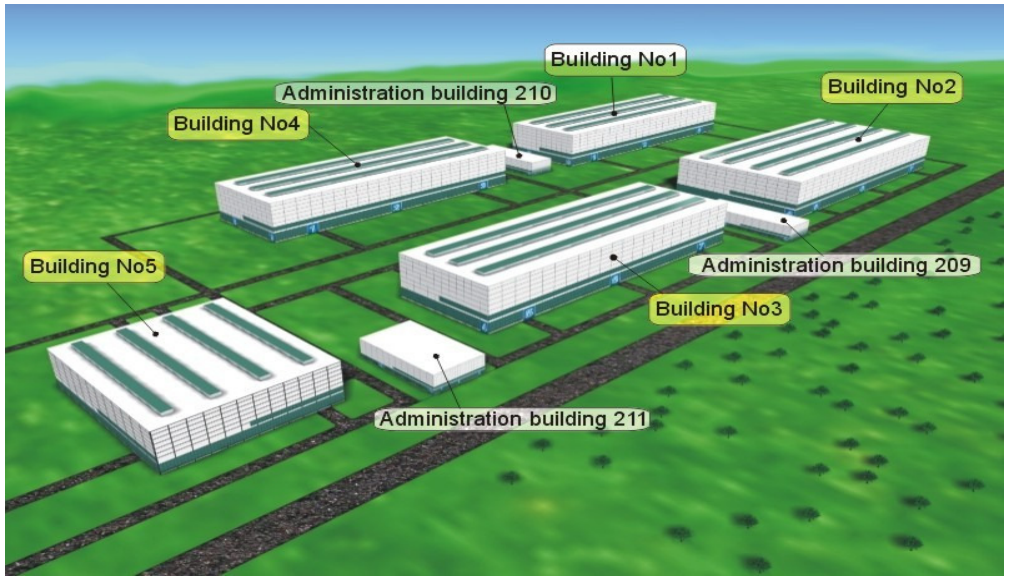
KAMAZ

PUBLICLY
TRADED
COMPANY

FORGING PLANT

2020

General information



Area	*Total area – 668 000 m²;* *production area – 217,200 m²*
Production facilities	*4 active forge-and-press production buildings,* *1 mothballed production building (building No.2)*
Technological cycle	*Cutting of rolled metal into billets, forging process, heat treatment, finishing operations. Complete cycle of technological preproduction, forge tooling production*
Forgings weight	*0,05–120 kg*
Forgings dimension	*The diameter of round in plan forgings is up to 350 mm; the length of elongated in plan forgings is up to 1800 mm*
Production capacity	*197 000 t of forgings per year*

Competitive advantages:

Full cycle of new product creation: from marketing and design to pre-production, production and sales. The company is equipped with modern facilities and has a wide range of competencies :

- ✓ own technology development,
- ✓ manufacturing of tooling, rehabilitation of tooling by welding,
- ✓ complete cycle production of forgings, stamping, heat treatment on various methods and modes of delivery of finished goods to the warehouse,
- ✓ own production of spare parts for equipment and the repair of equipment.

Production versatility: experience in forging production to the automotive business, railways, oil and gas industry, mining industry, etc.

Equipment

The forging process is performed on:

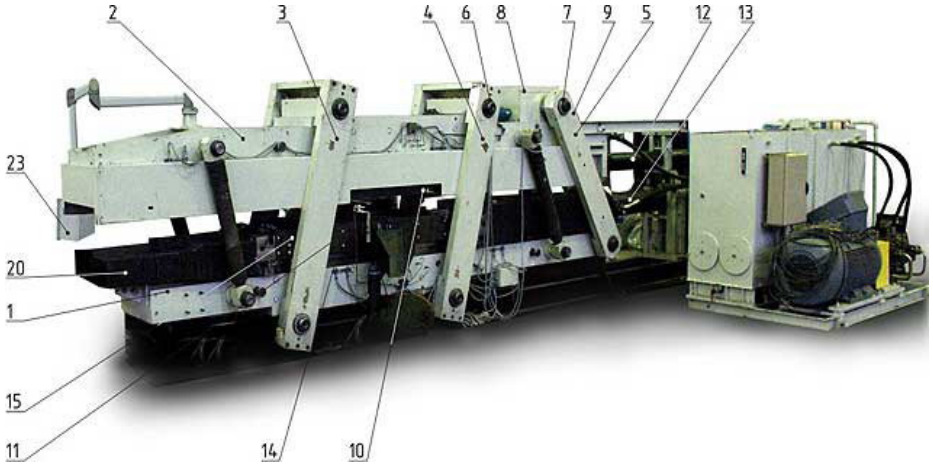
mechanized lines based on crank die forging presses:

