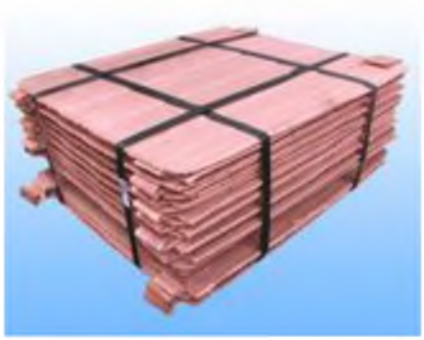
Copper cathodes



GOST 546-2001

brand M00к, Cu – 99.99%

brand M0к, Cu – no less than 99.97%

brand M1к, Cu – no less than 99.95%

Production cycle:

- copper-molybdenum ore production;
- flotation treatment with obtaining copper concentrate and molybdenum middling product;
- copper matte smelting;
- converting the copper matte with obtaining blister copper;
- blister copper fire refining with copper casting into anodes;
- copper anode electrolysis with production of copper cathodes and slime;

Application range:

Cable and conductor products, copper based alloys production, electrical engineering, copper pipes, motor industry, roofing, etc.

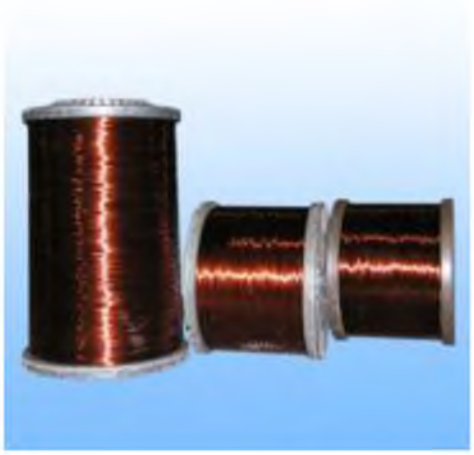
Form and packing:

Cathodes 820 mm x 850 mm x 10 mm, packed as bundles tied up with steel tape, the mass up to 1.5 tons.

The copper cathodes are manufactured as per the GOST 546 requirements 'Copper cathodes. Specifications', the chemical composition must conform to the
M00к, M0к, M1к brands copper.

Brands	No less than	Group Impurities, no more than:												
		1			2			3	4	5				
	Cu	Bi	Se	Te	Sb	As	P	Pb	S	Sn	Ni	Fe	Zn	O
M00к	99,99	0,0002	0,0002	0,0002	0,0004	0,0005	-	0,0005	0,0015	-	-	0,001	-	0,01
M0к	99,97	0,0005	-	-	0,001	0,001	0,001	0,001	0,002	0,001	0,001	0,001	0,001	0,015
M1к	99,95	0,001	-	-	0,002	0,002	0,002	0,003	0,004	0,002	0,002	0,003	0,003	0,02

Copper wire



Standard: TSh 64-05755737-141

Production cycle:

- preparation of copper wire\rod coils for the drawing operation;
- preparation of emulsion;
- preparation of rollers in the drawing machine;
- feeding of the drawing machine;
- placing the receiving spool;
- drawing the wire;
- removal of the receiving spool.

Application range:

The wire is meant to make cable and conductor products as well as for other electrical purposes.

Form and packing:

The wire length mass is no less than 40 kg.
The electrical round copper wire is produced according to requirements of the Standard Tsh 64-05755737-141.

Zinc

GOST 3640-94

brand Ц0А, Zn – 99.98%

brand Ц0, Zn – 99.975%

Production cycle:

- roasting the sulfide zinc concentrates in fluid-bed furnaces;
- leaching the zinc cinders and oxides with obtaining the zinc solutions and zinc cake;
- rotary-kiln operation for zinc cakes with producing the zinc oxides;
- clarification of zinc solutions;
- electrolysis of neutral clarified zinc solutions;
- re-melting the cathode zinc to obtain ingots.

Application range:

Galvanic coating, medicine, production of zinc-bearing alloy, production of paint and varnish items, machine building, construction, etc.

Form and packing:

Ingots having a mass of about 25 kg, packed as piles with a mass of not more than 1000 kg and not higher than 500 mm, tied up with a steel tape.
The metal zinc is made as per the GOST 3640 requirements, Ц0А and Ц0 brands.

