



# ZX5 Installation Procedure 2023

Key Steps for mechanical installation of ZX5

 Difficulty **Very Hard**

 Duration **4 day(s)**

## Contents

Introduction

Step 1 - Information links

Step 2 - Module Positioning

Step 3 - Module order of positioning and levelling

Step 4 - Identify correct factory location and set position

Step 5 - Support post installation

Step 6 - Levelling of multi outfeed or saw infeed Y axis

Step 7 - Check reference points

Step 8 - Levelling of multi outfeed or saw infeed X axis

Step 9 - Position 2nd frame Saw infeed or Multi head outfeed

Step 10 - Adjust height of 2nd levelled frame to match first

Step 11 - Add 2 Transfer beams and Parallel set between hepco Rails

Step 12 - Check and Set squareness of transfer table

Step 13 - Add remaining transfer beams

Step 14 - Check flatness of transfer beam top faces

Comments

## Introduction

Key data for installation of ZX5

Dokit to generate consistency of installation

Quality checks for installation

Manufacturing data supply

## Step 1 - Information links

In each step if applicable, Manufacturing links have been included to aid the installation progress for correct understanding of assembly process to achieve desired results

Please use the links if any adjustments have to be made on site, as critical measurements and setting details will be provided within the build data

Please ensure any quality/ discrepancies are correctly reported if encountered



## Step 2 - Module Positioning

Identify if either saw infeed or multi head outfeed is the logical frame to place first .

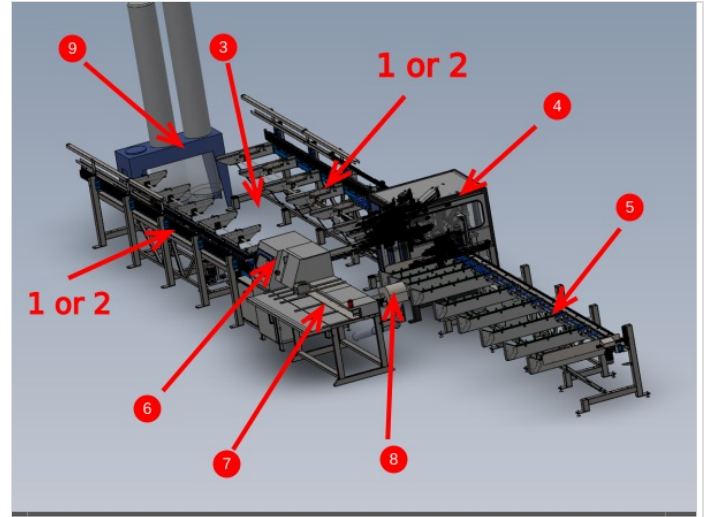
Consider access to machine when installing 1st frame

Consider handing of machine



## Step 3 - Module order of positioning and levelling

1. Saw infeed or Multi head outfeed
2. multihead outfeed or saw infeed
3. transfer table
4. Machining centre
5. Machining centre infeed
6. Saw module
7. Saw outfeed table
8. Conveyor
9. Extraction
10. Guarding



## Step 4 - Identify correct factory location and set position

Position first frame identified to be first and set parallel to installation area

Take into consideration walkways, access one machine is installed and service connections



