



**FACULTY OF ENGINEERING  
UNIVERSITI PUTRA MALAYSIA**

---

---


**ALIGNMENT SOLUTION OF MATERIAL TEST SYSTEM (MTS)**

**UPM/FK/WI/E10**

---

---

Issue No.: 01	Effective Date: 25/05/2018
Reviewed by: Deputy Technical Manager	Approved by: Technical Manager

	<b>FACULTY OF ENGINEERING</b>	
	<b>ALIGNMENT SOLUTION OF MATERIAL TEST SYSTEM (MTS) UPM/FK/WI/E10</b>	
	Page : 2 of 8	Issue No.: 01
		Effective Date: 25.05.2018

### MTS Alignment Solution

- a) The details provided is the simplified instruction for better understanding on the operation of MTS alignment solution. User must ensure that they had read the manual provided by MTS as well. User must ensure the rules listed in the manual are followed to ensure safety to user and machine.
- b) Install the alignment specimen and wait around 30 minutes for its temperature to stabilize.
- c) In the Option tab, follow the setting shown in Figure 1.

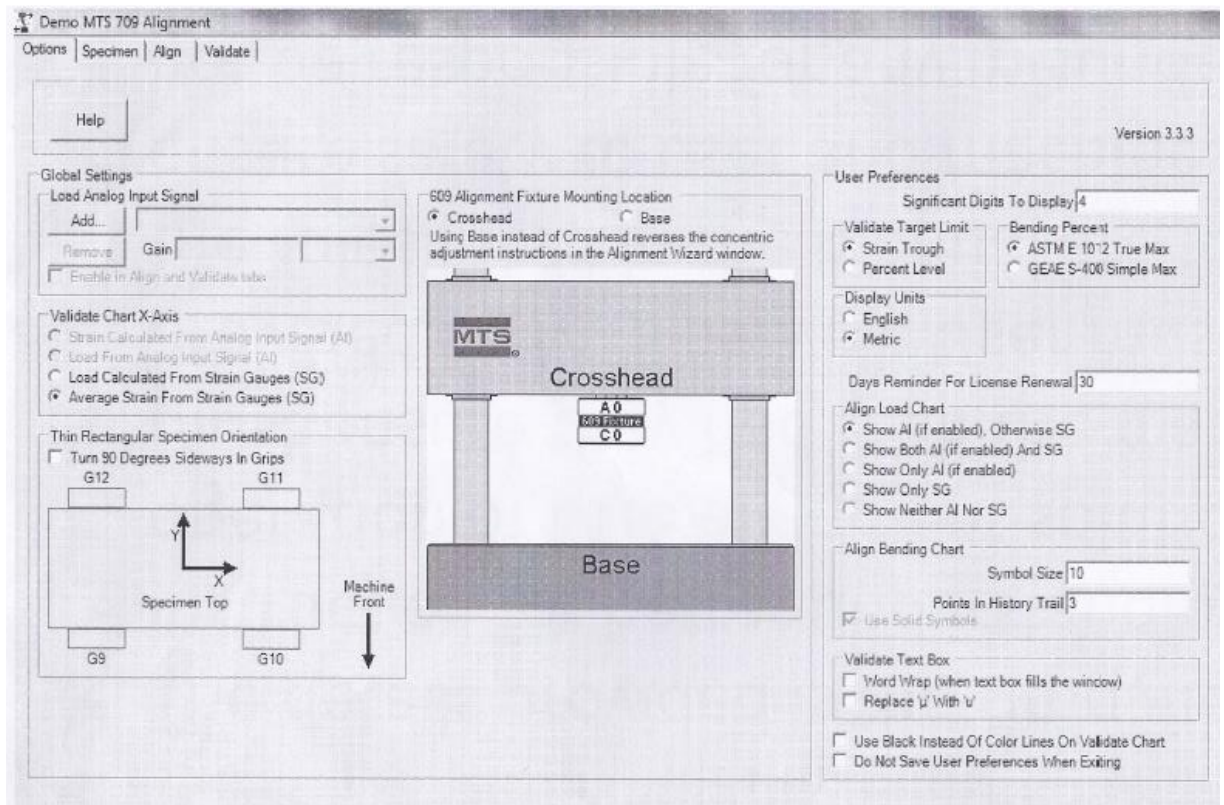


Figure 1: Option Tab Setting

- d) In the Align tab, click Open... and choose flat specimen. Then, click the Clear All Offsets button as shown in Figure 2.

