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The “Uralmashplant” JSC, is a key equipment supplier for basic industry sectors: mining, metallurgical industries.

In 2013 the “Uralmashplant” marked its 80th anniversary.

The main shareholder of the “Uralmashplant” is the “Gazprombank” JSC, one of the three largest Russian banks.

Today, the “Uralmashplant” JSC is a company providing the state-of-the-art engineering, welding, metal-working, mechanical assembly, and tool production works.

Main product assortment includes:

Mining equipment

- walking and track-type draglines,
- track-type open-mine excavators,
- cone and jaw crushers for all crushing stages,
- ball and rod grinding mills, semiautogenous and autogenous grinding mills,
- concrete-production equipment.

Metallurgical equipment

- sintering equipment,
- indurating equipment,
- blast furnace equipment,
- continuous casting machines,
- rolling equipment,
- press-forging equipment,
- rolling mill rolls

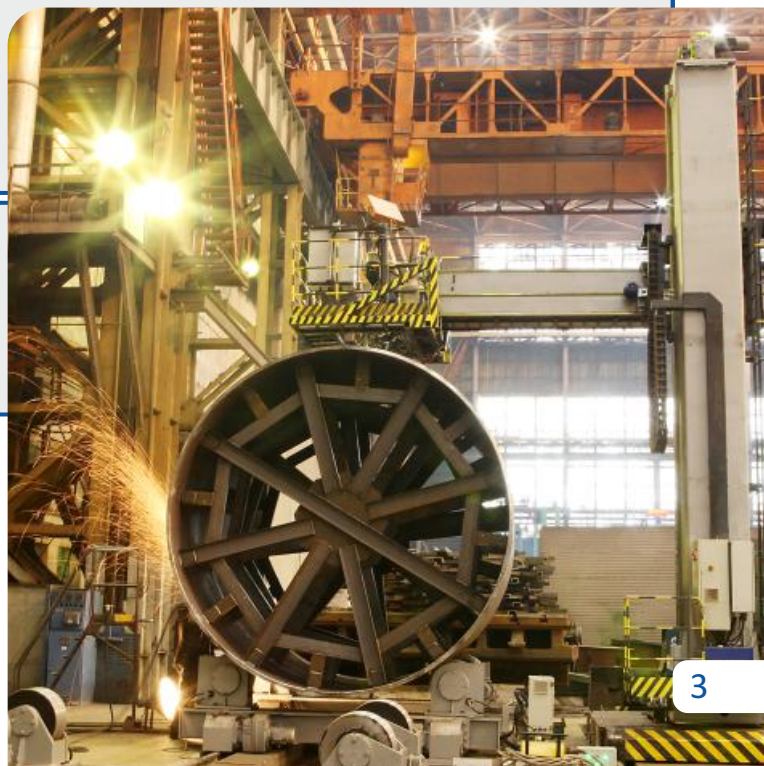
Handling equipment

- heavy cranes for metallurgical works,
- handling equipment for nuclear plants,
- general purpose special and bridge cranes.

Power equipment and nonstandard equipment

- hydraulic turbine units,
- transfer and homogenizing equipment units.

A company development strategy is aimed at creating a world-class machine-building company able to fully fulfill customers' needs for modern equipment.



MANUFACTURING CAPABILITY

Heat treatment, induction hardening, nitriding, and carburization.

Intermediate and final heat treatment of parts – normalizing, tempering, hardening and tempering, ageing, quenching.

Special chemicothermal treatment

- nitriding;
- carburization.



Also, the company is able to perform the induction hardening.

Welding fabrication

Equipment for fabricating 55 800 t/y of large metal structures.

Welding methods:

- Semiautomatic argon-based gas-shielded welding
- Automatic welding
- Manual electric arc welding.

Deposition:

- Carbon and stainless steels
- Non-ferrous and hard alloys

Thermal cutting of rolled sheet metal:

- Gas-oxygen cutting method – metal thickness up to 250 mm
- Air plasma cutting method – metal thickness up to 20 mm



MANUFACTURING CAPABILITY

Metalworking production

Raw and finishing metalworking system with numerical program control: 45000 t/y.

