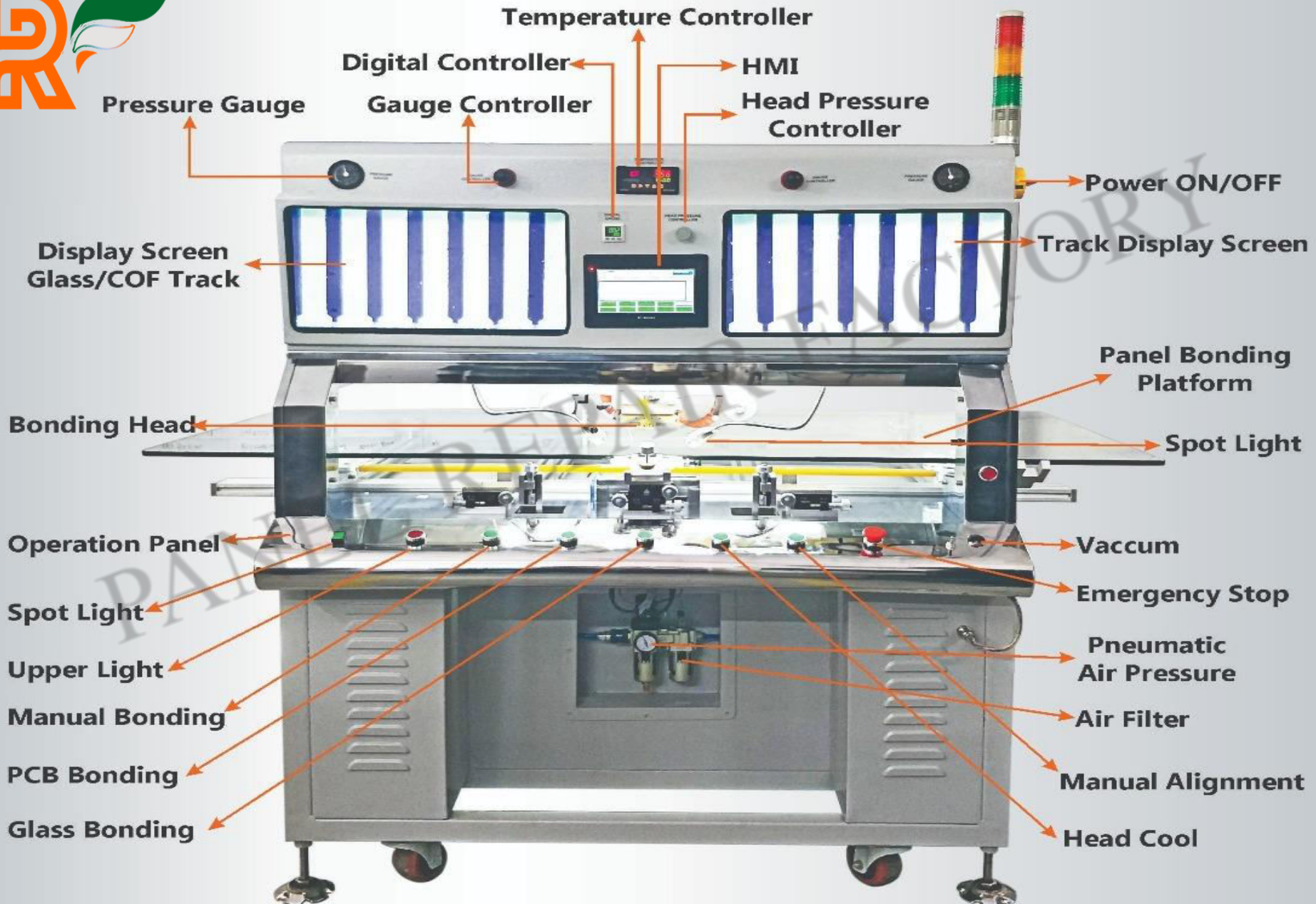




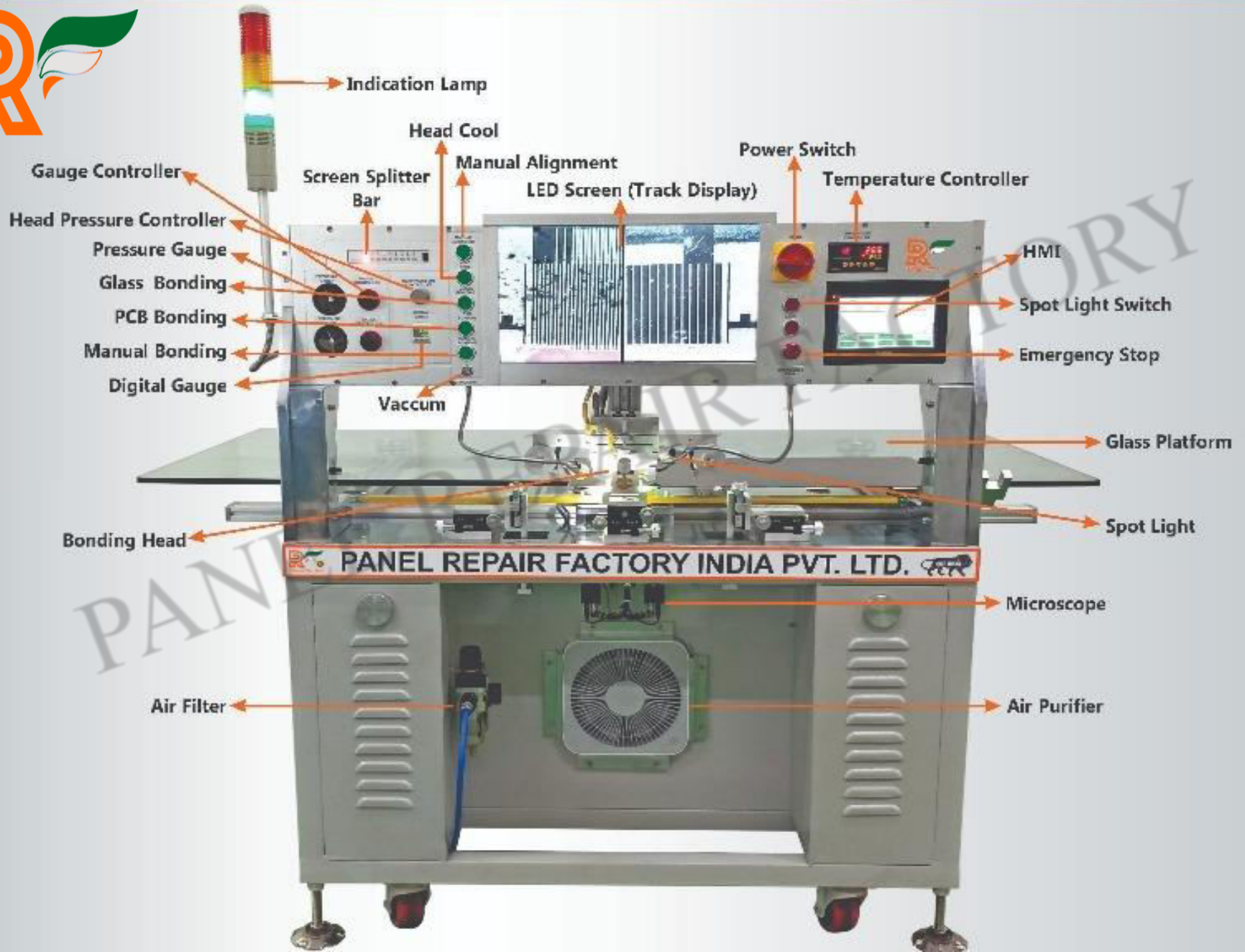
# **ACF BONDING TRAINING**

**PANEL REPAIR FACTORY INDIA PVT. LTD.  
A42, 1<sup>ST</sup> FLOOR, MAYAPURI PHASE-2  
NEW DELHI-110064  
PHONE-011-49123872  
E MAIL-INFO@PANELREPAIRFACTORY.COM**