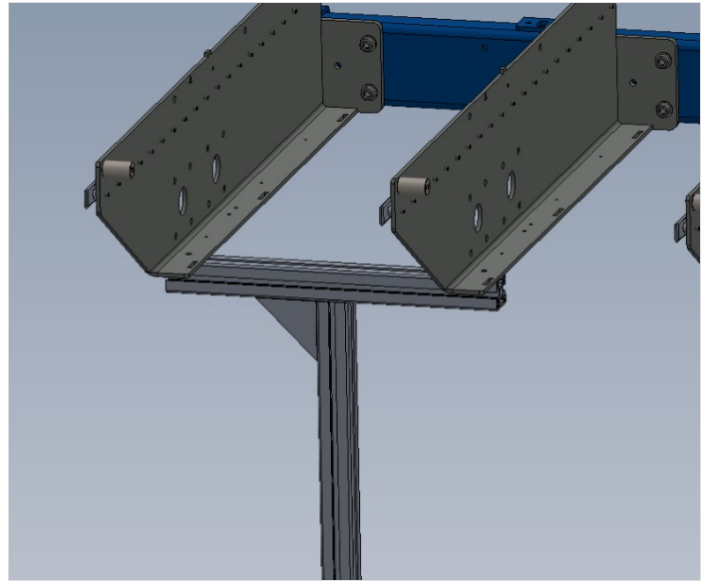
## Step 5 - Support post installation

It is vital the support arm is utilized at this point to allow correct adjustment of position 1 and 2 support arms

Use the adjustment in the foot to correctly level arms 1 and 2

R0015245 Module C support arm alignment

R0015273 Module E support arm alignment



## Step 6 - Levelling of multi outfeed or saw infeed Y axis

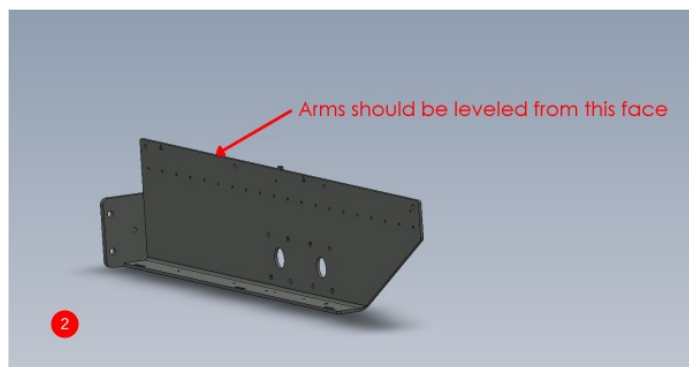
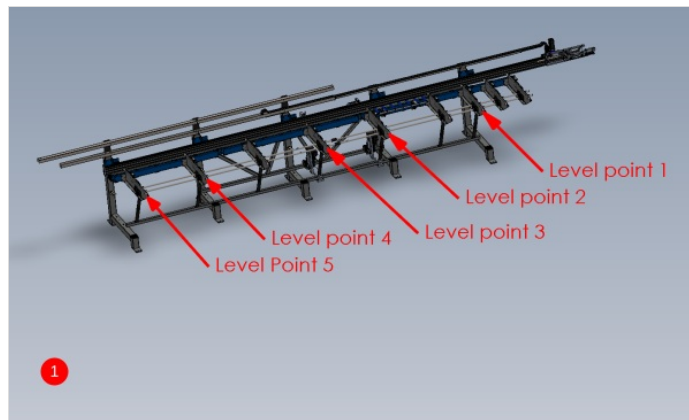
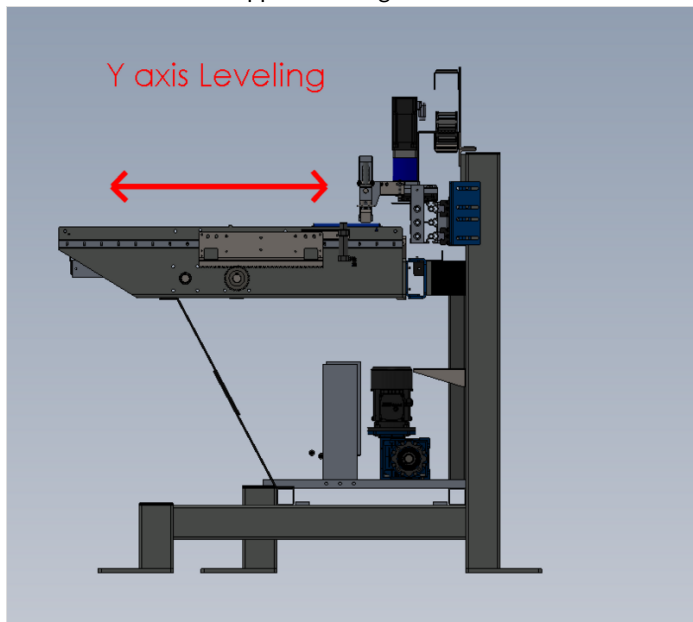
Both frames will be initially levelled in the same way, and then fine tuned once multi head or saw is installed