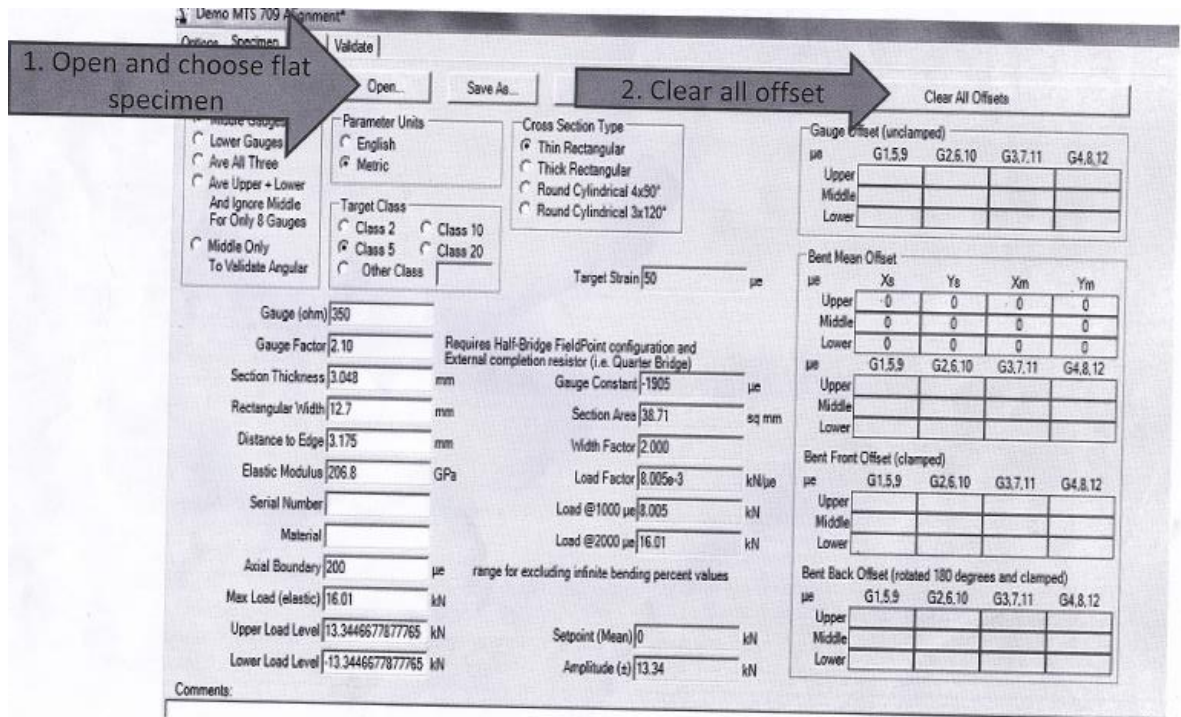


Figure 2: Align Tab Setting

e) In the Specimen tab option, follow the setting as shown in Figure 3.

