

CATALOGUE

Mill Rolls

About Us

Our company NKMZ Central Europe s.r.o. founded in the Czech Republic in 2015 as an official representative of NKMZ, Ukraine.

Over the past time, our company has established itself as a reliable partner and supplier of rolls, as well as parts of metallurgical equipment for European metallurgical plants and corporations.

We have established strong partnerships with companies such as: ArcelorMittal, Liberty Steel, Salzgitter, VAI, NLMK Europe, Aleris and many others.

Today NKMZ Central Europe s.r.o. successfully develops and presents to your attention a new project for the complete manufacture and supply of rolling rolls and parts of metallurgical equipment, based on the effective use of design and technological knowledge, as well as manufacturing experience gained at NKMZ over 80 years of creating of these products.

Within the framework of this project, our company employs the best design and engineering personnel responsible for the performance of products and their full compliance with customer requirements.

To ensure the whole production, of NKMZ Central Europe s.r.o. uses the manufacturing sites of our partners in China, the Czech Republic, Romania and Bulgaria.

A significant part of the operations is performed out at our own production facilities located in Germany and equipped with the most recent industrial machinery, including CNC equipment.

The process of manufacturing and compliance with the necessary technology at all stages of production takes place under the direct and constant monitoring of highly qualified technical specialists of NKMZ Central Europe s.r.o.

The final quality control of products is carried out without fail by independent inspection companies with a worldwide reputation. Quality control results are provided directly to the customer.In general, NKMZ Central Europe s.r.o. possesses the unique know-how in the field of manufacturing, organization of quality control and after sales service of our state of the art heavy products.

We are sure that in this catalog you will find useful information about the presented products, the technology of their production and the organization of quality control.

We are open to dialogue and ready to answer all your questions.

MILL ROLLS

Today, we have expanded our capabilities and are ready to provide manufacturing, supply and service for the following types of rolls:



This catalog details our capabilities in the production of forged steel rolls of all types.



MELTING AND ESR

A wide range of efficient metallurgical and forging and pressing equipment is used to produce high-quality blanks. This equipment meets modern requirements and is serviced by highly qualified personnel.

Electric Arc Furnace

50 tons 1 set 100 tons 1 set

Ladle Refining Furnace

50 tons 1 set 150 tons 2 sets

VD/VOD Furnace

50 tons 1 set 150 tons 2 sets

Vacuum Pouring equipments

80-450 tons 10 sets

Three-phase ESR equipment

40 tons 1 set 30 tons 1 set 20 tons 1 set

Single-phase ESR equipment

20 tons 3 set













FORGING EQUIPMENT

Forging Press:

12000t 1 set

3150t 1 set

8400t 1 set

1250t 1 set

Manipulator:

450t 1 set

80t 1 set

55t 1 set

10t 1 set

Furnace

Quantity: 35 sets

Dimensions: 7x10m, 5x25m,

6x15m, etc.

Forging Head Crane:

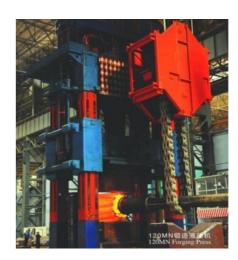
550t、500t、400t、200t, etc.

Annual output of forgings:

180,000 tons



450t Manipulator



120MN Forging Press

FORGED PRODUCT PORTFOLIO

- Work Roll /Intermediate Roll
- Large Size Back Up Roll ≤80T
- 20Hi Sendzimir Roll

Products	WR/IMR	BUR
Total length	6000 mm	8000 mm
Body length	3500 mm	2800 mm
Diameter	910 mm	1800 mm
Radial Depth	45 mm	100 mm
Max weight	13000 kg	80000 kg

