With over 40 years in the business, Hy-Ram’s new WeldMaster range of Machines take Butt Fusion technology to a new level.

Firstly, the machine looks modern; solid, compact and well proportioned, strong where it needs to be, light-weight where pertinent. The whole machine has a real look of quality. Finished in grey and black, all in all it’s a very attractive package boasting clever design touches, optimised choice of materials and the use of modern manufacturing techniques.

Looking beyond the appearance, it is clear that the WeldMaster has evolved from Hy-Ram’s long history of Butt Fusion design and manufacture. The long list of features unique to the WeldMaster machine set it apart from its challengers. This is a clever machine… and it puts Hy-Ram into an enviable class-leading position.

Why buy an ordinary Butt Fusion machine, when you could have a WeldMaster?

Why specify old technology... when you can get ahead?

Same old... or brand new?

In terms of equipment made in the UK, there really hasn’t been much to report about with regard to new developments with current versions of popular machines being first launched in excess of 10 years ago!

The WeldMaster readdresses this balance with a fresh approach, contemporary design, bang up to date software with a large colour touchscreen interface, QWERTY keyboard, animated ‘on-screen’ prompts, embedded GPS, USB connectivity, Bluetooth connectivity, Integrated RFID reader, Barcode reader, Bespoke Database incorporating Google Maps, Smartphone App to remotely monitor joint status, Control Point compatibility… the list goes on!

At the heart of the WeldMaster range is a powerful windows driven operating system which has given Hy-Ram the platform to be able to offer something different and modern.

This can be evidenced by the large 7” colour touchscreen with features such as the moving animated graphics which show the operator ‘how to’ screens - enabling easy progression through each part of the welding process. The screen also features a pop-up QWERTY keypad making data entry quick and easy compared to other methods of data entry.
The simplicity of operation

Power the machine up and the operator is greeted with the home screen. A nice touch is the factory option to ‘personalise’ the machine and to have the home screen configured with the buyer’s name and logo... helping with reinforcing brand image and also making the machine less attractive to thieves.

The display on the user interface is intuitive and it doesn’t take long to get the knack of switching between features. It is easy to switch between manually opening and closing the Chassis, pipe parameter set-up, inputting job details, reviewing completed joints (scroll-back), running diagnostics and so on. Operating the machine soon becomes second nature even for new operators.

The weld cycle itself is pure simplicity thanks to the clear on-screen step-by-step text instructions and the corresponding animated image... it is (nearly) impossible to make a mistake. On-screen instructions lead the operator through the whole process prompting each phase of the weld cycle. A nice feature is that there is a table displayed on the screen which tells the operator the status as each joint progresses. The table states target versus actual values for pressure, temperature and time. The time aspect being particularly useful in order to know how much waiting time there is in between operator interaction. The Controller features a loud electronic buzzer which sounds when the chassis is about to move and also at the end of the joint. [Note: Information from the table and joint complete notifications can be repeated/mimicked on the operator’s Smartphone by using the Hy-Ram App... referenced later in this publication.

Hy-Ram’s Database...

Hy-Ram have developed a bespoke database featuring multi search criteria. Making use of drop-down menus for all search options, the information available is in easy to understand format.

If you need to know the status of an operators weld, on a certain diameter, with a certain material, between certain times...you can select and pin point this information!

Other useful features include:
- Map connectivity to pinpoint the coordinates of the weld – making use of Google or Bing maps
- Instant ‘email’ button – to simplify sending joint information.
- Data transfer to the Database via an ‘off-the-shelf’ USB memory stick.

Ergonomic layout for easy maintenance

The Operator Interface boasts a large colour touchscreen with animated graphics - a first in the field! The Controller itself has a tough steel enclosure and is compact in comparison to its rivals. It has a real feel of durability.

Release the stainless steel toggles to open the enclosure and reveal the hydraulic power pack neatly housed in the bottom section of the Controller.

First impressions are of very clean lines and a neat layout... resulting in all the components being accessible from above. Components such as the Oil Filler Cap and Pressure Filter are handily placed for easy maintenance.

The top section is a sealed unit and is effectively the brains of the whole machine housing the hardware, software and the slick user-interface.

As well as the touchscreen the interface also houses the USB port, the RFID reader (to verify operator training / validity) and the prominent emergency-stop button - and that’s it... no other buttons... the touchscreen takes care of everything else.
How clever will your next machine be?

