 5 GOST 22536.6 clause 2 GOST 2604.11 clause 2	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron and unalloyed cast iron	—	—	Weight percentage, % As	0.002-0.20 0.01-0.20 0.01-0.25
41	GOST 12360 clause 2, clause 3,3a	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % B	0.0005-0.10
42	GOST 12361 clause 4	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % Nb	0.002-4.0
43	GOST 12362 clause 7 GOST 12362 clause 11	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % Pb Zn, Cd	0.0002-0.01 0.0005-0.01

1	2	3	4	5	6	7
44	GOST 12364 clause 2	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % Ce	0.002-0.05
45	GOST 12365 clause 2 GOST 12365 clause 3 GOST 22536.14 clause 2	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), unalloyed cast iron	—	—	Weight percentage, % Zr	0.01-1.00 0.01-0.5 0.005-0.10
46	GOST 29117 clause 2 GOST 29117 clause 3	Alloy and high-alloy steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % Bi	0.0005-0.01 0.0001-0.01
47	GOST R 50424	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron and unalloyed cast iron	—	—	Weight percentage, % Ca	0.001-0.20

1	2	3	4	5	6	7
48	GOST R 51927	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.), alloy cast iron and unalloyed cast iron	—	—	Weight percentage, % Ca	0.001-0.10
49	GOST 17745	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including tin-plate, armature, tubes, rails, wire, iron powder and iron-based construction powder materials, etc.)	—	—	Weight percentage, % N O H	0.0005-0.8 0.0005-0.2 0.00005-0.01
50	GOST 16698.1 GOST 21876.1	Metallic manganese and nitrogenized manganese, ferromanganese	—	—	Weight percentage, % Mn	80.0-96.5 65-95
51	GOST 16698.4 GOST 21876.5	Metallic manganese and nitrogenized manganese, ferromanganese	—	—	Weight percentage, % P	0.002-0.09 0.01-0.7
52	GOST 16698.5 clause 4 GOST 21876.4 clause C	Metallic manganese and nitrogenized manganese, ferromanganese	—	—	Weight percentage, % Si	0.1-2.5 0.1-4.0
53	GOST 16698.5 clause 5 GOST 21876.4 clause A	Metallic manganese and nitrogenized manganese, ferromanganese	—	—	Weight percentage, % Si	0.5-2.5 0.5-10.0
54	GOST 16698.6 clause 4, clause 6 GOST 16698.6 clause 7	Metallic manganese and nitrogenized manganese	—	—	Weight percentage, % Fe	0.1-3.5 0.5-3.5
55	GOST 16698.7	Metallic manganese and nitrogenized manganese	—	—	Weight percentage, % Ni	0.0002-0.10
56	GOST 16698.9 clause 2 GOST 16698.9 clause 3	Metallic manganese and nitrogenized manganese	—	—	Weight percentage, % Cu	0.0005-0.10 1.0-4.0

1	2	3	4	5	6	7
57	GOST 16698.10 clause 2 GOST 16698.10 clause 3	Metallic manganese and nitrogenized manganese	—	—	Weight percentage, % Al	0.005-0.50 0.5-2.0
58	GOST 16698.11	Metallic manganese and nitrogenized manganese	—	—	Weight percentage, % Ti	0.002-0.1
59	GOST 16698.12	Metallic manganese and nitrogenized manganese	—	—	Weight percentage, % Ca Mg	0.1-0.7 0.1-0.7
60	GOST 27041	Ferro-alloys, metallic chromium and metallic manganese	—	—	Weight percentage, % S	0.002-0.6
61	GOST 27069	Ferro-alloys, metallic chromium and metallic manganese	—	—	Weight percentage, % C	0.002-10.0
62	GOST 13230.1 clause 4 GOST 13230.1 clause 5	Ferrosilicium	—	—	Weight percentage, % Si	8-95
63	GOST 13230.4	Ferrosilicium	—	—	Weight percentage, % P	0.01-0.25
64	GOST 13230.5 clause 4 GOST 13230.5 clause 5 GOST 13230.5 clause 6	Ferrosilicium	—	—	Weight percentage, % Mn	0.05-1.2 0.05-1.2 0.05-1.2
65	GOST 13230.6 clause 4 GOST 13230.6 clause 5 GOST 13230.6 clause 6	Ferrosilicium	—	—	Weight percentage, % Cr	0.05-1.2 0.05-0.3 0.3-1.2
66	GOST 13230.7 clause 4 GOST 13230.7 clause 5 GOST 13230.7 clause 6	Ferrosilicium	—	—	Weight percentage, % Al	0.05-5.0 0.02-0.05 0.5-5.0
67	GOST 13230.8 clause 4 GOST 13230.8 clause 5	Ferrosilicium	—	—	Weight percentage, % Ca	0.02-1.2 0.5-1.2
68	GOST 13230.9 clause 4 GOST 13230.9 clause 5	Ferrosilicium	—	—	Weight percentage, % Ti	0.01-0.2 0.05-0.2
69	GOST 16591.3	Ferrosilicon manganese	—	—	Weight percentage, % Mn	50-80 55-95
70	GOST 16591.4	Silicon manganese	—	—	Weight percentage, % Si	8-30
71	GOST 16561.5	Ferrosilicon manganese	—	—	Weight percentage, % P	0.025-0.7
72	GOST 14858.3	Calcium silicon	—	—	Weight percentage, % P	0.01-0.10



1	2	3	4	5	6	7
73	GOST 14858.4	Calcium silicon	—	—	Weight percentage, % Si	30-75
74	GOST 14858.5	Calcium silicon	—	—	Weight percentage, % Fe	2.0-40.0
75	GOST 14858.6	Calcium silicon	—	—	Weight percentage, % Ca	8.0-40
76	GOST 14858.7 clause 2 GOST 14858.7 clause 3	Calcium silicon	—	—	Weight percentage, % Al	0.10-6.0 0.5-6.0
77	GOST 13201.1	Ferrochrome silicon	—	—	Weight percentage, % Cr	25-60
78	GOST 13201.2	Ferrochrome silicon	—	—	Weight percentage, % Si	10-55
79	GOST 13201.6	Ferrochrome silicon	—	—	Weight percentage, % P	0.01-0.05
80	GOST 17001.6	Zirconium ferrosilicon	—	—	Weight percentage, % Si	20.0-55.0
81	GOST 17001.5 clause 2 GOST 17001.5 clause 3	Zirconium ferrosilicon	—	—	Weight percentage, % P	0.02-0.3 0.02-0.10
82	GOST 17001. clause 8	Zirconium ferrosilicon	—	—	Weight percentage, % Al	1.0-12.0
83	GOST 17001.7 clause 2 GOST 17001.7 clause 3	Zirconium ferrosilicon	—	—	Weight percentage, % Cu	0.1-4.0
84	GOST 17001.4 clause 2 GOST 17001.4 clause 3	Zirconium ferrosilicon	—	—	Weight percentage, % Zr	15.0-70.0
85	GOST 21600.3	Ferrochrome	—	—	Weight percentage, % Si	0.4-12.0
86	GOST 21600.4	Ferrochrome	—	—	Weight percentage, % P	0.005-0.06
87	GOST 21600.17 clause 2 GOST 21600.17 clause 3	Ferrochrome	—	—	Weight percentage, % Cr	55.0-80.0
88	GOST 21600.18 clause 2, clause 3 GOST 21600.18 clause 4	Ferrochrome	—	—	Weight percentage, % Al	0.02-0.8 0.02-0.8
89	GOST 13020.1	Metallic chromium	—	—	Weight percentage, % Cr	96.0-99.6

1	2	3	4	5	6	7
90	GOST 13020.4	Metallic chromium	—	—	Weight percentage, % P	0.002-0.04
91	GOST 13020.5 clause 2 GOST 13020.5 clause 3	Metallic chromium	—	—	Weight percentage, % Si	0.1-0.4 0.4-1.0
92	GOST 13020.6 clause 2 GOST 13020.6 clause 3	Metallic chromium	—	—	Weight percentage, % Al	0.1-1.8
93	GOST 13020.7	Metallic chromium	—	—	Weight percentage, % N	0.002-0.06
94	GOST 13020.8 clause 2 GOST 13020.8 clause 3	Metallic chromium	—	—	Weight percentage, % Fe	0.3-1.5
95	GOST 13020.11	Metallic chromium	—	—	Weight percentage, % Pb	0.0002-0.0012
96	GOST 13020.12	Metallic chromium	—	—	Weight percentage, % As	0.002-0.012
97	GOST 13020.13	Metallic chromium	—	—	Weight percentage, % Sb	0.0002-0.01
98	GOST 13020.14 clause 2 GOST 13020.14 clause 3	Metallic chromium	—	—	Weight percentage, % Cu	0.002-0.06
99	GOST 13020.16	Metallic chromium	—	—	Weight percentage, % Co	0.002-0.006
100	GOST 13151.1	Ferromolybdenum	—	—	Weight percentage, % Mo	45.0-80.0
101	GOST 13151.2	Ferromolybdenum	—	—	Weight percentage, % W	0.1-1.6
102	GOST 13151.5	Ferromolybdenum	—	—	Weight percentage, % Si	0.2-10.0
103	GOST 13151.6	Ferromolybdenum	—	—	Weight percentage, % P	0.01-0.12
104	GOST 13151.7 clause 2 GOST 13151.7 clause 3	Ferromolybdenum	—	—	Weight percentage, % Cu	0.1-3.0
105	GOST 13151.8	Ferromolybdenum	—	—	Weight percentage, % Zn	0.001-0.005
106	GOST 13151.9	Ferromolybdenum	—	—	Weight percentage, % Sn	0.005-0.050
107	GOST 13151.10	Ferromolybdenum	—	—	Weight percentage, % Sb	0.005-0.050

