

# MONOCON

E.A.F. MONOCATOR



FOR HOT REFRACTORY  
REPAIR OF ELECTRIC  
ARC FURNACES



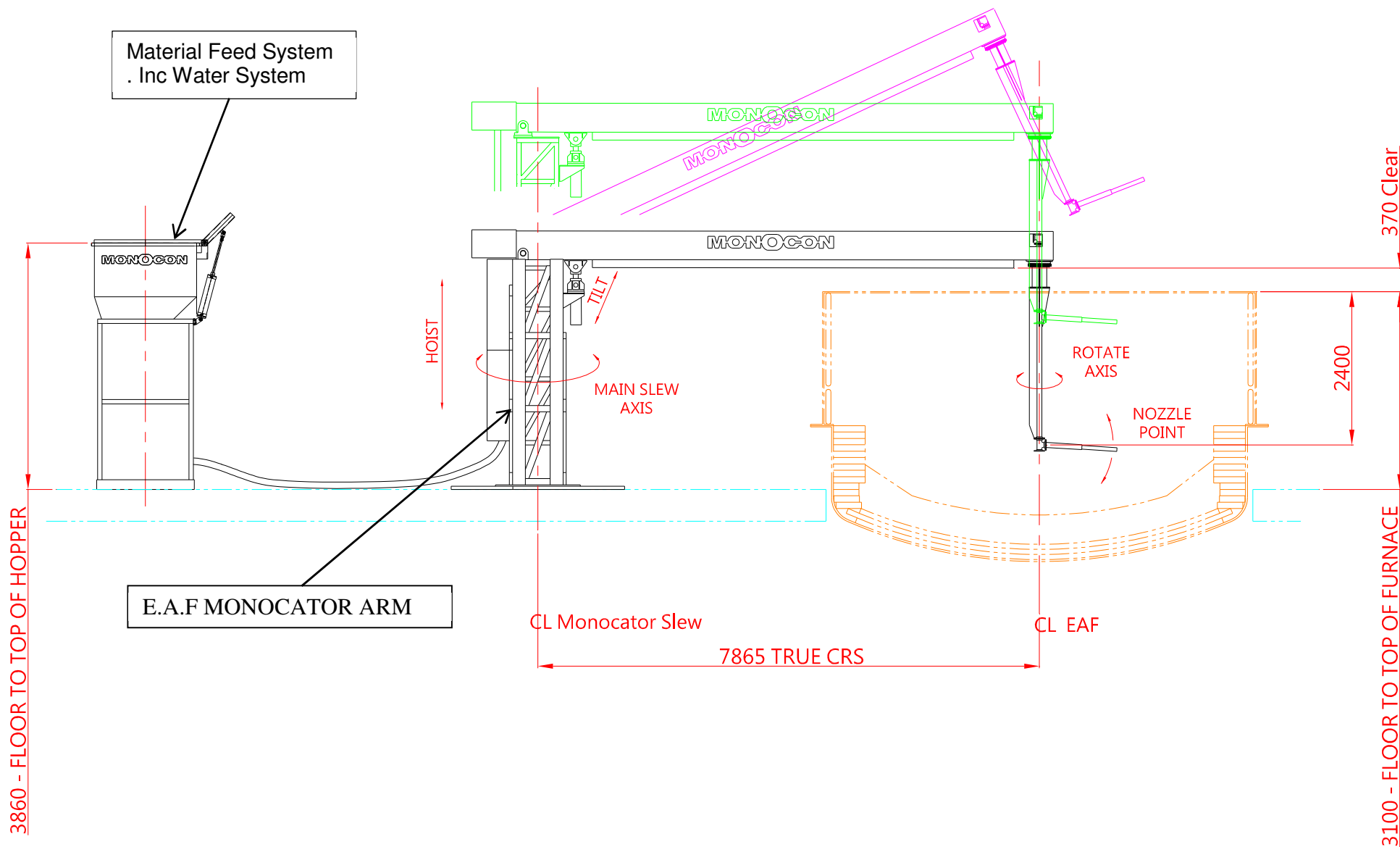
**DESCRIPTION**

The EAF Monocatoris used to repair two sidewalls & slaglines of Electric Arc Furnaces.

