

M.M.I or H.M.I Data sheet

15” coloured touch screen E1151 Operator interface.

The M.M.I (Man to Machine interface) or H.M.I (Human to machine interface) is the operators control panel. Great research has been taken on the decision to use MITSUBISHI control systems. Product support, availability, flexibility, robustness and cost were just some of the points taken into account. The E1151 coupled with the FX range of sequence controllers is a formidable piece of technology and has the scope to keep up with future demands.

The 15” touch screen panel’s active area is 304.1mm by 228.1mm. It has a TFT-LCD 64,000 colour display 1024 by 768 pixels and comes with a CCFL 35,000 hour back light. This gives an excellent large sharp image in all light conditions. The panel has excellent chemical resistance and is IP66 rated.

The operator’s software has been designed in house around some key aspects. The panel is extremely user friendly and takes less than an hours training for a competent operator to master.

Its key features are:

1. Full recipe handling. The panel will record all timer, heater zones, operation selections and valve positions and store them under individual program names for future use.
2. The screens are laid out in an easy to follow format and will prompt the operator when required.
3. The panel gives full machine diagnostics. Machine faults are recorded on the alarm page and flag up for the operator or maintenance personnel to see. Each alarm can be accessed and comes with a full description of the error with all possible causes and remedies. The machine monitors all contactors, overloads and switches.
4. Maintenance pages allow access to inputs and outputs checks which are displayed as digital text I.E “the upper heater is back” the upper heater is not back” very simple to follow. The pneumatic and electrical schematics can also be displayed. The panel has a real time built in clock which it uses to determine maintenance schedules. A full check list can be displayed.
5. The software allows for different modes of operation. Various warm up modes are available to bring the machine and sub assemblies up to an operating temperature before running material. Fully automatic cycle allows an operator to run production with the simple push of a button. Manual selection allows a step by step operation of the machines functions and can be used for sampling. Tool change allows for semi or fully automatic tool changes.
6. The software comes with a power and time saving mode. When the operator takes a tea or lunch break the machine will take into account the time the operator is away from the station, it will power down heaters, vacuum pumps and auxiliary equipment and bring them back online ready for immediate operation on there return.
7. The software is a complete package so that if you install other optional equipment at a later date I.E a pyrometer temperature sensor, it is not necessary to up date the software just select the device on screen.

Most importantly when you purchase this system you own the software. We are pleased to supply you with a copy and we will give free upgrades at later dates subject to terms and conditions.

The M.M.I is equipped with communication ports RS-232, RS-422/485, USB and Ethernet. It also has a CF- slot type 1 & 2. Flash memory for the application is 4MB. This allows several options. We can couple the machine to the production office via the Ethernet connection; this will allow you to check on production in real time. Feed back for product type, the cycle times being achieved, load times etc can be displayed directly on to your personal computer.



With an external phone connection we can diagnose the machine from our main office. 65% of call outs are for relatively simple breakdowns. Using this technique we can advise your own maintenance department of the problem they face and advise them on the correct remedy bringing you back into production much quicker than was previously possible.

MITSUBISHI equipment is available “off the shelf” from hundreds of outlets. They take pride in the fact that each new product is compatible with the last, this means that in the ever changing world of electronics you are always going to get the back up, support and products to keep your equipment functioning for the future.

The FX range of sequence controllers are used in conjunction with the MMI for overall control of the machine. This system can be fitted on any manufactures equipment during a part or full refurbishment.