# PRF-960 Specification of Machine



# PRF-999 Export Model Features of Machine





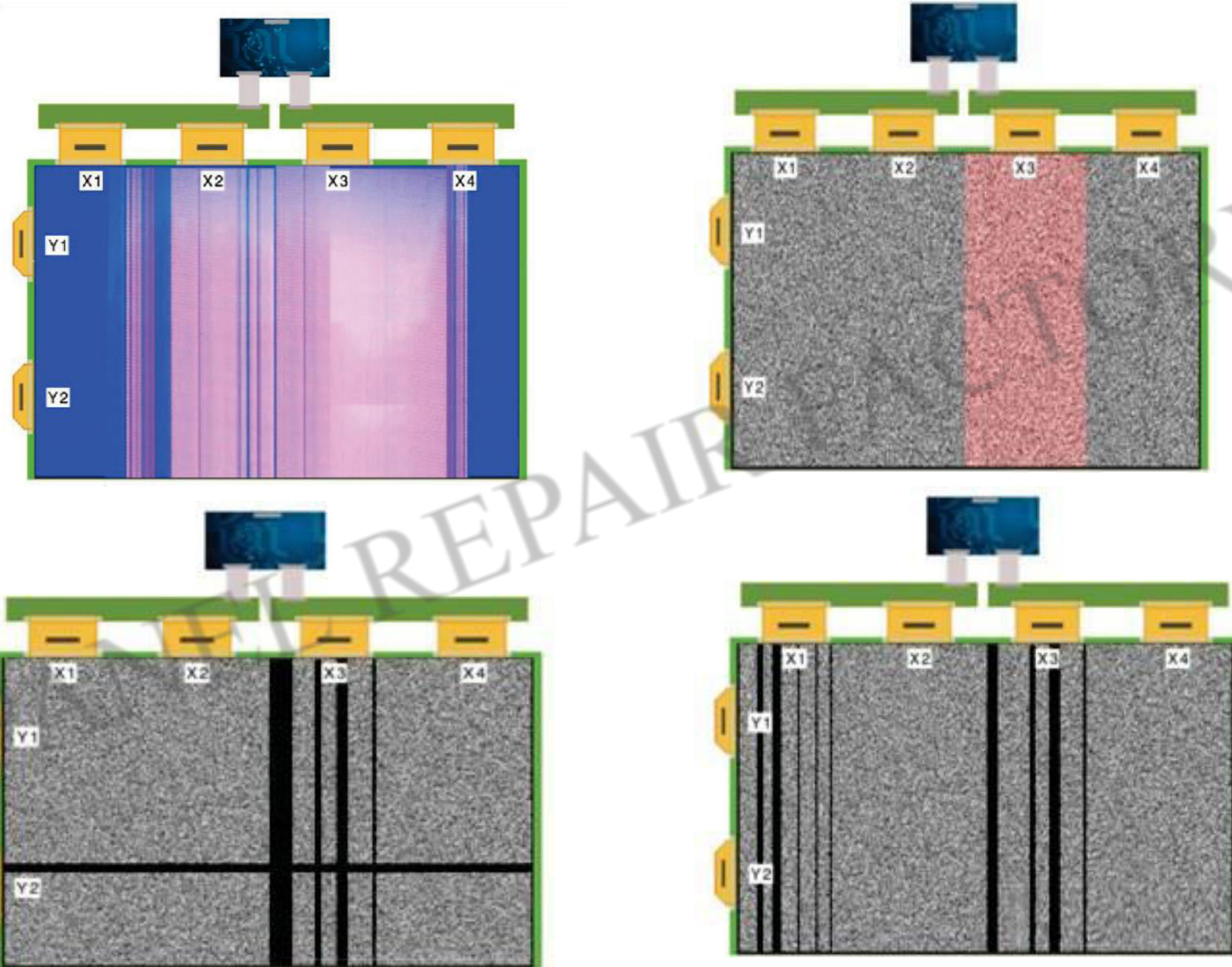
## COMMON FAULT IN LCD/LED PANEL

- Vertical lines
- Horizontal lines
- Multiple lines
- Vertical bar
- Horizontal bar
- Intermediate lines
- Double image
- Ghost image
- Negative picture
- Abnormal picture