Y axis levelling

1. Only level the arms at the positions indicated, as these are the only arms that sit directly above adjustment feet
2. Level support arms from the indicated face

R0015245 Module C support arm alignment

R0015273 Module E support arm alignment



---

## Step 7 - Check reference points

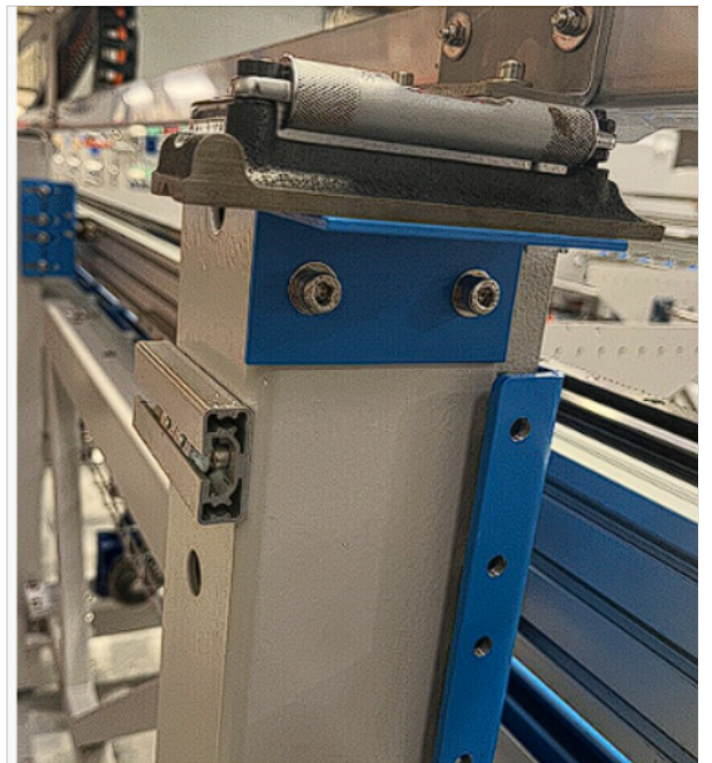
Once the previous step has been performed, reference brackets should be checked to confirm factory setting has been achieved

The levelling brackets indicated should match the level of the support arms

Discrepancy should be immediately reported

R0015244 Frame ancillaries Fitting





## Step 8 - Levelling of multi outfeed or saw infeed X axis

X axis is initially set up using the carriage plate as a register. Once additional units are installed and levelled, this x axis setting will be rechecked and adjusted if required