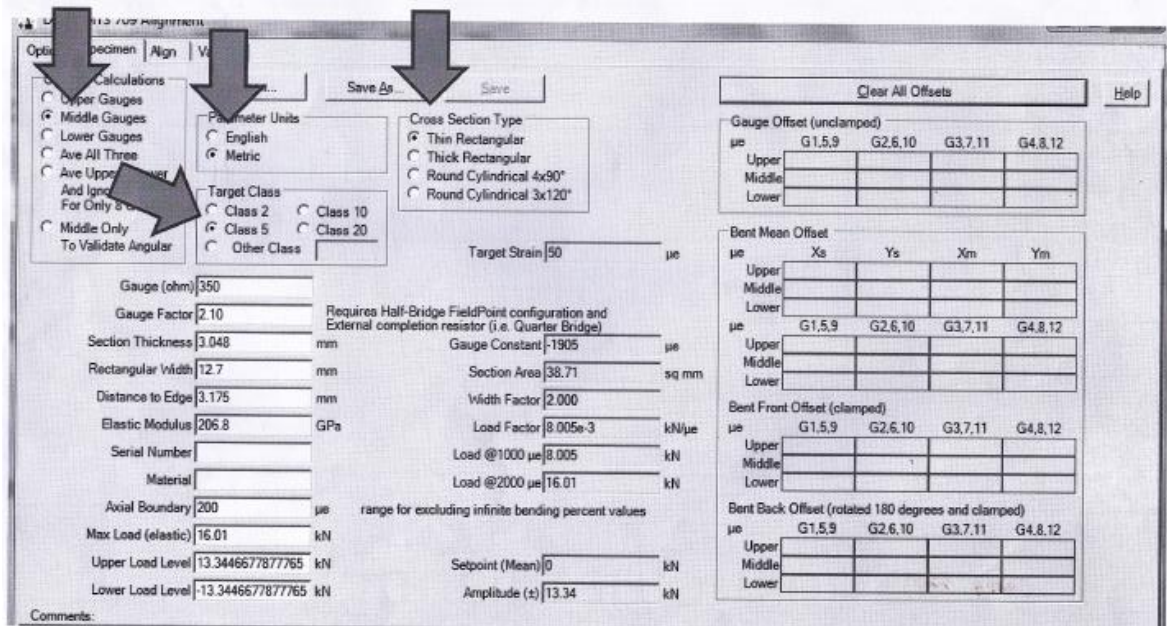


Figure 3: Specimen Tab Setting

- f) In the Align tab, Select Specimen Offsets... button. Click on Gauge tab as shown in Figure 4. The alignment specimen should not be installed yet.
- g) Click on read then add.
- h) Wait for 15 seconds and clicks read then add.
- i) Wait for 15 seconds and clicks read then add.