Brands	No less than	Chemical composition, Impurity percentage, no more than						
	Zn	Pb	Cd	Fe	Cu	Sn	As	Всего
Ц0А	99,98	0,01	0,003	0,003	0,001	0,001	0,0005	0,02
Ц0	99,975	0,013	0,004	0,005	0,001	0,001	0,0005	0,025

Cadmium

GOST 1467-93

brand Кд0А, Cd – 99.98%

brand Кд0А, Cd – no less than 99.96%

Production cycle:

- leaching the copper-cadmium cakes, with the transfer of cadmium into solution;
- cementation of the solutions by zinc powder to obtain the cadmium sponge;
- dissolution of the cadmium sponge in the sulfuric acid solution;
- electrolysis of the cadmium-bearing solution to produce the cadmium cathode;
- re-melting the cadmium cathodes with obtaining the cadmium ingots.

Application range:

The metal cadmium is used to produce alloys for electrical engineering, machine building, for anticorrosive coating of metals, in atomic industry, and to make nonorganic coloring matters.

Form and packaging:

The ingot cadmium has a mass of (10.0 ± 1.5) kg, with the placing on pallets. Each ingot must be marked: trademark of the manufacturer, cadmium brand, and the lot number.
The metal cadmium is produced in line with GOST 1467, brands: Кд0А and Кд0.

Brands	Cadmium, no less than	Chemical composition, Impurities percentage, no more than					
	Cd	Zn	Pb	Fe	Cu	Tl	Всего
Кд0А	99,98	0,001	0,008	0,0003	0,004	0,002	0,02
Кд0	99,96	0,004	0,02	0,002	0,01	0,003	0,04

Portland cement

GOST-31108-2003, GOST 30515-97

brand ЦЕМ П\А-И 32.5 Н

brand ЦЕМ I 32.5 Н

brand ЦЕМ I 42.5 Н

brand ЦЕМ П\А-З 32.5 Н

Production cycle:

- production of limestone and timbers;
- crushing the limestone and timbers to obtain the premix;
- grinding the premix to produce the raw meal;
- burning the raw meal to produce the clinker;
- grinding the clinker with adding gypsum and mineral additives to obtain cement;
- shipment of the cement to consumers in bulk or in bags.

Application range:

The general-purpose Portland cement is mainly used in reinforced-concrete work, in performing foamed concrete, concrete, general-purpose construction work, as well as in laying walkway slabs and pavement plates.

Form and package:

The general-purpose Portland cement is packed either in polypropylene bags, which have a polyethylene insert, or in 50 kg multilayer paper bags, or shipped in bulk (in railway cars or cement trucks).

The general-purpose Portland cement is produced as per GOST-31108, GOST 30515, brands: ЦЕМ П\А-И 32.5 Н; ЦЕМ I 42.5 Н; ЦЕМ П\А-З 32.5 Н.

Cement strength class	Compressive strength, MPa, at the age, days				Initial setting time, min, no earlier than	Soundness (expansion), mm, no more than
	2	7	28			
	No less than			No more than		
32,5Н		16,0	32,5	52,5	75	10,0
42,5Н	10,0		42,5	62,5	60	

White Portland cement

Standard: O'z Dst 761-96

Brand ПЦБ I 1-500\42.5

Brand ПЦБ I 1-400\32.5

Production cycle:

- extraction of limestone;
- crushing of limestone and kaolin and obtaining the premix;
- premix grinding with obtaining the raw meal;
- roasting the raw meal with obtaining clinker;
- grinding the clinker with adding mineral additives to produce cement;
- shipment of the cement to consumers in bulk or packaged.

Application range:

Production of dry construction mixes, and manufacture of concrete products.