**WeldMaster unique features...**
- Colour touchscreen display
- Home page can be configured with buyers or hirers logo
- Moving animation coupled with text instructions to instruct operator of next operation
- Digital display of Hotplate temperature on Controller and on Hotplate
- QuickCal... quick and easy electronic calibration
- Integrated RFID reader allowing only authorised access
- Barcode reader as an alternative to RFID for reading operator cards and pipe details
- Bespoke joint data analysis software
- Bluetooth connectivity to Apps
- ControlPoint BlueBox enabled option

**Other features...**
- Automatic recognition of size of chassis connected
- Options for pipe set-up automatically limited to size range of Chassis
- GPS embedded in the machine, coordinates saved with joint data
- Step by step Target v’s Actual... pressures, times, temperature
- Quick dwell time, rapid hotplate retraction and symmetrical pull off
- Enhanced scroll back facility to review joint data and status
- 1 million+ joint memory storage
- Interchangeability of Controller with certain sizes of machine
- Integrated ambient temperature measurement and compensation
- Automatic pipe slippage detection
- Multiple joint data download options
- Quick Top Clamp clamping using cam / lever design
- Easy ‘on-site’ conversion of Chassis for welding of fittings
- Removable carrying Cradle for tight operating conditions

**Joint recording and downloading**

As you would expect, the WeldMaster has a huge memory for joint data, with the ability to record in excess of one million joints.

More impressive are the download options where Hy-Ram have every option covered.

For traditionalists, there is still the option of a printout via the connection of a hand-held printer.

There is a new feature called ‘scroll-back’ which allows all parameters to be reviewed on-screen for completed joints. This shows full information for each joint including final joint status.

Data can be downloaded via the USB port and then subsequently up-loaded to a PC. Using the Hy-Ram Database, joint information can then be filtered, viewed and interrogated in a number of useful ways.

The Controller can be specified with Bluetooth connectivity - allowing a Smartphone to be paired and data transferred to the Hy-Ram App. Joint information can subsequently be emailed and then using the Hy-Ram Database, joint information can be filtered, viewed and interrogated.

The Controller can be specified as being ‘ControlPoint Bluebox’ enabled. In conjunction with ControlPoint’s App the joint data is captured and automatically transferred to ControlPoint’s ‘Joint Manager’ database for storage.

**WeldMaster ‘QuickCal’ Calibration**
...no screw-driver required!

In diagnostics mode, there is an option for re-calibration. WeldMaster ‘QuickCal’ enables a 15 minute simplified calibration procedure, minimal workshop/site tools are required!

With just a digital volt meter and a pressure gauge the quick and easy electronic calibration of all essential elements including time, pressure, temperature and linear distance can be carried out almost anywhere.
Future Proof?

Bar coded pipes...
A Barcode scanner can be connected to the Controller via the USB socket or via Bluetooth. In addition to reading bar-coded operator cards, this also allows for the scanning of a barcode on the pipes. The Controller will automatically verify the compatibility of the two pipes to be welded. In the event that the pipes are not compatible (i.e. different diameter, SDR, material etc.) the Controller will inhibit welding. Assuming the pipes are compatible, the welding parameters are automatically configured within software and the machine is ready to weld... quick, easy and fool-proof!

Control Point compatibility...
The WeldMaster Controller can be specified as ‘ControlPoint Bluebox’ enabled. This means that the welding is carried out in conjunction with the ControlPoint App and all joint data is automatically transferred to ControlPoint’s Joint Manager Database for storage.

Software Updates...
Future WeldMaster software updates can be simply uploaded via the USB socket on the Controller.

Support and Training...
The WeldMaster has been designed in England, and is manufactured at Hy-Ram’s Mansfield facilities. As the actual manufacturer of the machine... and on the door-step of UK clients... our service levels are uncompromised and uncomplicated. In the case of the UK, there is no need for Hy-Ram to employ sales agents, repair agents or third party repair houses. Hy-Ram’s pool of service engineers are fully conversant and qualified in all aspects of the machine. In deed, they probably built, tested and completed the PDI prior to the machines delivery!

Security features...
The Controller home screen can be factory set / encrypted with the buyers or hirers company logo. This gives a smart corporate look and also identifies the owner’s identity... making the machine less attractive to thieves.
The Controller also features an Integrated RFID reader for user cards / wristbands etc. ensuring only authorised, registered and qualified operators have access to the machine.

Welding Specification

Dummy Joint...
The chosen welding specification may require dummy joints. This may happen at the beginning of the day or if the Hotplate temperature drops below specified limits. The WeldMaster Controller can be factory configured to automatically enforce the carrying out of a ‘dummy joint’ when required... meaning that the specification is being met with minimal operator knowledge.

Welding of Pipe to Fittings? No problem!
The WeldMaster range has the ability for simplistic ‘on-site conversion’ of the chassis to allow welding of pipe to spigot fittings, tees, elbows etc. This may involve single clamp clamping of the Fitting, or in some cases use of the additional Back-plate and Multi-Spigot kit (refer to photo).

Traditional values combined with 40 years of experience.... and a dedicated team to support you... wherever you are in the world.

WeldMaster - Find out more...
Our Sales team are on hand to help you with any questions you may have regarding the WeldMaster range.
To find out more, please contact our Head Office Sales team:
Telephone: +44 (0)1623 422982
Email: enquiries@hyram.com
To view a video presentation of the WeldMaster range, check out the Media/ Download section of our website.
Website: www.hyram.com