# FAULTY LCD/LED PANEL

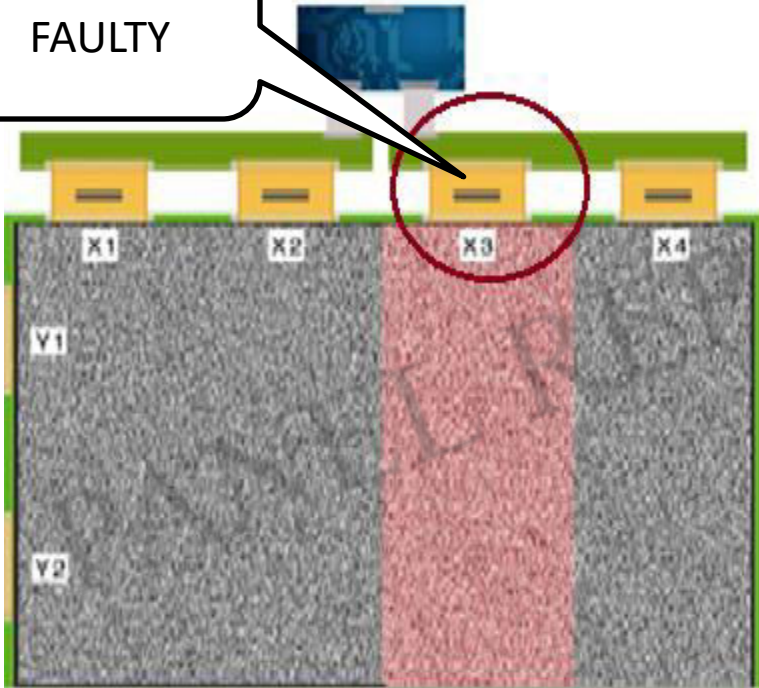




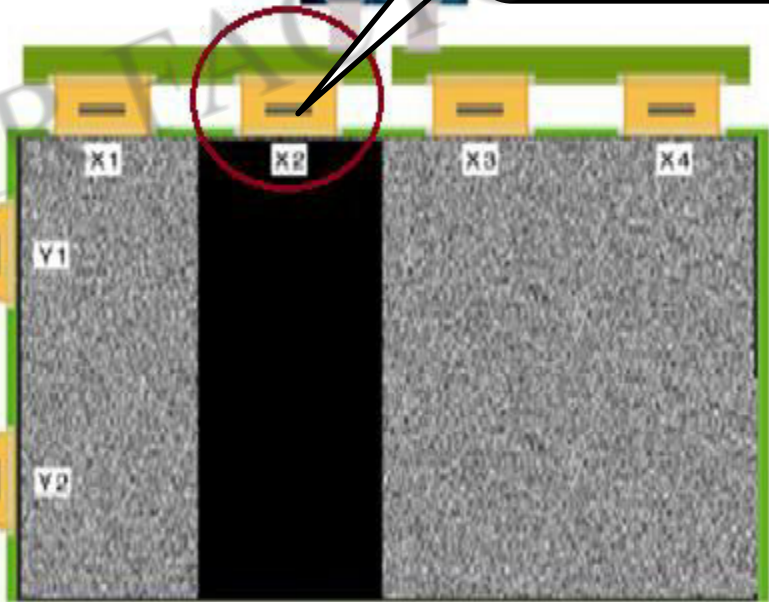
# CHECK PANEL FAULT BEFORE BONDING

In 1<sup>st</sup> image X3 COF is faulty & in 2<sup>nd</sup> image X2 COF is faulty.

X3 COF IS  
FAULTY



X2 COF IS  
FAULTY





# ACF Bonding Process

- ✓ Check LCD/LED Panel
- ✓ LCD/LED Panel fault mark
- ✓ Remove COF from PCB & ITO side
- ✓ Cleaning COF, PCB & ITO
- ✓ Prepare COF for bonding
- ✓ Use acf bonding machine for bonding



# REMOVE COF FROM PCB & GLASS SIDE

SMD RANGE-

TEMPERATURE-250 TO 300 °

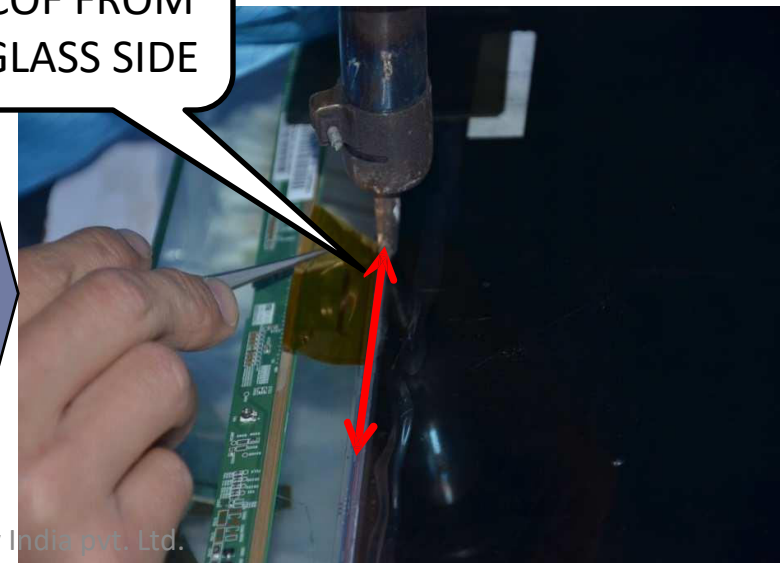
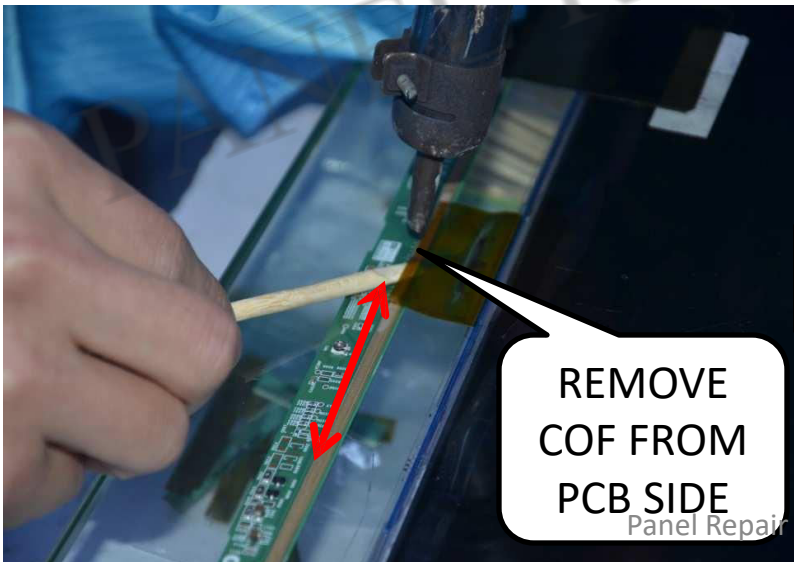
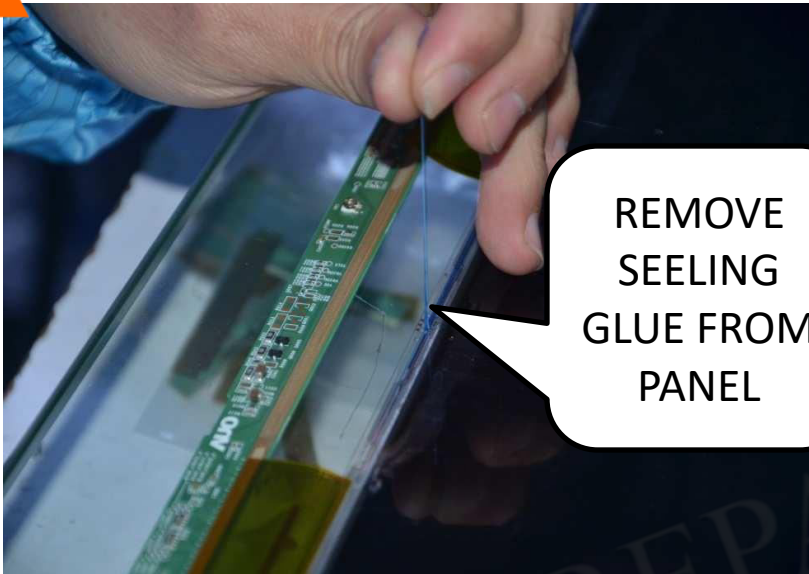
AIR -4 TO 5







