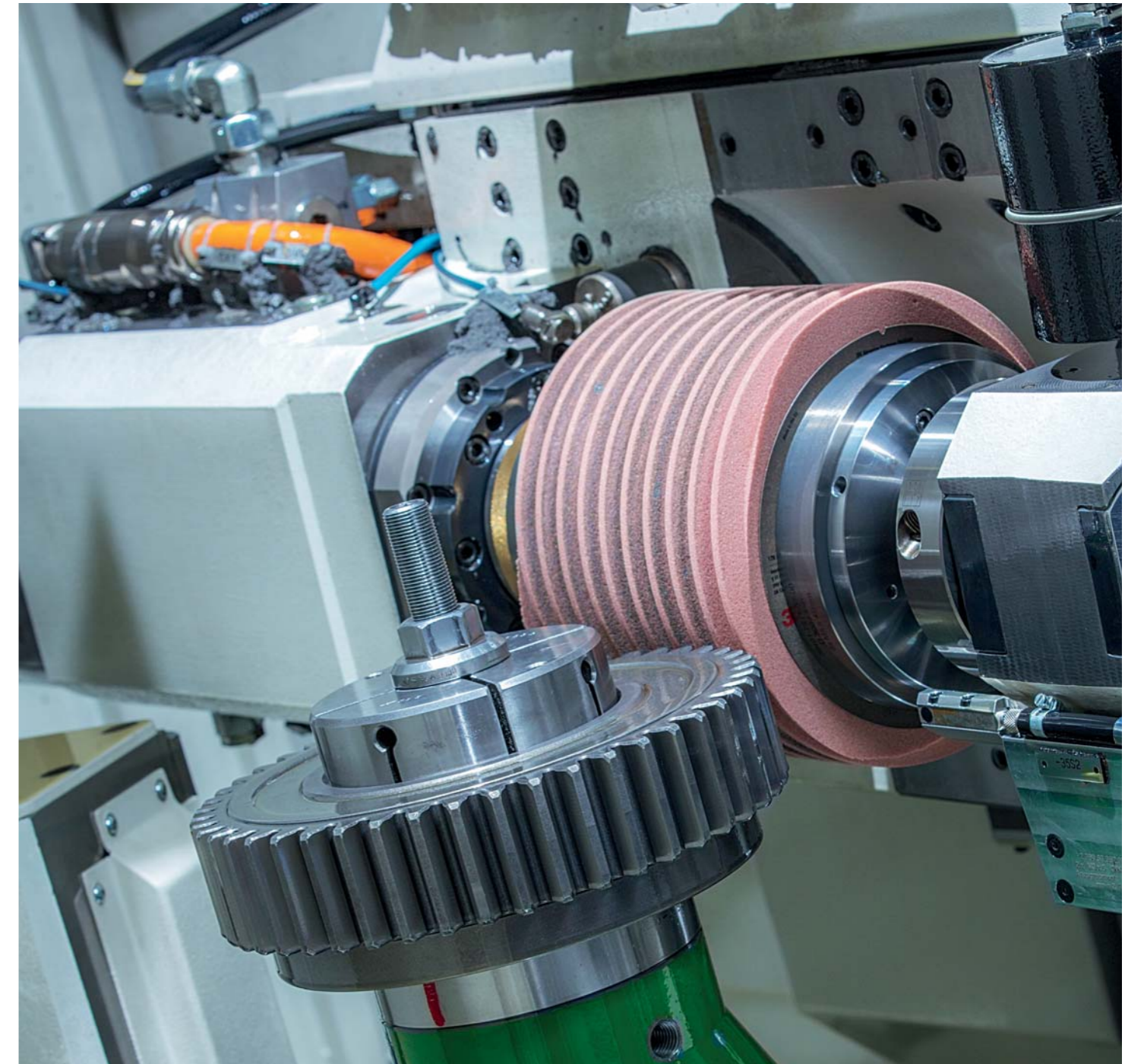


**Wikov** besides designing and manufacturing gears, gearboxes and complete drive systems, also offers one-off machine operations as part of subcontracting orders. Such type of work might involve turning (including vertical turning), shaping, hobbing, grinding the gearing or diameters, CNC machining, heat treatment and many other operations. We use state-of-the-art technologies. All operations are inspected and assessed using first-class measuring devices.

Gearing geometry is verified on Klingelnberg P100 or P300 machines. For 3D measurements, we use Merlin or Wenzel LHF3020-40 devices. All the dimensions, parameters, lists of machines and operations are stated here only to give you a rough outline; for more detailed information, contact us at the addresses below.

# Production and machinery

Wikov MGI a.s.



## Wikov Manufacturing Facility

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The Essence of Engineering



### Lathes

Dimensions of semi-finished products from  $\varnothing 10 \times L = 40$  to  $\varnothing 850 \times L = 3000$  mm (for grinding)  
from  $\varnothing 10 \times L = 40$  to  $\varnothing 940 \times L = 3800$  mm (for turning)

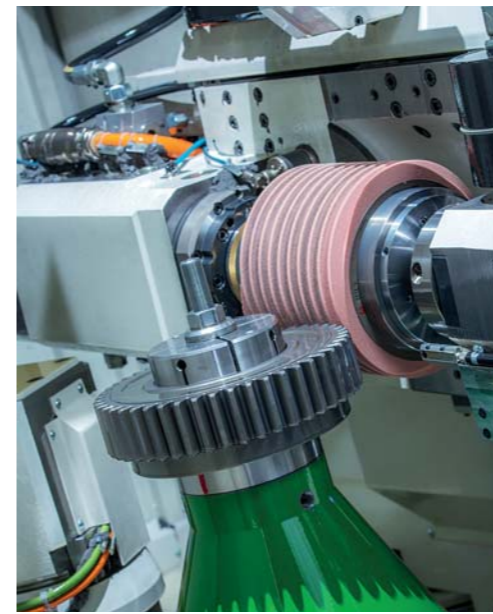
Accuracy of tools up to IT5 according to ISO 286-1:1988

