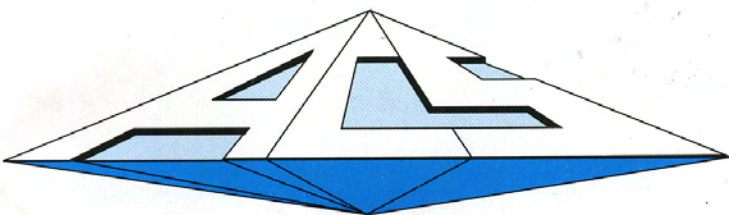
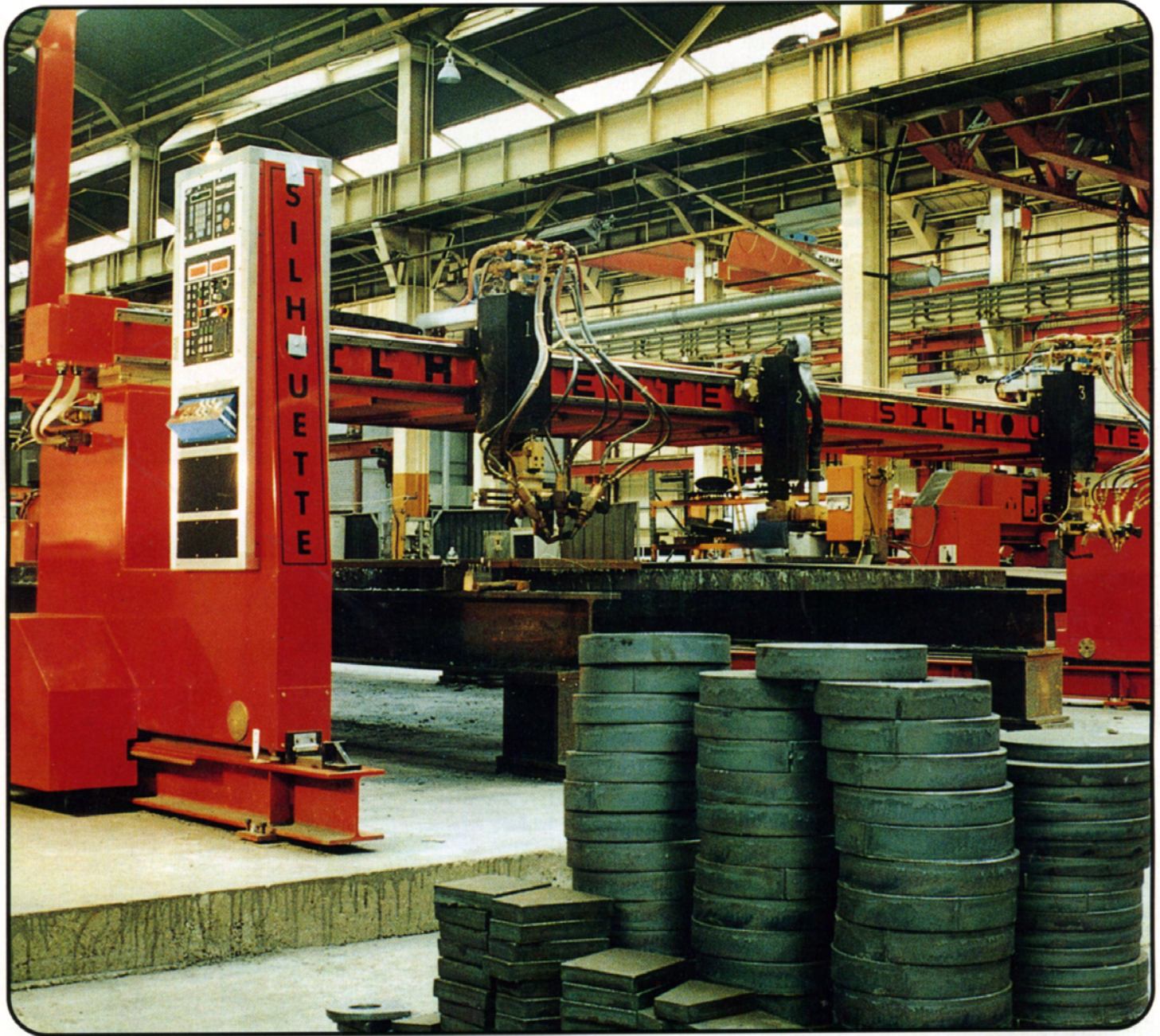