1	2	3	4	5	6	7
108	GOST 13151.11	Ferromolybdenum	—	—	Weight percentage, % As	0.005-0.05
109	GOST 14631.1	Ferrowolfram	—	—	Weight percentage, % W	50.0-85.0
110	GOST 14631.3	Ferrowolfram	—	—	Weight percentage, % P	0.01-0.15
111	GOST 14631.4	Ferrowolfram	—	—	Weight percentage, % Si	0.15-3.0
112	GOST 14631.5	Ferrowolfram	—	—	Weight percentage, % Mn	0.05-0.70
113	GOST 14631.6	Ferrowolfram	—	—	Weight percentage, % Al	0.5-6.0
114	GOST 14631.8	Ferrowolfram	—	—	Weight percentage, % Mo	0.10-8.5
115	GOST 14631.9 clause 2 GOST 14631.9 clause 3	Ferrowolfram	—	—	Weight percentage, % Cu	0.01-0.4 0.01-0.4
116	GOST 14631.12	Ferrowolfram	—	—	Weight percentage, % Sb	0.001-0.05
117	GOST 14631.14	Ferrowolfram	—	—	Weight percentage, % Bi	0.001-0.05
118	GOST 14631.15	Ferrowolfram	—	—	Weight percentage, % As	0.002-0.10
119	GOST 13217.1	Ferrovandium	—	—	Weight percentage, % V	30.0-80.0
120	GOST 13217.4 clause 2	Ferrovandium	—	—	Weight percentage, % Si	0.2-4.0
121	GOST 13217.5	Ferrovandium	—	—	Weight percentage, % P	0.01-0.24
122	GOST 13217.6 clause 2 GOST 13217.6 clause 3	Ferrovandium	—	—	Weight percentage, % Mn	0.1-7.0 0.1-7.0
123	GOST 13217.7 clause 2 GOST 13217.7 clause 3	Ferrovandium	—	—	Weight percentage, % Al <sub>total</sub>	0.1-4.0 0.1-4.0
124	GOST 13217.8 clause 2 GOST 13217.8 clause 3	Ferrovandium	—	—	Weight percentage, % Cr	0.3-3.0 0.3-3.0
125	GOST 13217.9 clause 2 GOST 13217.9 clause 3	Ferrovandium	—	—	Weight percentage, % Cu	0.01-0.6 0.01-0.6

1	2	3	4	5	6	7
126	GOST 13217.11 clause 3	Ferrovandium	—	—	Weight percentage, % As	0.003-0.06
127	GOST 14250.1	Ferrotitanium	—	—	Weight percentage, % Ti	15.0-80.0
128	GOST 14250.4	Ferrotitanium	—	—	Weight percentage, % P	0.02-0.20
129	GOST 14250.5 clause 2 GOST 14250.5 clause 3	Ferrotitanium	—	—	Weight percentage, % Cu	0.03-3.5 0.03-3.5
130	GOST 14250.6	Ferrotitanium	—	—	Weight percentage, % Al	3-40
131	GOST 14250.7	Ferrotitanium	—	—	Weight percentage, % Si	0.2-40
132	GOST 14250.8 clause 2 GOST 14250.8 clause 3	Ferrotitanium	—	—	Weight percentage, % V	0.05-3.5 0.05-3.5
133	GOST 14250.9 clause 2 GOST 14250.9 clause 3	Ferrotitanium	—	—	Weight percentage, % Mo	0.01-3.0 0.01-3.0
134	GOST 14250.10 clause 2 GOST 14250.10 clause 3	Ferrotitanium	—	—	Weight percentage, % Sn	0.01-0.20 0.01-0.20
135	GOST 14250.11 clause 2 GOST 14250.11 clause 3	Ferrotitanium	—	—	Weight percentage, % Zr	0.01-2.5 0.2-2.5
136	GOST 14250.12 clause 2 GOST 14250.12 clause 3 GOST 14250.12 clause 4	Ferrotitanium	—	—	Weight percentage, % Cr	0.05-0.2 0.2-2.0 0.05-2.0
137	GOST 14250.13 clause 2 GOST 14250.13 clause 3 GOST 14250.13 clause 4	Ferrotitanium	—	—	Weight percentage, % Mn	0.05-2.0 0.5-2.0 0.1-2.0
138	GOST 14021.1 clause 2 GOST 14021.1 clause 3	Ferroboration	—	—	Weight percentage, % B	3.0-35.0 3.0-35.0
139	GOST 14021.4 clause 2 GOST 14021.4 clause 3	Ferroboration	—	—	Weight percentage, % Si	2.0-20. 0.5-4.0
140	GOST 14021.5	Ferroboration	—	—	Weight percentage, % P	0.004-0.04
141	GOST 14021.6	Ferroboration	—	—	Weight percentage, % Mn	0.1-1.0
142	GOST 14021.7 clause 2 GOST 14021.7 clause 3	Ferroboration	—	—	Weight percentage, % Cu	0.01-0.15 0.01-0.15

1	2	3	4	5	6	7
143	GOST 14021.8 clause 2 GOST 14021.8 clause 3	Ferroboron	—	—	Weight percentage, % Al	0.3-15 0.5-15
144	GOST 15933.3	Ferroniobium	—	—	Weight percentage, % P	0.03-0.6
145	GOST 15933.4	Ferroniobium	—	—	Weight percentage, % Si	0.5-25
146	GOST 15933.5	Ferroniobium	—	—	Weight percentage, % Nb+Ta	30.0-70.0
147	GOST 15933.6	Ferroniobium	—	—	Weight percentage, % Ta	0.1-1.4
148	GOST 15933.7	Ferroniobium	—	—	Weight percentage, % Al	0.5-7.0
149	GOST 15933.8	Ferroniobium	—	—	Weight percentage, % Ti	0.04-9.0
150	GOST 15933.12	Ferroniobium	—	—	Weight percentage, % Co	0.005-0.10
151	GOST 15933.13	Ferroniobium	—	—	Weight percentage, % Bi	0.002-0.10
152	GOST 15933.14	Ferroniobium	—	—	Weight percentage, % Sn	0.005-0.10
153	GOST 15933.15	Ferroniobium	—	—	Weight percentage, % As	0.001-0.010
154	GOST 15933.16	Ferroniobium	—	—	Weight percentage, % Sb	0.001-0.10
155	GOST 15933.17	Ferroniobium	—	—	Weight percentage, % Zn	0.0005-0.0050
156	GOST 15933.18	Ferroniobium	—	—	Weight percentage, % Pb	0.001-0.10
157	GOST 12764 GOST 23581.1	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % Moisture	0.1-10.0
158	GOST 16589	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % Magnetite	>1
159	GOST 19187 clause 2 GOST 19187 clause 4	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % BaO	0.1-5.0 0.06-3.0
160	GOST R 53659	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % MnO	0.02-10.0

1	2	3	4	5	6	7
161	GOST R 53657	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % FeO	0.5-45.0
162	GOST R 53403	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % TiO <sub>2</sub>	0.01-5.0
163	GOST 23581.5 clause 2 GOST 23581.5 clause 3	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % Cr	0.01-0.5 0.1-7.0
164	GOST R 53658	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % Cu	0.005-1.0
165	GOST 23581.7 clause 2 GOST 23581.7 clause 4	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % Pb Zn Pb Zn	0.1-0.50 0.1-0.50 0.005-1.0 0.005-0.5
166	GOST 23581.8 clause 2 GOST 23581.8 clause 3	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % As	0.001-0.2 0.001-0.50
167	GOST 23581.10 clause 2 GOST 23581.10 clause 3	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % Na <sub>2</sub> O K <sub>2</sub> O	0.01-2.0 0.01-2.0
168	GOST 23581.11	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % Fe <sub>met</sub>	0.1-2.0
169	GOST 23581.12	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % H <sub>2</sub> O con.	1.0-10.0
170	GOST 23581.13	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % Loss on ignition	0.5-20.0
171	GOST 23581.14	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % Residue undissolved in HCL	0.5-30.0
172	GOST 23581.15 clause 2 GOST 23581.15 clause 3	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % SiO <sub>2</sub>	1.0-45. 0.2-20.
173	GOST 23581.16 clause 2 GOST 23581.16 clause 3 GOST 23581.16 clause 4	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % CaO, MgO	1.0-30.0 0.3-30.0 0.015-20.0
174	GOST 23581.17 clause 2 GOST 23581.17 clause 3 GOST 23581.17 clause 4	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % Al <sub>2</sub> O <sub>3</sub>	0.1-10.0 1.0-25.0 0.1-25.0
175	GOST 23581.18	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % Fe <sub>total</sub>	15.0-70.0

1	2	3	4	5	6	7
176	GOST 23581.19 clause 2 GOST 23581.19 clause 3	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % P	0.005-2.0 0.1-5.0
177	GOST 23581.20	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % S	0.05-5.0
178	GOST 23581.21 clause 2 GOST 23581.21 clause 3 GOST 23581.21 clause 4	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % V <sub>2</sub> O <sub>5</sub>	0.02-1.0 0.2-1.0 0.02-1.0
179	GOST 23581.22 clause 2 GOST 23581.22 clause 3 GOST 23581.22 clause 4	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % NiO	0.01-0.1 0.25-1.0 0.01-1.0
180	GOST 26628 clause 2 GOST 26628 clause 3	Iron ores, concentrates, agglomerates, pellets	—	—	Weight percentage, % Co	0.001-1.0 0.005-1.0
181	GOST 22772.1	Manganese ores, concentrates, agglomerates	—	—	Weight percentage, % Moisture	0.1-10.0
182	GOST 22772.2	Manganese ores, concentrates, agglomerates	—	—	Weight percentage, % Mn <sub>total</sub>	10.0-60.0
183	GOST 22772.3	Manganese ores, concentrates, agglomerates	—	—	Weight percentage, % MnO <sub>2</sub>	5.0-95.0
184	GOST 22772.4 clause 2 GOST 22772.4 clause 3	Manganese ores, concentrates, agglomerates	—	—	Weight percentage, % Fe <sub>total</sub>	1.0-25. 0.2-2.0
185	GOST 22772.5 clause 2 GOST 22772.5 clause 3	Manganese ores, concentrates, agglomerates	—	—	Weight percentage, % SiO <sub>2</sub>	1.0-40.0 0.5-20.0
186	GOST 22772.6	Manganese ores, concentrates, agglomerates	—	—	Weight percentage, % P	0.005-0.70
187	GOST 22772.7	Manganese ores, concentrates, agglomerates	—	—	Weight percentage, % S	0.005-1.0
188	GOST 22772.8 clause 2 GOST 22772.8 clause 3	Manganese ores, concentrates, agglomerates	—	—	Weight percentage, % Ni	0.01-1.0 0.005-1.0
189	GOST 22772.9 clause 2 GOST 22772.9 clause 3	Manganese ores, concentrates, agglomerates	—	—	Weight percentage, % Cu	0.005-1.0 0.005-1.0
190	GOST 22772.10 clause 2 GOST 22772.10 clause 3 GOST 22772.10 clause 4	Manganese ores, concentrates, agglomerates	—	—	Weight percentage, % Al <sub>2</sub> O <sub>3</sub>	1.0-8.0 0.1-3.0 0.1-8.0