- 1000 ton force – 6 units
- 1600 ton force – 10 units
- 2500 ton force – 8 units
- 4000 ton force – 9 units
- 6300 ton force – 5 units;

2 automated lines based on *Oemuco* crank presses operated by 12,000 ton wedge drive;

automated lines based on *Hasenklever* horizontal forging machines 250, 500, 630, 800, 1250, 2000 and 3150 ton force – totally 9 units.

12000 t automated line.



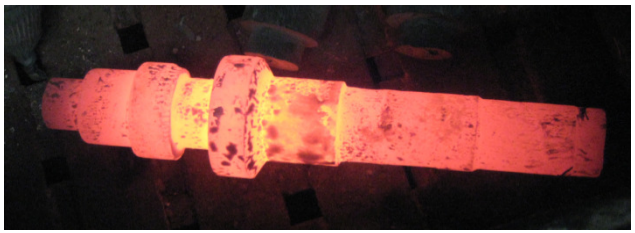
Forging technologies

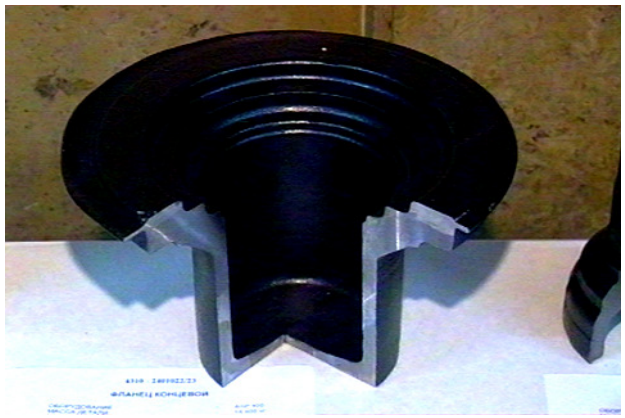
- Stamping using pre shaping (ARWS rolling)
- Stamping shafts with a set of smaller cross-section billet
- Cross-wedge shaft rolling

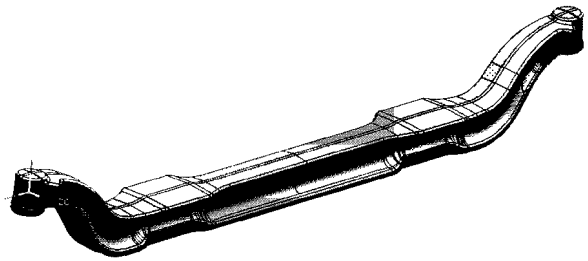
Forging production

Hot forgings of different parts for trucks and passenger cars, agricultural vehicles, trailers and power trains:

- Steering knuckles
- Front axle beams
- Crankshafts
- Hubs and flanges, round and elongated in the plan
- Levers
- Shafts
- Gears