SILHOUETTE

PROFILE CUTTING MACHINE



Advanced Cutting Systems
PROFILE CUTTING MACHINES

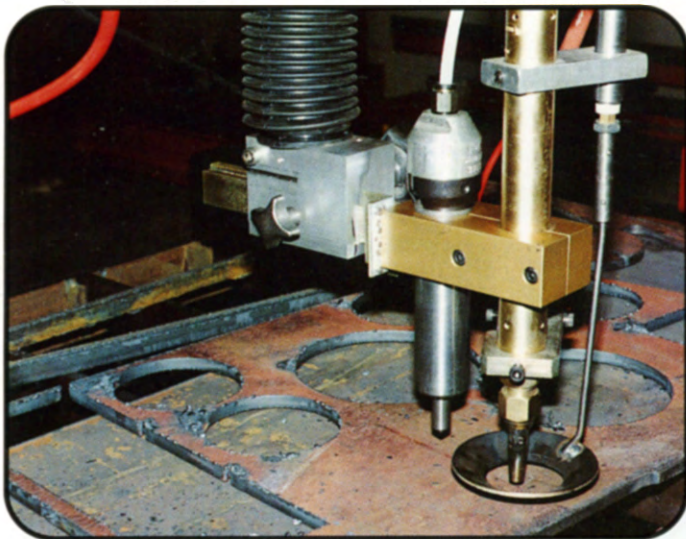
SILHOUETTE

PROFILE CUTTING MACHINE

The SILHOUETTE represents a breakthrough in profile cutting machine performance. A novel patented design completely eliminates the mechanical oscillation associated with conventional portal frame cutting machines. The benefits for you are extremely high levels of accuracy and reproducibility at affordable cost.

The SILHOUETTE offers,

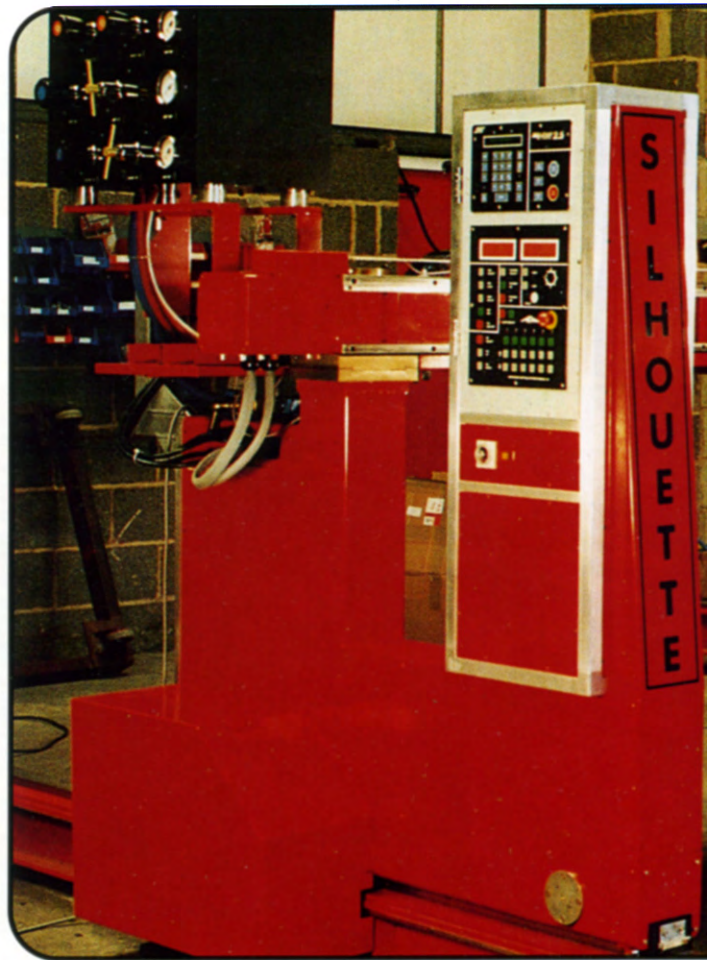
- Suitability for oxy fuel, plasma arc, laser, water jet and a variety of marking systems including powder, ink jet, pneumatic punch and plasma marking.
- Low level rails on both sides of the machine for ease of plate or sheet loading by crane or fork lift truck.
- User friendly microprocessor control of all machine functions.
- Speed capability of up to 12 metres per minute with rapid acceleration for high speed cutting and positioning.
- Twin side synchronised longitudinal drive to ensure smooth and accurate travel.
- Positioning of control panel enables an operator to control one or more machines at once when running on a common track.