Machines  
CTX 1250 Gamma  
GHT-6-1300-G2x4000  
Gildemeister NEF 600 V3  
SUS 80 and SU 90

### Vertical lathes

Number of pieces from 1 pc  
Dimensions of semi-finished products from  $\varnothing 10 \times L = 40$  to  $\varnothing 2000 \times L = 1500$  mm  
Heat treatment quenching and tempering, carburising, hardening and tempering; nitriding

Accuracy of dimensions up to IT5 according to ISO 286-1:1988  
Machines Powerturn 2000 C-M



### Grinders

Module 1.5 - 22  
Pitch diameter 15 - 1200 mm  
Max. facewidth 1000 mm  
Max. length of pinion 1600 mm  
Roughness Ra 0.8  
Accuracy DIN 3961 IT4  
Max. mass of semi-finished product 8000 kg; pinion 3000 kg  
Profile grinding of inner gearing must be agreed  
Profile grinders Niles ZE 1000 (1200)  
Niles ZE 400  
Continuous generating grinder Niles ZX 630



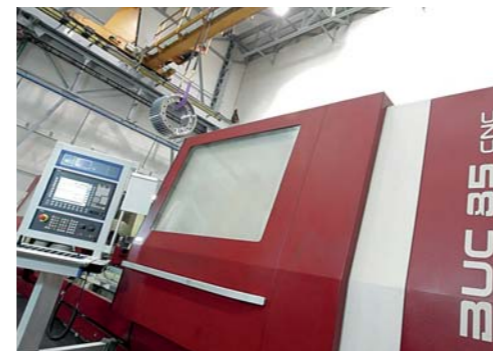
### Gear shaping machines

Module 1 - 8  
Pitch diameter 20 - 500 mm  
Max. facewidth 125 mm  
Roughness Ra 3.2  
Accuracy DIN 3961 IT9-10  
Max. mass of semi-finished product 300 kg  
Shaping of inner spiral gearing must be agreed  
Machines OHA 50A



### Machining centres

Travel X x Y x Z 12000 x 3600 x 1600 (1900) mm  
Semi-finished products welded, cast  
Heat treatment annealing  
Pitch accuracy up to 1000 mm  $\pm 0.01$  mm; over 1000 mm  $\pm 0.02$  mm  
Machines StarragHeckert HEC 1800  
Hedelius 100  
SHW-UF 6 L  
FRFQ 250



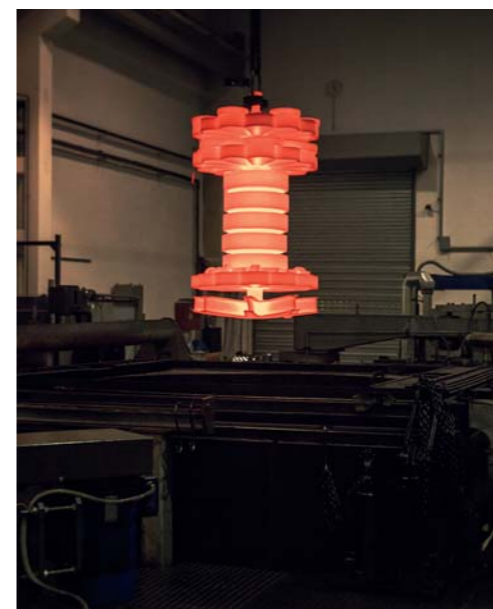
### Centre grinders

Dimensions of semi-finished products up to  $\varnothing 850 \times L = 3000$  mm  
Machines BUC 85 C CNC  
UB 63/2000 CNC



### Gear hobbing machines

Module 1 - 22  
Pitch diameter 6 - 1250 mm  
Max. facewidth 500 mm  
Max. length of pinion 1200 mm  
Roughness Ra 1.6  
Accuracy DIN 3961 IT7  
Max. mass of semi-finished product 1500 kg  
Machines OFA 71A  
Pfaüter P 600/800  
Pfaüter P 1200



### Heat treatment

Type of heat treatment	Charge		Temperature (°C)	Depth of layer (mm)
	max. useful dimensions (mm)	max. mass (kg)		
Annealing – various types	w x h x l	2000 x 2000 x 4500	10000	900
Quenching and tempering – car-type furnace	w x h x l	1000 x 1000 x 2000	2000	960
Hardening – car-type furnace	w x h x l	1000 x 1000 x 2000	2000	960
Hardening – shaft furnaces	$\varnothing \times l$	2000 x 2500	8 000	950 (1000)
Gas carburising – shaft furnaces	$\varnothing \times l$	2000 x 2500	8000	1000 up to 4.7
Tempering by freezing	$\varnothing \times l$	2000 x 2500	8000	- 75 to +450
Gas nitriding – bell-type furnace	$\varnothing \times l$	750 x 1200	1100	520 up to 0.7
HF surface hardening (pins, shafts)	$\varnothing \times l$	120 x 1000	1 pc approx. 80	up to 2.0
Quenching press AH1200	$\varnothing \times h$	1200 x 250	1500	840