Machinery – 499 pcs., including:

NC units and machining centers – 48 pcs.;

Automatic and semiautomatic units – 65 pcs.;

Specialized units – 14 pcs.;

All-purpose machines – 372 pcs.

Machining of different components of all items from the company product assortment, welding parts, cold and hot rolling rolls.

Mechanical assembly production

Includes assembly shops, where produced machines are assembled, adjusted, painted, and packed.

Modernization of the machinery equipment

With the financial support of the “Gazprombank” we are implementing a machinery equipment modernization program.

Since December 2011 we have commissioned 3 PAMA machining centers (Italy); large turning-and-boring lathe by Hankook (S. Korea).

Our plans include the procurement and installation of the following items:

NC turning and boring mill. faceplate diameter 1600 mm,

Horizontal boring mill with spindle diameter 160 mm,

Gear cutting center with a numerical control,

NC metalworking equipment for the small-scale metalworking shop,

Portable radial drilling machines,

Modernization of main metalworking equipment.



DRAGLINES

The “Uralmashplant” produces high-capacity walking and track-type dragline excavators that are used in mining industry for surface mining operations.

Walking draglines are used in overburden operations carried out by direct dumping method when ore is placed in an open area or on a pit edge.

Track-type draglines are designed for overburden excavation with dumping or loading in trucks.

Also, the draglines may be used for digging trenches, building canals and dams, operations in process mud storage areas.



Walking draglines are equipped with diagnostic information system, automatic protection system, automatic centralized lubrication system, operating parameters monitoring and optimization system.

Ease of installation, maintenance, and repairs, reliability, improved operationability of units, high mobility, good passability, and considerable machine capabilities allow operating the excavators with great efficiency.

The excavators are designed for the reliable operation in the temperature range from minus 50° to plus 40° C.

Since 1949 the “Uralmashplant” has produced 253 walking draglines with 10 - 100 m³ bucket capacity, and more than 150 of these draglines are operated today by mining companies in Russia, CIS, Mongolia, India, and North Korea.

We offer:

13 dimension types of walking draglines with 11-100 m³ bucket and a boom length of 75-130 m.

Track-type dragline excavators on the ЭКГ-5А and ЭКГ-12 base with 3.2-8 m³ capacity buckets and a boom length of 25-55 m.

Including modifications with reduced specific ground pressure.



MINING POWER SHOVELS

Track-type power shovels are designed for excavating mineral products and rock overburden in open pit mining, loading them in trucks, and for performing stacking and loading operations at storages and conveyor ore transportation routes.

The excavators are designed for different climatic conditions.

All units of the excavators are individual process unit, thus it is possible to repair the excavator by replacing its units.

The design concept of the “Uralmashplant” power shovels is:

A two-beam bucket arm and a rack crowd.

The excavators are equipped with diagnostic information system, automatic protection system, operating parameters monitoring and optimization system.

Since 1948 we have supplied more than 13000 excavators with 5 m³ capacity buckets.

In the last 30 years we have supplied 36 mining power shovels with 12-20 m³ capacity buckets for Russian coal and iron-ore mining companies.

We offer:

ЭКГ-5А and modifications (bucket capacity 4.6-6.3 m³, working mass - 196 t)

ЭКГ-12А (bucket capacity 12-16 m³, working mass - 655/668 t)

ЭКГ-18 (bucket capacity 16-20 m³, working mass - 760 t, AC drive)

ЭКГ-30 (bucket capacity 20-42 m³, working mass - 1250 t, AC drive)



CRUSHING AND GRINDING EQUIPMENT

We manufacture a wide size range of crushing and grinding equipment on the basis of our own engineering. Over 5000 nos. crushers and mills for various applications have been manufactured since 1935.

Our crushing machines ensure stable operation without backup machines both within the Arctic circle and tropics; at crushing plants and directly in open pits; processing of any materials – from titanomagnetite ores to clay kimberlite.