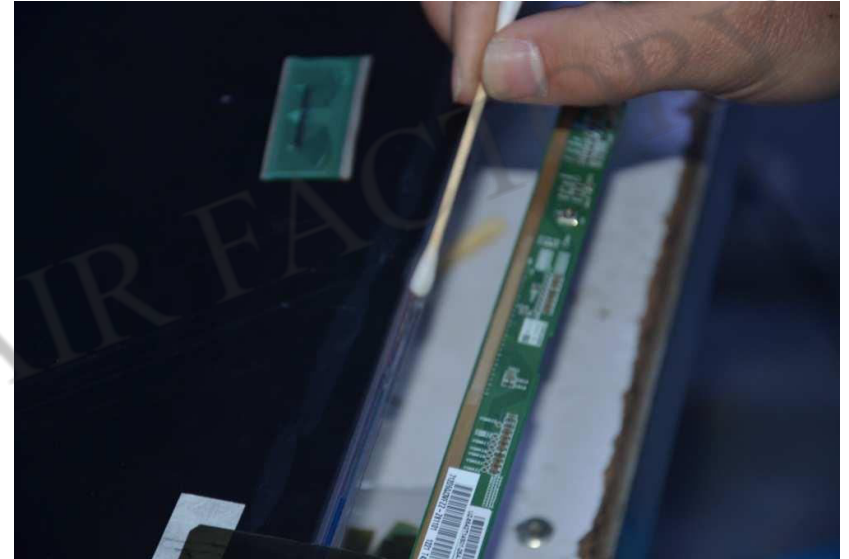
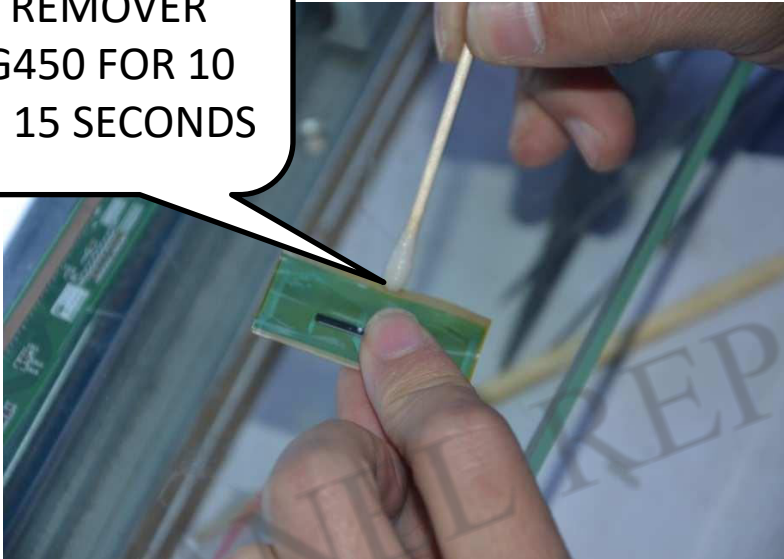
1. REMOVE SEALING GLUE
2. **REMOVE COF FROM :**  
FIRST ON PCB SIDE  
SECOND GLASS SIDE





ACF  
REMOVER  
G450

APPLY ACF  
REMOVER  
G450 FOR 10  
to 15 SECONDS



Apply right amount of ACF Remover G540 on Glass, PCB and COF both sides. Too less or too much is not working good. Don't apply liquid on other part of them, because the liquid is corrosion, will damage polarizer film or protection film. Don't touch the liquid with your finger or skin. ACF REMOVER G 450 use for COF cleaning.



## COF CLEANING WITH ACETON



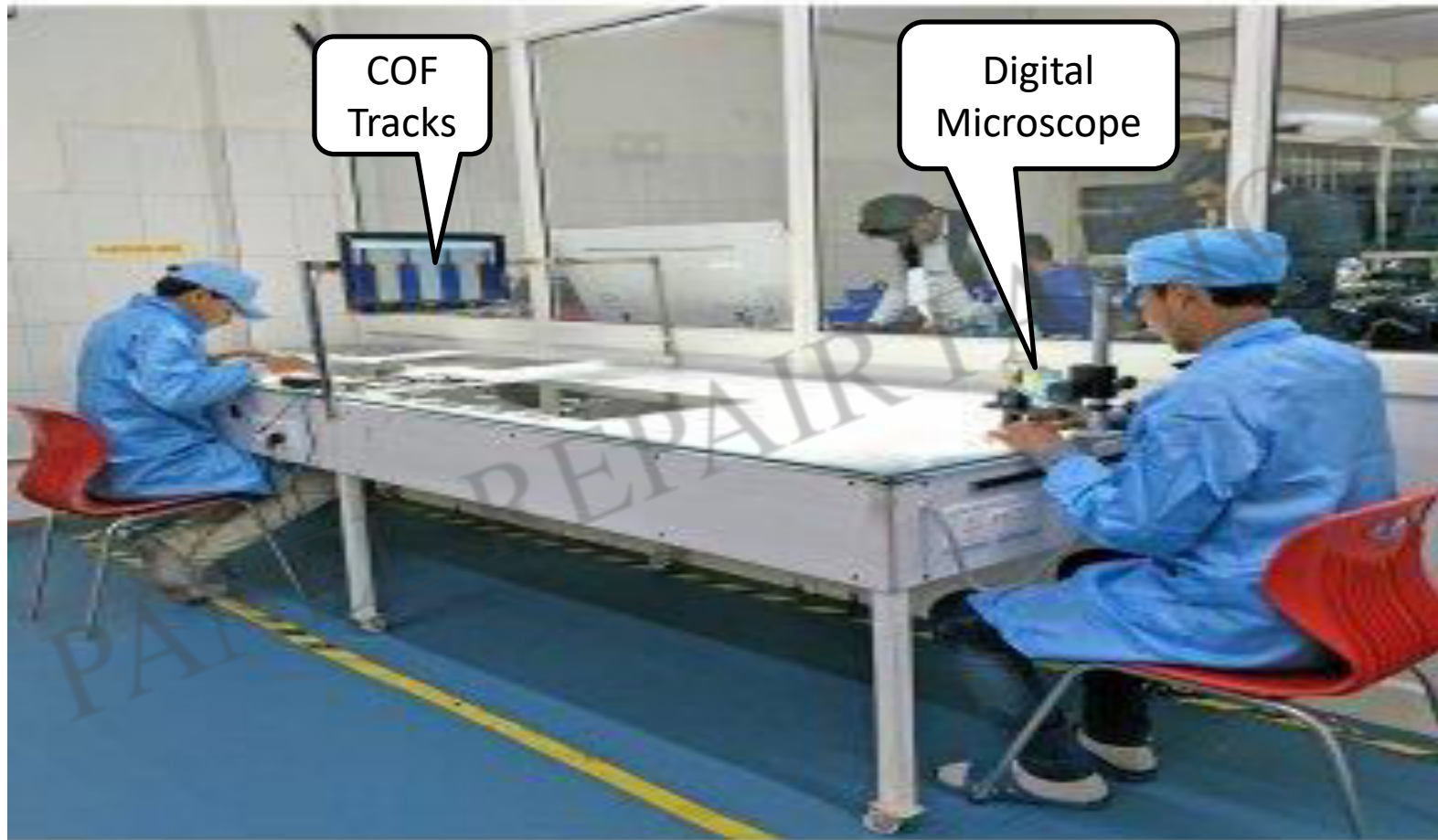
Dip cotton buds in acetone  
& COF clean only vertical  
direction



Fold cloth on stick & dip in  
acetone and COF clean  
only vertical direction



# COF CHECKING WITH MICROSCOPE







# ACF TAPE MODEL

ACF is necessary for COF bonding, the ACF will connect COF with Glass and PCB. Should choose the correct ACF before bonding. The ACF for Glass side and PCB side is different.