Form and package:

The white Portland cement is placed into either polypropylene bags with a polyethylene insert or multilayer paper bags having a mass of 50 kg.
The white Portland cement is produced in compliance with requirements of the standard O'z Вые 761 for the brands: ПЦБ I 1-500\42.5 and ПЦБ I 1-400\32.5.
The strength of the White Portland cement meets the following requirements:

Brand and Strength class of Portland cement	Compressive strength, MPa, at the age, days			
	2	7	28	
	No less than			no more than
ПЦБ I 1-500/42,5	14,0		49,0	68,0
ПЦБ I 1-400/32,5		22,0	39,2	58,0

Copper tubes

Standard: Ts 00193950-006:2014

Brand: M1 (soft, hard)

Production cycle:

- cathode copper smelting with adding the phosphorous-copper alloy for de-oxidation;
- discharge of copper pieces;
- rolling and drawing the copper pieces – in case of need: making the internal valley;
- winding the copper tubes onto coils (spiral, layer-by-layer ordered), and making the linear sections;
- annealing the copper tubes;
- packaging.

Application range:

Copper tubes are used in cold and hot water lines, heating systems, gas pipelines, and other infrastructure systems, and also in refrigerating equipment and heat exchangers.

Form and packaging:

The mass of the tubes in coils must be 80 kg to 300 kg. The tubes in coils and stacks are packed with polyethylene film and placed into wooden boxes on pallets or into corrugated cardboard boxes according to GOST 7376.

The packing is carried out either on pallets as per GOST 9557, or without pallets for tubes as the pieces, using blocks with cross section at least 50 x 50 mm, tied up with a wire, having the diameter at least 0.3 x 30 mm, or with the use of package straps.

The general-purpose copper seamless tubes with cold deformed circular cross section are manufactured according to the requirements of Ts 00193950-006.

The mechanical properties of the tubes must comply with the following requirements:

Tube nominal outside diameter, mm	Delivery form	Material state	Ultimate strength σ_B, MPa (kgf\mm^2), no less than	Specific elongation δ_5, % no less than
3.0 to 19.0 inclusive	in coils	soft	210 (21)	36
3.0 to 44.0 inclusive	in pieces	half-hard	240 (25)	11
3.0 to 44.0 inclusive	in pieces	hard	280 (29)	3

Silfuric acid

GOST 2184

brand ‘Improved’,

brand ‘Commercial’

Production cycle:

- gas-washing the sulfur-containing process gases from the metallurgical aggregates;
- in-depth drying the process gases;
- contacting the gases with the transition of sulfurous anhydride into sulfuric anhydride;
- absorption of the sulfuric anhydride with the transition to sulfuric acid (SO_3 into H_2SO_4);
- pouring into cisterns or containers to subsequent transportation.

Application range:
The acid is used in the ore treatment operations, particularly at mining the rare elements; also, the production of mineral fertilizers; as electrolyte in lead accumulators; production of various mineral acids and salts; production of man-made fibers, dye stuffs, and smoke-forming and explosive materials; oil, metal-working, textile, leather, and other industries – is registered as a food additive E513 (emulsifier); industrial organic synthesis, sulfonation (synthetic detergents and intermediate products in the dye production sector), alkulation (production of isooctane, polyethylene-glucol, and caprolactam), etc.

Form and package:
The water-free sulfuric acid looks like a colorless transparent oily liquid, with the density 1.8305 g\cu m at the temperature 20° C.
The sulfuric acid is shipped in special r\w cisterns or by the pipeline system.
When shipping the sulfuric acid in cisterns or containers, a consignment will be no more than 10 cisterns or containers, and in case of the contact improved sulfuric acid and the improved oleum – no more than one cistern or one container.
When shipping the product in barrels, the lot size does not exceed 20 tons.
The commercial sulfuric acid are manufactured in line with the requirements of GOST 2184 for the brands: improved and commercial (first-rate and second-rate).

Наименование показателя Description	Standard		
	Improved	Commercial	
		First grade	Second grade
Mass fraction of monohydrate, %	92,5-94,0	no less than 92.5	
Mass fraction of iron (Fe), %, no more than	0,006	0,02	0,11
Mass fraction of residue after calcination, % no more th.	0,02	0,05	No norms
Mass fraction of nitrogen oxide (N_2O_3), %, no more than	0,00005	No norms	
Mass fraction of arsenic (As), %, no more than	0,00008	No norms	
Mass fraction of lead (Pb), %, no more than	0,001	No norms	
Mass fraction of chlorides (Cl), %, no more than	0,0001	No norms	
Color in cu cm of comparison solution, no more than	1	6	
Transparency	transparent without dilution	No norms	

Ammonium perrhenate

GOST 31411-2009

brand AP-00

brand AP-0

brand AP-1

Production cycle:

- batch mixture granulation and granule roasting with obtaining the cinder and rhenium-bearing process gases;
- capture of rhenium from the sublimates;
- sorption with producing the pregnant solution;
- desorption and evaporation to obtain the rough ammonium perrhenate;
- re-crystallization, washing and drying the ammonium perrhenate.