1	2	3	4	5	6	7
191	GOST 24937 clause 2 GOST 24937 clause 3	Manganese ores, concentrates, agglomerates	—	—	Weight percentage, % CaO MgO CaO MgO	0.5-20.0 0.5-7.0 0.01-20.0 0.01-7.0
192	GOST 27308	Manganese ores, concentrates, agglomerates	—	—	Weight percentage, % Pb	0.005-1.0
193	GOST 27309 clause 2 GOST 23709 clause 3	Manganese ores, concentrates, agglomerates	—	—	Weight percentage, % BaO	0.5-6.0 0.05-3.0
194	GOST 27561	Manganese ores, concentrates, agglomerates	—	—	Weight percentage, % Moisture	Up to 15.0
195	GOST 15848.1	Chromium ores and concentrates	—	—	Weight percentage, % Cr <sub>2</sub> O <sub>3</sub>	10.0-65.0
196	GOST 15848.2	Chromium ores and concentrates	—	—	Weight percentage, % Fe <sub>total</sub>	5.0-30.0
197	GOST 15848.3	Chromium ores and concentrates	—	—	Weight percentage, % FeO	0.5-20.0
198	GOST 15848.10 clause 2 GOST 15848.10 clause 3	Chromium ores and concentrates	—	—	Weight percentage, % Al <sub>2</sub> O <sub>3</sub>	3.0-30.0 3.0-15.0
199	GOST 15848.11 clause 2 GOST 15848.11 clause 3	Chromium ores and concentrates	—	—	Weight percentage, % CaO MgO CaO MgO	1.0-4.5 3.0-35.0 0.1-4.5 3.0-15.0
200	GOST 15848.12 clause 2 GOST 15848.12 clause 3	Chromium ores and concentrates	—	—	Weight percentage, % SiO <sub>2</sub>	0.1-10.0 1.0-30.0
201	GOST 15848.14	Chromium ores and concentrates	—	—	Weight percentage, % P	0.002-0.10
202	GOST 15848.17	Chromium ores and concentrates	—	—	Weight percentage, % V	0.005-0.2
203	GOST 15848.21	Chromium ores and concentrates	—	—	Weight percentage, % Moisture	0.1-5.0
204	GOST 2082.3 clause 2 GOST 2082.3 clause 3	Molybdenum concentrate	—	—	Weight percentage, % Mo	10.0-60.0 10.0-60.0
205	GOST 2082.4 clause 2 GOST 2082.4 clause 3	Molybdenum concentrate	—	—	Weight percentage, % SiO <sub>2</sub>	0.10-1.00 1.00-15.00



1	2	3	4	5	6	7
206	GOST 2082.5	Molybdenum concentrate	—	—	Weight percentage, % As	0.005-0.08
207	GOST 2082.6	Molybdenum concentrate	—	—	Weight percentage, % Sn	0.005-0.10
208	GOST 2082.7	Molybdenum concentrate	—	—	Weight percentage, % P	0.005-0,10
209	GOST 2082.8 clause 2 GOST 2082.8 clause 3	Molybdenum concentrate	—	—	Weight percentage, % Cu	0.005-0.06 0.05-2.5
210	GOST 2082.9	Molybdenum concentrate	—	—	Weight percentage, % Na, K	0.01-2.0
211	GOST 2082.10	Molybdenum concentrate	—	—	Weight percentage, % W <sub>2</sub> O <sub>5</sub>	0.1-6.0
212	GOST 2082.11	Molybdenum concentrate	—	—	Weight percentage, % Sb	0.005-0.05
213	GOST 2082.13 clause 2 GOST 2082.13 clause 3	Molybdenum concentrate	—	—	Weight percentage, % Fe	0.10-5.0
214	GOST 2082.14	Molybdenum concentrate	—	—	Weight percentage, % Bi	0.001-0.5
215	GOST 2082.16	Molybdenum concentrate	—	—	Weight percentage, % Re	0.001-0.12
216	GOST 11884.1 clause 2 GOST 11884.1 clause 3	Tungsten concentrate	—	—	Weight percentage, % W <sub>2</sub> O <sub>5</sub>	20.0-50.0 from 50.0
217	GOST 11884.2 clause 2 GOST 11884.2 clause 3	Tungsten concentrate	—	—	Weight percentage, % MnO	0.05-2.0 0.50-20.0
218	GOST 11884.3	Tungsten concentrate	—	—	Weight percentage, % MnO	0.20-10.0
219	GOST 11884.4	Tungsten concentrate	—	—	Weight percentage, % P	0.005-2.0
220	GOST 11884.5	Tungsten concentrate	—	—	Weight percentage, % S	0.05-4.0
221	GOST 11884.6 clause 2 GOST 11884.6 clause 3	Tungsten concentrate	—	—	Weight percentage, % As	0.005-0.50 0.08-0.5
222	GOST 11884.7	Tungsten concentrate	—	—	Weight percentage, % Sn	0.005-1.0
223	GOST 11884.9	Tungsten concentrate	—	—	Weight percentage, % Mo	0.005-5.0

1	2	3	4	5	6	7
224	GOST 11884.10	Tungsten concentrate	—	—	Weight percentage, % CaO	0.5-10.0
225	GOST 11884.12	Tungsten concentrate	—	—	Weight percentage, % Sb	0.005-0.50
226	GOST 11884.13	Tungsten concentrate	—	—	Weight percentage, % Bi	0.005-0.50
227	GOST 11884.14	Tungsten concentrate	—	—	Weight percentage, % Cu, Pb	0.005-0.50
228	GOST 3221	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Fe Si Cu Mg Mn Ti V Cr Zn	0.003-0.60 0.003-0.60 0.005-0.03 0.005-0.1 0.005-0.02 0.005-0.02 0.005-0.01 0.005-0.01 0.007-0.15
229	GOST 7727	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Fe Si Cu Mg Mn Ti V Cr Zn Zr Ca Be Ni Sn Pb	0.01-5.0 0.01-15.0 0.01-15.0 0.01-15.0 0.01-5.0 0.01-0.50 0.01-0.50 0.01-0.50 0.01-15.0 0.01-0.50 0.01-0.50 0.0005-0.01 0.01-5.0 0.01-0.5 0.01-0.5
230	GOST 1762.1 clause 1 GOST 11739.7 clause 5	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Si	1.0-15.0 0.3-25.0

1	2	3	4	5	6	7
231	GOST 1762.1 clause 2 GOST 11739.7 clause 4 GOST 12697.6	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Si	1.0-15.0 0.02-1.0 0.0005-1.0
232	GOST 11739.7 clause 6	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Si	0.1-25.0
233	GOST 1762.2 clause 1 GOST 11739.6 clause 4 GOST 12697.7 clause A	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Fe	0.15-1.0 0.01-2.0 0.0004-1.0
234	GOST 1762.2 clause 5 GOST 11739.6 clause 5 GOST 12697.7 clause B	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Fe	0.15-1.0 0.005-2.0 0.005-1.0
235	GOST 1762.3 clause 1 GOST 1762.3 clause 5	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Ca	0.03-0.30
236	GOST 1762.3-71 clause 8 GOST 12697.14	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Ca	0.03-0.30 0.005-0.2

1	2	3	4	5	6	7
237	GOST 1762.4 clause 1 GOST 11739.20 GOST 12697.10	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Ti	0.005-0.25 0.003-0.4 0.0003-0.2
238	GOST 1762.4 clause 5	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Ti	0.10-0.25
239	GOST 1762.5 clause 1 GOST 11739.12 clause 4 GOST 12697.3 clause A	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Mn	0.005-0.80 0.005-2.0 0.001-0.015
240	GOST 1762.5 clause 5 GOST 11739,12 clause 5 GOST 12697.3 clause B	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Mn	0.005-0.80 0.005-2.0 0.005-0.015
241	GOST 1762.6 clause 2 GOST 11739.13 clause 6 GOST 12697.8 clause 2	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Cu	0.001-0.04 0.002-0.8 0.0002-0.08
242	GOST 1762.6 clause 4 GOST 11739.13 clause 7	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Cu	0.005-0.10 0.005-8.0

1	2	3	4	5	6	7
243	GOST 1762.7 clause 2 GOST 12697.9 clause 3	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Zn	0.004-0.09 0.0002-0.15
244	GOST 1762.7 clause 4 GOST 11739.24 clause 5 GOST 12697.9 clause 5	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Zn	0.01-0.075 0.01-6.0 0.001-0.02
245	GOST 11739.24 clause 4	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Zn	0.1-12.0
246	GOST 11739.1	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Al <sub>2</sub> O <sub>3</sub>	0.002-1.0
247	GOST 11739.2	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % B	0.001-0.50
248	GOST 11739.3 clause 4	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Be	0.001-1.0

