

# Matchless Machines Ltd.

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### PRESS RELEASE

# NEWALL-AGIE Jig Erosion Machine, 1520-75K

At the Brussels Machine Tool Exhibition in 1965 Newall, Agie and Matchless Machines decided to build a genuine jig erosion machine. The start of a completely new range of machines was thus made. Very small jig erosion machines have been built before but never has such a large machine using a high capacity generator been used.

The base of the machine tool, column and cross slide are taken from the well proven range of Newall Jig Borers. Manufactured in Peterborough these components have the normal guaranteed accuracy of machines built to date.

The generator, or power pack, as well as the hydraulic servo head is built in Switzerland by Agie, the head having been specially designed for this machine.

The cross slides are positioned by precision leadscrews or a completely zeroing optical system is available. The possibility of digital read-out is there.

A free-standing hydraulic power pack feeds the servo system; in the event of electrical mains failure the system is completely fail-safe, i.e. no quill movement.

The generator is the well proven Agiepuls 75 amp (optionally 45 amp) fully transistorised impulse unit with built-in relaxation networks.

The knowledge and ability of two well-known firms in their respective fields have thus been combined and the machine shown today is an example of European co-operation.

Matchless Machines have undertaken the final assembly, sale, installation, and service of these machines. A demonstration machine will be permanently in the Company's premises at Horsham.



# NEWALL-AGIE Jig Erosion Machine, 1520-75K

# DATA

# Machine Tool

Table clamping surface 20" x 14"

Economic working area of electrode 15 sq. ins (75 amp unit)

8 sq. ins (45 amp unit)

Traverse of longitudinal slide 14.5"
Traverse of transverse slide 10"

Accuracy of co-ordinate slide displacement within .0002"
Accuracy of repetition of slides .0001"
Maximum distance table top to spindle nose 18"

Maximum distance table top to spindle nose 18"

Hydraulic servo movement of quill 8"

Range of head adjustment 9"

Spindle nose prismatic clamping IMEA 201

Provision for special equipment

#### Generator

Maximum working amperage 75 amps

45 amps (optional)

Maximum stock removal of roughing .05 cu.ins. per minute

(.02 cu.ins. per minute 45 amps)

Surface finish 12 micro, ins. CLA

Transistorised impulse circuit and relaxation standard

Built-in time cycle control

Anti-arc circuits

Switchable polarity reversal

Power drawn at mains 75 amp 8 KVA

(45 amp 3.4 KVA)

#### Pump and Filtration Unit

5 um filtration 1 pressure pump 1 vacuum pump Built-in heat exchanger

Capacity of dielectric

65 gallons

#### Hydraulic Power Pack

Free standing

Working pressure

Filtration

Fail-safe hydraulics

375 lbs. per sq. in.

2 um