Application range:

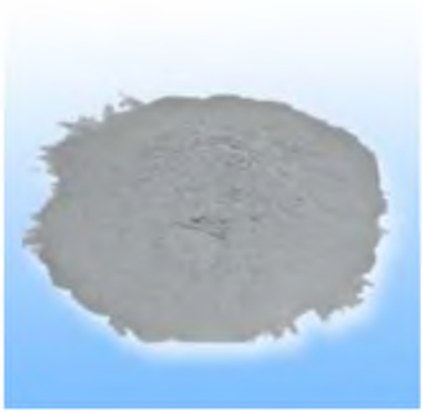
Ammonium perrhenate is used to make electronic devices, and also in the space engineering and in the cracking by catalyst.

Form and packaging:

The ammonium perrhenate is a white crystalline powder, packed in plastic bags.
The ammonium perrhenate is produced as per requirements of GOST 31411, brands: AP-00, AP-0 and AP-1.

Brand	Chemical composition, %													
	Re	Al	Fe	K	Ca	Si	Mg	Mn	Cu	Mo	Na	Ni	S	P
AP-00	69,3	0,0005	0,0005	0,001	0,001	0,001	0,0002	0,0001	0,00005	0,0005	0,0005	0,0002	0,002	0,001
AP-0	69,1	0,0005	0,0005	0,005	0,001	0,001	0,0002	0,0001	0,0001	0,0005	0,001	0,0002	0,002	0,001
AP-1	69,0	0,002	0,001	0,01	0,003	0,002	0,002	0,002	0,001	0,01	0,002	0,002	0,005	0,001

Zinc powder



GOST 12601-2005

brand ПЦ6 (class Б)

Production cycle:

- re-melting the cathode zinc;
- blasting the liquid zinc through a quartz pipe with compressed air;
- catching the dust-like zinc in cyclones and bag filters.

Application range:

For cementation when recovery of non-ferrous and noble metals.

Form and packaging:

The zinc powder has light-gray or gray color.
The zinc powder is packed in special airtight packages: metal containers, drums made as per design documentation of the manufacturer, and flasks as per GOST 5799 of the ФС or ФСЦ type, or as per GOST 5037 of the ФА or ФЛ type.
The zinc powder is made according to requirements of GOST 12601 class Б, brand ПЦ6.

Class	Brand	Mac Mass fraction of residue on screen as per GOST 6613, no more than				Mass fraction of particles under 0.63 mm, but not exceeding 0.16 mm, at sifting through screens 063 К and 016 К as per GOST 6613, - no less than	Mass fraction of particles less than 0.25 mm, but no more than 0.05 mm, when bolting through screens 025 К and 005 К as per GOST 6613, - no less than
		016 К	008 К	0071 К	005 К		
Б	ПЦ6	–	–	–	–	94,0	–

Commercial selenium

GOST 10298-79

brand CT-0, Se – 99.8%

brand CT-1, Se – 99.0%

Production cycle:

- de-sliming of slime;
- slime burning and selenium oxides catching by gas washing to obtain pregnant solutions;
- precipitation of selenium from the solutions;
- filtration and drying the selenium residue;
- smelting the selenium and obtaining the ingots.

Application range:

At making semiconductors, selenides of many elements are used, such as selenides of tin, lead, bismuth, antimony, and selenides of lanthanides. Also, the glass, chemical (production of paints and enamels), and pharmaceutical industries.

Form and packaging:

The commercial selenium is produced in ingots no more than 7.5 kg, and it is shaped as truncated pyramid.
The commercial selenium ingots are wrapped up in package paper and put into wooden boxes as per GOST 5959. The mass of the selenium does not exceed 50 kg.
The commercial selenium is made according to requirements of GOST 10298 for the brands: CT-0 and CT-1.