We offer:

Design and engineering of modern high-performance crushing and grinding lines;

Complete delivery of cone crushers for coarse, reducing, intermediate and fine crushing, simple-swing jaw crushers with remote crushing gap adjustment;

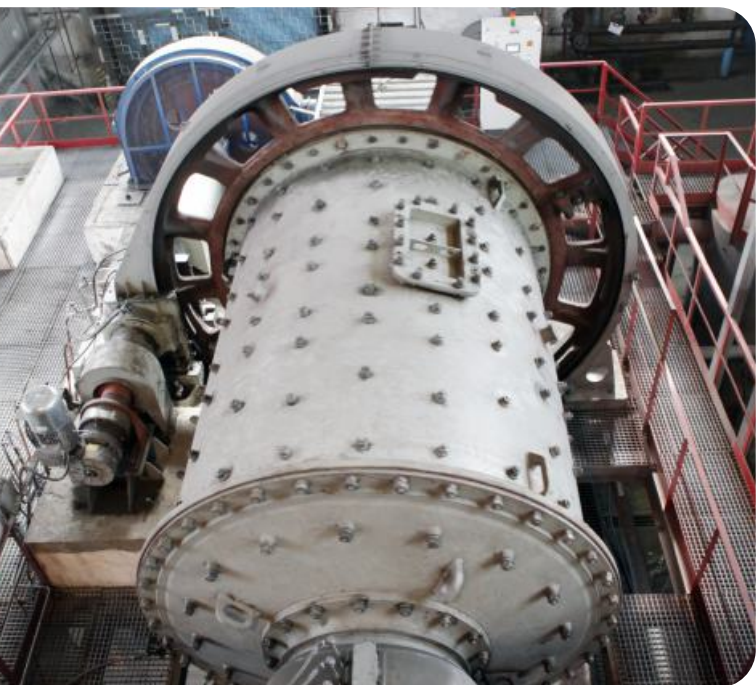
Complete delivery of ball, rod, ore and pebble mills, dry and wet autogenous grinding mills;

Complete delivery of modern crushing and grinding equipment for cement industry;

Installation at site;

Supply of spare parts;

Service, including equipment repair at the Manufacturer's.



CEMENT PRODUCTION EQUIPMENT

Up to the end of the sixties of the last century the “Uralmashplant” was an only large supplier of cement-making equipment, particularly, rotary kilns, crushers and mills.

At the beginning of this millennium the Company restored and is successfully expanding the cement production equipment jointly with renowned design companies from abroad. On the basis of their engineering, we manufacture various equipment for new cement plants.

We offer:

Gear boxes for mills and rotary kilns weighing up to 130 t;

Mills for raw materials and cement:

- 2.6x13 (throughput: raw materials – 40 t/h, clinker – 26 t/h);
- 3.2x15 (throughput: raw materials – 80 t/h, clinker – 59 t/h);

Shells for mills and rotary kilns:

- Mills: 2x10.5, 2.2x13, 2.6x13, 3x14, 3.2x15, 4x13.5;
- Shells and sections of rotary kilns: bay, banding, recovery zone sections, coming in different diameters, max. 100mm thick;

Charge and discharge covers for various mill sizes;

Welded and floating tyres for different kiln sizes;

Girth gears and girth gear pinions;

Idlers with capacity of 300, 400, 660 and 1000 t;

Toothed couplings, splined couplings.



INDURATION MACHINES

The “Uralmashplant” is an only Russia's designer and supplier of travelling-grate induration machines.

Since 1964, about 50 nos. pellet plants with travelling-grate induration machines of 72-700 sq.m effective area and component equipment of the required capacity for various technologies have been developed and put into operation.

Travelling-grate induration machines are used for production of pellets from iron ore and nickel concentrates, chromium ores, phosphorites, as well as for production of a cement clinker, non-waste processing of slate coal and other technologies related to roasting.

The Company focuses on design and engineering, manufacture and service of induration machines providing high efficiency and environmental safety of operations.

We offer:

Complete delivery of new generation travelling-grate induration of any effective area and capacity;

Revamping of the existing pellet plants using modern technologies and efficient gas flow systems with the re-use of the existing production buildings, foundations, and utility lines as much as possible;

Delivery of individual components and spares for induration machines.



SINTER PLANTS

The “Uralmashplant” supplies production complexes based on travelling-grate sintering machines of 18 to 592 m² grate area and capacity up to 4.7 MTPA.