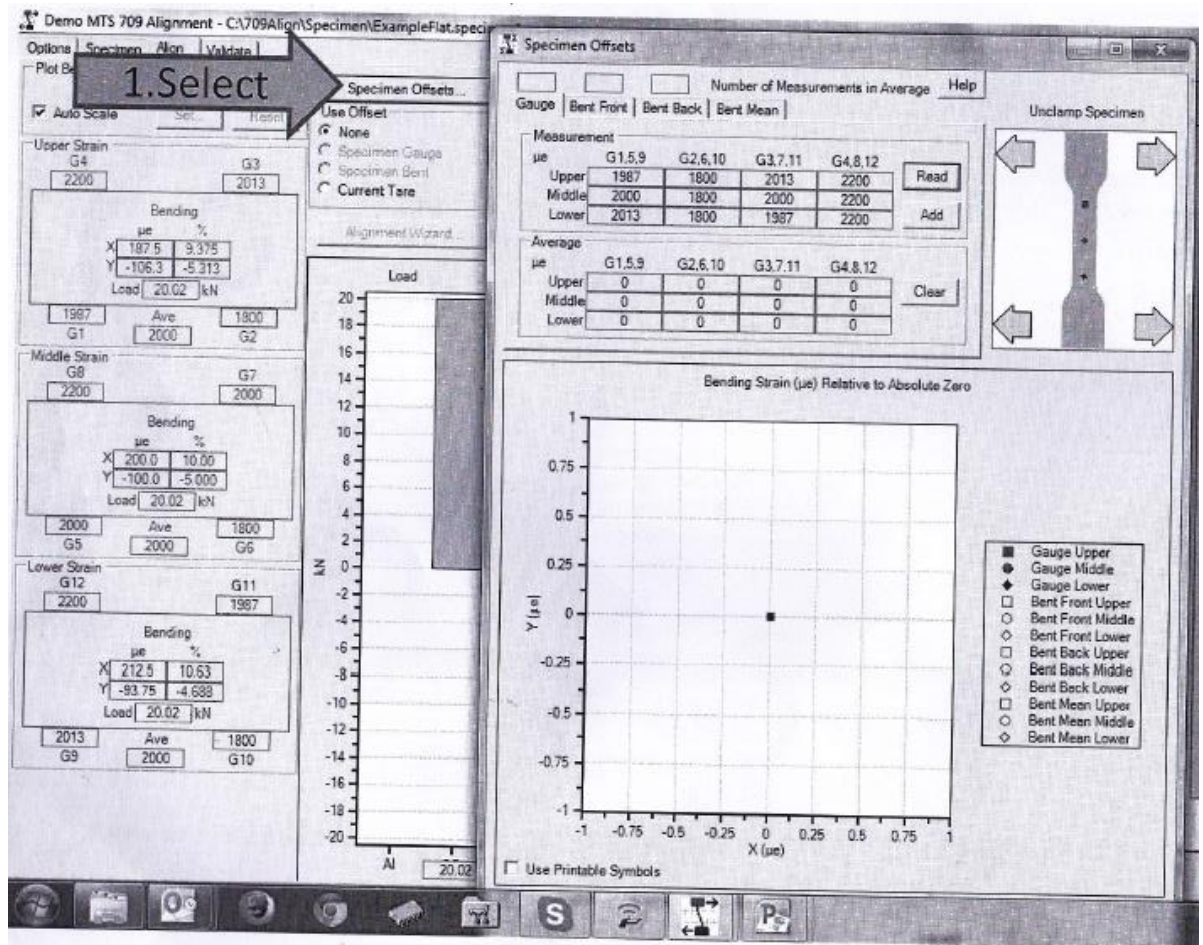


Figure 4: Gauge Tab Procedure

- j) Click on Bend Front tab as shown in Figure 5. Install the alignment specimen.
- k) Click on read then add. Open and close lower grip only. Click read then add. Open and close lower grip again. Click read then add. Repeat it another two (2) times.