1	2	3	4	5	6	7
249	GOST 11739.4 clause 2 GOST 11739.4 clause 3	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Bi	0.005-0.8 0.05-1.0
250	GOST 11739.5 clause 2 GOST 12697.1	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % V	0.005-0.5 0.002-0.03
251	GOST 11739.5 clause 3	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % V	0.05-0.5
252	GOST 11739.8	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % K	0.001-0.05
253	GOST 11739.9	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Cd	0.01-1.0
254	GOST 11739.10	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Li	0.05-3.0

1	2	3	4	5	6	7
255	GOST 11739.11 clause 4	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Mg	0.1-13.0
256	GOST 11739.11 clause 5 GOST 12697.2 clause 3	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Mg	0.01-13.0 0.001-0.02
257	GOST 12697.2 clause 2	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Mg	0.001-0.02
258	GOST 11739.14 GOST 12697.12 clause 2	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % As	0.002-0.04 0.0004-0.04
259	GOST 11739.15 GOST 12697.4	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Na	0.002-0.05 0.001-0.05
260	GOST 11739.16 clause 2 GOST 11739.16 clause 3 GOST 11739.16 clause 4	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Ni	0.5-8.0 0.005-3.0 0.005-8.0

1	2	3	4	5	6	7
261	GOST 11739.17 clause 2 GOST 11739.17 clause 3	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Sn	0.005-0.1 0.01-1.0
262	GOST 11739.18	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Pb	0.01-1.5
263	GOST 11739.19 clause 2 GOST 11739 clause 3	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Sb	0.0002-0.01 0.01-0.3
264	GOST 11739.21 clause 2 GOST 11739.21 clause 5	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Cr	0.1-1.0 0.01-1.0
265	GOST 11739.21 clause 3, clause 4 GOST 12697.5	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Cr	0.001-1.0 0.0002-0.10
266	GOST 11739.23 clause 4, clause 5 GOST 11739.23 clause 6	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Zr	0.002-0.5 0.5-3.0



1	2	3	4	5	6	7
267	GOST 11739.25 clause 2 GOST 11739.25 clause 3	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Sc	0.02-2.0 0.1-5.0
268	GOST 11739.26 clause 2 GOST 12697.13 clause 2	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Ga	0.001-0.1 0.001-0.1
269	GOST 11739.26 clause 3 GOST 12697.13 clause 3	Aluminium, aluminium foil, wrought aluminum alloys, cast alloys, ingots, pigs, sheets, tapes, bars, profiles and other products thereof	—	—	Weight percentage, % Ga	0.05-1.0 0.01-0.1
270	GOST 23902	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Al V Mo Zr Sn Mn Fe Cr Si C	0.005-8.0 0.01-6.0 0.01-6.0 0.01-6.0 0.005-4.0 0.001-3.0 0.01-2.0 0.005-3.5 0.005-0.70 0.003-0.20
271	GOST 9853.3	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % C	0.003-0.2
272	GOST 9853.2 GOST 19863.5 clause 2	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Fe	0.002-2.0 0.01-2.0
273	GOST 19863.5 clause 3	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Fe	0.01-5.0
274	GOST 19863.1 clause 2 GOST 19683.1 clause 3	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Al	0.20-10.0 0.10-10.0
275	GOST 9853.7	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Al	0.005-1.0

1	2	3	4	5	6	7
276	GOST 9853.9 GOST 19863.6 clause 2	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Si	0.005-0.12 0.04-0.50
277	GOST 19863.6 clause 3	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Si	0.10-0.50
278	GOST 9853.10	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Nb Ta	0.002-0.01 0.001-0.005
279	GOST 19863.9 clause 2 GOST 19863.9 clause 3	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Nb	0.10-5.0 0.5-5.0
280	GOST 19863.11	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Pd	0.05-1.0
281	GOST 9853.11 GOST 19863.14 clause 2	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Cu	0.0005-0.2 0.01-0.40
282	GOST 19863.14 clause 3	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Cu	0.01-5.0
283	GOST 9853.12 GOST 19863.13 clause 3	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Zr	0.001-1.0 0.02-0.50
284	GOST 19863.13 clause 2 GOST 19863.13 clause 4	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Zr	0.50-20.0
285	GOST 9853.13	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Sn	0.005-0.02
286	GOST 19863.10 clause 2 GOST 19863.10 clause 3	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Sn	0.5-6.0
287	GOST 9853.14	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Mg	0.001-0.1
288	GOST 9853.15 GOST 19863.8 clause 2	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Mo	0.0005-0.10 0.01-15.0
289	GOST 19863.8 clause 4 GOST 19863.8 clause 3	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Mo	28.0-36.0 0.05-15.0
290	GOST 9853.16 GOST 19863.4 clause 2	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % W	0.005-0.50 0.10-6.0
291	GOST 19863.4 clause 4	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % W	0.50-6.0
292	GOST 9853.18 GOST 19863.7 clause 2	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Mn	0.0005-0.10 0.02-2.5

1	2	3	4	5	6	7
293	GOST 19863.7 clause 3	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Mn	0.01-2.5
294	GOST 9853.19	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Cr	0.003-0.20
295	GOST 19863.12 clause 2 GOST 19863.12 clause 3	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Cr	0.10-12.0
296	GOST 9853.20	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % V	0.002-0.5
297	GOST 19863.2 clause 2 GOST 19863.2 clause 3	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % V	0.10-6.0 0.10-6.0
298	GOST 9853.22 clause 4 GOST 9853.22 clause 5	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Ni	0.005-0.15 0.001-0.01
299	GOST 19863.15	Titanium, titanium alloys and products thereof	—	—	Weight percentage, % Ti	40.0-50.0
300	GOST 851.1 clause 2 GOST 3240.20 clause 2	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Fe	0.002-0.060 0.001-0.20
301	GOST 851.1-93 clause 3 GOST 3240.20 clause 3	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Fe	0.0005-0.060 0.01-0.20
302	GOST 851.2 GOST 3240.8	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Si	0.006-0.060 0.003-0.60
303	GOST 851.3 clause 2 GOST 3240.15	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Ni	0.0003-0.0030 0.0005-0.40
304	GOST 851.3 clause 3	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Ni	0.0005-0.0060
305	GOST 851.4 clause 2 GOST 3240.12 clause 2	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Cu	0.0003-0.05 0.001-0.8
306	GOST 851.4 clause 3 GOST 3240.12 clause 3	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Cu	0.0005-0.05 0.001-0.8
307	GOST 851.5 clause 2 GOST 3240.1 clause 2	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Al	0.0002-0.060 0.003-0.40
308	GOST 851.5 clause 3 GOST 3240.1 clause 3	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Al	0.001-0.060 0.50-12.0
309	GOST 3240.1 clause 2	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Al	0.50-12.0
310	GOST 851.6 clause 2 GOST 3240.2 clause 2	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Mn	0.001-0.10 0.01-0.2

1	2	3	4	5	6	7
311	GOST 851.6 clause 3 GOST 3240.2 clause 3	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Mn	0.0005-0.050 0.01-3.0
312	GOST 3240.2 clause 2	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Mn	0.20-3.0
313	GOST 851.8	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Na K	0.001-0.02
314	GOST 3240.10	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Li	10.0-25.0
315	GOST 3240.11	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % K	0.002-0.02
316	GOST 3240.13	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Na	0.001-0.05
317	GOST 3240.14	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Nd	1.0-5.0
318	GOST 851.9 clause 2 GOST 3240.18	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Ti	0.0005-0.020 0.001-0.02
319	GOST 851.9 clause 3	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Ti	0.0005-0.020
320	GOST 851.11	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Sn	0.001-0.030
321	GOST 851.12	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Pb	0.0005-0.01
322	GOST 3240.3	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Zn	0.02-8.0
323	GOST 3240.5 clause 2 GOST 3240.5 clause 3	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Zr	0.05-1.5 0.001-0.02
324	GOST 3240.6	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Cd	0.02-2.0
325	GOST 3240.7	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % Ca	0.01-0.2
326	GOST 3240.17 clause 2 GOST 3240.17 clause 3	Magnesium, magnesium alloys and products thereof	—	—	Weight percentage, % g	0.50-2.0

1	2	3	4	5	6	7
327	GOST 31382	Copper, copper alloys and products thereof	—	—	Weight percentage, % As Sn Pb Fe S P Ni Zn Mn Sb	0.001-0.03 0.001-0.09 0.001-0.06 0.001-0.08 0.001-0.03 0.001-0.09 0.001-0.30 0.001-0.006 0.001-0.003 0.001-0.09
328	GOST 9716.2	Copper, copper alloys and products thereof	—	—	Weight percentage, % As Al Si Mn Sn Ni Fe Pb Sb	0.003-0.06 0.01-4.0 0.004-1.0 0.009-3.7 0.01-1.6 0.05-1.5 0.01-1.5 0.008-3.5 0.001-0.05
329	GOST 20068.2	Copper, copper alloys and products thereof	—	—	Weight percentage, % As Al Si Mn Sn Zn Ni Fe Pb	0.001-0.15 0.01-0.40 0.05-0.50 0.02-2.5 0.03-0.50 0.05-2.0 0.10-2.0 0.03-1.5 0.002-0.40
330	GOST 1652.1	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Cu	from 45.0
331	GOST 1652.2 clause 2 GOST 1953.2 clause 3 GOST 15027.7 clause 2	Copper, copper and copper-zink alloys, products thereof x	—	—	Weight percentage, % Pb	0.5-5.0 1.0-30.0 0.8-65.0
332	GOST 1652.2 clause 4 GOST 15027.7 clause 5	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Pb	0.005-1.0 0.001-0.5