Brands	Chemical composition, %								
	Se, no less than	Impurities, no more than							
		Fe	Cu	Pb	Hg	Te	As	S	Al
CT-0	99,8	0,005	0,002	0,002	0,001	0,05	0,003	0,005	0,005
CT-1	99,0	0,01	0,005	0,005	0,005	0,1	0,005	0,02	0,005

Zinc sulfate

Standard: TSh 48.1-57:2012

Production cycle:

- filtration of cadmium-weak zinc solution;
- dehydration of the zinc solutions in the fluid-bed furnace;
- discharge from the furnace and catching the finished zinc sulfate in the cyclones;
- packaging the zinc sulfate.

Application range:

Used at the production of viscose, mineral paints, glazes, in the metallurgy and concentration (flotation agent), medicine, agriculture, as well as in accumulators and chemical energy sources.

Form and packaging:

The commercial zinc sulfate is granules, a powder or a white-colored mixture. Packaged in sacks (50 kg) or 'big-bags'.
The zinc sulfate is manufactured in compliance with the requirements of Tsh 48.1-57.

Chemical composition, %					
no less than	no more than				
Zn	Fe	Mn	Cu	Cl	Insoluble residue
30,0	0,4	1,4	0,02	0,2	0,5

Copper sulfate

GOST 19347-99

Brand ‘A’ (best grade – 99.1%, first grade – 98.0%)

Brand ‘Б’ (best grade – 98.1%, first grade – 96.0%, second grade – 93.1%)

Production cycle:

- neutralization of acid copper-bearing solutions in oxidizers with the use of copper granules;
- cleaning and filtering the neutral copper-bearing solutions;
- evaporation and crystallization of cleaned solutions;
- centrifugation, spinning and drying to obtain the finished copper sulfate.

Application range:

Copper sulfate is used to produce other compounds, in medicine, food industry, at making mineral paints, and in agriculture as an antiseptic, fungicide, and fertilizer.

Form and packaging:

Packaged in plastic or polypropylene bags (50 kg).
The copper sulfate is made according to requirements of GOST 19347 of the brands: ‘A’ and ‘Б’.

Description	Standard for the brand				
	‘A’		‘Б’		
	Top grade	First grade	Top grade	First grade	Second grade
Mass fraction of copper sulfate: - in terms of $CuSO_4 \times 5H_2O$, %, no less than	99,1	98,0	98,1	96,0	93,1
- in terms of Cu, %, no less than	25,22	24,94	24,97	24,43	23,67
Mass fraction of iron, %, no more than	0,02	0,04	0,04	0,05	0,10
Mass fraction of free sulfuric acid, %, no more than	0,20	0,25	0,20	0,25	0,25
Mass fraction of water-insoluble residue, %, no more than	0,03	0,05	0,05	0,05	0,10
Mass fraction of arsenic, %, no more than	0,002	0,012	0,012	0,012	0,028

Cinder of the molybdenum intermediate product

Standard: TSh 64-23283880-07:2013

Production cycle:

- selection of collective concentrate to obtain the copper concentrate and the copper-molybdenum intermediate product;
- burdening and granulation of the molybdenum intermediate product;
- roasting the molybdenum intermediate product with obtaining the molybdenum intermediate product cinder and the rhenium-bearing process gases;
- packaging the cinder of the molybdenum intermediate product.

Application range:

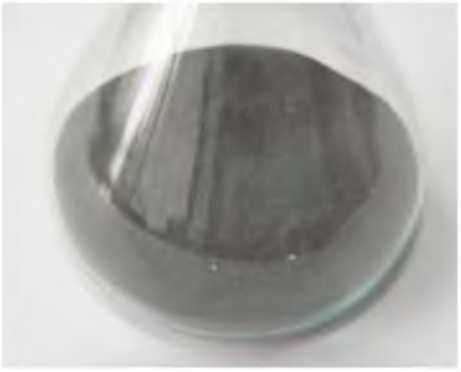
Molybdenum is used in producing alloyed steels and alloys on its basis, alloys with non-ferrous and rare metals, and also as chemical compounds, as well as in production of electrical illuminating lamps and high-vacuum electronic tubes (radio valves, oscillating tubes, X-ray tubes, etc.)