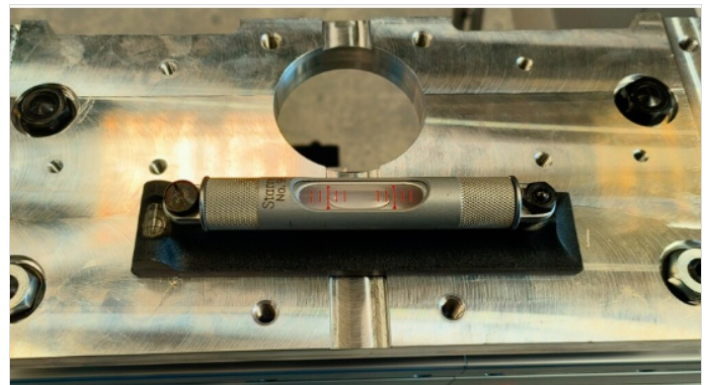
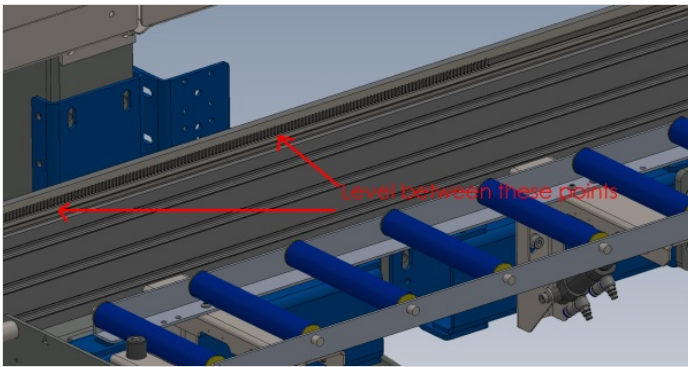
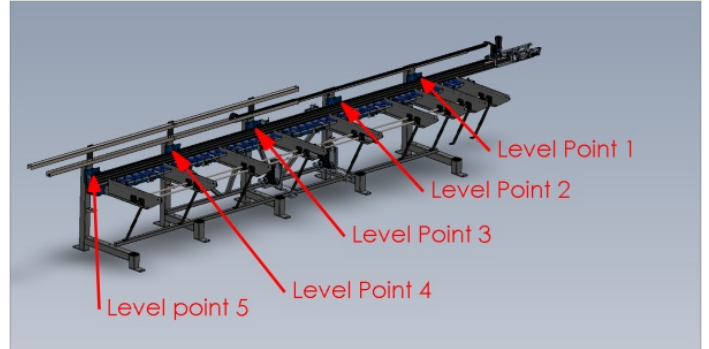
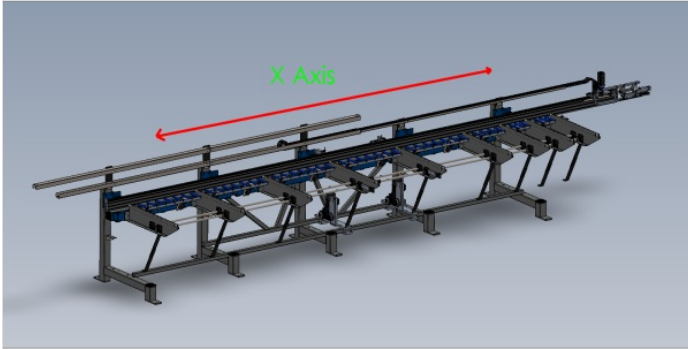
Please note photo of level is taken from production stage. It is to give reference of the part to be used to set X axis level. Position level at available point on assembled carriage plate

R0015028D ZX5 Hepco Beam Alignment Module C

R0015028D ZX5 Hepco Beam Alignment Module C part 2

R0015029D Hepco Beam Alignment

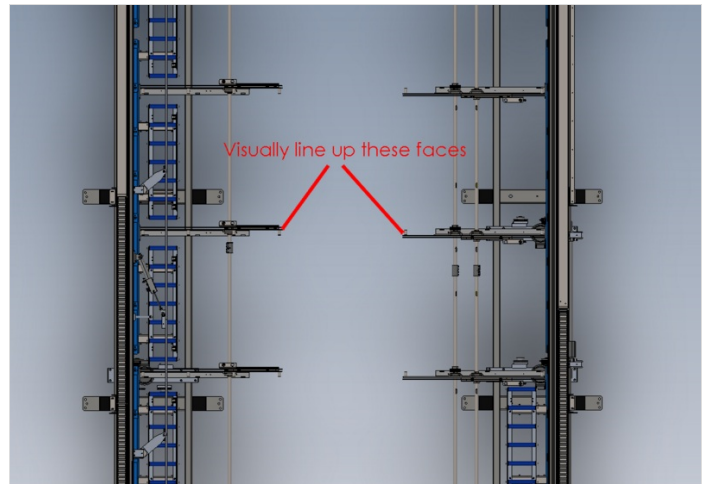
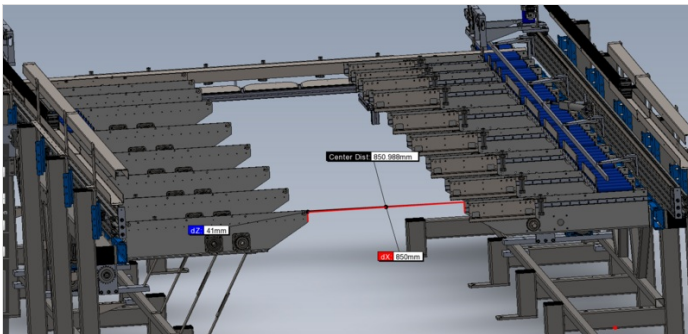
R0015029D Hepco Beam Alignment Part 2