1	2	3	4	5	6	7
333	GOST 1652.2 clause 5 GOST 1953.2 clause 5 GOST 15027.7 clause 6 GOST 31382 clause 11	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Pb	0.005-5.0 0.002-12.0 0.002-12.0 0.0005-0.06
334	GOST 1652.3 clause 2 GOST 15027.3 clause 2	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Fe	1.0-5.0 0.4-7.0
335	GOST 1652.3 clause 3, clause 4 GOST 1953.7 clause 2, clause 3 GOST 6674.5 clause 2 GOST 15027.3, clause 5 GOST 23859.5 GOST 31382 clause 8.3	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Fe	0.01-2.0 0.0025-0.60 0.01-0.50 0.01-1.0 0.01-0.06 0.0005-0.100
336	GOST 1652.3 clause 5 GOST 6674.5 clause 3 GOST 15027.3 clause 6 GOST 31382 clause 8.4	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Fe	0.1-5.0 0.05-0.20 0.01-7.0 0.0008-0.6
337	GOST 1652.4 clause 2 GOST 15027.4 clause 2	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Mn	0.5-7.0 0.5-6.0
338	GOST 15027.4 clause 4	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Mn	8.0-16.0
339	GOST 1652.4 clause 3 GOST 1953.13 GOST 15027.4 clause 3	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Mn	0.01-4.0 0.05-0.30 0.01-3.5
340	GOST 1652.4 clause 4 GOST 15027.2	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Mn	0.01-5.0 0.01-6.0
341	GOST 1652.5 clause 2 GOST 15027.10 GOST 31382 clause 12	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Sn	0.001-0.7 0.01-0.5 0.0005-0.08
342	GOST 1652.5 clause 6 GOST 1953.3 clause 4 GOST 15027.10	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Sn	0.005-5.0 0.25-12.0 0.01-0.5
343	GOST 1953.3 clause 2	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Sn	0.5-12.0
344	GOST 1953.3 clause 3	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Sn	0.5-12.0

1	2	3	4	5	6	7
345	GOST 1652.6 clause 2, clause3 GOST 1953.10 GOST 6674.3 GOST 15027.9 clause 2 GOST 31382 clause 14.3	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Sb	0.001-0.30 0.001-0.60 0.001-0.20 0.001-0.65 0.0005-0.10
346	GOST 1652.6 clause 5 GOST 1953.10 GOST 15027.9 clause 3 GOST 31382 clause 14.4	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Sb	0.001-0.20 0.001-0.60 0.001-0.6 0.0005-0.10
347	GOST 1652.7 clause 2a, clause 5 GOST 1953,11 clause 2a GOST 31382 clause 15.3	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Bi	0.005-0.05 0.001-0.02 0.0003-0.02
348	GOST 1652.7 clause 6 GOST 1953 clause 5 GOST 6674.4 GOST 31382 clause 15.4	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Bi	0.005-0.05 0.001-0.02 0.008-0.02 0.0003-0.005
349	GOST 1652.8 clause 2, clause 4 GOST 1953.15 GOST 15027.8 clause 2	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % As	0.001-0.20 0.01-0.15 0.001-0.4
350	GOST 15027.8 clause 3	Copper, copper alloys and products thereof	—	—	Weight percentage, % As	0.005-0.4
351	GOST 1652.9 GOST 1953.12 GOST 31382 clause 6	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % S	0.001-0.05 0.001-0.10 0.0002-0.050
352	GOST 1652.10 clause 2	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Al	0.5-8.0
353	GOST 1652.10 clause 3 GOST 1953.8 clause 2 GOST 15027.2 clause 2	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Al	0.005-0.5 0.001-0.25 0.005-0.25
354	GOST 1652.10 clause 4 GOST 1953.8 clause 3 GOST 15027.2 clause 3	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Al	0.01-8.0 0.01-0.25 0.01-13.0
355	GOST 15027.2 clause 5	Copper, copper alloys and products thereof	—	—	Weight percentage, % Al	3.0-13.0
356	GOST 1652.11 clause 3 GOST 1953.5 clause 2 GOST 15027.5 clause 2	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Ni	0.5-7.0 0.9-2.5 0.5-35.0

1	2	3	4	5	6	7
357	GOST 1652.11 clause 2 GOST 1953.5 clause 3 GOST 15027.5 clause 3 GOST 23859.6 GOST 31382 clause 10.3	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Ni	0.01-7.0 0.05-2.5 0.05-7.0 0.40-0.90 0.0005-0.50
358	GOST 1652.11 clause 3 GOST 31382 clause 10.4	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Ni	0.01-7.0 0.0005-0.40
359	GOST 1652.12 clause 2 GOST 15027.6 clause 2 GOST 23859.2 clause 2	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Si	1.0-5.0 0.5-4.0 0.2-0.8
360	GOST 1652.12 clause 3 GOST 1953.9 GOST 15027.6 clause 3 GOST 23859.2 clause 3	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % Si	0.05-1.0 0.001-0.30 0.01-0.3 0.005-0.06
361	GOST 1652.13 GOST 1953.4 GOST 6674.1 GOST 15027.11 GOST 23859.4 GOST 31382 clause 7	Copper, copper and copper-zink alloys, products thereof	—	—	Weight percentage, % P	0.002-0.10 0.005-1.2 5.0-14.0 0.001-1.2 0.005-0.012 0.0003-0.06
362	GOST 24978 clause 2 GOST 1953.6 clause 2 GOST 15027.12 clause 2	Copper, copper alloys and products thereof	—	—	Weight percentage, % Zn	3.0-45.0 1.5-30.0 0.2-2.0
363	GOST 24978 clause 3 GOST 1953.6 clause 3 GOST 15027.12 clause 3 GOST 31382 clause 9	Copper, copper alloys and products thereof	—	—	Weight percentage, % Zn	3.0-10.0 0.1-10.0 0.01-10.0 0.0005-0.006
364	GOST 1953.14 GOST 15027.20 clause 2	Copper, copper alloys and products thereof	—	—	Weight percentage, % Mg	0.005-0.05 0.05-0.6
365	GOST 15027.20 clause 3	Copper, copper alloys and products thereof	—	—	Weight percentage, % Mg	0.05-0.6
366	GOST 1953.16 GOST 15027.14 clause 2 GOST 23859.10	Copper, copper alloys and products thereof	—	—	Weight percentage, % Ti	0.02-0.20 0.05-0.3 0.02-0.09
367	GOST 15027.14 clause 3	Copper, copper alloys and products thereof	—	—	Weight percentage, % Ti	0.05-0.3
368	GOST 15027.13	Copper, copper alloys and products thereof	—	—	Weight percentage, % Be	1.5-2.5



1	2	3	4	5	6	7
369	GOST 15027.15 clause 2 GOST 23859.9	Copper, copper alloys and products thereof	—	—	Weight percentage, % Co	0.01-0.60 1.0-2.0
370	GOST 15027.15 clause 3	Copper, copper alloys and products thereof	—	—	Weight percentage, % Co	0.01-0.60
371	GOST 15027.16	Copper, copper alloys and products thereof	—	—	Weight percentage, % Cd	0.1-1.5
372	GOST 15027.17 GOST 31382 clause 13.4	Copper, copper alloys and products thereof	—	—	Weight percentage, % Ag	0.02-2.5 0.0010-0.02
373	GOST 31382 clause 13.3	Copper, copper alloys and products thereof	—	—	Weight percentage, % Ag	0.0010-0.02
374	GOST 15027.18	Copper, copper alloys and products thereof	—	—	Weight percentage, % Cr	0.20-1.5
375	GOST 23859.3	Copper, copper alloys and products thereof	—	—	Weight percentage, % Cr	0.15-0.90
376	GOST 15027.19 clause 2 GOST 15027.19 clause 3	Copper, copper alloys and products thereof	—	—	Weight percentage, % Te	0.2-1.0
377	GOST 23859.8	Copper, copper alloys and products thereof	—	—	Weight percentage, % Zr	0.005-0.30
378	GOST 23859.11	Copper, copper alloys and products thereof	—	—	Weight percentage, % Cr Ni Co Fe Zn Mg Ti	0.1-1.3 0.005-3.0 0.1-2.0 0.005-0.8 0.0008-0.03 0.0005-0.06 0.02-2.0
379	GOST 13047.3	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Co	from 98,8
380	GOST 13047.4 clause 4 GOST 6689.9 clause 2	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Co	0.001-1.0 0.02-1.5
381	GOST 13047.4 clause 5 GOST 6689.9 clause 3	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Co	0.001-1.0 0.02-1.5

1	2	3	4	5	6	7
382	GOST 13047.2	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Ni	from 98.8
383	GOST 6689.2 clause 2	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Ni	from 0.5
384	GOST 6689.2 clause 3	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Ni	from 0.5
385	GOST 13047.5 clause 4	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Ni	0.001-0.60
386	GOST 13047.5 clause 5 GOST 6689.2 clause 4	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Ni	0.001-0.60 0.50-7.0
387	GOST 6689.14 clause 2	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Cr	8.0-11.0
388	GOST 6689.14 clause 3	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Cr	8.0-11.0
389	GOST 13047.6 GOST 6689.10 GOST 24018.7	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % C	0.003-0.50 0.002-0.30 0.001-0.10
390	GOST 13047.7 GOST 6689.18 GOST 24018.8-80	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % S	0.0005-0.050 0.001-0.05 0.001-0.02
391	GOST 13047.8 GOST 6689.7 clause 3	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Si	0.0003-0.05 0.001-0.3

1	2	3	4	5	6	7
392	GOST 6689.7 clause 2	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Si	0.10-1.6
393	GOST 13047.9 GOST 6689.19 clause 2	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % P	0.0002-0.005 0.0005-0.05
394	GOST 13047.10 clause 4 GOST 6689.1 clause 5 GOST R 51576 clause 4	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Cu	0.0002-2.0 0.005-0.60 0.005-0.10
395	GOST 13047.10 clause 5 GOST 6689.1 clause 6 GOST R 51576 clause 5	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Cu	0.0002-2.0 0.005-0.60 0.01-6.0
396	GOST 13047.11 GOST 6689.4 clause 5	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Zn	0.002-0.010 0.001-0.60
397	GOST 6689.4 clause 2	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Zn	17.0-30.0
398	GOST 13047.12 clause 5 GOST 6689.15 clause 5	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Sb	0.0001-0.0020 0.001-0.05
399	GOST 13047.12 clause 4 GOST 6689.15 clause 2 GOST 24018.2 clause 2, clause 3	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Sb	0.0001-0.0020 0.0005-0.01 0.0002-0.01
400	GOST 13047.13 clause 4 GOST 6689.20 clause 5 GOST 24018.3 clause 3	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Pb	0.0001-0.01 0.002-0.02 0.0002-0.01
401	GOST 24018.3 clause 2	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Pb	0.0005-0.01