**Main Components**

- Monocator Arm
- Material Feed System
- Weigh System
- Water System
- Control panel
- Radio Control Joystick

**TYPICAL EAF MONOCATOR LAYOUT**



**TYPICAL MATERIAL FEED SYSTEM  
(Pressure Vessel Type)**

- Bulk hopper – 2m<sup>3</sup>
- Pressure Vessel – 1.1m<sup>3</sup>
- Max Pressure – 6 Bar
- Air consumption – 8m<sup>3</sup>/min. (max)
- Material Delivery – 5m<sup>3</sup>/hr (max)



**WEIGH SYSTEM**

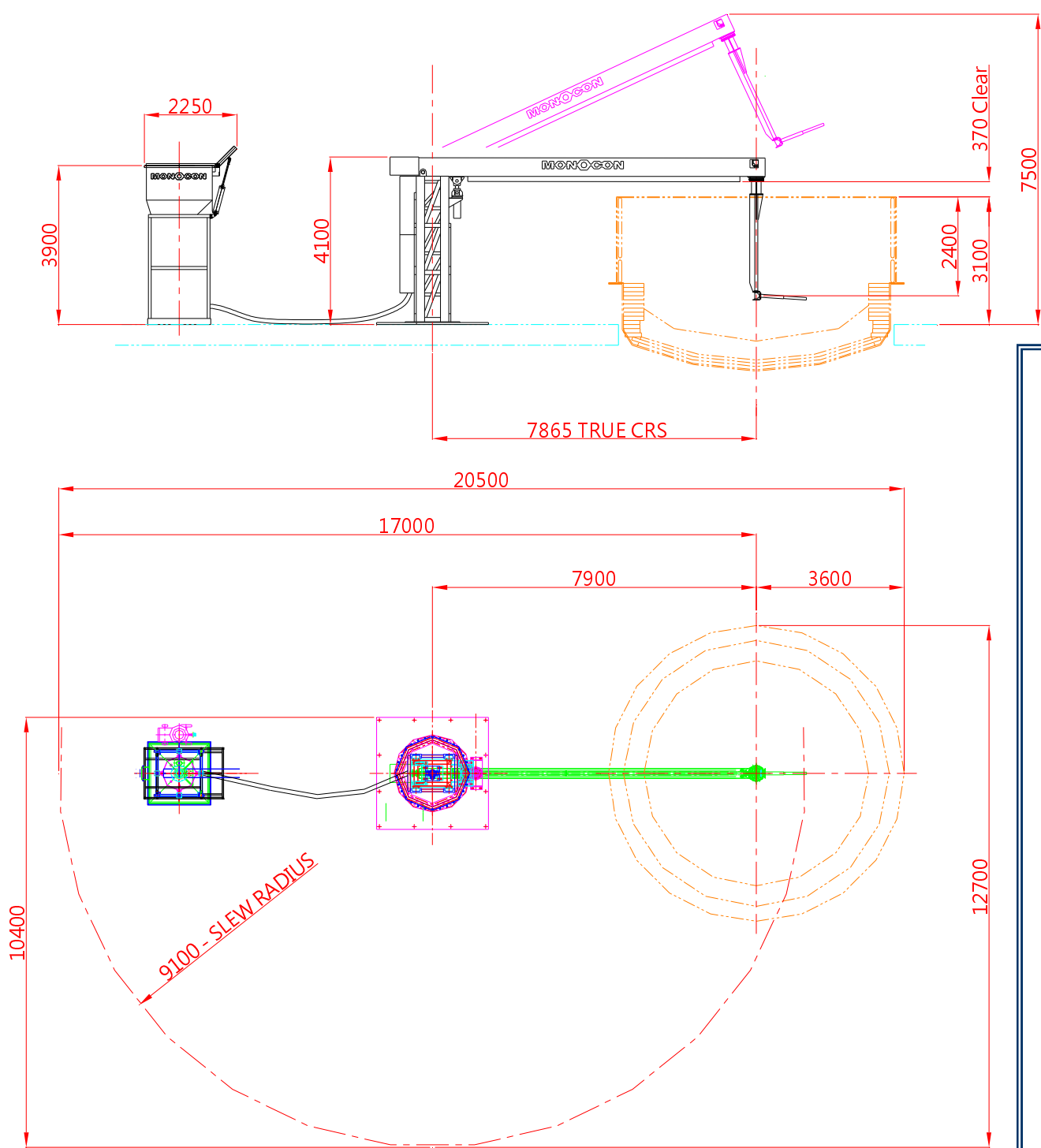
- Display Qty of dry material
- Load Cells on Feed System
- Digital Display on Control Panel