## Step 9 - Position 2nd frame Saw infeed or Multi head outfeed

- Position second frame opposing first one which has been levelled
- Use measurement shown to set the frames roughly the correct distance apart
- Move the frame on the x axis to visually line up the support arms on both frame
- Level second frame using steps for levelling first frame above

R0015291 Install Transfer Beams To Module C and E

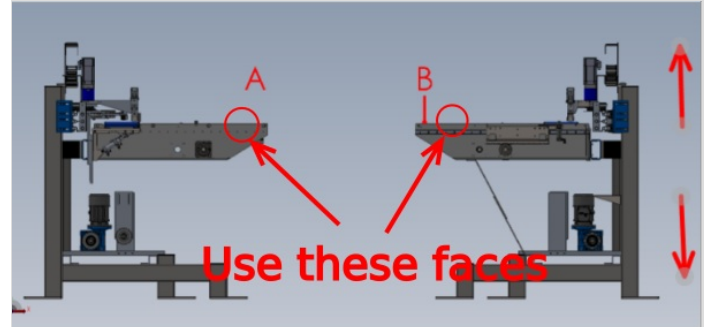
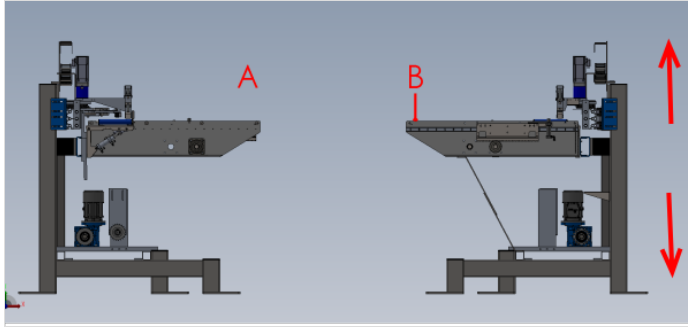


## Step 10 - Adjust height of 2nd levelled frame to match first

Points A and B should be level with each other.

Adjust 2nd frame up or down on all frame bolts to achieve this  
Take care not to effect previous level settings when adjusting height