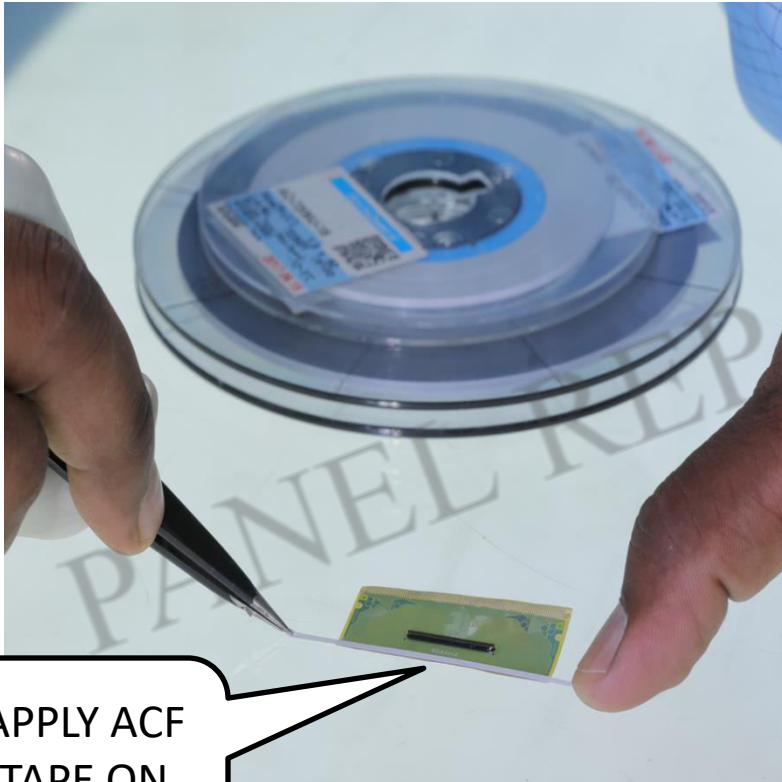
AC-7206U-18 1.5(W)X50(L)M  
for glass side

AC-2056R-35 2.0(W)X50(L)M  
for PCB side

- ACF should be stored in low temperature 5(like fridge),
- Please check the valid date of use written on the ACF label.
- ACF should not be used when expired.
- Put ACF back to the fridge after every day work finished.