Molybdenum wire and tape is used as heaters for high-temperature furnaces and as a constructional material in power reactors.

Form and packaging:

The cinder of molybdenum intermediate product is of yellow-red color.
The cinder of molybdenum intermediate product is packed in the 'big-bags' with the mass of 1,000 to 1,300 kg.
The roasted molybdenum intermediate product is manufactured in compliance with the requirements of Tsh 64-23283880-07.

	Chemical composition, %								
	Mo, no less than	Impurities, no more than							
		SiO_2	As	Cu	P	WO_3	S	Re	H_2O
The cinder of the molybdenum intermediate product	32,0	11,0	0,07	3,0	0,05	0,8	1,5	0,017	0,5



Commercial tellurium

GOST 17614-80

brand T0, Te – 99.85%

brand T1, Te – 99.0%

brand T2, Te – 96.0%

Production cycle:

- de-sliming;
- roasting the slime with obtaining the cinder;
- smelting the cinder to obtain the slag;
- leaching the slag, and conversion the tellurium into the solution;
- electrolysis and forming the telluride solution;
- precipitation of tellurium from the solution;
- filtration and washing the precipitate;
- drying and packing.

Application range:

Tellurium is used in the production of lead alloys with the higher plasticity and strength (used, for instance, at the cable production). The production of the lanthanide tellurides, and of its alloys, as well as of alloys with metal selenides – to produce thermoelectric generators with the highest efficiency (up to 72-78%), and also to make the KPT (cadmium-mercury-tellurium) alloys, which can detect the emission at the rocket launching.

Form and packaging:

The commercial tellurium is produced as powders. The powder-like tellurium has dark-grey or black color and the apparent density no more than 2.9 g\cu cm.
The powder-like tellurium is packaged in plastic bags as per GOST 17811 and placed into boxes according to GOST 5959.
The commercial tellurium is manufactured in compliance with requirements of GOST 17614, brands: T0, T1 and T2.

Brands	Chemical composition, %									
	Te, no less than	Impurities, no more than								
		Se	Pb	Cu	S	Na	Si	Al	Fe	The sum
T0	99,85	0,05	0,006	0,004	0,04	0,01	0,001	0,006	0,006	0,07
T1	99,0	0,1	0,2	0,05	0,04	0,05	0,05	0,04	0,1	1,0
T2	96,0	1,5	1,0	0,3	0,2	0,3	0,2	0,1	0,15	4,0

Sulphate-resisting portland cement

SRPC 400-D0

GOST 22266-94

GOST 30515-97

Production cycle:

- raw meal preparation;
- raw meal baking and clinker preparation;
- clinker grinding with gypsum and production of sulfate-resistant portland cement;

Usage: Sulphate-resisting portland cement is intended for manufacture of concrete and concrete-steel constructions having resistance to corrosion on exposure to media that are aggressive in their sulfate content.

Parameters	Clinker characteristics	Cement properties
Chemical analysis		
% SiO_2	21,43....21,50	21,40....21,51
% Al_2O_3	4,43....4,52	4,20....4,50
% Fe_2O_3	4,53....4,90	4,55....4,95
% CaO	62,35....62,70	62,5....63,7
% MgO	1,50....1,52	1,60....1,72
% K_2O	0,92....1,35	0,99....1,24
% Na_2O	0,18....0,25	0,17....0,30
% SO_3	0,59....0,73	2,20....2,40
Rating module		
SR (saturation ratio)	88,60....89,70	88,58....89,75
Silicate module	2,34....2,40	2,32....2,39
Aluminate module	0,96....0,98	0,94....0,98
Tricalcium silicate (C3A) , %	3,92....4,42	0,70....3,20
Physical tests		
Specific surface, cm^2/gm		2800....3000
Compression ultimate strength at the age of 28 days, MPa		39,4....40,4
Initial setting, min		235....250
Final setting, min		280....325

Zinc oxide

GOST 202-84

Grade БЦ 1

Application area:

For manufacture of paintwork materials, asbestos articles, imitation leather and sole rubber.

Form and packaging:

Packing – 25 kg in polypropylene bags with polyethylene stuffer.