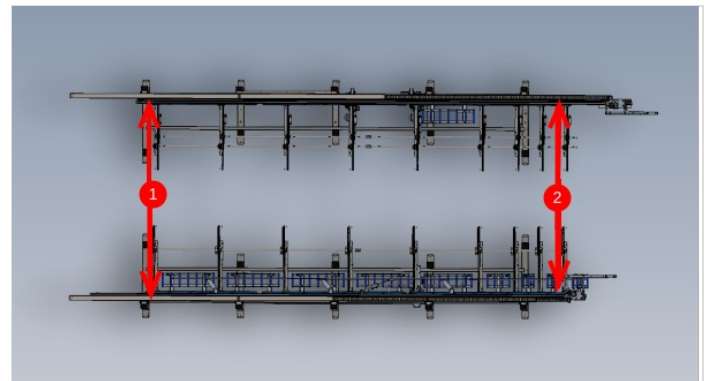
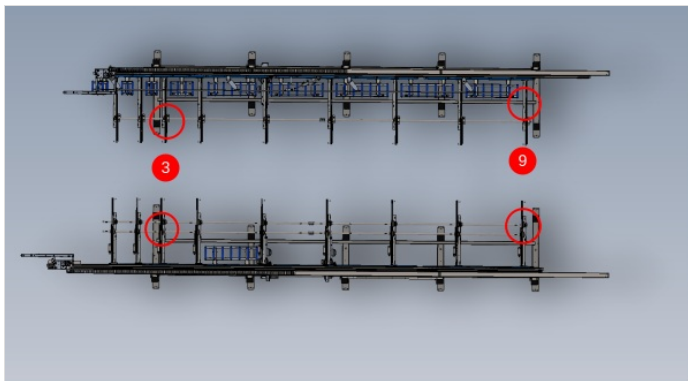
[1]R0015291 Install Transfer Beams To Module C and E



## Step 11 - Add 2 Transfer beams and Parallel set between hepco Rails

- Attach transfer beams 3 and 9 in there locations
- Add fasteners to beams to secure but leave loose enough for adjustment
- Measure the distance between the 2 hepco rails at the points shown on diagram 2 . Both indicated measurements should be the same . If not the slot in the transfer beam can be used to allow adjustment of this measurement to correct . Tolerance +- 1mm
- Tighten transfer beam fixings to hold frames in correct position

R0015291 Install Transfer Beams To Module C and E

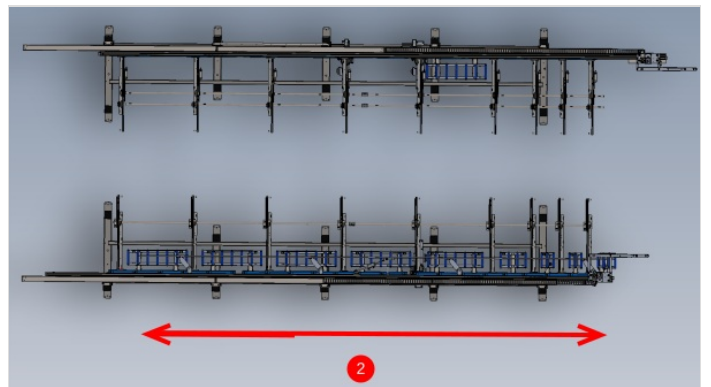
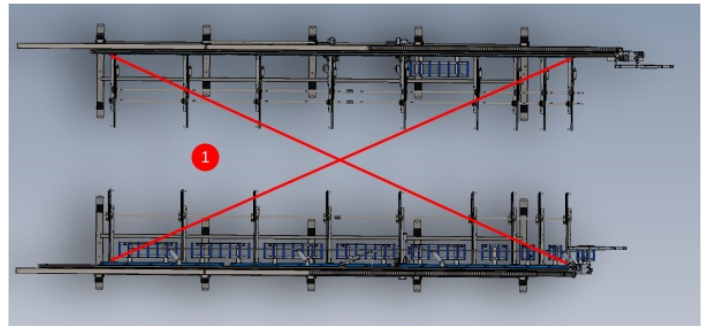
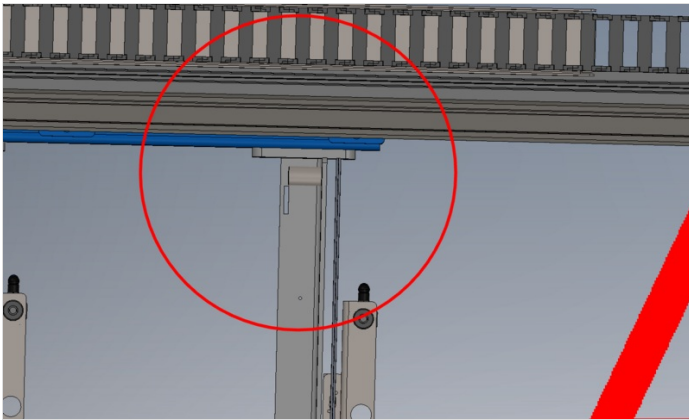
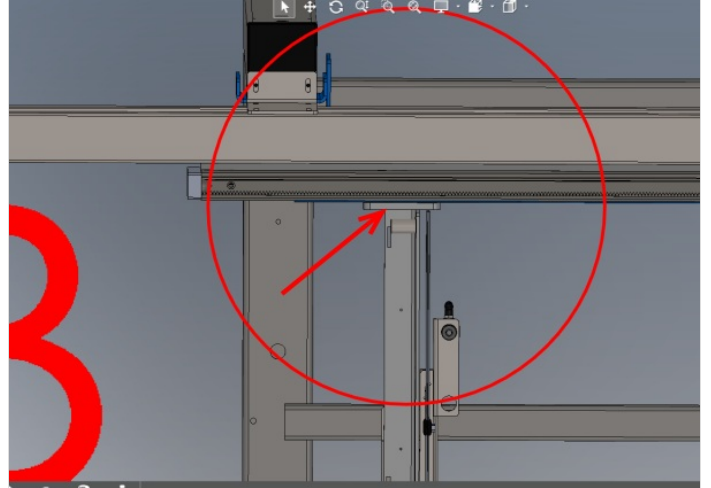
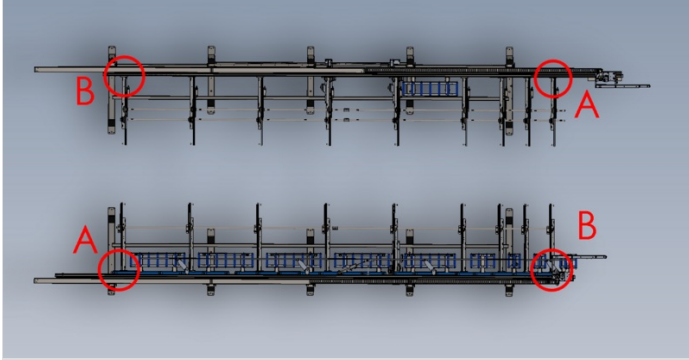