## APPLY ACF TAPE ON COF



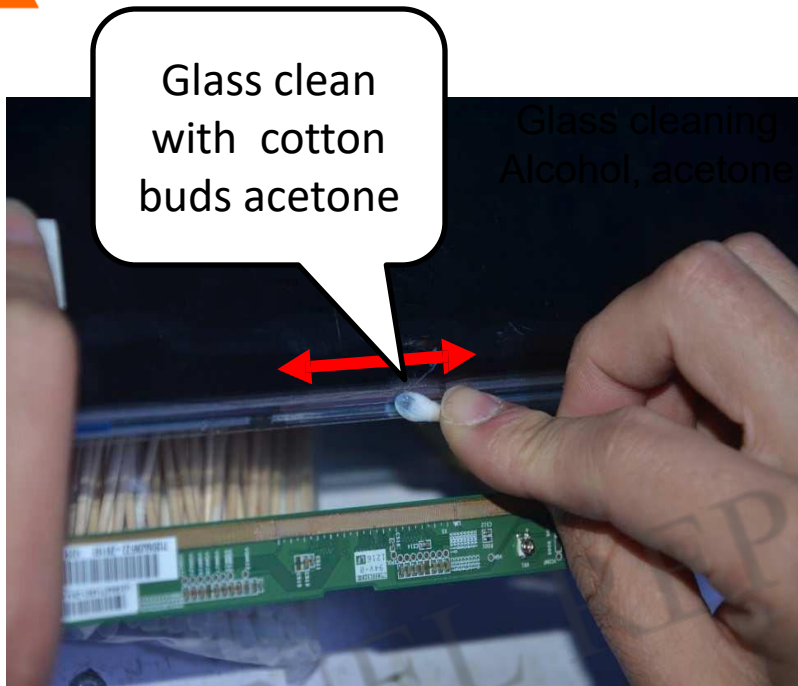
APPLY ACF  
TAPE ON  
BOTH SIDE



HEAT WITH  
T BIT IRON



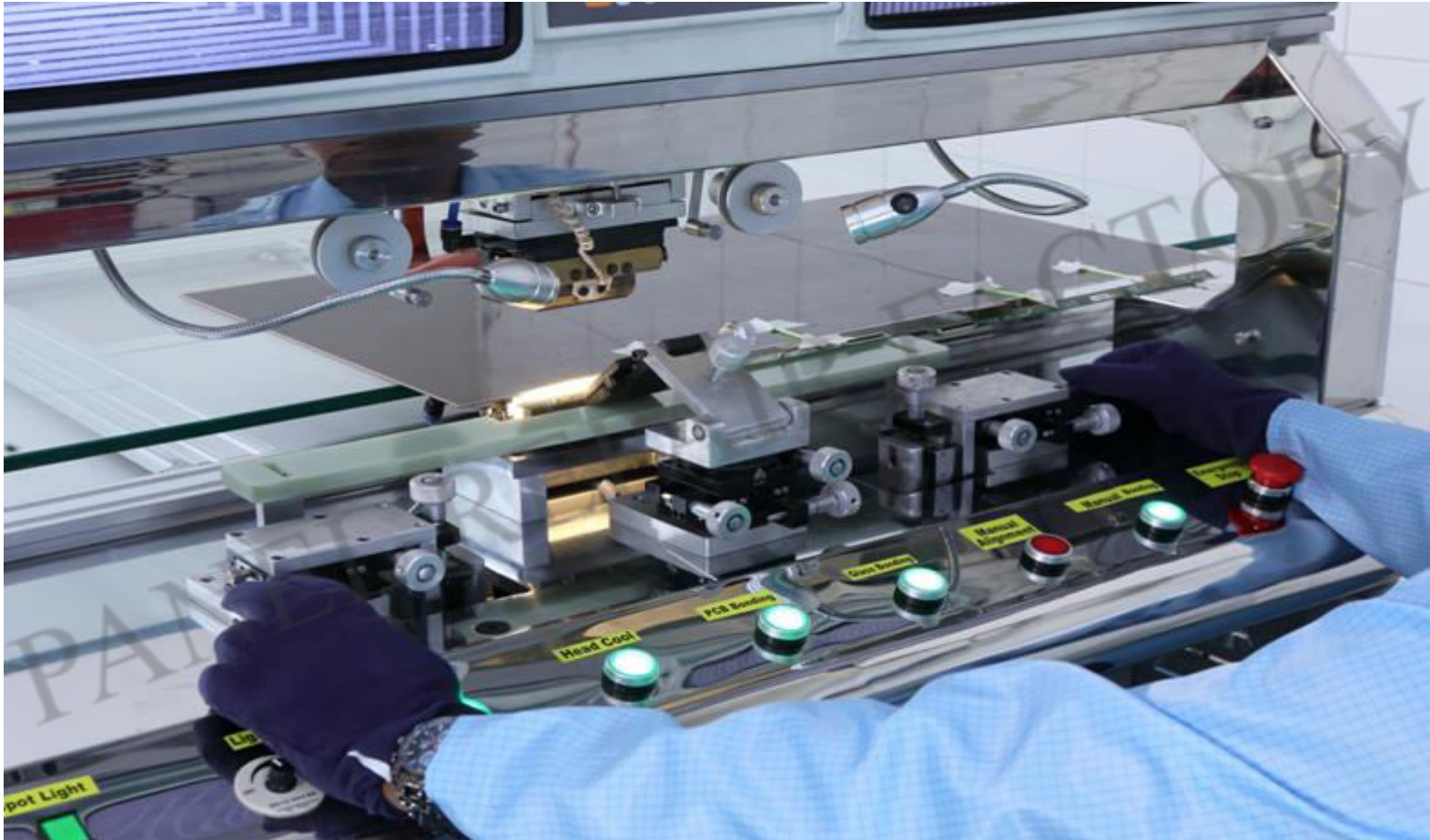
# GLASS & PCB Cleaning



For Glass cleaning: 1. Scrub the residual ACF with cotton buds with acetone; 2. Scrub with cotton swab(electrostatic cloth) and acetone. 3. Repeat step 1 and 2 until the Glass is clear.