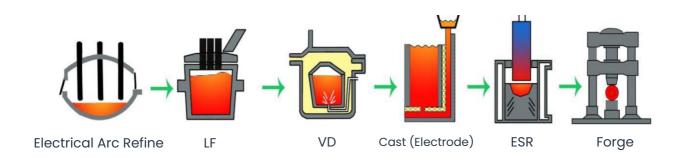




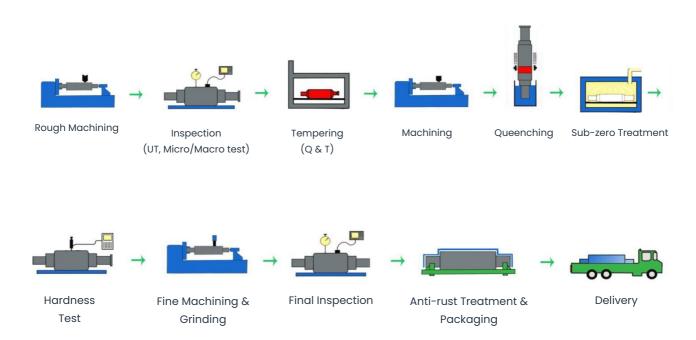




MANUFACTURING PROCESS - WR / IMR



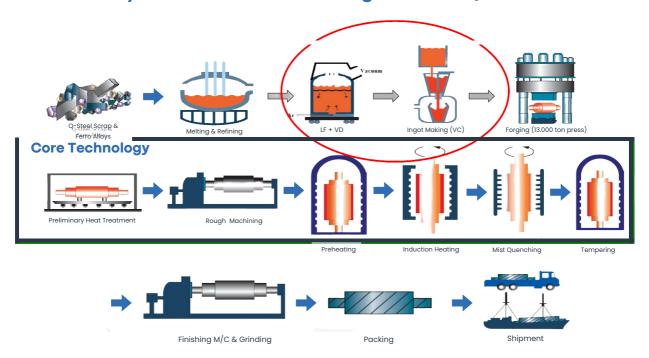
ESR process for all WR+IMR to enusre roll material cleanliness, high strength and ductility, avoid centerline porosity, alloy segregation.



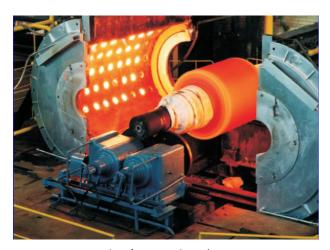


BACK-UP ROLL MANUFACTURING PROCESS

Roll blank by double vacuum refining (VD + VC).



Gas fired hardening (Selas furnace)







Spray cooling equipment

The barrel is quickly heated in selas furnace by using gas or natural gas combustion as heat source, then shift the roll to the spray cooling equipment.

HEAT TREATMENT FURNANCE











MACHINING EQUIPMENT

Sawing Machine

Vertical Turning Lathe



Gantry Milling Machine

CNC Turning Lathe

We have advanced machining equipment and can precisely machine all the details of mill rolls and roll rings. When CNC lathe and CNC grinding machine are applied, every dimension can be controlled strictly under the range of tolerance. When turning different material, it is important to choose appropriate machining tools and turning speed to achieve a better performance. And we can provide any suggestion on machining according to the customer's requirements.



CNC Grinding Machine



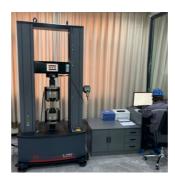
Milling Machine

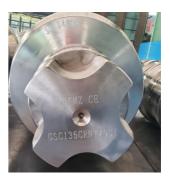
QUALITY CONTROL

The whole process from melting, casting, forging, heat treatment to final machining and packing is under control of our quality system.









Large magnetic particle detector and ultrasonic flaw detector, ultrasonic wall thickness meter and inner scope, guarantee 360 degree inspection of each product to meet customer's demand.

According to the physical and chemical laboratory construction, we can meet:

- the tensile test
- minus 80 degrees Celsius temperature impact
- chemical composition analysis
- metallographic analysis
- non-metallic inclusion analysis
- gas content analysis
- gain size analysis an magnetic induction intensity
- no magnet magnetic induction gradient
- intergranular corrosion test





CONTACT INFORMATION

Office in Czech Republic:

Jindrisska 941/24 Nove Mesto, 110 00 Praha 1 Czech Republic

Phone: +420 222 232 287 **e-mail:** info@nkmz-ce.com

Office in Germany:

Berliner Straße , 78 02943, Weißwasser Germany

Phone: +493 514 977 2001 **e-mail:** buro@nkmz-ce.com

Office in Spain:

C/Virgen de Lourdes, 26 28027, Madrid Spain

Phone: +34 654 204 157 e-mail: espana@nkmz-ce.com

Office in China:

Pudong Nan Road 1709 1101 Pasific Plaza 200120 Pudong, Shanghai

Phone: +8613611872168 e-mail: china@nkmz-ce.com

Office in UK:

17 Abbey Gardens London NW8 9AS United Kingdom

Phone: +44 7484 299934 **e-mail:** uk@nkmz-ce.com