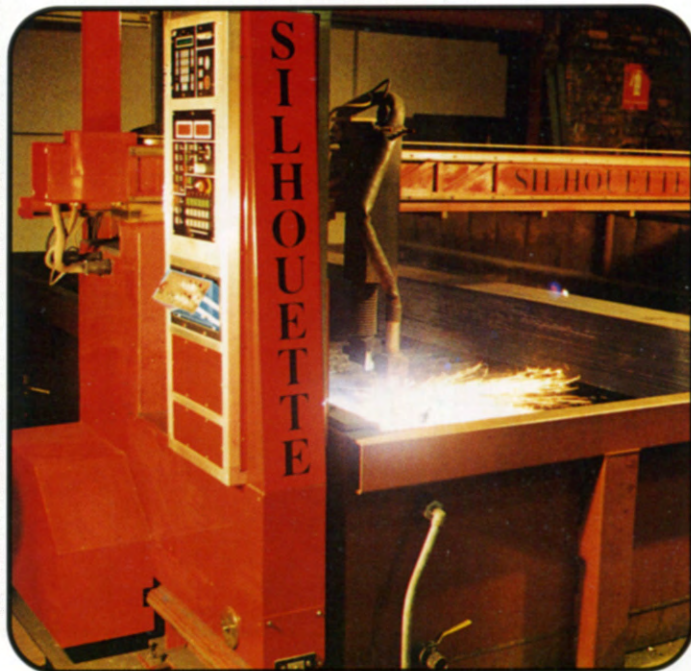
Motorised torch station fitted with oxy fuel cutting torch, pneumatic punch marker and torch height control

The SILHOUETTE is designed to carry either oxy/fuel or plasma arc cutting equipment and to operate in the most harsh environmental conditions. The machine is equipped as standard with a BURNY 2.5 system of control, which can be linked, via DNC to any programme centre suitable for the cutting process.

The machine is capable of handling small, medium and high throughputs of steel with maximum efficiency and minimum downtime. The main structural element of the portal design is the rigid transverse beam on which the torch suspensions move to give cross travel. The beam is supported at each end by identical pods, the connection being a novel patented floating system which eliminates mechanical oscillation associated with conventional portal designs.



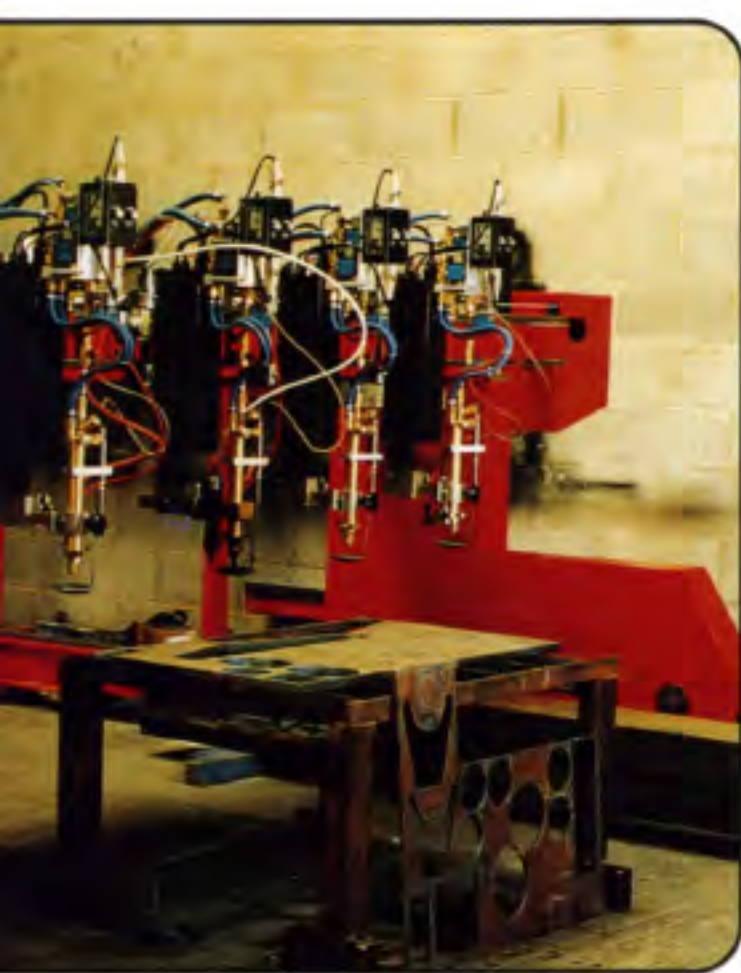
Silhouette fitted with four motorised oxy fuel torch stations