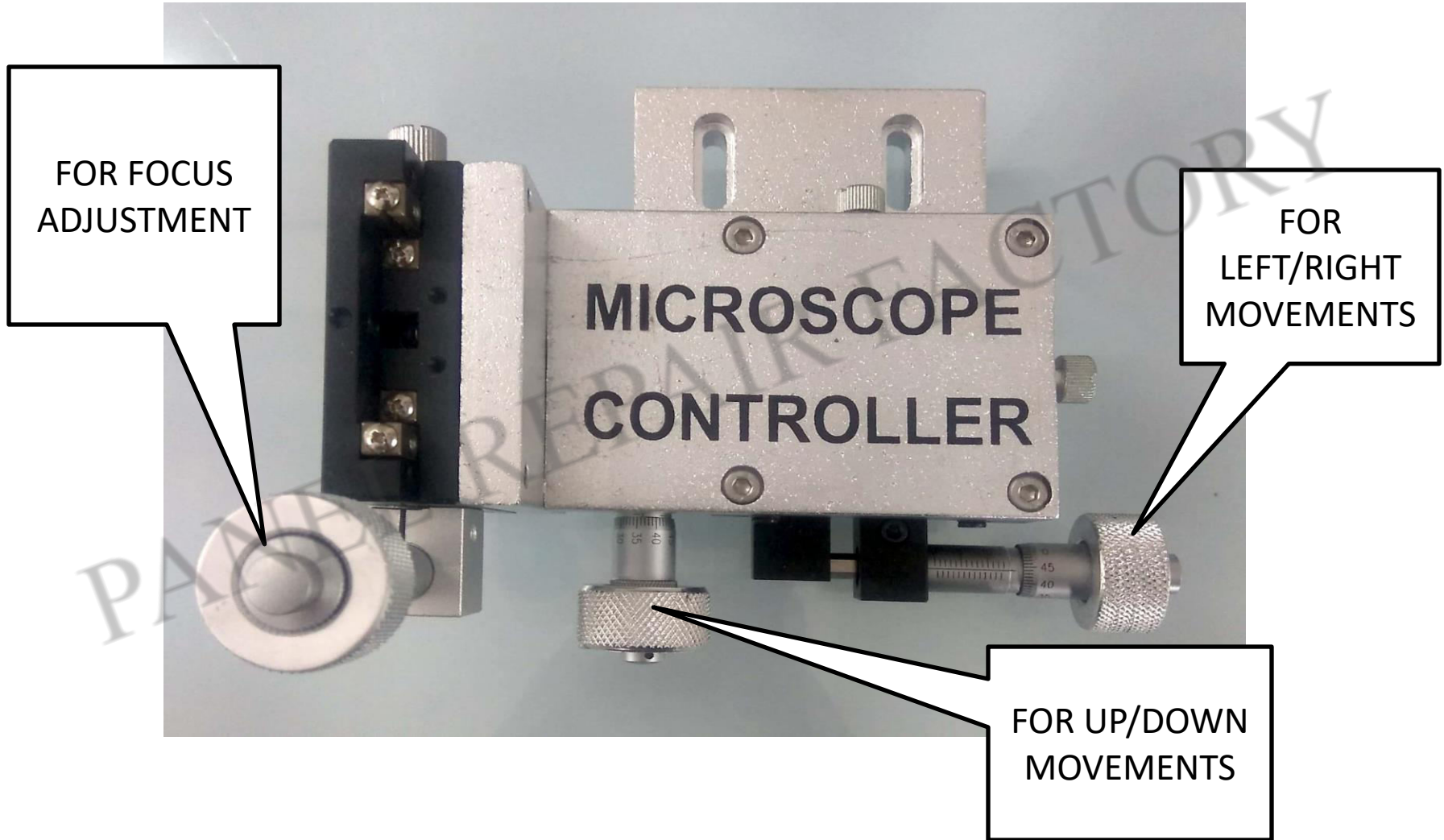
# GLASS SETTING ON BONDING MACHINE







# MICROSCOPE CONTROLLER





## HEAD SETTING ON PANEL ITO

CHECK ITO  
SYMBOL

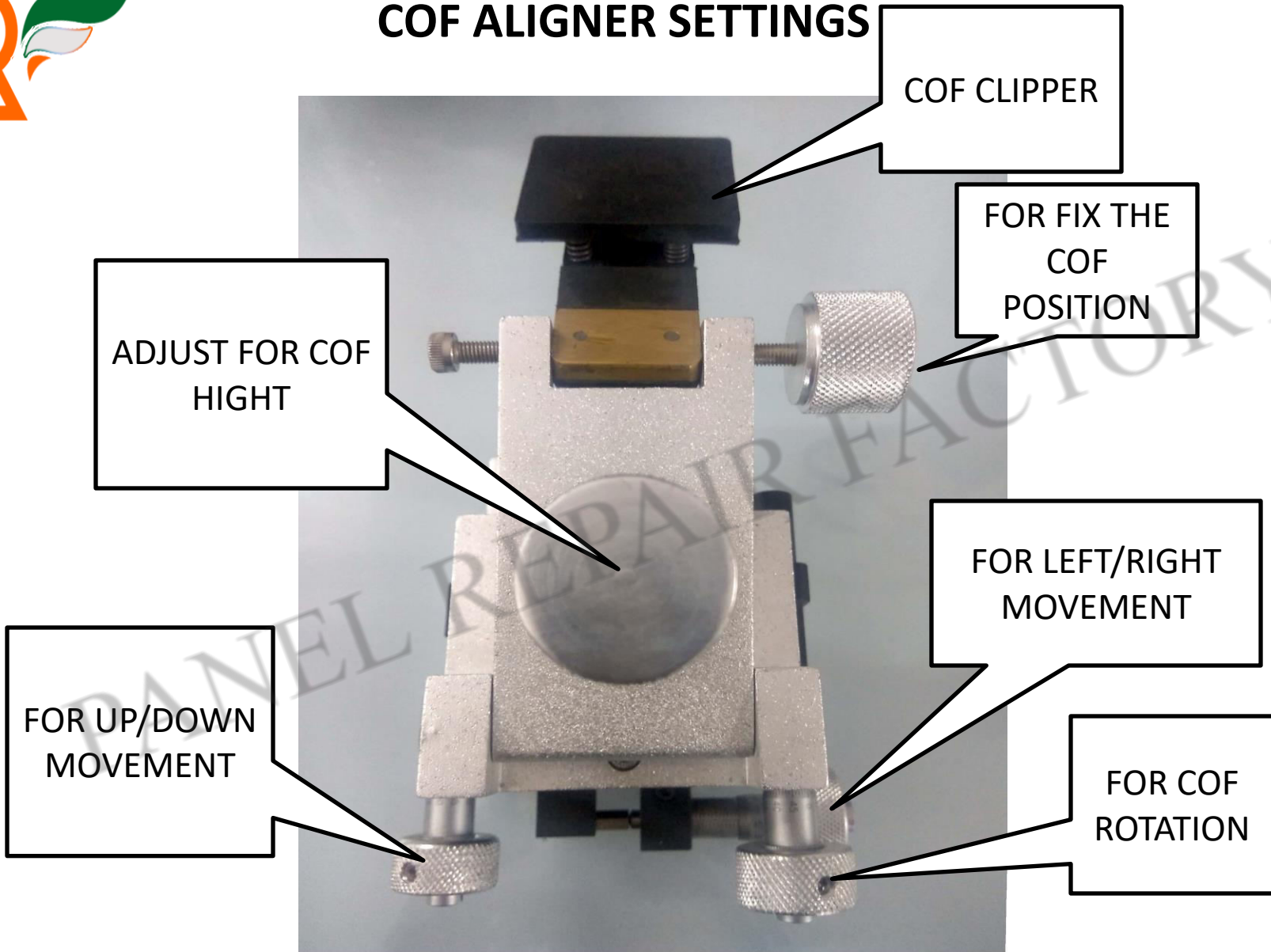
CHECK ITO  
SYMBOL

CHECK HEAD  
POSITION ON  
TRACKS

CHECK HEAD  
POSITION ON  
TRACKS



## COF ALIGNER SETTINGS





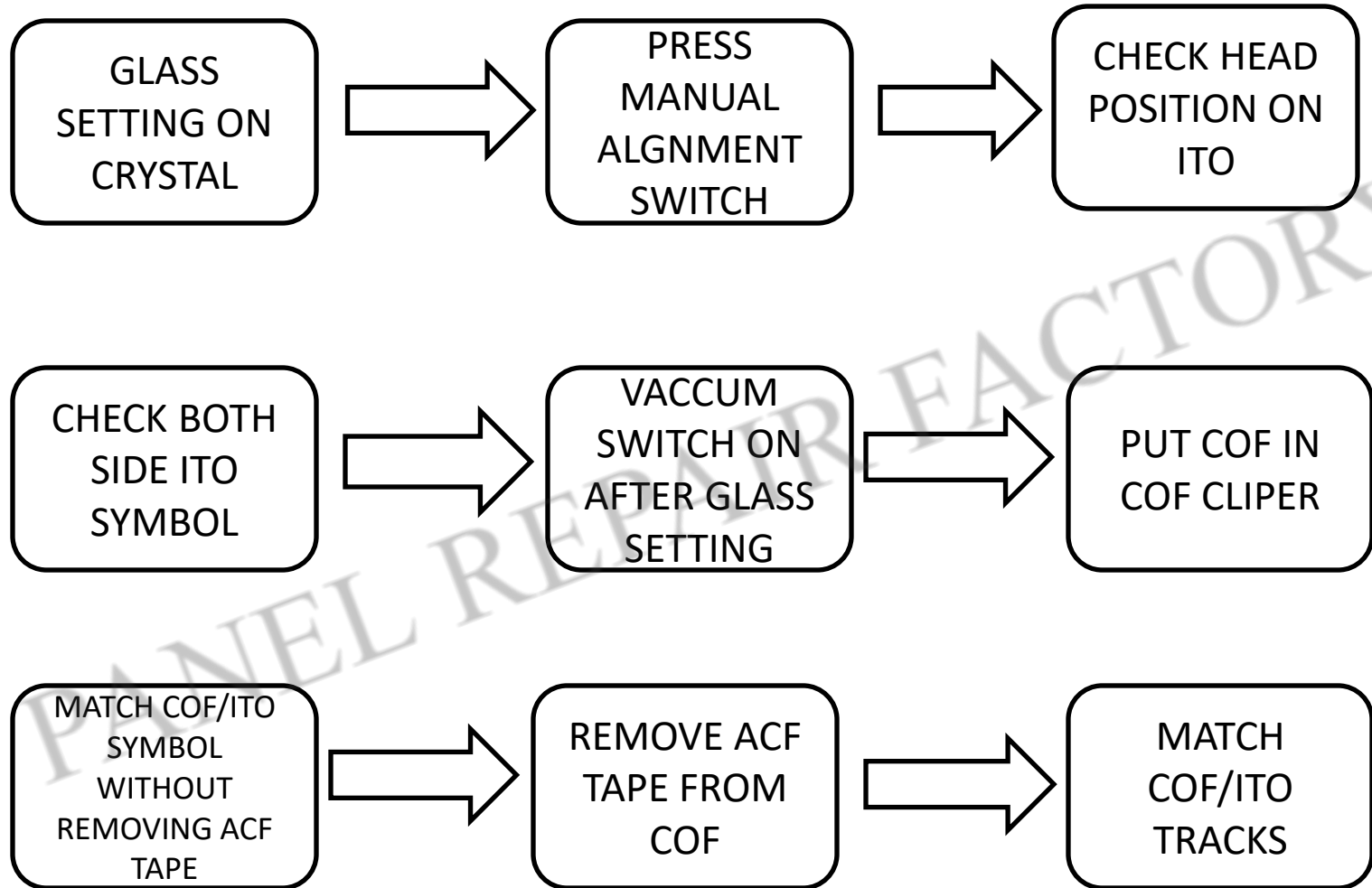
## COF & ITO TRACKS ALIGNMENT





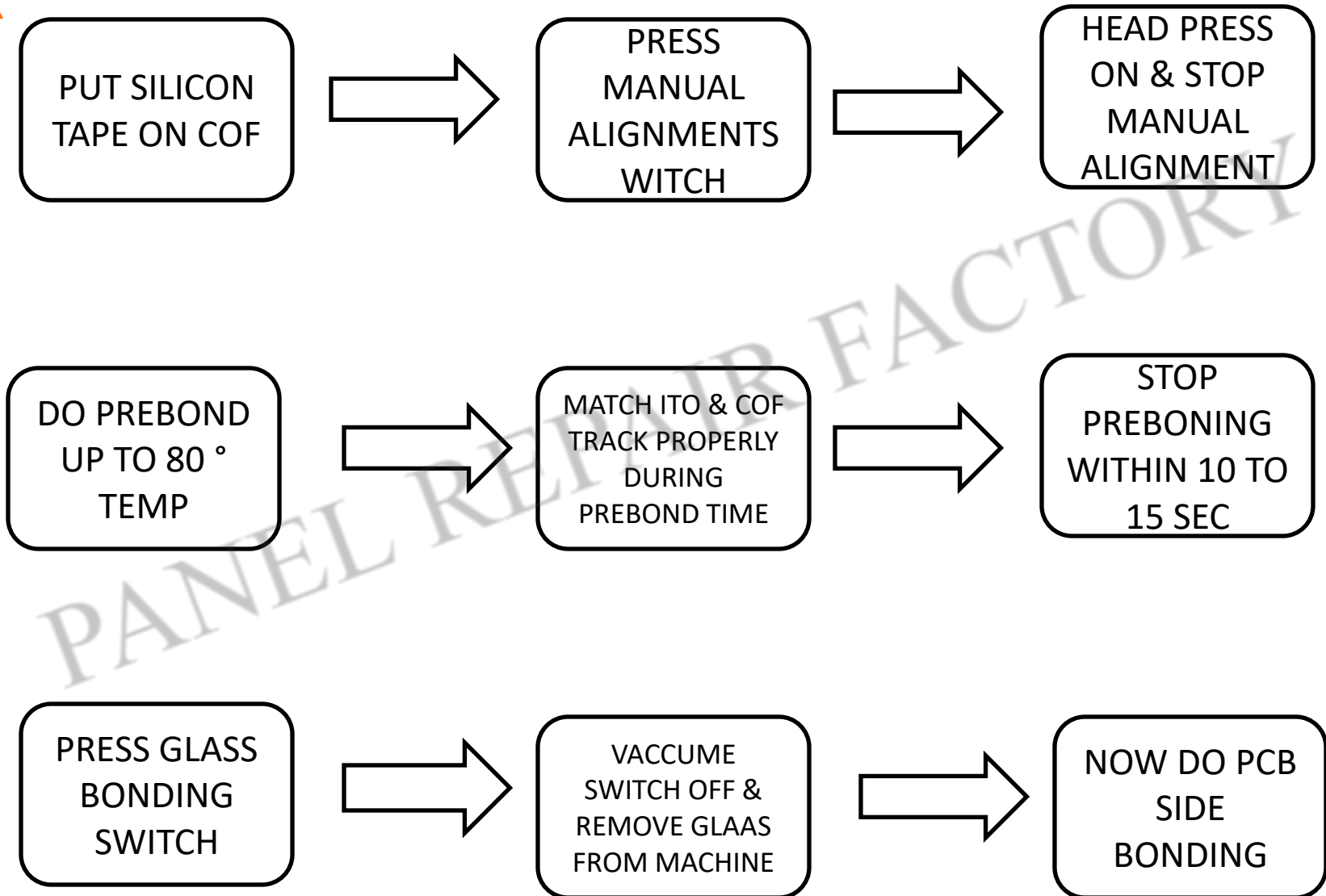


