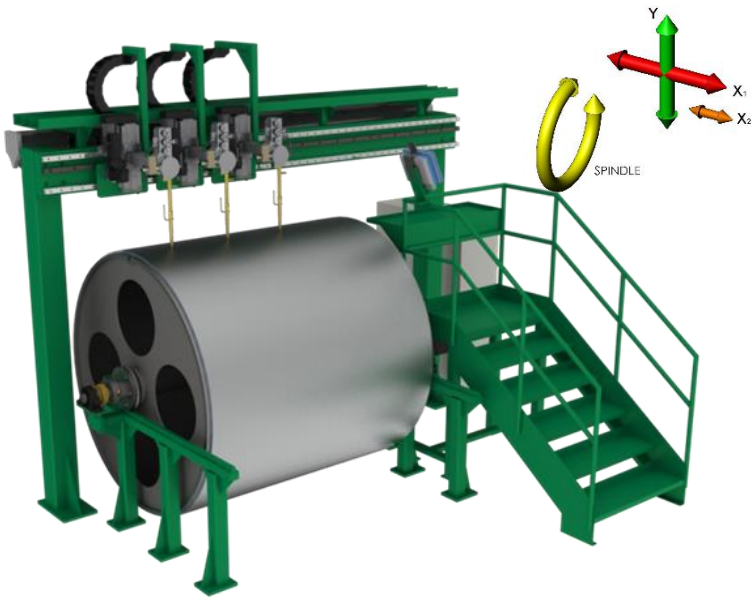
Technical Data Sheet

Stationary Welding Automation

WA Machines Rotary Plate Cladder



DESCRIPTION

Automated machine for the production of hardfaced plates via a rotary drum. Single or double plates can be hardface with automatic stepover ensuring minimal arc downtime.

FEATURES

Dedicated for plate cladding applications

Configurable for multiple heads

Welding patterns include stringer, square wave, oscillation and sine wave beads

Seam Jump function to stop welding at the junction of the plate

INDUSTRIES

Cement, mining, glass and recycling.

SPECIFICATION	Single plate	Double plate
Plate length (L)	3000mm	6000mm
Plate width (W)	1500mm	1500mm

TRAVEL

Motorised X^1 Axis	1mm - 2000mm
Motorised Y Axis	1mm - 500mm
Drum Rotation Speed	0.026 - 0.26 r.p.m.
Motorised X^2 Axis	1mm - 150mm

WIREFEED SPEEDS

0.5 - 10m/min, 1.0 - 20m/min - through a 4 wheel driven wire feed unit with integrated straightener

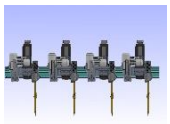
WIRE SIZES

1.0 mm, 1.2 mm, 1.6 mm, 2.0 mm, 2.4 mm, 2.8 mm, 3.2 mm, 4.0 mm

WELDING PROCESSES AVAILABLE FOR THIS MACHINE

FCAW-S, FCAW-G, SAW,

CONTROL SYSTEM





D3 *Touch*

Incorporating:

Master, X Axis, Z Axis, X^2 Axis, Spindle and wirefeed control modules.

Robust industrial PC running on Linux operating system and using state of the art communication systems to all peripherals

Programmer allowing the saving and recovery of programs, the number of programs that can be saved is only limited by the size of hard drive.

Auto diameter automatically maintains constant surface speed on varying component diameters

All parameters are adjustable during welding (Amps, Volts, WF Speed, Spindle speed, etc...).

ADDITIONAL OPTIONS

POWER SOURCES

WAP 1000-10-CC/CV	100% Duty Cycle	1000 Amps, 44 Volts DC	100 - 1250 Amps in CC mode	10 - 60 Volts in CV mode
WAP 650-10-CC/CV	100% Duty Cycle	650 Amps, 44 Volts DC	50 - 815 Amps in CC mode	10 - 65 Volts in CV mode

TWIN WIRE

For increased deposition rate:

Via a twin wire feed unit and twin wire integrated torch - can be used with the FCAW-S, FCAW-G and SAW processes with a depostion rate of upto 16kg/hr/head

FULL SUBMERGED ARC SYSTEM

For Use with Submerged Arc wires:

Recirculating flux system, 30kg capacity, including hoppers, vacuum pump, filter bags, flux tray, hoses and fittings.

POWDER FEED DELIVERY SYSTEM

For Use with Bulk welding process:

Powder hopper, 5 litre capacity, valves, hoses and delivery tube and fittings to attach to Y Axis.

ARC VIEWING SCREEN

For environmental protection:

To allow visual monitoring of the arc during welding of FCAW and GMAW process with connection to fume extraction system when installed

PENDANT

For quick set up:

Pendant with toggle switches to drive X, Y, Spindle and Wirefeed axis for positioning of welding gun and component. Also containing Stop/Start function and emergency stop buttons.

FUME EXTRACTION SYSTEMS

For environmental protection:

Aluminium ducting with travelling inlet carriage, collecting fume from directly behind welding gun, can be connected to a filter box or fan to customers own fume extraction ducting

AUTOMATIC STICK-OUT ADJUSTER

For use on irregular component geometries:

The ASA system is used to maintain and control the stick-out of wire from the welding tip to the work surface by controlling the movement of the appropriate axis ensuring that welding Amperage is maintained

PROGRAMMER

For greater automation and repeat work:

Programmer – Allows the saving and recovery of programs, the number of programs that can be saved is only limited by the size of hard drive. NB. The number programs that can be saved on the machine would be in the thousands.

DATA LOGGER

For monitoring QA records:

The datalogger can record any parameter on the system, all data is then stored. The operator can enter in specific information about the weld eg. roll type, serial number, Amps, Volts and travel speeds etc if necessary. All data can be retrieved by USB.