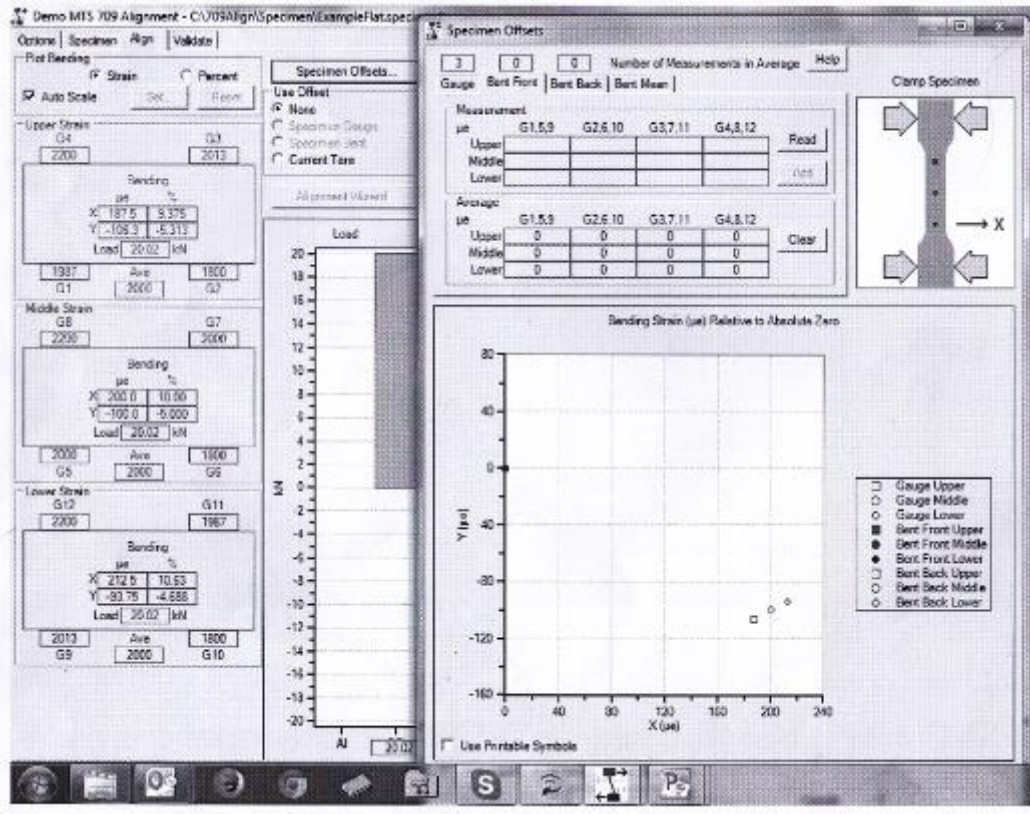


Figure 5: Bend Front Tab Procedure

- l) Click on Bend Back tab as shown in Figure 6. The alignment specimen still installed.
- m) Click on read then add. Open and close upper grip only. Click read then add. Open and close upper grip again. Click read then add. Repeat it another two (2) times.

