



The ANITA EZ09

A New Concept

for Smart Patch Repair

Bonding

THE ANITA BONDING CONSOLES

The Anitas are recognised worldwide by MROs and aircraft constructors as the most appropriate equipment for the repair by bonding of high performances aircraft structures. Their design and process handling benefit of twenty years of GMI AERO commitment in

composite fabrication and repair.

They are conceived as portable systems, light, handy for field application and their operations have been optimised to be extremely simple to use by shop technicians.

In this family, the **Anita EZ0901**, provides a new revolutionary way to conduct advanced bonding operations. This version with a Touch Screen Panel offers easy operative procedures; several functions are made now possible for adaptive process control together with quality document elaboration and innovative training information.

Large touch screen (160 x 125 mm) displays make it easy for the operator

TOUCH SCREEN PANEL OPERATIONS

The Anita is equipped with a large touch screen panel. A sophisticated software allows easy operations for:

- Programming easily simple and elaborated cycles
- Immediate Start of Cycles,
- Process Supervision with graphical and tabulated presentations,
- Interactive selection of temperature control modes,
- Selection of innovative functions,

ADVANCED PERFORMANCES

In a small compact box, the Anita gathers all the necessary functions to control the bonding heating process under vacuum for a repair on composites or metal structures.

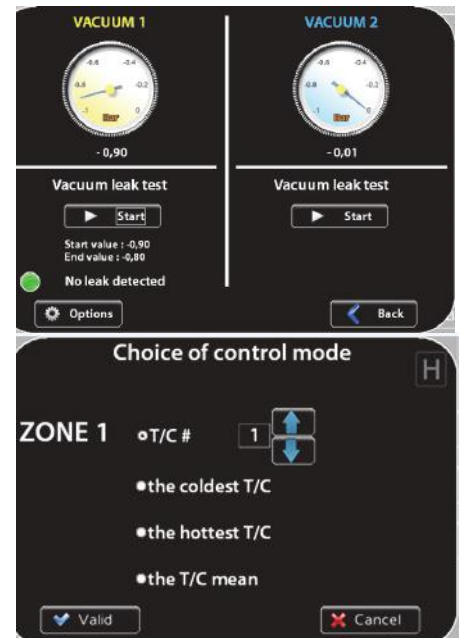
It is specially conceived to reach maximum performances on small and large surfaces, on thin and thick structures and on structures with differentiated thermal reaction.



Ref.: GMIEZMKD1611-1

MAIN FUNCTIONS

- Heat control on **two** independent channels for 1 repair with 1 or 2 heating zones or 2 separate repairs,
- Innovative **third** channel for heat losses compensation on the bag or around the patch,
- Large heating capacity with 6000 watts/220 Volts
- Bag vacuum sensing for repair qualification; 2 sensors installed,
- Panel Printer,
- Touch screen panel for
 - easy programming
 - start cycle
 - graphic supervision
 - active control mode selection
 - calibration
 - quality control report
 - heat blanket testing
- Blanket power check and detection of shorts
- Built in electronic safety circuits.
- Large memory storage capacity for cycle data
- **USB** connections: 2 ports
- Transfer of data to a USB key
- Automatic reporting under pdf
- Calibration made easy by dialogue and software tuning operations.

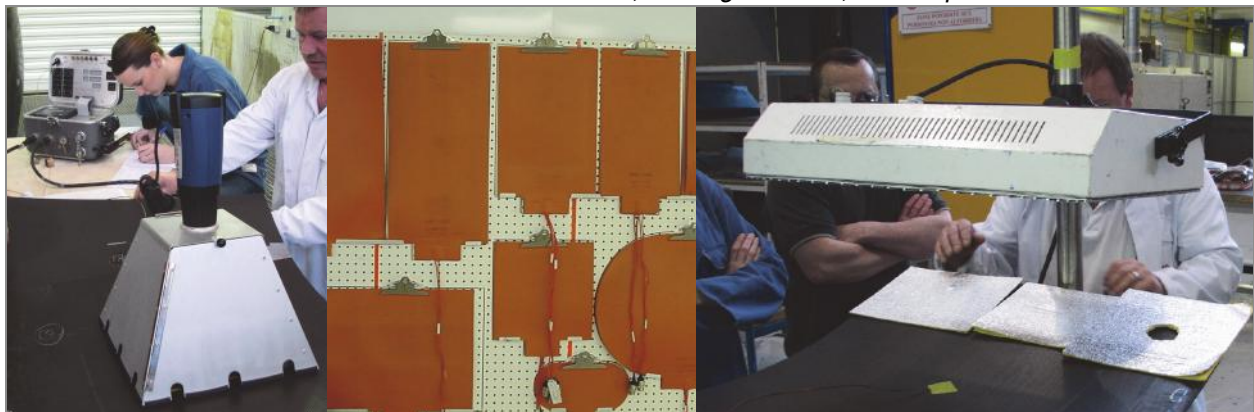


HEATING SYSTEMS

The Anita can drive, without any other circuit tuning, various heating systems like:

- heat blankets, (see our general catalogue for selection)
- radiant panels,
- hot air blowers,....