Since 1934, 158 nos. sintering machines have been developed and put into operation. These machines are based on the continuous process and intended for sintering of fine iron ores and concentrates and partial removal of detrimental impurities (sulfur, phosphorus, etc) and for phosphorite firing and production of cement clinker.

We offer:

Complete delivery of modern high-performance sintering machines of any grate area with automation system;

Revamping of sinter plants including extension of sintering area with the re-use of the existing production buildings, foundations, and utility lines as much as possible;

Delivery of individual components and spares for sinter plants;

High-performance ignition furnaces with roof-mounted burners.



BLAST FURNACE EQUIPMENT

The “Uralmashplant” supplies various equipment for blast furnaces.

For decades a considerable part of blast furnaces in Russia, Ukraine, Kazakhstan, Eastern Europe, India, and China were equipped with efficient and reliable equipment of Uralmash make.



We offer:

Underfire feed system for BF charge materials:

- Inclined, vertical, horizontal conveyors;
- Vibrating feeders;
- Vibrating screens for removal of sinter and coke fines;
- Weighing devices for coke and iron ore materials;
- Lifters and shut-off devices;
- Material flow switches.

Machines and mechanisms for charge feed to the blast furnace charging device:

- Skips;
- Skip winches;
- Cable pulleys.

Machines and mechanisms for blast furnace top arrangements:

- Charge distributors;
- Charging devices;
- Bell beams;
- Bell control winches;

Machines and mechanisms for blast furnace tapping, handling and transportation of cast iron and slag.

CONTINUOUS CASTING MACHINES

We design continuous casting machines for slabs, blooms and billets with production capacity up to 3 MTPA.

Since 1959, 154 nos. continuous casters were developed and put into operation at steelmaking plants in Russia, CIS, Slovakia, Poland, Roumania, Bulgaria, Pakistan and other countries.

All our continuous casters have radial or vertical moulds with further multipoint strand unbending according to a certain law in order to minimize deformation at the freeze line.

We offer:

Slab casters (billets with cross section of 150...250 x 500...2500 sq. mm);

Bloom casters (billets with cross section of 210...350 x 210...450 sq. mm);

Continuous casters for rounds (diameter 150...400 mm).



ROLLING EQUIPMENT

The “Uralmashplant” JSC is a supplier of process equipment for cold and hot rolling shops.

Since 1935 The “Uralmashplant” JSC has developed and commissioned about 110 hot and cold rolling mills, and 100 strip treatment lines for domestic and foreign ferrous and non-ferrous metallurgical industry companies.



We offer:

Rolling mills (reversing, continuous, one- and two-stand temper mills, and pickling-and-rolling lines);

Strip treatment lines (continuous pickling lines, hot galvanizing lines, and continuous annealing lines);

Finishing lines (stretch-straightening lines, strip preparation units, transverse and longitudinal strip-cutting machines, plate and coil packing machines);

As well as structural mills, ring-rolling mills, wheel-rolling mills, heat treatment equipment, rolled material straightening machines and workshops.



HOT AND COLD ROLLING MILL ROLLS

The “Uralmashplant” JSC manufactures forged steel backup and working rolls for cold and hot rolling. We supply rolls for different metallurgical plants in Russia, CIS, Western and Eastern Europe, India, Turkey, China, South-East Asia, USA.

We offer

Working rolls for sheet mills.

