

customer address:	
Order number:	
Serial number:	

Preparation

Visual inspection - take pictures of machine location and machine condition (also back and machine inside)! Note abnormalities: _____	☐
Main function test (power button, emergency stop, cover, power, touch screen, door lock).	☐
Open the remote and carry out a reference run (listening test).	☐
Dismantle the maintenance flaps and check the maintenance unit for moisture, replace the filter if necessary.	☐

Axes and actuators

Cleaning the inside of the machine (rear side).	☐
Pull – pushtest (axes: X, Y und Z).	☐

Check the backlash of the X, Y and Z axes. The backlash must not exceed 0.02 mm!
The actual values are to be recorded below.

Actual value X-axis:

Before: mm After : mm

Actual value Y-axis:

Before : mm After : mm

Actual value Z-axis:

Before : mm After : mm

Align A-axis.	☐
Clean und lubricate all mechanical guides and Ball-Nuts (axes: X, Y and Z).	☐
Clean tooth belt pulley and check the screws for tightness (axes: X, Y and Z).	☐
Belt change (axes: X, Y and Z). Before marke the toothed pulleys!	☐

Listen to all axes for strange noises.	☐
Replace the extraction hose in the machine.	☐
Change backup battery 350i Pro series.	☐
Clean bellows and check for damage (axes: X, Y and Z).	☐
Home Offset before Index at 350i and 350i Loader adjust	☐

Spindle

Clean the spindle collet, grease it and mount it back	☐
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Spindle turning speed

Measured at 10.000 rpm.	min.9.700U/min max.10.300U/min	rpm
Measured at 30.000 rpm.	min.29.100U/min max.30.900U/min	rpm
Measured at 50.000 rpm..	min.48.500U/min max.51.500U/min	rpm

Check Spindle concentricity

The tolerance is 0,02mm at 40mm down.

Measured at the collet:	mm
Measured at 40mm distance to the collet:	mm

Tool Magazine

Clean tool magazine and replace worn tool holders.	☐
Adjust all positions of the tool holder and also check the springs	☐
Check the function of the tool magazine cover (sensor/magnet, clamping screw)	☐
Check the function and tightness of the solenoid valves and tubing (auditory and visual inspection).	☐
Teach length measuring probe and check for plane surface & function (20x measuring, max. tolerance 0.009mm!)	☐
Measure collet.	☐

Zero-point clamping system and spindleair

Turn the B-axis 90° downwards, spray NPSS with penetrating oil and open and close several times, then leave to take effect for 10 minutes. Flush the oil out at B0° position.	☐
Check the pneumatic values of the spindle! The check must take place at an operating pressure of 6.5 bar (maintenance unit)! Measure the pressure immediately after the throttle valve. Check the function and tightness of the valves and hoses.	

Spindle sealing air

Nominal value: Actual value:

Blow-off during machining

Nominal value: Actual value:

Blow-off during tool change

Nominal value: Actual value:

Check pressure/retension NPSS, correct if necessary (nominal value 5 bar).	☐
Replace NPSS 3 O-rings and check for leaks	☐
Check that all blankholder are firmly seated in the NPSS and retrofit washers if necessary.	☐

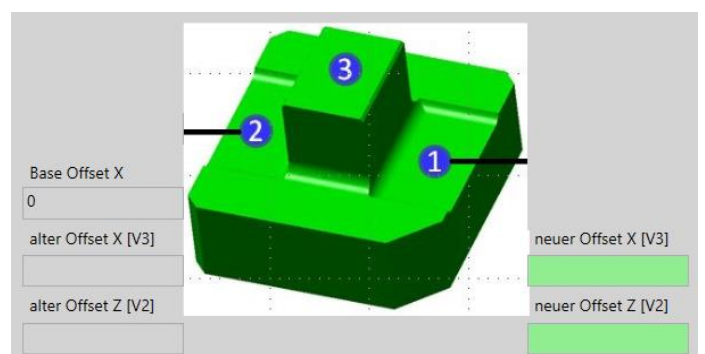
Measurement and calibration

Teach from the X axis zero point	☐
Mill a Calibration Body 3 + 12, measure, calculate and save in TK-Zero Point. When calculating and saving the values, Remote must be closed!	☐

Position	Y-Side (long)	Y-Side (short)	Lid thickness
TK 3			
TK12			

Mill 5x-Calibration Body, enter in TK-Zero Point and give it also in the CAM ☐

1. Measurement	mm
2. Measurement	mm
3. Measurement	mm



Calibrate the Pre-milled abutment holder, measure and if CAM from imes-icore, then request correction values (subject to charge). ☐

Cooling lubricant and extraction system and spindle cooling unit

Check the cooling lubricant circuit for function and tightness. If the hoses are porous and damaged, they must be replaced	☐
Adjust the spray nozzles	☐
When processing glass ceramics, the spray nozzles must be set at 50,000 rpm with the milling cutter T21 (two nozzles must hit the milling cutter)!	☐
Check the function of the suction system.	☐
Additionally with CORiTEC 350i PRO+	
Check cooler liquid level, dust filter and flow at the spindle cooler.	☐

Loader

Check the balck clamp claws for wear and replace if necessary.	☐
Check the holding rollers on the blankholder for firm seating.	☐
Clean blank detection sensor and check the position of detection	☐
Check the holding rollers on the blank wheel for contact.	☐
Calibrate the Loaderpositionen.	☐
Do a blankchange with a full Loader. Inform customer about symmetrical loading!	☐

Final Tasks

Clean the machine	☐
Check all doors for easy sliding and also check the rails from the doors	☐
Clean all windows	☐
Check axes labelling (axis direction arrows) and replace if necessary.	☐
Clean the disc (spinning disc) of the spindle.	☐
Check and clean fan / air filter	☐

All hoses and cables properly connected to or in the machine and to the control PC?	☐
Check the grounding wires for strong and good connection.	☐
The electrical security check	☐
Assembling the machine / final visual inspection.	☐
Clean the machine inside and out.	☐

Software

Bakup from the folders CNC-Manager, CNC-Workbench und imes-icore and save it in the Backup folder C:/Backup: But it there in a new folder with the name SN._Date → example: SN.691225_16.04.2021_	☐
Delete the old milling files from the PC (but first ask the customer)	☐
Check the FTDI settings (Bit rate und Latency timer)	☐
Save pictures from machine to USB stick with the backup	☐
Attach the maintenance sticker to the machine.	☐
Final function test with customer handover.	☐

Additional work (subject to a charge!)

Calibrate Medentika / Pre-Milled Abutments	amount
Machine was not freely accessible.	☐
Machine had to be cleaned additionally	☐

Place, Date	Signature of client	Signature contractor