**WATER SYSTEM**

- 200 Litres Capacity
- Multi stage pump
- Control Valve
- Visual of Digital flow meter
- Temperature Controlled



**TYPICAL DIMENSIONS** – Dependant upon site Survey



**DIMENSIONS**

Height Approx.	7500 mm
Working Area Length Approx.	17,000 mm
Working Area Width Approx.	10,400 mm
Weight Approx.	7000 kg

**MAIN CONTROL PANEL**

Weigh System Display

Radio Control



Electrical Control

**RADIO CONTROL JOYSTICK**

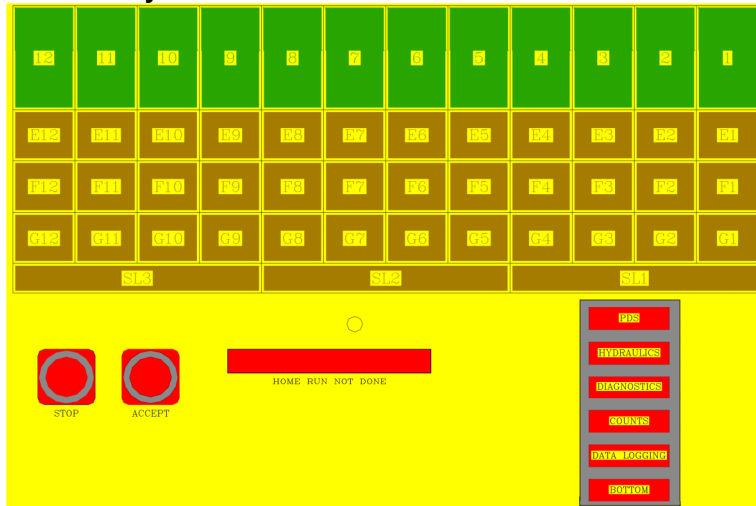




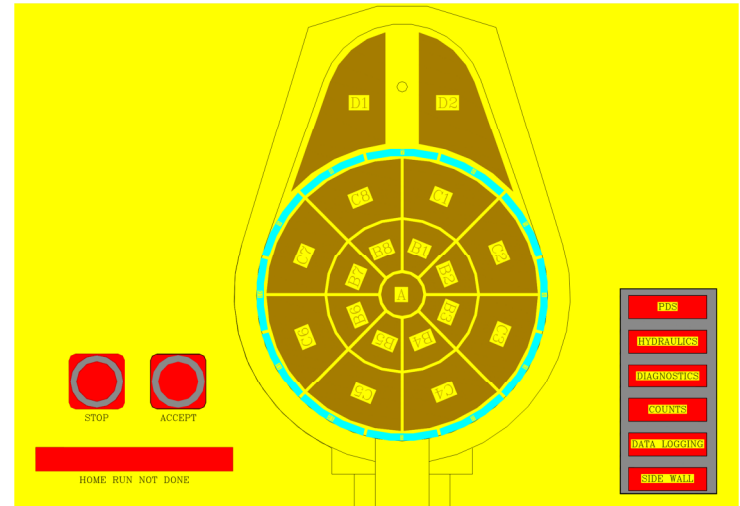
# MONOCATOR 'EXTRAS

## EAF Monocator – Extra Features Available

- **Automatic**  
 In addition to the standard Radio Control Joystick the Monocator can be provided with a touchscreen monitor. This Monitor is used to select areas for repair from the control room. –The Monocator will then repair the furnace automatically

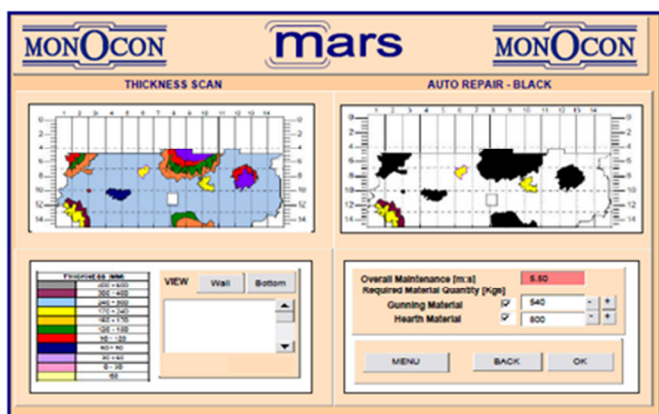


Standard  
 (Sidewall/Slagline Repair)



