J0001000H Autoflow Mk4 Mechanical installation-Alignment

Installation and Alignment criteria for Autoflow Mk4

Difficulty Hard

Ouration 2 day(s)

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Comments

Introduction

Information to clarify correct process for installation of J0001000H Autoflow $\mathsf{Mk4}$

Levelling tolerance of 0.004" /0.1mm over 300mm (1 division on engineers level) must be adhered to

Step 1 - Machine Location/Position

Use footprint drawing to determine machine location for installation



Step 2 - Module A Infeed table

Identify correct position for installation of Infeed frame. Ensure consideration is given to walkways and installation of machine guarding at later part of installation



Step 3 - Levelling Datums

Indicated are the leveling datums for the Infeed table

X Axis as indicated by 1

Y axis as indicated by 2



Step 4 - Infeed Table Levelling Process

1 Ensure indicated central 4 adjusting bolts/ pads are lifted out of the way, so they do not impede the levelling process 2 Set gap of indicated pads to the starting measurement shown of 40mm

3 Adjust Y axis position to read level at indicated points using pads indicated in number 2 only

4 Adjust X axis position using same pads as previous, and ensure Y axis level is not compromised by adjusting pads in pairs









Step 5 - Adjust remaining pads

Remaining pads should now be adjusted down to touch floor.

Ensure no additional pressure is applied to they which will cause levels to be affected



Step 6 - Position Machining/Saw unit

Position Module B/F into the approximate area according to the floor plan



Step 7 - level datums

Datums for levels are as shown

1 X Axis . Only first and last datum rollers should be used initially for levelling

2 Y Axis should be set from fixed cut table







Step 8 - Set levels

1 Ensure centre support foot is wound up away from floor to not impede initial level setting

2 Use a 2 meter straight edge and engineers level to bridge between 2 indicated datum points for X axis datum. Adjust perimeter pads only to bring this level (centre rollers tables may appear low when straight edge is used. This is normal and will be adjusted out later)

3 Use engineers level on the indicated face to adjust Y axis level. Ensure floor pads are adjusted in pairs to maintain X axis level that has been set









Step 9 - Finalise Position Machining centre X axis

Spacing between Infeed and Machining centre should be set to 370mm as indicated. This measurement is taken from internal faces of frame box section.



Step 10 - Finalise Position Machining Centre Y axis

1 Use 2 meter straight edge against indicated rollers on infeed table .

2 Adjust position of Machining centre so indicated rollers align to straight edge set against infeed rollers





Step 11 - Finalise Machining centre height

- ...Infeed table lift rollers are required to set height relationship to Machining centre. These must be set in the lifted position. Use temporary air supply
- 1 Use 2 meter straight edge on indicated rollers to project height to Machining centre
- 2 Use indicated rollers to accept projection from Infeed table
- 3 Adjust 4 corner pads of Machining centre equally to match height to straight edge .
- 4 Increase height of Machining centre by 0.5mm to allow slight bump up from Infeed rollers to Machining centre







Step 12 - Adjust Centre support

1 Centre support foot can now be set on Machining centre. Insert 2 meter straight edge and bridge 2 datum points for x axis on the machining centre (same as previous step)

2 If all rollers are contacting straight edge, adjust centre support to take weight of Machining centre but not adjust roller position

3 If discrepancy is visible, centre support can be adjusted to align centre rollers to straight edge





Step 13 - laser Alignment Height

Laser alignment is now required to ensure all alignment is correct

1 Use a laser to cast from indicated rollers in the direction shown

2 Ensure measurement indicated is constant on every roller on infeed table





Step 14 - Laser Alignment Backfences

1 Use a laser to cast from the indicated point in the direction shown

2 Take indicated measurement From roller closest to Machining centre

3 Take the same measurement at the last roller on the Infeed. These measurements need to be the same to ensure correct alignment

4 If the measurement is different, the Machining centre will require adjusting slightly to correct this pivot the Machining centre Rear in the indicated directions to correct laser error

5 Recheck Step 10 if adjustments are made

All Previous parameters for alignment must be rechecked (steps 7 to 13) once final adjustments have been done







Step 15 - Finalise Front guard Support

Now alignment between Infeed table and Machining centre is complete, the front tray support can set

Adjust support so front tray is held level to rest of assembly







Step 16 - Assemble JX Axis

The JX axis requires assembling to allow setting of the outfeed table