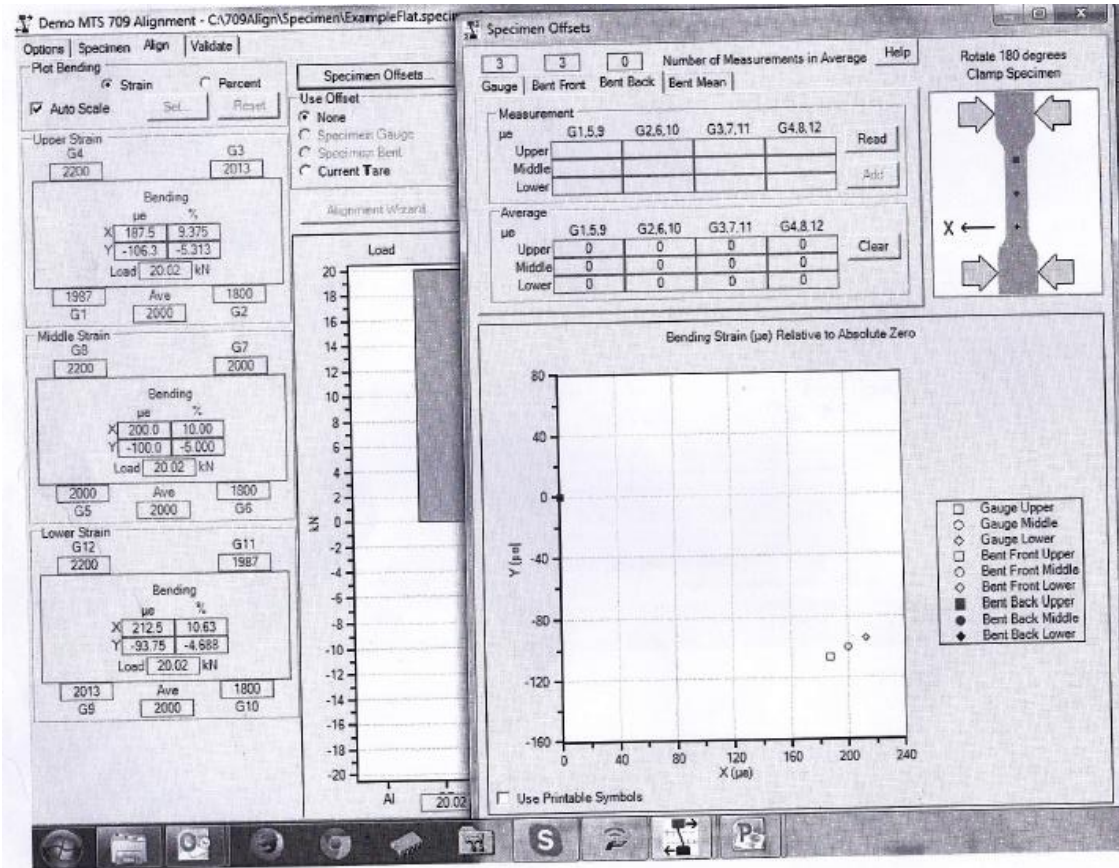


Figure 6: Bend Back Tab Procedure

- n) Click OK.
- o) Follow the setting in the Align tab as shown in Figure 7. Click on the Alignment Wizard... tab.

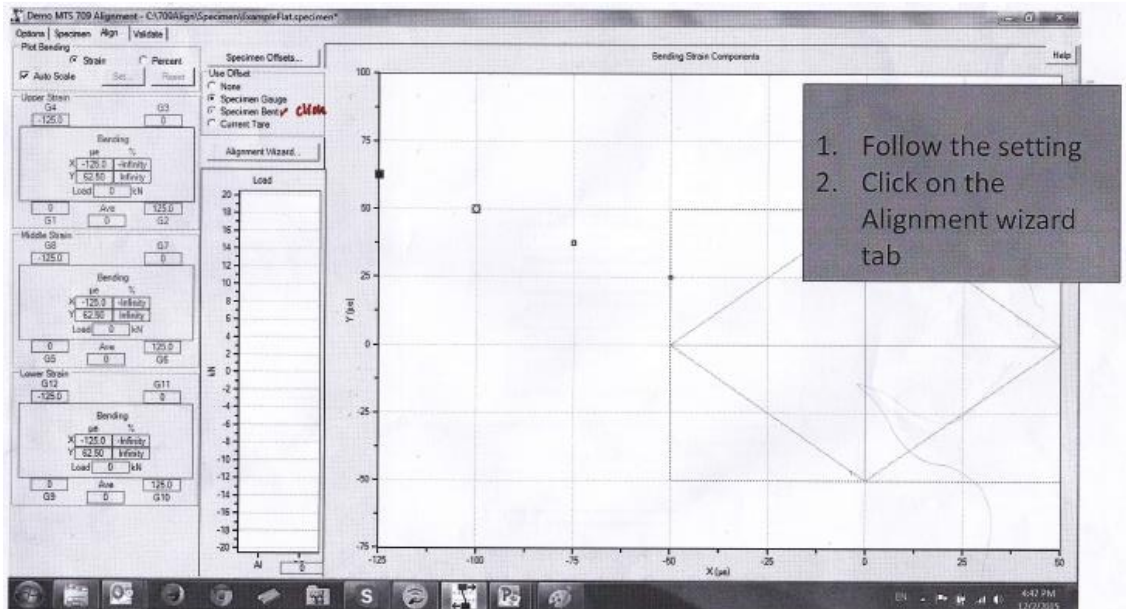


Figure 7: Align Tab Setting

- p) Check on Auto Select Angular Or Concentric. Check on Play Audio For Screw To Tighten if you want the system to guide you on the alignment adjustment. Click Reset to listen to the system instruction again as shown in Figure 8.

