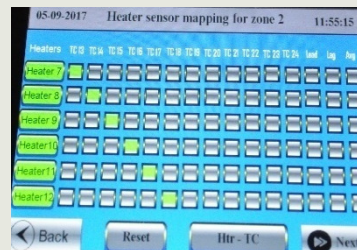
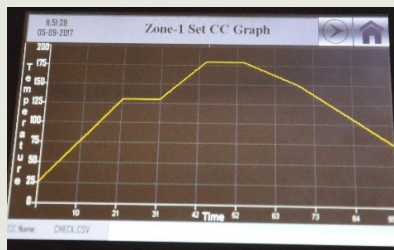


Multi Zone Hot Bonder

For advanced in situ repair
of aircraft structures with
12 zone temperature &
2 zone vacuum control



Touch-screen controller



CSIR-National Aerospace Laboratories

Multi Zone Hot Bonder

Specifications

Number of temperature zones	12 independently controlled zones
Maximum temperature	230°C (for silicon heater blankets)
Number of Controlled vacuum levels	Two
Maximum heater area	0.9Square Meter (1380sq.inch) per zone
Maximum heater power	6900W (30A/230V) per heater / per zone
Total heater power rating	13.8KW (60A/230V) for 2 zones
Number of Temperature sensors	24 Numbers (J type)
Temperature control accuracy	± 1°C of set value
Temperature uniformity	± 2°C among the 12 zone controlled value
Heater – sensor mapping	Any heater to any one or more sensors
Temperature control basis	Online selection as the leading, lagging or average of any set of sensors
Weight and Size of the MZHB	20 Kg: 660 x 430 x 330 mm (LxWxH)

Salient Features

- 7" Colour touch screen (PLC-HMI) controller
- 2 simultaneous repairs with independent 12-zone temperature control
- Menu driven program to create, run & view Cure Cycles (CC)
- Online and offline reporting / printing
- Hold, modify & continue or extend CC
- Power interruption management
- Customization requirements are welcome

Safeties

- Detection of heater–sensor mismatch
- Sensor failure management
- Protection against sensor faults such as Open, Short or improper contact
- Auto-hold if Temp. Gradient or deviation exceeds limit
- Over temperature cut-off
- Alarm on vacuum failure and other faults

Note: Specifications are subject to changes due to improvements



For more information, please contact
National Aerospace Laboratories
 Tel: +91-80-25273351-54
 director@nal.res.in
 www.nal.res.in