Motorised torch station fitted with high power plasma arc torch

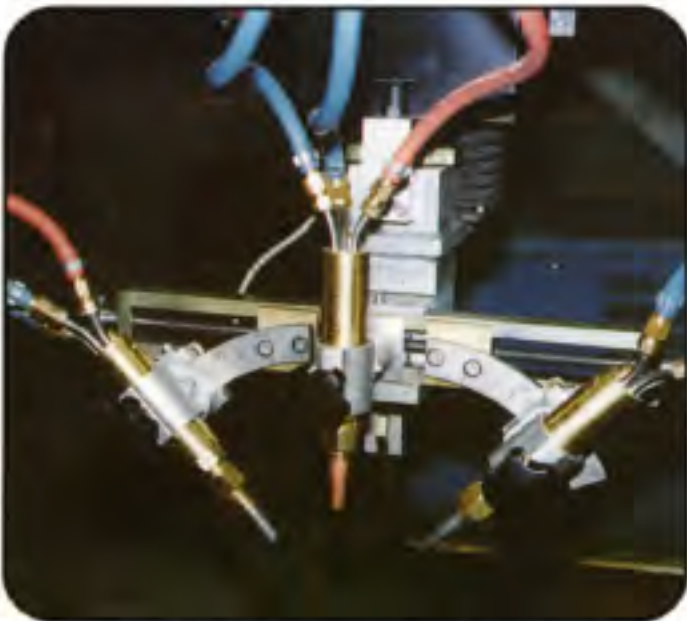
MACHINE CONSTRUCTION

Manufactured from high strength box section providing rigidity and vibration free travel throughout the speed range and giving accurate assembly with all moving parts sealed against the harsh cutting shop environment. This, together with high quality components ensures minimum wear and long production cycles with low maintenance related downtime.



DRIVE AMPLIFIER

Three axis drive system uses AC brushless motors to ensure rapid acceleration and positional accuracy. A ramp circuit with corner slow down is included to produce smooth, oscillation free motion through corners and arcs, even at full cutting speed. Cutting speed is infinitely variable from 0 - 12000mm per minute with continuous indication on the control panel.



Motorised torch station fitted with triple torch head for plate edge preparation



Easy to use operator's control panel

CONTROLLER

The Silhouette as standard is fitted with a Burny 2.5+ or 10 LCD control which comes with a non-volatile 128K Memory and can accommodate 512K internal storage expansion. The unit can withstand the harshest of industrial environments, its membrane keyboard being completely sealed from the effects of dust, oil and other contaminants. It is ideal for use with plasma, oxy-fuel, laser or water jet, receiving its cutting information from a number of options i.e., pre-programmed macros (standard shapes), manual *data input*, punched paper tape or DNC link.

LONGITUDINAL DRIVE SYSTEM

Longitudinal linearity is accomplished by adjustable eccentric check rollers guiding each side of the machine along linear rails. Twin axis synchronised drives ensure smooth and accurate travel even at high speeds. Both sides of the machine are powered via pulse width modulated amplifier drive motors connected to a minimal synchronisation between sides gives precise correlation of speed and position. Any deviation caused for example by an obstruction on either rail, disengages the drives.

TRANSVERSE DRIVE SYSTEM

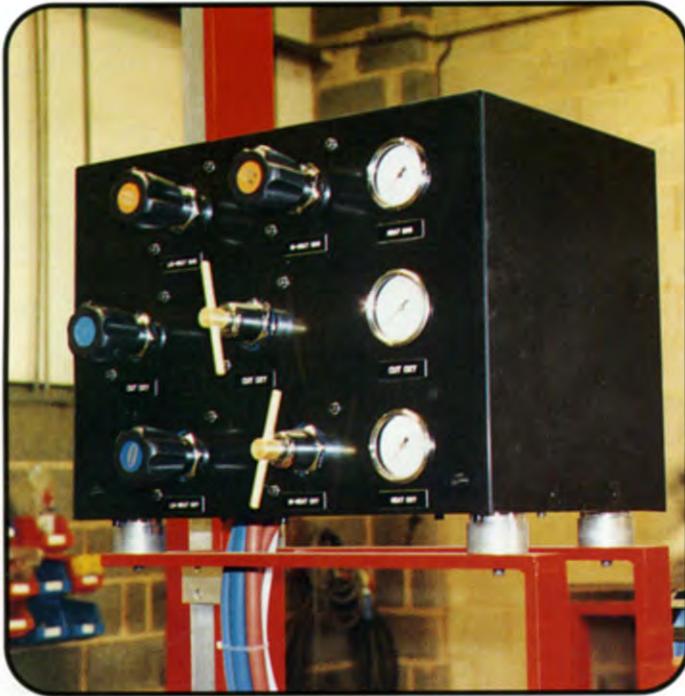
The transverse master torch suspension is connected to an endless, non-slip toothed belt rotating between a pulley at each end of the beam and is powered by the same drive system as the longitudinal axis. Additional torch suspensions are drawn along by means of clamping to the belt.