1	2	3	4	5	6	7
402	GOST 6689.20 clause 2	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Pb	1.0-2.5
403	GOST 13047.14 clause 4 GOST 6689.17 clause 2 GOST 24018.4 clause A	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Bi	0.0001-0.01 0.0005-0.02 0.0005-0.01
404	GOST 13047.14 clause 5 GOST 6689.17 clause 4 GOST 24018.4 clause B	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Bi	0.0001-0.01 0.001-0.02 0.0002-0.01
405	GOST 13047.15 clause 4 GOST 6689.22 clause 4 GOST 24018.1 clause 3	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Sn	0.0001-0.0020 0.01-0.25 0.0002-0.01
406	GOST 6689.22 clause 2 GOST 24018.1 clause 2	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Sn	0.0005-0.25 0.001-0.01
407	GOST 13047.17 clause 4 GOST 6689.5 clause 2	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Fe	0.001-1.0 0.001-0.10
408	GOST 13047.17 clause 5 GOST 6689.5 clause 4	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Fe	0.001-1.0 0.004-6.5
409	GOST 6689.5 clause 3	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Fe	0.40-6.5
410	GOST 13047.18 clause 4 GOST 6689.13 clause 2 GOST 24018.6 clause 2	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % As	0.0001-0.01 0.0005-0.05 0.001-0.01
411	GOST 13047.18 clause 5 GOST 6689.13 clause 4 GOST 24018.6 clause 3	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % As	0.0001-0.01 0.005-0.05 0.0001-0.005

1	2	3	4	5	6	7
412	GOST 13047.19 clause 4 GOST 6689.8 clause 4	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Al	0.0001-0.01 0.01-3.5
413	GOST 6689.8 clause 3	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Al	0.005-0.50
414	GOST 6689.8 clause 2	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Al	1.0-3.5
415	GOST 13047.20 GOST 6689.12 clause 3	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Mg	0.0002-0.003 0.002-0.20
416	GOST 6689.12 clause 2	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Mg	0.005-0.20
417	GOST 13047.21 clause 5 GOST 6689.6 clause 4	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Mn	0.0003-0.30 0.001-6.0
418	GOST 13047.21 clause 4 GOST 6689.6 clause 3	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Mn	0.0003-0.30 0.001-1.5
419	GOST 6689.6 clause 2	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Mn	0.5-15.0
420	GOST 6689.11	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % W	2.0-4.0
421	GOST 6689.21 clause 2 GOST R 51013	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Ti	0.05-0.40 0.15-5.0

1	2	3	4	5	6	7
422	GOST 6689.21 clause 3	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Ti	0.05-0.40
423	GOST 6689.24	Metallic cobalt, metallic nickel and nickel alloys and products thereof	—	—	Weight percentage, % Ca	0.03-0.20
424	GOST 19251.1 clause 2 GOST 25284.6-95 clause 5 GOST 25284.6-95 clause 6	Zink, zink alloys, products thereof	—	—	Weight percentage, % Fe	0.001-0.20 0.01-0.40
425	GOST 25284.6 clause 4	Zink, zink alloys, products thereof	—	—	Weight percentage, % Fe	0.01-0.40
426	GOST 23957.2	Zink, zink alloys, products thereof	—	—	Weight percentage, % Sn	0.0005-0.06
427	GOST 25284.7 GOST 19251.5 clause 2	Zink, zink alloys, products thereof	—	—	Weight percentage, % Sn	0.0005-0.05 0.0005-0.06
428	GOST 19251.3	Zink, zink alloys, products thereof	—	—	Weight percentage, % Cu	0.0005-0.08
429	GOST 25284.2 clause 4	Zink, zink alloys, products thereof	—	—	Weight percentage, % Cu	0.005-8.0
430	GOST 25284.2 clause 5	Zink, zink alloys, products thereof	—	—	Weight percentage, % Cu	0.5-6.0
431	GOST 25284.3 clause 4	Zink, zink alloys, products thereof	—	—	Weight percentage, % Mg	0.005-0.10
432	GOST 25284.3 clause 5	Zink, zink alloys, products thereof	—	—	Weight percentage, % Mg	0.01-0.10
433	GOST 19251.4	Zink, zink alloys, products thereof	—	—	Weight percentage, % As	0.001-0.03
434	GOST 19251.6 clause 2 GOST 19251.6 clause 3	Zink, zink alloys, products thereof	—	—	Weight percentage, % Sb	0.0005-0.025
435	GOST 25284.1 clause 4	Zink, zink alloys, products thereof	—	—	Weight percentage, % Al	3.0-13.0
436	GOST 19251.7 clause 6 GOST 25284.1 clause 6	Zink, zink alloys, products thereof	—	—	Weight percentage, % Al	0.002-0.03 3.0-12.5
437	GOST 19251.7 clause 5 GOST 25284.1 clause 5	Zink, zink alloys, products thereof	—	—	Weight percentage, % Al	0.002-0.03 3.0-13.0

1	2	3	4	5	6	7
438	GOST 23957.1	Zink, zink alloys, products thereof	—	—	Weight percentage, % Pb Cd Sb Fe Cu	0.002-3.0 0.001-0.3 0.01-0.05 0.001-0.20 0.0005-0.70
439	GOST 25284.4 clause 4	Zink, zink alloys, products thereof	—	—	Weight percentage, % Pb	0.002-0.05
440	GOST 25284.4 clause 5	Zink, zink alloys, products thereof	—	—	Weight percentage, % Pb	0.0025-0.05
441	GOST 25284.5 clause 4	Zink, zink alloys, products thereof	—	—	Weight percentage, % Cd	0.001-0.03
442	GOST 25284.5 clause 5	Zink, zink alloys, products thereof	—	—	Weight percentage, % Cd	0.001-0.03
443	GOST 25284.8	Zink, zink alloys, products thereof	—	—	Weight percentage, % Si	0.005-0.1

1	2	3	4	5	6	7
444	GOST 5981 clause 9.1	Cans and metal caps thereto for tinned foods	—	—	Geometrical dimensions.	Conforms/does not conform
	Clause 9.2				Appearance,	Conforms/does not conform
	Clause 9.6				Presence of sealing paste, Quality of longitudinal seam	Conforms/does not conform
	Clause 9.2				Quality of paint coating at inner surface of cans and caps,	Conforms/does not conform
	Clause 9.2				Tenacity of inner surface when sterilized in model media.	Conforms/does not conform
	Appendix A.4				Presence of foreign smell and taste after sterilization in distilled water, Tenacity of paint coating at external surface when sterilized in drinking water Permissible amount of chemical substances migration to model medium, mg/l: Al Fe Cu Pb Ti Cr Zn	Test is passed/not passed  Acceptable/not acceptable  Test is passed/not passed  0.05-5.0 0.1-5.0 0.005-5.0 0.005-10.0 0.005-1.0 0.01-10.0 0.005-1.0
Appendix A.4						
Appendix C GN 2.3.3.972 Appendix 2						
445	GOST 13345 Appendix 2	Tin-plate	—	—	Class of tin coatings	Class 1-3 Class D1-D3



1	2	3	4	5	6	7
446	GOST R 51687 Clause 7.1 Clause 7.14 Clause 7.16 GN 2.3.3.972 Appendix 2	Table-ware and kitchen utensils made of corrosion resistant steel	—	—	Holding of products parts, elements and armature. Corrosion resistance  Permissible amount of chemical substances migration to model medium, mg/l: Cu Zn Al Pb Ni Cr	Test is passed/not passed Test is passed/not passed  0.005-5.0 0.005-1.0 0.05-5.0 0.005-10.0 0.01-5.0 0.01-10.0
447	GOST 27002 Clause 5.6  Clause 5.17 Clause 5.3 Clause 5.18 GN 2.3.3.972 Appendix 2	Dishware made of corrosion resistant steel	—	—	Knobs holding strength  Corrosion resistance  Thickness, mm  Permissible amount of chemical substances migration to model medium, mg/l: Pb Cu Zn Ni Cr	Presence/absence of permanent deformation, weakening of holding to body Test is passed/not passed Conforms/does not conform  0.005-10.0 0.005-5.0 0.005-1.0 0.01-5.0 0.01-10.0

1	2	3	4	5	6	7
448	GOST 17151 Clause 4.1 Clause 4.14.4 Clause 4.14.5 Clause 4.14.3 Clause 4.14.2 Clause 4.13.5 GN 2.3.3.972 Appendix 2	Household dishware made of aluminium sheet	—	—	Testing of non-stick coating:  Color variation  Thermal resistance  Inadhesion of food products Coating integrity  Adhesion to metal  Permissible amount of chemical substances migration to model medium, mg/l: Pb Cu As Zn B Ni Co	Is absent/present Test is passed/not passed Test is passed/not passed Test is passed/not passed Test is passed/not passed      0.005-10.0 0.005-5.0 0.005-1.0 0.005-1.0 0.005-1.0 0.01-5.0 0.01-5.0

