

GENERAL

MAKE - TYPE

MKG

Kardex Shuttle XP



Zeiss Contura G2

Zeiss Duramax

Zeiss Accura

Mitutoyo LH600

Mitutoyo Trimos

Mitutoyo SJ210

Olympus SZX10

Mantis Compact

UV lamp

Various test systems including reporting software

Extensive range of manual quality control tools

DESCRIPTION/SPECIFICATIONS

Enterprise resource planning software for manufacturing & production

Dynamic storage & retrieval system

QUALITY ASSURANCE & CONTROL

3D CNC Measuring machine, Calypso software, Accuracy 1,9 µm + 1 µm * l (mm) /300

MAX. WORKING RANGE (mm)

1000x1600x600

NUMBER

2 items

3D CNC Measuring machine, Calypso software, Accuracy 2,4 µm + 1 µm * l (mm) /300

500x500x500

1 item

3D CNC Measuring machine, Calypso software, Accuracy 1,6 µm + 1 µm * l (mm) /330

1200x1800x1000

1 item

Altimeter

0 -972

1 item

Altimeter

0 - 615

2 items

Surface roughness measurement

1 item

Microscope Magnification 126x, Resolution 600 LP/mm

1 item

Magnifier up to 8x

1 item

For cleanliness check of cleanroom products

1 item

- Variety of standard and special pressure drop and flow measurements
- Dedicated test systems for function testing



COMPONENT PRODUCTION:

PROCESS ENGINEERING & MANAGEMENT:

MAKE - TYPE

Edgecam

Dlog

APM

Zoller Saturn 1

Zoller Venturion

DESCRIPTION/SPECIFICATIONS

MAX. WORKING RANGE (mm) **NUMBER**

External programming software for CNC-machining supported file formats		7 seats
Programming software for CNC machining supported file format: Dxf		4 seats
Product data management system for CNC programs (including versions registration), actual production data and quality report archiving. Modules: NC+, Quality+, Tool+en Clamp+		59 seats
Pre-adjustment device datalink to transfer data to systems		1 item
Pre-adjustment device, datalink to transfer data to systems		1 item

MILLING & TURNING EQUIPMENT:

CNC MILLING 5-AXIS (SIMULTANEOUS)

Matsuura Mam72-35v	32 pallets; 120-240 tools; spindle speed:15,000 rpm + internal cooling; Fanuc control; Renishaw touch probe; Renishaw breakage detection	Ø 350xH240	4 items
Matsuura Mam72-63v	Machines are connected to Fastems system with 42 pallets; 240 tools; Spindle speed: 12,000 -20,000 rpm + internal cooling; Fanuc control; Renishaw touch probe; Renishaw breakage detection	700x500xH500 Pallet 500x500	2 items
Hermle C40	Automatic loading by free standing robot, 195 tools, spindle speed 18,000 rpm, Siemens 840D control, Renishaw touch probe	800x750x500	2 items
Mori Seiki NWV 5000	Automatic loading by free standing robot, 181 tools, spindle speed 12,000 rpm, Siemens 840D control, Renishaw touch probe	730x510x510	2 items

MAKE - TYPE

CNC MILLING HORIZONTAL

Matsuura H-plus 405

6 pallets; 120 tools; spindle speed:15,000 rpm + internal cooling (25 bar); Stark mounting system; Fanuc 16i control; Renishaw breakage detection

600x600xH600
Pallet 500x50

1 item

CNC MILLING VERTICAL

Matsuura Mc-800Vg

30 tools; spindle speed:15,000 rpm + internal cooling (25 bar); Stark mounting system; Yaskawa J300 control; Fourth shaft

800x500xH600

2 items

Matsuura Mc-1000Vg

30 tools; spindle speed:15,000 rpm + internal cooling (25 bar); Stark mounting system; Yaskawa J300 control; fourth shaft

1000x500xH600

1 item

Matsuura Ra-2

2 pallets; 30 tools; spindle speed:15,000 rpm + internal cooling (25 bar); Stark mounting system; Yaskawa J300 control

660x460xH485

2 items

Matsuura Ra-3

2 pallets; 30 tools; spindle speed:15,000 rpm + internal cooling (25 bar); Stark mounting system; Yaskawa J300 control; Renishaw breakage detection;

800x500xH500

2 items

Victor V70

40 tools; spindle speed:12,000 rpm + internal cooling (20 bar); Stark mounting system; Fanuc 21i control

700x480xH510

2 items

Dmu 50T

16 tools; spindle speed: 8,000 rpm; Stark mounting system; Tnc 426 control; 4th and 5th shaft manually adjustable

500x400xH400

2 items

CNC TURNING-CUTTING

Mazak Intergrex 200-III ST

40 tools; main and sub-spindle; spindle speed: 12,000 rpm + internal cooling ; Renishaw breakage detection; Mazatrol control; bar feeder

Ø 200x600 Shaft
passage max Ø 65

1 item

Nakamura Super NTY 3

3 turrets; 72 tools; main and sub-spindle; spindle speed: 6000 rpm (spindle and turrets); Fanuc 30i control; bar feeder

Ø 175x588 Shaft
passage max Ø 50

1 item

Nakamura WT 250

2 Turrets 48 tools, main and sub spindle, spindlespeed 6000 rpm, FANUC 30i control

Ø 300 x 600 Shaft
passage max Ø 65

1 item

OTHER

Various Saw machines

Automatic band and circular

3 items



MAKE - TYPE

Cleanroom

Regular assembly area

Curing oven

PlasmaTreat OpenAir system

Glue dispensers

Variety of semi-automatic assembly equipment

ASSEMBLY, SUPPLY & VALUE CHAIN MANAGEMENT:

DESCRIPTION/SPECIFICATIONS

MAX. WORKING RANGE (mm) NUMBER

ISO class 7 (10.000), Separated entrance/exit, ISO class 6 (1.000) in Crossflow cabinet 3x, Pressurized air ISO class 1

2000x2000x2000

175 m2

Project assembly desks, Process assembly lines, ESD- workspaces and floor

425 m2

Max to 250 degrees Celsius

300 x 400 x 300

1 item

Plasma system for cleaning and pretreatment of wide range of materials

1 item