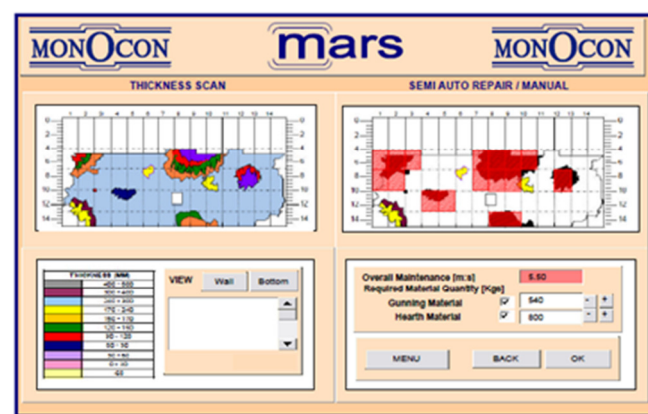
If fettling option is chosen  
 (Banks & Hearth Repair)

- **Fettling**  
 The Monocator can be upgraded to apply fettling material to the EAF hearth & banks. – A second feed system is required for this option.
- **Refractory Scanner**  
 The Monocator can be supplied with an integrated refractory scanner. This can be used to repair specific areas in the furnace according to the residual lining thickness. Fully automatic or by radio control.



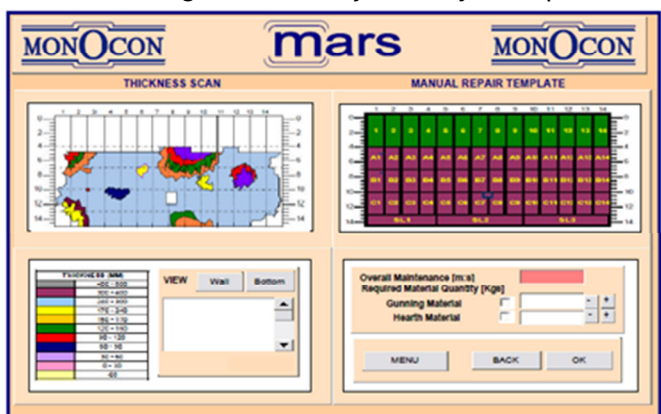
### From this screen;

- The operator can see the scanned areas of the furnace on the left hand side.
- The operator can see the recommended areas for repair indicated in black on the right hand side display.
- The time taken to complete the repair is indicated.
- The quality in Kg's is indicated for each material which will be consumed in performing the repair.
- Time and/or Kg's can be adjusted by the operator if required.



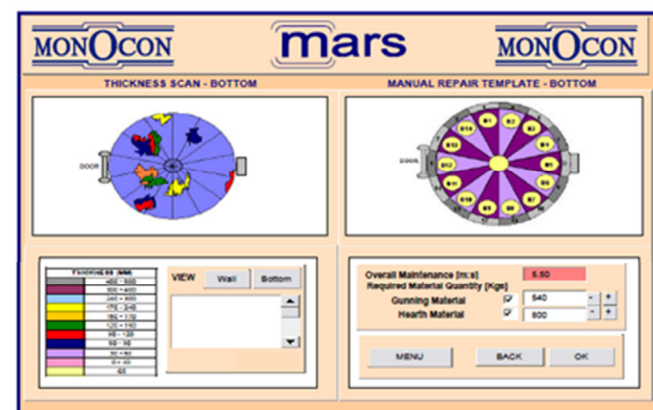
### From this screen;

- The operator can see the scanned areas of the furnace on the left hand side.
- The operator can see that blocks covering the essential areas for repair are hatched using standard mapping.
- This selection can be automatically selected or manually selected by the touch screen monitor.



### From this screen;

- The operator can see the scanned areas of the furnace on the left hand side.
- The operator can make judgements of which blocks repair from the touch screen monitor.



### From this screen;

- As for the sidewall, similar screens are displayed showing a scan of the EAF bottom and suggested repairs are offered.

### This screen shows;

- Standard mapping screen on the right hand side.
- Scan on the left hand side