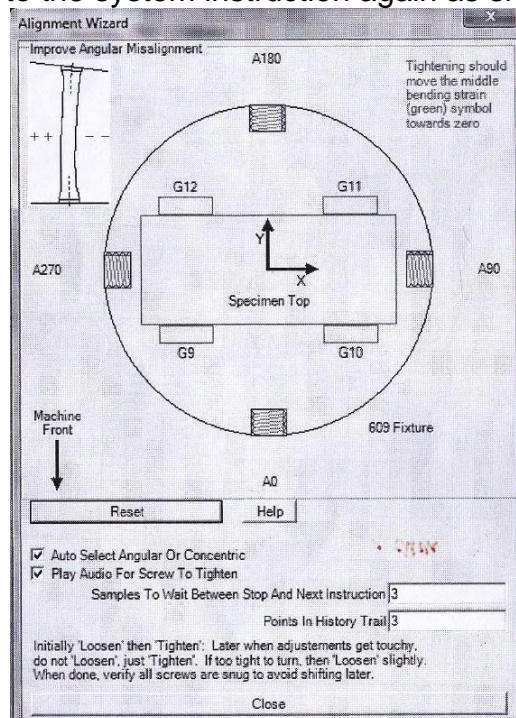


Figure 8: Alignment Wizard Settings

**ALIGNMENT SOLUTION OF  
MATERIAL TEST SYSTEM (MTS)  
UPM/FK/WI/E10**

Page : 8 of 8

Issue No.: 01

Effective Date:  
25.05.2018

- q) The alignment system will guide you to do the adjustment.
- r) Instruction angular 270 will tell you to turn A270 of the fixture clockwise until it tells you to stop.
- s) The system is trying to move the three dots as close to the center of the box. Need not all dots exactly at the center, as long as they are close to center as shown in Figure 9.

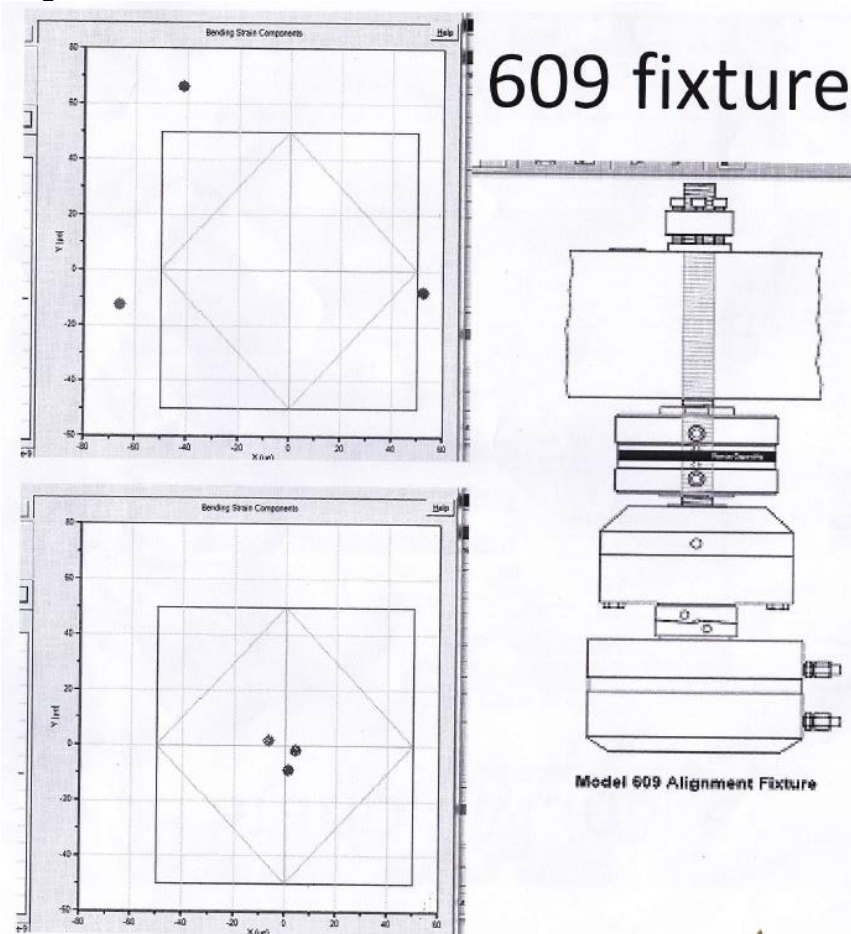


Figure 9: Adjusting the dots