



# LINGENHÖLE TECHNOLOGIE

**Center for heat treatment  
Mechanical Components  
Hydropower plants - Turbine manufacturing**

## CNC TURNING CENTRE

| <b>Make</b>                              | <b>Type</b> | <b>Rotating Ø<br/>Bezel Ø</b> | <b>Distance between centres</b> | <b>Spindle bore</b> | <b>Performance</b> | <b>Special equipment</b>   |
|--|-------------|-------------------------------|---------------------------------|---------------------|--------------------|--|
| <i>Heyligenstaedt<br/>Heynumat 25 UK</i> | CNC         | 400                           | 6000                            | 102                 | 60 kW              | <i>C-axis, TRANSMIT,<br/>driven tools, 2 bezels<br/>and tailstock, program-<br/>controlled</i>                   |
|  |             | 270                           |                                 |                     |                    |  |
| <i>Heyligenstaedt<br/>Heynumat 25 UK</i> | CNC         | 400                           | 5000                            | 102                 | 50 kW              | <i>C-axis, TRANSMIT,<br/>driven tools, bezel<br/>and tailstock, program-<br/>controlled</i>                      |
|  |             | 300                           |                                 |                     |                    |  |
| <i>Heinemann<br/>DN 300</i>              | CNC         | 610                           | 4000                            | 130                 | 63 kW              | <i>Tandem bezel and<br/>tailstock, program-<br/>controlled<br/>- Faceplate Ø 500 mm<br/>- SMW chuck Ø 460 mm</i> |
|  |             | 300                           |                                 |                     |                    |  |
| <i>Index GU 3000</i>                     | CNC         | 450                           | 3000                            | 100                 | 37 kW              | <i>Driven tools<br/>Bezel and tailstock<br/>program-controlled</i>   |
|  |             | 170                           |                                 |                     |                    |  |
| <i>Index GU 1500</i>                     | CNC         | 450                           | 1500                            | 100                 | 37 kW              | <i>Bezel and tailstock<br/>program-controlled</i>  |
|  |             | 170                           |                                 |                     |                    |  |
| <i>Index GU 800</i>                      | CNC         | 320                           | 800                             | 65                  | 36 kW              | <i>Driven tools, tailstock,<br/>program-controlled</i>   |
|  |             | 170                           |                                 |                     |                    |  |
| <i>Index GE 65</i>                       | CNC         | 200                           | 340                             | 65                  | 30 kW              | <i>Driven tools,<br/>road loader</i>   |



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## CNC TURNING/MILLING CENTRE

| <b>Make</b>                     | <b>Type</b> | <b>Rotating Ø<br/>Bezel Ø</b> | <b>Distance bet-<br/>ween centres</b> | <b>Spindle<br/>bore</b> | <b>Performance</b> | <b>Special equipment</b>  |
|---------------------------------|-------------|-------------------------------|---------------------------------------|-------------------------|--------------------|---|
| <i>Index G400</i>               | <i>CNC</i>  | 450                           | 2000                                  | 102                     | 53 kW              | 2 revolvers with<br>multifunction unit<br>5 axes, main and counter<br>spindle                               |
| <i>Gildemeister<br/>GMX 300</i> | <i>CNC</i>  | 400<br>100                    | 1500                                  | 66                      | 37 kW              | 5 axes, main and counter<br>spindle, short bar loading<br>magazine up to<br>Ø 65 mm                         |
| <i>WFL Millturn<br/>M35</i>     | <i>CNC</i>  | 500<br>245                    | 2090                                  | 77                      | 33 kW              | 5 axes with tilting<br>B-axis<br>Gear hobbing<br>Workpiece measuring  |
| <i>WFL Millturn<br/>M65</i>     | <i>CNC</i>  | 700<br>460                    | 4500                                  | 165                     | 60 kW              | 5 axes<br>Active B-axis<br>Gear hobbing<br>Pin milling<br>Deep drilling<br>Broaching<br>Workpiece measuring |

## CNC MILLING CENTRE

| <b>Make</b>                     | <b>Type</b> | <b>X<br/>axis travel</b> | <b>Y<br/>axis travel</b> | <b>Z<br/>axis travel</b> | <b>Performance</b> | <b>Special equipment</b>  |
|---------------------------------|-------------|--------------------------|--------------------------|--------------------------|--------------------|---|
| <i>Heller<br/>MC 16</i>         | <i>CNC</i>  | 630                      | 630                      | 630                      | 30 kW              | Tool changer with<br>40 tool spaces<br>2 palettes 400 x 500   |
| <i>Heller<br/>MCP-H 250</i>     | <i>CNC</i>  | 800                      | 800                      | 710                      | 43 kW              | Tool changer with<br>52 tool spaces<br>2 palettes 500 x 630   |
| <i>Hedelius BC 80<br/>X2500</i> | <i>CNC</i>  | 2500                     | 800                      | 750                      | 50 kW              | Tool changer with<br>30 tool spaces<br>NC indexing table with<br>thrust bearings<br>Angled milling head |
| <i>Hedelius BC 80<br/>X3500</i> | <i>CNC</i>  | 3500                     | 800                      | 750                      | 50 kW              | Tool changer with<br>30 tool spaces<br>NC indexing table with<br>thrust bearings<br>Angled milling head |



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## CYLINDRICAL GRINDING

| <b>Make</b>            | <b>Distance between centres</b> | <b>Max. swing diameter Ø</b> | <b>Max. swing diameter Ø in steady rest</b> | <b>Special options</b>  |
|------------------------|---------------------------------|------------------------------|---|---|
| CETOS 6000<br>BUC 63B  | 6000                            | 630                          | 350   | Marposs   |
| TOS 3000               | 3000                            | 280                          | 100   | Marposs E9  |
| TOS 4000               | 4000                            | 630                          | 250   | Marposs   |
| SCHAUDT PF61<br>CNC    | 2000                            | 360                          | -   | Measuring probe<br>Internal grinding attachment<br>Eccentric grinding     |
| TACHELLA<br>TRADE CNC  | 1500                            | 450                          | -   | 2 grinding spindles<br>Internal grinding attachment<br>Eccentric grinding |
| Kellenberger<br>1500 R | 1500                            | 250                          | 90  | Marposs   |

## INTERNAL GRINDING

| <b>Make</b> | <b>Grinding Ø</b> | <b>Max. grinding tdepth</b> | <b>Workpiece length</b> | <b>Special equipment</b>                      |
|-------------|-------------------|-----------------------------|-------------------------|---|
| Voumard     | 5 - 250           | 250                         | 500                     | Flat grinding machine<br>Bezel, magnetic disc |

## FLAT GRINDING

| <b>Make</b>           | <b>Working Area</b> | <b>Special equipment</b> |
|-----------------------|---------------------|--------------------------|
| G+H FS 840 SC Economy | 800 x 400 x 375     | Digital display          |

## CENTRE GRINDING

| <b>FMake</b> | <b>Grinding Ø</b> | <b>Workpiece Ø</b> | <b>Workpiece length</b> | <b>Special equipment</b> |
|--------------|-------------------|--------------------|-------------------------|--------------------------|
| Technika     | 3 - 60            | 125                | 1000                    | -                        |