RUNNING RAIL

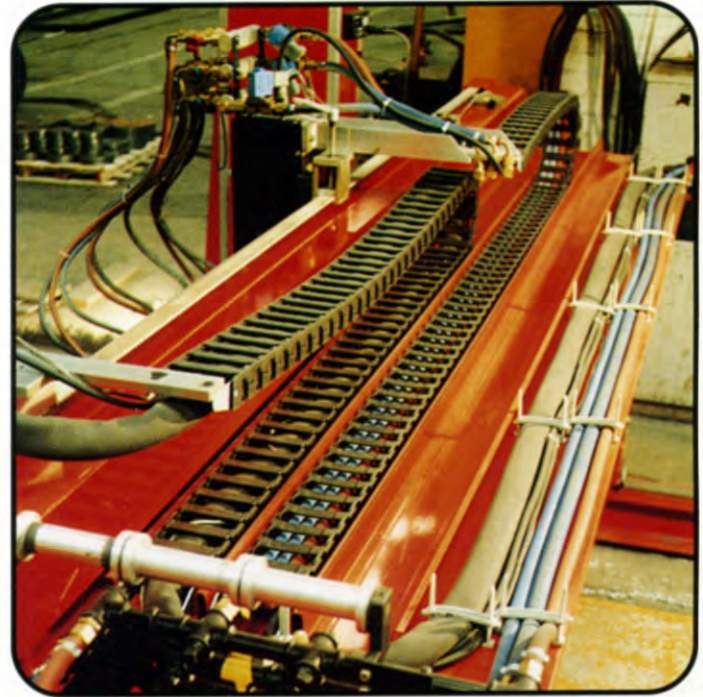
Each pod is driven via motor gearbox along two parallel rails mounted at floor level. Rail height is approximately 200mm is designed to facilitate easy loading from either side by crane or forklift truck. Each rail incorporates a precision rack which is used by the synchronisation circuits to guarantee squareness and the encoder to ensure positional accuracy.

SILHOUETTE

PROFILE CUTTING MACHINE



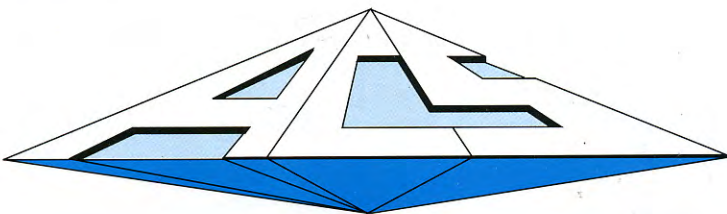
Gas control panel



Caterpillar track for hoses and leads

TECHNICAL DATA

Plate width	2000mm	2500mm	3000mm	4000mm	5000mm	6000mm
Overall width	3665mm	4165mm	4665mm	5665mm	6665mm	7665mm
Maximum number of torches	4	4	6	6	6	6
Curting width (1 torch)	2000mm	2500mm	3000mm	4000mm	5000mm	6000mm
Cutting width (2 torches)	2x900mm	2x1150mm	2x1400mm	2x1900mm	2x2400mm	2x2900mm
Cutting width (4 torches)	4x350mm	4x475mm	4x600mm	4x850mm	4x1100mm	4x1350mm
Cutting width (6 torches)	N/A	N/A	6x330mm	6x500mm	6x660mm	6x830mm
Basic track (length)	6000mm	6000mm	6000mm	6000mm	6000mm	6000mm
Cutting length (basic track)	4500mm	4500mm	4500mm	4500mm	4500mm	4500mm
Maximum speed	12000mm/min	12000mm/min	12000mm/min	12000mm/min	12000mm/min	12000mm/min
Connection voltage	110/240v 50Hz	110/240v 50Hz	110/240v 50Hz	110/240v 50Hz	110/240v 50Hz	110/240v 50Hz
Input power	1000VA	1000VA	1000VA	1000VA	1000VA	1000VA
Track height	200mm	200mm	200mm	200mm	200mm	200mm



Advanced Cutting Systems
PROFILE CUTTING MACHINES

Goodwin Park, Sandwich industrial Estate, Sandwich, Kent CT13 9LN
Telephone 01304 612522 Fax 01304 617512

www.advancedcutting.co.uk

sales@advancedcutting.co.uk