

TECHNICAL INFORMATION SHEET STEWAL

SOFTWARE

| | |
|--|---|
| ERP: CRM- and project and order management system | -Software for REVERSE ENGINEERING of 3D- scanned objects |
| CAD: 3D development and design: solids and surfaces Kinematic presentation of designed mechanism | - MiCAT -software for generation of CMM measuring programs on 3D- CAD - models with PMI-data |
| CAM: Machining of 2 1/2D and 3D surfaces Pluri-axial machining | -Software for the optimal dynamic calculation and manufacturing of CAMS |

MACHINERY

| TURNING | # | max. Ø through spindle | Max. Ø from sledge | Max. Ø from bed | distance between centers | EXTRA |
|--------------------------------|---|------------------------|--------------------|-----------------|--------------------------|----------------------|
| Conventional turning | 3 | 51 mm | 300 mm | 575 mm | 1500 mm | |
| CNC turning | 2 | 78 mm | 260 mm | 475 mm | 1500 mm | |
| Turn-mill center 5-axis | 1 | 51 mm | 520 mm | 540 mm | 1005 mm | Sub-spindle |
| Turn-mill center 5-axis '24/7' | 1 | 80 mm | 680 mm | 500 mm | 629 mm | Bar feeder and robot |

| MILLING | # | Max. travels X - Y - Z | EXTRA |
|---|---|------------------------|---|
| Conventional milling | 2 | 500 x 400 x 400 mm | |
| 3 axis vertical milling center '24/7' | 1 | 762 x 508 x 508 mm | Pallet pool (4 large pallets) + robot (7 kg) |
| 4 axis traveling column vertical machining center | 1 | 2000 x 750 x 400 mm | 2 work zones |
| 5 axis universal milling machines | 3 | 800 x 630 x 630 mm | Rotary tables |
| 5 axis milling center '24/7', high precision | 1 | 400 x 240 x 350 mm | Pallet pool (18 small pallets) – tools Ø0.3-Ø10mm |

| EDM | # | Longitudinal travel | Transversal travel | Vertical travel | Tank dimensions |
|----------------------|---|---|--------------------|--|---------------------|
| Die sinking EDM | 1 | 320 mm | 250 mm | 420 mm | 820 x 450 x 300 mm |
| CNC Die sinking EDM | 1 | 500 mm | 350 mm | 500 mm | 1200 x 800 x 600 mm |
| CNC Wire cutting EDM | 1 | 350 mm | 250 mm | 256 mm | 800 x 700 x 600 mm |
| EDM-drilling | 1 | max. workpiece dimensions: 660 x 360 x 240 mm | | Holes from Ø0.3 upto Ø3mm, depth upto 250 mm | |

| GRINDING | # | Longitudinal travel | Transversal travel |
|----------------------------|---|------------------------|---|
| Plane grinding | 1 | 800 mm | 550 mm |
| Plane and Profile grinding | 3 | 610 mm | 200 mm |
| Cylindrical grinding | 2 | Max. interior Ø: 150mm | Max. exterior Ø: 360mm distance between centers: 1000mm |

| DRILLING | # | Longitudinal travel | Transversal travel | Max. range |
|--|---|---------------------|--------------------|------------|
| Deep hole drilling | 1 | 600 mm | 400 mm | 600 mm |
| Various conventional drilling and tapping machines | | | | |

| WELDING | # | certified according to EN15085-2 -CL2 - P | EXTRA |
|---------------|---|---|---|
| TIG welding | 1 | I-max 220A | separate storage and welding areas for C-steel and stainless steel/non-ferrous metals |
| MIG welding | 1 | I-max 300A | |
| Laser welding | 1 | Pulsed YAG laser 800 x 300 x 600 mm, P=120W | |

| MISCELLANEOUS | # | |
|------------------------------|-----|--|
| Sawing | 3 | Max. Ø 400 mm |
| Heat treatment | 1 | Oven (internal dimensions 210 x 350 x 500 mm) |
| Hydraulic press | 1 | 30T, stroke 600 mm |
| Injection moulding | 1 | Closing pressure 200T, max. mold dimensions 508 x 770 mm, max. injection volume 372g |
| Mechanical surface finishing | var | Rotary vibrator , sand blasting, polishing equipment... |

METROLOGY (CLIMATISED MEASURING ROOM)

| | | | | |
|-----------------------|---|--|--------------------------|---|
| CMM accuracy 1.7µm | 1 | 500 x 700 x 400 mm, max. load 180 kg, swiveling head | Digital height gauge | 1 |
| CMM accuracy 1.7µm | 1 | 900 x 1000 x 600 mm, max 1200kg, streaming probes , swiveling head | Roughness Tester (Ra/Rz) | 1 |
| Optical CMM (camera) | 2 | 250 x 200 x 150 mm, precision 3 µm, max. 10 kg | Hardness tester (HRC) | 1 |
| 3D scanner (handheld) | 1 | range <400 mm, resolution 0.1mm, accuracy 0.03mm | Profile projector | 1 |