1	2	3	4	5	6	7
449	GOST R51162 Clause 7.1 Clause 7.10 Clause 7.11 Clause 7.12 Clause 7.4 GN 2.3.3.972 Appendix 2	Molded aluminum dishware	—	—	Testing of external paint coating: Coating smoothness Thermal resistance Mechanical resistance Chemical resistance Permissible amount of chemical substances migration to model medium, mg/l: Pb Cu As Zn B	Test is passed/not passed Test is passed/not passed Test is passed/not passed Test is passed/not passed 0.005-10.0 0.005-5.0 0.005-1.0 0.005-1.0 0.005-1.0
450	GOST R 51243 Clause 6.2 Clause 6.2 Clause 6.2 Clause 6.11 Clause 6.15 Clause 6.21 Clause 6.23 Clause 6.24	Shaving systems for wet shaving	—	—	Coating appearance Coating thickness Safety of shaving systems and their elements Blade hardness, HV Resistance to effect of weakly alkaline medium Design requirements Faces of blade flanges Interchangeability of shaving systems elements	Conforms/does not conform Conforms/does not conform Conforms/does not conform Not less than 550 units Test is passed/not passed Test is passed/not passed Conforms/does not conform Ensures/does not ensure

1	2	3	4	5	6	7
451	GOST 745 Clause 7.1 Appendix E Appendix G GN 2.3.3.972 2	Aluminium foil for package	—	—	Appearance Wetability Adhesion Permissible amount of chemical substances migration to model medium, mg/l Al Mn Fe Cu Zn Ti V	Conforms/does not conform Conforms/does not conform Test is passed/not passed  0.05-5.0 0.01-2.0 0.1-5.0 0.005-5.0 0.005-1.0 0.005-1.0 0.005-10.0
452	GOST R 51268 Clause 6.4 Clause 6.5 Clause 6.7 Clause 6.1	Scissors	—	—	Holding strength of blades with handles Functional properties  Protective and decorative coating Appearance of handles and rings	Conforms/does not conform Test is passed/not passed Conforms/does not conform Conforms/does not conform
Metallographic studies						
453	GOST 801	Roller-bearing steel	—	—	Assessment of nonmetallic impurity rating Assessment of microstructure: carbide network carbide liquation structural banded orientation annealed steel microporosity	(1-4) grade  (1-5) grade (1-5a) grade (1-5) grade (1-10) grade (1-5a) grade

1	2	3	4	5	6	7
454	GOST 1435	Unalloyed chisel steel	—	—	Assessment of microstructure: hardenability perlite cementite network	(0-V) grade (1-10) grade (1-5) grade
455	GOST 1763	Construction carbon and alloy steel with at least 0.3% carbon content; chisel carbon and alloy steel, spring, roller-bearing and high-speed steel	—	—	Finding of decarburized layer depth	(0.01-50) micrometers
456	GOST 1778	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including armature, tubes, rails, wire, bars, strips, etc.)	—	—	Assessment of steel nonmetallic impurity rating	(0.5-5) grade
457	GOST 3443	Unalloyed and low-alloy cast iron	—	—	Assessment of graphite: PGd15 PGd 25 PGd 45 PGd 90 PGd 180 PGd 350 PGd 750 PGd 1000 ShGd15; KGd15 ShGd 25; KGd 25 ShGd 45; KGd 45 ShGd 90; KGd 90 ShGd 180; KGd 180 ShGd 360; KGd 360 PG2, ShG2 PG 4, ShG4 PG 6, ShG6 PG 10, ShG10 PG 12, ShG12 VG100 VG98 VG92 VG85 VG70	up to 15 micrometers 15-30 micrometers 30-60 micrometers 60-120 micrometers 120-250 micrometers 250-500 micrometers 500-1000 micrometers from 1000 micrometers from 15 micrometers 15-30 micrometers 30-60 micrometers 60-120 micrometers 120-250 micrometers 250-500 micrometers up to 3% 3-5% 5-8% 8-12% from 12% 0% up to 5% 5-10% 10-20% 20-40%

1	2	3	4	5	6	7
					Assessment of microstructure:	
					P	from 98%
					P96	94-98%
					P92	90-94%
					P85	80-90%
					P70	60-80%
					P45	30-60%
					P20	10-30%
					P6	2-10%
					P0	up to 2%
					F0	up to 2%
					F4	2-6%
					F8	6-10%
					F15	10-20%
					F30	20-40%
					F55	40-70%
					F80	70-90%
					F94	90-98%
					F	from 98%
					PD0.3	up to 0.3 micrometers
					PD0.5	0.3-0.8 micrometers
					PD1.0	0.8-1.3 micrometers
					PD1.4	1.3-1.6 micrometers
					PD1.6	from 1.6 micrometers
					FEd250	up to 250 micrometers
					FEd400	250-500 micrometers
					FEd650	500-750 micrometers
					FEd1000	750-1250 micrometers
					FEd1250	from 1250 micrometers
					FEd2000	up to 2000 micrometers <sup>2</sup>
					FEd6000	2000-10000 micrometers <sup>2</sup>
					FEd13000	10000-16000 micrometers <sup>2</sup>
					FEd20000	16000-20000 micrometers <sup>2</sup>
					FEd25000	from 25000 micrometers <sup>2</sup>
					Ts2	up to 2%
					Ts4	2-5%
					Ts10	5-15%
					Ts25	15-40%
					Ts40	from 40%
					Tsp2000	up to 2000 micrometers <sup>2</sup>
						2000-10000 micrometers <sup>2</sup>

1	2	3	4	5	6	7
					Tsp6000 Tsp13000 Tsp20000 Tsp25000	10000-16000 micrometers <sup>2</sup> 16000-25000 micrometers <sup>2</sup> from 25000 micrometers <sup>2</sup>
458	GOST 5639	Steels and alloys	—	—	Measuring of austenite grain	from -3 to 14
459	GOST 5640	Low-carbon and carbon steel (sheets and taps)	—	—	Assessment of microstructure: free cementite perlite banded orientation of ferritic and perlitic structure Widmannstatten structure	(0-5) grade (0-5) grade  (0-5) grade (0-5) grade
460	GOST 5950	Chisel alloy steel (bars, strips, skeins)	—	—	Assessment of microstructure: chisel alloy steel carbide inhomogeneity carbide network size of austenite grain by fracture	(1-10) grade (1-10) grade (1-6) grade  number from 1 to 5
461	GOST 8233	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including armature, tubes, rails, wire, bars, strips, etc.)	—	—	Assessment of microstructure: lamellar perlite granular perlite martensite nitride impurity carbide network carbide inhomogeneity perlite and ferrite correlation  martensite and troostite correlation  granular perlite and lamellar perlite correlation	(1-10) grade (1-10) grade (1-10) grade (1-10) grade (1-6) grade (1-6) grade $(\frac{100}{0}\%$ of perlite / $\frac{0}{100}\%$ of ferrite) $(\frac{100}{0}\%$ of martensite / $\frac{0}{100}\%$ of troostite) $(\frac{100}{0}\%$ of granular perlite / $\frac{0}{100}\%$ of lamellar perlite)

1	2	3	4	5	6	7
462	GOST 10243	Low-alloy, alloy and high-alloy carbon steel, mill products and products thereof (including armature, tubes, rails, wire, bars, strips, etc.)	—	—	Assessment of macrostructure	presence/absence (1-5) grade
463	GOST 11878	Austenitic stainless steel and other steels of austenitic class	—	—	Assessment of ferritic phase content	(0,5-5) grade (1-48.5) %
464	GOST 19265	High-speed steel (bars and strips)	—	—	Assessment of microstructure: carbide inhomogeneity	(1-8) grade
465	GOST 21014	Unalloyed and alloy steels and alloys (bars, sheets, strips, taps, profiles, coils)	—	—	Assessment of surface defects	presence/absence
466	GOST 22838	Heat resisting alloys	—	—	Assessment of macrostructure	presence/absence
Mechanical tests						
467	GOST 9.302 clause 5.5	Metal and non-metal inorganic coatings made using electrochemical, chemical and hot (tin coating and tin alloys) methods	—	—	Coating adhesion strength	conforms/does not conform
468	GOST T 9.302 clause 5.6	Metal and non-metal inorganic coatings made using electrochemical, chemical and hot (tin coating and tin alloys) methods	—	—	Coating adhesion strength	conforms/does not conform
469	GOST 9.302 clause 5.9	Metal and non-metal inorganic coatings made using electrochemical, chemical and hot (tin coating and tin alloys) methods	—	—	Coating adhesion strength	conforms/does not conform
470	GOST 9.302 clause 15	Metal and non-metal inorganic coatings made using electrochemical, chemical and hot (tin coating and tin alloys) methods	—	—	Coating adhesion strength	conforms/does not conform
471	GOST 25.503	Ferrous and non-ferrous metals and alloys	—	—	Ultimate strength	0-1000 kN



1	2	3	4	5	6	7
472	GOST 1497	Ferrous and non-ferrous metals and products thereof	—	—	Ultimate proportionality Elastic modulus Yield limit Ultimate stress Percentage proportional elongation Tension set Percentage reduction of area	0-1000 kN
473	GOST 1545	Round wire made of metals and alloys with diameter from 0.20 to 10 mm and shaped wire with cross sectional areas corresponding to such diameters	—	—	Torsion value	from 1
474	GOST 1579	Wire made of metals and alloys with various forms of cross-section with diameter or characteristic dimension from 0.3 up to 10.0 mm	—	—	Bending value	from 1
475	GOST 2789	Products surfaces	—	—	Ra - surface average roughness; Rz – profile maximum height; Rmax - profile total height; Sm - average pitch of roughness; S - average pitch of local peaks of the profile; tp – relative profile bearing length	Ra – 0.008-100 micrometers Rz – 0.025-1600 micrometers Rmax – 0.025-1600 micrometers Sm – 0.002-12.5 micrometers S – 0.002-12.5 micrometers tp – 10-90 %
476	GOST 2999	Metals and alloys	—	—	Vickers hardness	4.95-2576 HV
477	GOST 3248	Ferrous and non-ferrous metals and alloys	—	—	Conventional creep limit	0-1000 kN