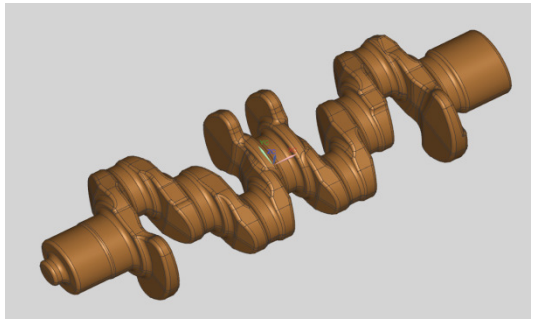


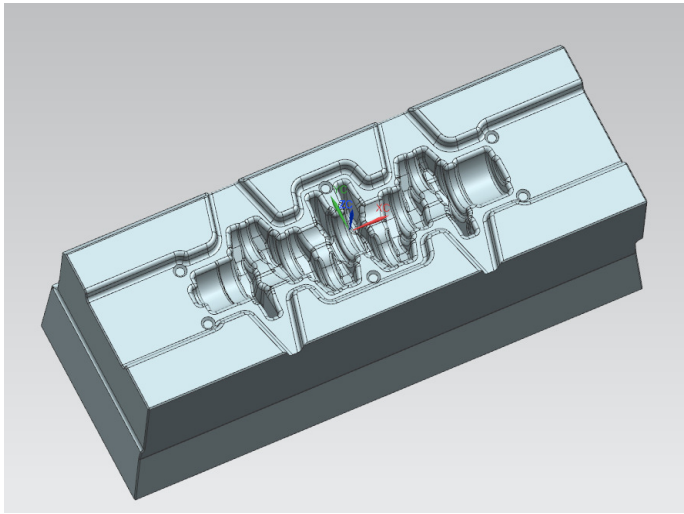


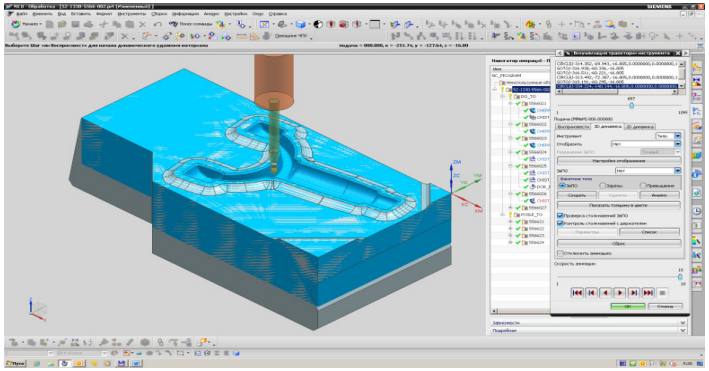
Pre-production

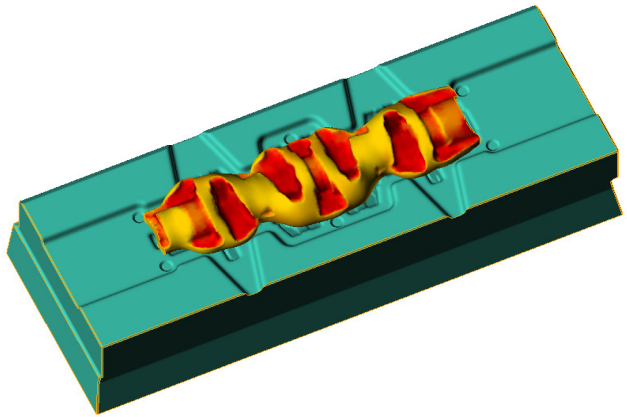
Pre-production is carried out using the latest design techniques and tooling systems CAD – CAM – CAE:

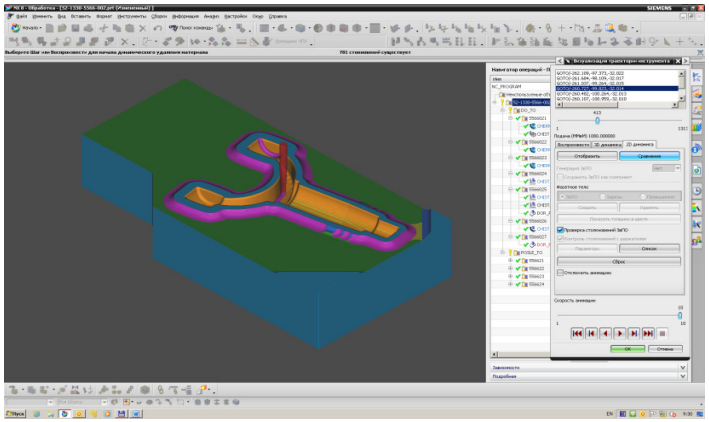
- Unigraphics NX4 package – 3D design,
- Qform package – hot forging simulation processes;
- manufacture of dies using machining centers on 3D-models.











Contact details:

Chief sales officer of metallurgy
Industrial Components KAMAZ, LLC
Marat A. Zakirov
phone: +7(8552) 37-48-19
e-mail: ZakiroffMA@kamaz.ru

Deputy general director for commercial affairs
Industrial Components KAMAZ, LLC
Rustem R. Sunagatov
phone: +7(8552) 55-19-55
e-mail: rusts@kamaz.ru