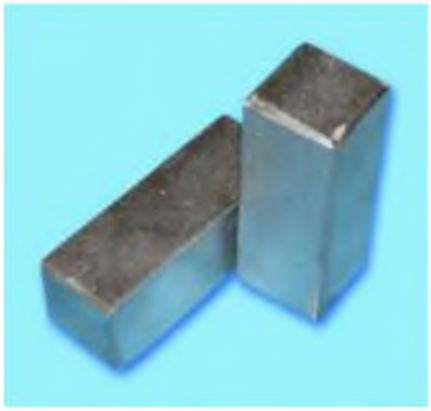
Terms of delivery – (EXW) customer pick up, “Almalyk MMIW” warehouses.

Terms of payment – 100% prepayment.

Realization of zink oxide is performed daily thorugh electronic exchange auction of JSC UzRCE.

Zinc oxide meets requirements indicated in the table:

Indicator	Norm
Mass fraction of zinc compounds (Zn), calculated as zink oxide (ZnO), %, at least	99,5
Mass fraction of lead compounds (Pb) calculated as lead oxide (PbO), %, at most	0,010
Mass fraction of substances insolluble in chlorhydric acid, %, at most	0,015
Mass fraction of solluble substances, %, at most	0,15
Mass loss under baking, %, at most	0,3
Reminder on sieve with mesh No.0063, %, at most	0,1
Covering power, г/м², at most	130
Whiteness, nominal units, at least	95



Tungsten

Ts 15126592-01:2013

Brands: 1, 2

Manufacturing cycle:

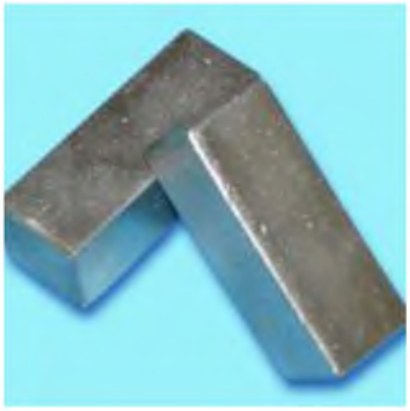
- Preparation of metallic tungsten powder, screening
- Preparation of a plasticizer
- Neutralization and moistening of metal tungsten powder
- Pressing briquettes
- Sintering briquettes
- Control of finished products

Application:

It is used in the metallurgical industry for alloying steel.

Technical requirements

Name of indicators	Standard	
	Brand 1	Brand 2
Content of the main substance (tungsten), not less than %	96,918	96,859
Content of impurities, no more than,%		
Silica	1,5	1,5
Molybdenum	0,4	1,0
Oxygen (and moisture)	1,0	1,0
Carbon	0,1	0,1
Phosphorus	0,02	0,02
Sulphur	0,01	0,01
Cuprum	0,01	0,01
Arsenic	0,03	0,03
Stannic	0,003	0,003
Antimony	0,003	0,003
Plumbum	0,003	0,003
Bismuth	0,003	0,003
Briquette weight, kg	0,02÷5,0	



Molybdenum

Ts 15126592-02:2013

Brands: 1, 2

Manufacturing cycle:

- Production of molybdenum trioxide, sieving
- Recovery (production of MoO_2), screening
- II reduction (metal Mo production), sieving
- Preparation of a plasticizer
- Neutralization and moistening the molybdenum metal powder
- Pressing briquettes
- Sintering briquettes
- Control of finished products

Application:
It is used in the steel industry for alloying steel.

Technical requirements

Name of indicators	Standard	
	Brand 1	Brand 2
Content of the main substance (molybdenum), not less than %	97,692	97,062
Content of impurities, no more than,%		
Silica	1,5	1,5
Tungsten	0,3	0,3
Oxygen (and moisture)	1,0	1,0
Carbon	0,1	0,1
Phosphorus	0,01	0,01
Sulphur	0,01	0,01
Cuprum	0,01	0,01
Arsenic	0,01	0,01
Stannic	0,003	0,003
Antimony	0,003	0,003
Plumbum	0,003	0,003
Zinc	0,006	0,006
Bismuth	0,003	0,003
Nickel	0,1	0,1
Ferrum	-	0,5
Briquette weight, kg	0,02÷2,6	