1	2	3	4	5	6	7
478	GOST 4765	Paint materials	—	—	Maximum height	conforms/does not conform
479	GOST 6032 clause 4	Metal products made of corrosion-resistant steels and alloys as well as their welded seams and weld metal	—	—	Intercrystalline corrosion resistance	conforms/does not conform
480	GOST 6032 clause 5	Metal products made of corrosion-resistant steels and alloys as well as their welded seams and weld metal	—	—	Intercrystalline corrosion resistance	conforms/does not conform
481	GOST 6032 clause 6	Metal products made of corrosion-resistant steels and alloys as well as their welded seams and weld metal	—	—	Intercrystalline corrosion resistance	conforms/does not conform
482	GOST 6032 appendix A	Metal products made of corrosion-resistant steels and alloys as well as their welded seams and weld metal	—	—	Intercrystalline corrosion resistance	conforms/does not conform
483	GOST 6032 appendix B	Metal products made of corrosion-resistant steels and alloys as well as their welded seams and weld metal	—	—	Intercrystalline corrosion resistance	conforms/does not conform
484	GOST 6130 clause 1.3	Steels, alloys and products thereof	—	—	Mass	0-200 g
485	GOST 6130 clause 1.4	Steels, alloys and products thereof	—	—	Mass	0-200 g
486	GOST 6130 clause 1.5	Steels, alloys and products thereof	—	—	Linear dimensions	0-250 mm
487	GOST 6996 clause 4	Welded seams, weld metal	—	—	Yield limit Ultimate stress Percentage proportional elongation Tension set Percentage reduction of area	0-1000 kN

1	2	3	4	5	6	7
488	GOST 6996 clause 5	Welded seams, weld metal	—	—	Impact energy Impact hardness	0-300 J
489	GOST 6996 clause 6	Welded seams, weld metal	—	—	Impact hardness	0-300 J
490	GOST 6996 clause 7	Welded seams, weld metal	—	—	Vickers hardness Brinell hardness Rockwell hardness	4,95-2576 HV 95,5-653 HB 20-70 HRC
491	GOST 6996 clause 8	Welded seams, weld metal	—	—	Ultimate stress Breaking point	0-1000 kN
492	GOST 6996 clause 9	Welded seams, weld metal	—	—	Bend angle	0-180°
493	GOST 6996 clause 10	Welded seams, weld metal	—	—	Specific impact energy	0-300 J
494	GOST 7268	Flat, strip, shaped and section stock	—	—	Impact energy Impact hardness	0-300 J
495	GOST 8695	Metal seamless and welded tubes with outer diameter of not more than 400 mm	—	—	Distance between parallels at the end of the test	conforms/does not conform
496	GOST 8817	Cold section stock and wires made of ferrous and non-ferrous metals	—	—	Deformation degree	conforms/does not conform
497	GOST 8818	Bars and finished rivets	—	—	Deformability of the metal	conforms/does not conform
498	GOST 9012	Metal with hardness of not more than 650 units	—	—	Brinell hardness	95,5-650 HB
499	GOST 9013	Metal	—	—	Rockwell hardness	70-100 HRA 60-100 HRB 20-70 HRC
500	GOST 9450 clause 1	Products and samples made of metals and alloys	—	—	Vickers hardness	4,95-2576 HV
501	GOST 9454	Ferrous and non-ferrous metals and alloys	—	—	Impact energy Impact hardness	0-300 J

1	2	3	4	5	6	7
502	GOST 9651	Ferrous and non-ferrous metals and products thereof	—	—	Yield limit Ultimate stress Percentage proportional elongation Tension set Percentage reduction of area	0-1000 kN
503	GOST 10006	Metal seamless, welded, composite tubes	—	—	Yield limit Ultimate stress Tension set Percentage reduction of area	0-1000 kN
504	GOST 10145	Ferrous and non-ferrous metals and alloys	—	—	Time to fracture Test duration Percentage extension Reduction of area after fracture	0-1000 kN
505	GOST 11150	Ferrous and non-ferrous metals and products thereof	—	—	Ultimate strength Yield limit Ultimate stress Percentage proportional elongation Tension set Percentage reduction of area	0-1000 kN

1	2	3	4	5	6	7
506	GOST 11701	Thin sheets and tapes made of ferrous and non-ferrous metals with thickness of up to 3.0 mm	—	—	Ultimate proportionality Elastic strength Yield limit Ultimate stress Percentage proportional elongation Tension set	0-1000 kN
507	GOST 12004	Reinforcing steel with round and deformed profile	—	—	Tension set Percentage proportional elongation Percentage reduction of area Ultimate stress Yield limit Elastic strength Elastic modulus	0-1000 kN
508	GOST 14019	Metal materials	—	—	Bend angle	0-180°
509	GOST 15140 clause 2	Paint coatings for metal surfaces	—	—	Coating strength	1-4 grades
510	GOST 15140 clause 3	Paint coatings for metal surfaces	—	—	Maximum height	conforms/does not conform
511	GOST 15140 clause 4	Paint coatings for metal surfaces	—	—	Coating strength	1-3 grades
512	GOST 18228	Sintered metal materials other than hard alloys	—	—	Transverse bending strength	0-1000 kN
513	GOST 19040	Metal seamless welded tubes with wall thickness of at least 0.2 mm	—	—	Yield limit Ultimate stress Tension set Percentage reduction of area	0-1000 kN

1	2	3	4	5	6	7
514	GOST 20017	Hard sintered alloys	—	—	Rockwell hardness	70-100 HRA
515	GOST 20019	Hard sintered alloys	—	—	Transverse bending strength	0-1000 kN
516	GOST 22975	Ferrous and non-ferrous metals and alloys	—	—	Rockwell hardness	0-100 HRN 0-100 HRT
517	GOST 23273	Metals, alloys and metal products	—	—	Shore hardness	0-140 HS
518	GOST 24167	Soldered joints of metals and alloys	—	—	Bend angle	0-180°
519	GOST 25172	Hard sintered alloys	—	—	Vickers hardness	1-50 HV
520	GOST 26528	Metal sintered (powder) materials	—	—	Impact energy Impact hardness	0-300 J
521	GOST 27034	Hard sintered alloys	—	—	Compressive yield limit Compressive ultimate strength	0-1000 kN
522	GOST 27208 clause 1	Iron castings	—	—	Ultimate stress Percentage extension	0-1000 kN
523	GOST 27208 clause 2	Iron castings	—	—	Ultimate stress	0-1000 kN
524	GOST 27208 clause 3	Iron castings	—	—	Ultimate stress	0-1000 kN
525	GOST 27208 clause 4	Iron castings	—	—	Brinell hardness	95,5-653 HB
526	GOST 28830	Soldered joints of metals and alloys	—	—	Ultimate stress	0-1000 kN
527	GOST 28830	Soldered joints of metals and alloys	—	—	Long-term strength	0-1000 kN
528	GOST 28870	Plate iron	—	—	Tension set Percentage reduction of area	0-1000 kN
529	GOST 29309	Paint coatings	—	—	Metal plate extrusion depth	conforms/does not conform

1	2	3	4	5	6	7
530	GOST 30456	of samples made of basic metal of steel tubes with diameter of 508 mm and more and flat stock for manufacture thereof	—	—	Quantity of ductile constituent	0-300 J
531	GOST R 52764	Metal sheets and tapes with thickness of 3 mm and less	—	—	Number of bends	from 1
532	GOST ISO 898-1 clause 9.1	Cap screws, screw nails and pins made of carbon and alloy steel	—	—	Ultimate strength Integrity of transition section between head and smooth stem or screw thread	0-1000 kN
533	GOST ISO 898-1 clause 9.2	Cap screws, screw nails and pins made of carbon and alloy steel	—	—	Ultimate strength	0-1000 kN
534	GOST ISO 898-1 clause 9.3	Cap screws, screw nails and pins made of carbon and alloy steel	—	—	Extension Conventional yield limit	0-1000 kN
535	GOST ISO 898-1 clause 9.4	Cap screws, screw nails and pins made of carbon and alloy steel	—	—	Breaking load	0-1000 kN
536	GOST ISO 898-1 clause 9.5	Cap screws, screw nails and pins made of carbon and alloy steel	—	—	Ultimate strength	0-1000 kN
537	GOST ISO 898-1 clause 9.6	Cap screws, screw nails and pins made of carbon and alloy steel	—	—	Screw strength	0-1000 kN
538	GOST ISO 898-1 clause 9.7	Cap screws, screw nails and pins made of carbon and alloy steel	—	—	Ultimate strength Lower yield limit or conventional yield limit Percentage extension Percentage reduction	0-1000 kN
539	GOST ISO 898-1 clause 9.9	Cap screws, screw nails and pins made of carbon and alloy steel	—	—	Vickers hardness Brinell hardness Rockwell hardness	4.95-2576 HV 95.5-653 HB 20-70 HRC

1	2	3	4	5	6	7
540	GOST ISO 898-1 clause 9.14	Cap screws, screw nails and pins made of carbon and alloy steel	—	—	Impact hardness	0-300 J
541	GOST ISO 898-2 clause 9.1	Nuts with big and small screw pitch made of carbon and alloy steel	—	—	Screw strength	0-1000 kN
542	GOST ISO 898-2 clause 9.2	Nuts with big and small screw pitch made of carbon and alloy steel	—	—	Vickers hardness Brinell hardness Rockwell hardness	4.95-2576 HV 95.5-653 HB 20-70 HRC
543	GOST ISO 898-5 clause 9.1	Adjusting screws and similar screw fixing hardware made of carbon and alloy steel	—	—	Vickers hardness Brinell hardness Rockwell hardness	4.95-2576 HV 95.5-653 HB 20-70 HRC
544	GOST R ISO 6507-1	Metals and alloys	—	—	Vickers hardness	4.95-2576 HV
545	GOST R ISO 7438	Metal materials	—	—	Bend angle	0-180°
546	GOST R ISO 9016	Welded seam	—	—	Impact energy Impact hardness	0-300 J