Hot air blower, heating blankets, radiant panel



TECHNICAL SPECIFICATIONS

- Dimensions: W x D x H: 350 x 220 x 260 mm - 14 x 9 x 9 in - Weight:..., 9,6 Kg - 22 lb
- Volts: 220 or 120 VAC, **automatic switching**
- Power Capability: 30 Amps x 220 Volts = 6000 Watts or 30 x 120 Volts = 3600 Watts available on **2 independent power output**
- High Quality **Touch Screen Panel** for Operator Dialogue and Data visualisation
Dimensions: 160 x 125 mm - 6.5 x 5 in.
- Sensing precision : temperature better than 0,4 °C /0,8°F; vacuum better than 0,050 bar/1,5 inHg

Innovative Features:...

- An **extra third output power channel** (230 Volts or 120 Volts - 3 Amp) for cold area heating
- **Test of presence of blanket**; measurement of **power of blanket** in the range 200 to 6000 watts
- Watch dog and safety associated circuits for safe operations.

Other features

- Dialogues in English, French, Spanish, German, Italian, Russian, Chinese, Japanese,.. selectable
- Units in °C and bars or °F and in of Hg selectable
- Thermocouple scanning capacity: type J or K (to be specified at the order), 12 plugs, with optional external extension up to 24 plugs
- 2 Vacuum electronic gauges on return hose from bag to qualify the actual vacuum in bag itself. This value is monitored permanently, displayed, printed, recorded,
- Printer with large standard paper,
- Audible alarm, and Mimics for alarms and heat actions; seen from far,
- Easy accessible external fuses
- All blanket cables come with special circular military connectors mounted for a high quality coupling. Our blankets come also with same quality mating connectors.
- Software and electronic safety features
- 2 USB ports, for export of data to a USB key or support

DELIVERY

The Anita comes with all its accessories necessary to implement a bonding operation under vacuum: a complete set of cables, hoses, in a nice storage and transportation console.

Console Dim: 18 x 14 x 7 in (460 x 350-x 166 mm); Weight: 27 Lb. -12 Kg

Content List:

- A Power cable: 1 unit, length 5 m (6-ft.)
- Blanket cable: 2 units, length 3 m (10 ft)
- Vacuum Silicone Hoses: 2 units for return sensing, length 3 m (10 ft.)
- 2 Vacuum Valves,
- A heat compensation blanket (230 or 120 Volts) and its cable
- Thermocouple cables:12 of 3 m long (10 ft.)
- A first set of printer consumable,
- A User and Service Manual.



The console comes with a case containing all accessories

REFERENCES TO ORDER

- **P/N:GMIEZ0901-T***
 - *T = To be specified at order for Thermocouples Type J or K , T=J or T= K

CONSUMABLES AND PERIPHERALS IN OPTION

- A box of 20 printer paper rolls P/N: GMIIOTI010-01
- A box of 10 printer ink cartridges P/N: GMIIOTI010-02
- A Venturi - Bag Valve Pump P/N : GMIIOTPV010 or V011 (US air in connector)
- An electrical vacuum pump (bi-voltage) P/N : GMIIWVP021
- A transport case containing the Anita, The accessory case, blankets and alia,..



TRAINING

GMI AERO offers a wide range of programs for training to composite repair. From level I and II programs to specialised on job repair sessions.

ADVANCED OPTIONS

- Scanner 12 TC** - Extension of thermocouple channels proposed to extend the capacity of temperature measurement by connexion of **a scanner** of Capacity 12 T/C .
Wireless linked to the Anita , the scanner can easily be positioned close to the repair and this is useful in case of difficult access , the Anita being positioned at distance..
 - Capacity 12= 2 x 6 thermocouples J or K , engineered at the order..
 - Detected automatically by the Anita.
 - With this scanner , total capacity of Thermocouples handled by Anita is : **24** for 1 large repair or **12 Thermocouples per zone for a repair with 2 zones****P/N GMIEZS012- J* or K according to your choice**
- Remote Control with a Screen Tablet :**
 We offer now the possibility to dialogue at distance with the Anita EZ through **a latest technology wifi** linking the Anita to a remote Tablet . This feature is unique to ease the work of the operator in field operations. Alarms are also transferred at distance **visually** on the remote screen and **loudly** through a speaker.
P/N : GMIEZR010



DEVELOPMENTS

GMI AERO can assist you to adapt the consoles and the peripheral equipment to suit your specific needs. Please consult us.

Several models are available to cover a large range of applications: **shop use, flight line intervention** (anti explosive proof model), with **4 heating zones**, for very large areas like: reversers or radomes