# STEP BY STEP BODING PROCESS



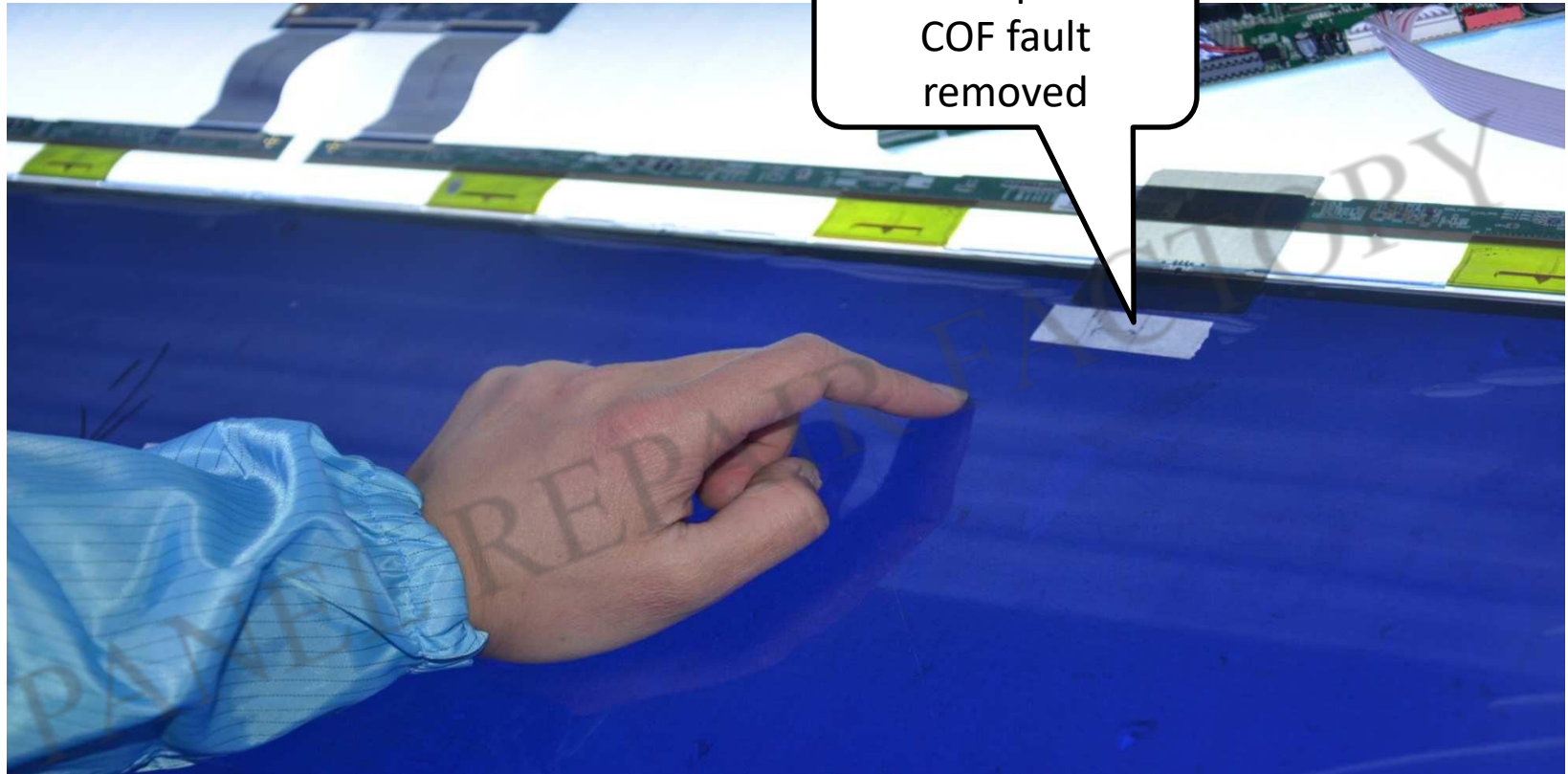


# STEP BY STEP BODING PROCESS





# Testing After Bonding



After bonding, do a testing with the screen, make sure the fault was repaired.

**If not repaired, analyze the reason and repair again. Usually bright line means short circuit; dark line means off circuit.**



## CHECK PANEL AFTER BONDING