## Step 12 - Check and Set squareness of transfer table

It is crucial to set the squareness of the transfer table by adjusting the infeed/ outfeed tables.

- 1 The squareness can be checked by using a tape rule to make corner measurements at the points indicated
- 2 Second frame can be moved in the directions shown to adjust the corner measurements to make them both the same  
Tolerance +- 3mm

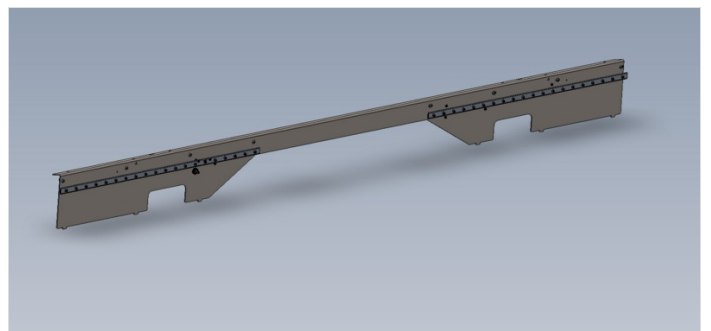
R0015291 Install Transfer Beams To Module C and E



## Step 13 - Add remaining transfer beams

Add remaining 7 transfer beams to two installed frames and fix in position on support arms

R0015291 Install Transfer Beams To Module C and E





## Step 14 - Check flatness of transfer beam top faces

Once all transfer beams are installed, it is vital to check that the top faces of the transfer beams are all aligned to each other and provide a flat table for correct profile transfer

Use 2 meter straight edge to inspect top faces in relation to each other  
R0015291 Install Transfer Beams To Module C and E