Backup rolls for sheet mills

Blooming and slabbing mill rolls

Billet mill rolls

Structural mill rolls

Section and small-section mill rolls

Vertical rolls for hot sheet rolling

Roll sleeves

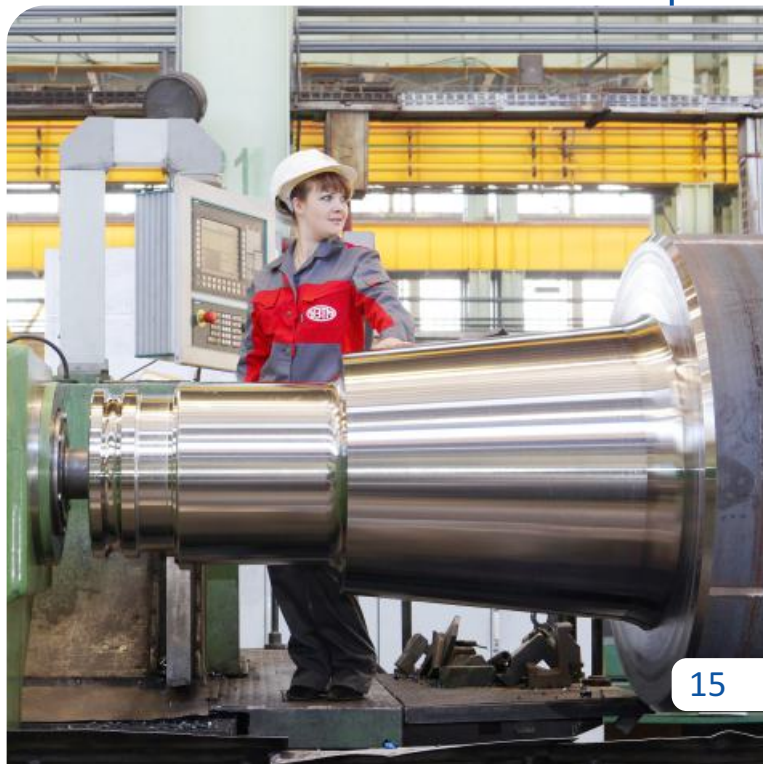
Pipe mill rolls

Working rolls for rolling, tempering, and reversing mills.

Backup rolls for rolling, tempering, and reversing mills.



We have set up the production of rolls with enhanced wear-resistance containing up to 5% of Cr.



PRESS-FORGING EQUIPMENT

The “Uralmashplant” JSC possesses the unique experience in designing and manufacturing press-forging equipment for different applications and forces.

Since 1935 The “Uralmashplant” JSC has developed and commissioned more than 250 heavy hydraulic presses with 20-300 MN force, including forging and die-forging presses, stretch-straightening machines, and pipe-bending mills for Russian, Ukrainian, Kazakhstanian, Polish, Romanian, and Chinese companies.



We offer:

Forging presses with force up to 150 MN;

Die-forging presses for closed-die forging and sheet stamping with force up to 300 MN;

Extrusion presses with force from 20 MN to 300 MN;

Power cable aluminum sheathing presses with force up to 100 MN;

Stretch-straightening machines with force from 3,5 to 60 MN;

Pipe-bending equipment for producing pipe bends from 28 mm to 1420 mm in diameter;

Spongy titan and zirconium processing line equipment.



MATERIALS HANDLING EQUIPMENT

The “Uralmashplant” is one of Russia's few companies with a complete production cycle for heavy-duty materials handling equipment.

Our cranes ensure operation of iron and steel works and carry out handling operations in steelmaking, rolling mill, press and forging, heat-treatment workshops.

In recent years several unique cranes have been manufactured using our engineering, including 450 t capacity pouring cranes for Magnitogorsk Iron and Steel Works and 520t capacity crane for Severstal Company.

Full-swing travelling cranes for reactor halls were supplied to Kudankulam nuclear power plant, India.

We offer:

Full-swing cranes;

Refueling machines and trestle cranes for nuclear power plants;

Charging box-magnet cranes;

Turnaround charging cranes;

Pouring cranes;

Retrieving magnet cranes;

Handling equipment for radioactive waste disposal.



GEOGRAPHY OF SUPPLY



Our clients are mining, metallurgical industry companies, machine-building companies and building material manufacturers.

Equipment manufactured by the "Uralmashplant" JSC was supplied to many countries worldwide: CIS countries, western and eastern Europe, Middle East, India, South-East Asia, Africa, North America, and Latin America.

Our clients include the major Russian and worldwide companies, such as:

MMK, NLMK, Evraz Group, Mechel, UGMK, Severstal, Metalloinvest, Norilskiy nickel, Arcelor Mittal, SAIL, NMDC, Coal India, Metinvest, Kazakhmys, Kazchrome, and other companies from other countries worldwide.



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