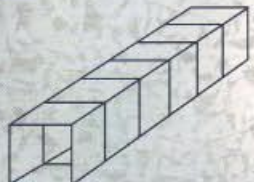
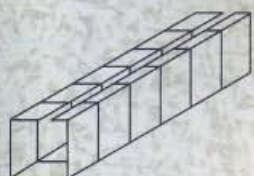
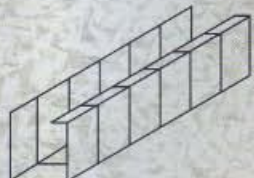
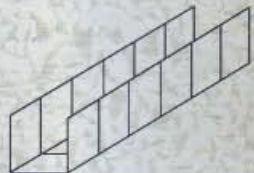
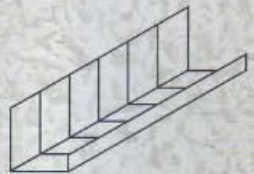




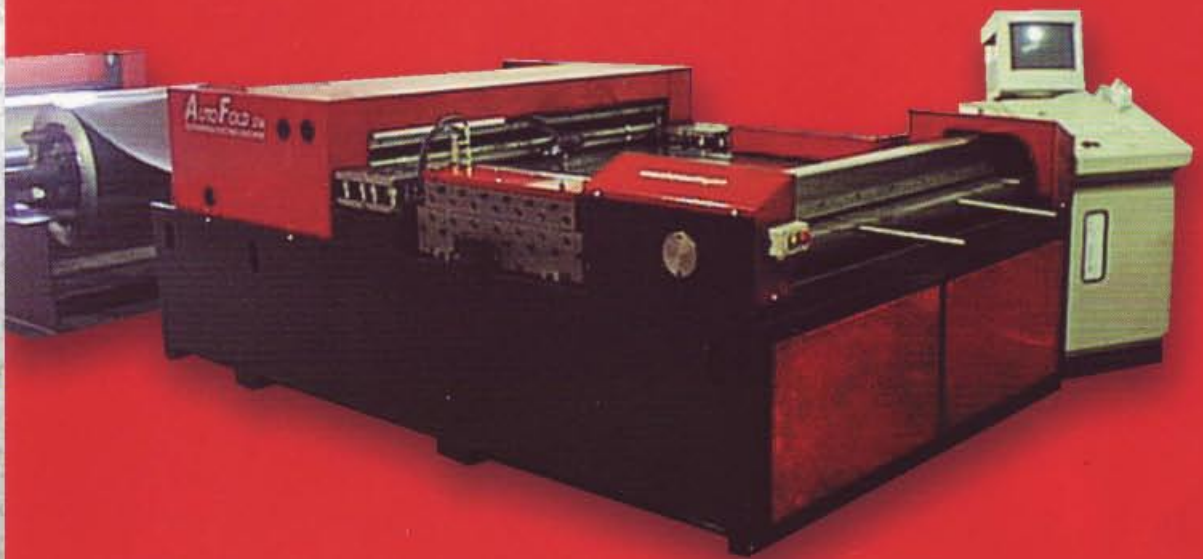
www.engeleuropa.com
www.autofold516.com



AUTOFOLD 516

AUTOMATED DUCTING MACHINERY

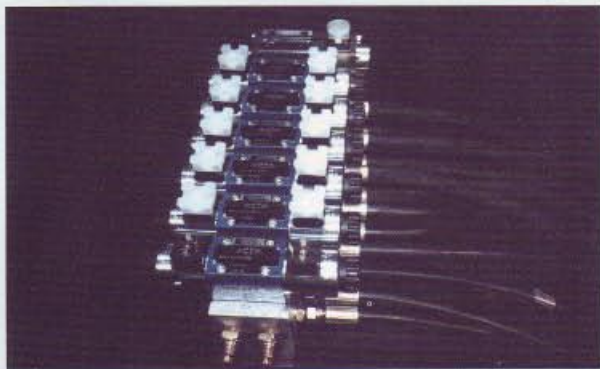
MACHINERY SPECIFICALLY DESIGNED FOR
THE SHEET METAL & H.V.A.C. INDUSTRY



The Autofold 516, with a model range of 30 versions, is specifically designed to suit any rectangular duct forming company anywhere in the world.

The complete automatic operation is designed to dramatically reduce waste, increase production, cut labour cost and accelerate schedules.

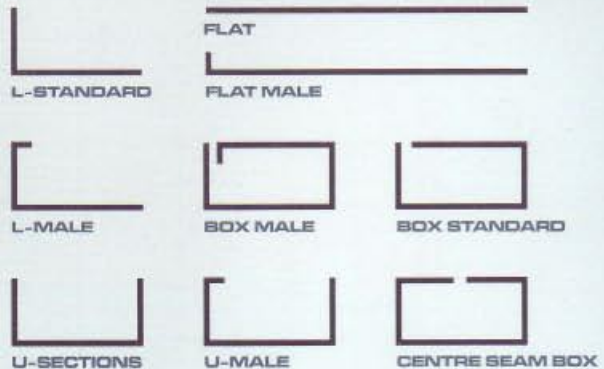
The Autofold is sold in 35 countries worldwide and is possibly the most chosen compact coil line in the world.



AUTOFOLD HEAD

All Autofold machines feature the clamp, fold and shear head on the front of the machine. The capacity to shear and fold is designed for 16 gauge material max. This unit incorporates 4 sided high chrome, high carbon blades top and bottom. The head allows the machine to produce flat sheet, L sections, U sections and fully folded box ductwork in seconds.

SECTIONS AVAILABLE ON AUTOFOLD



HYDRAULIC SYSTEM

All Autofold machines are driven hydraulically. The hydraulic system is renowned for durability, quality and accuracy.

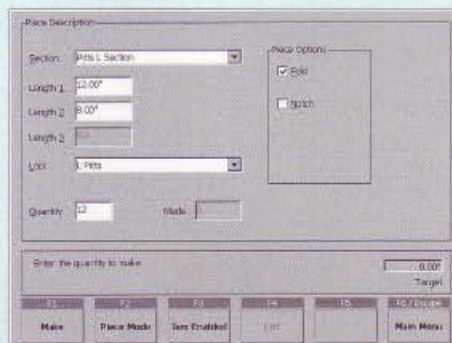
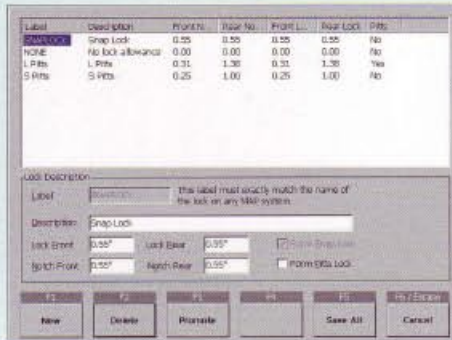
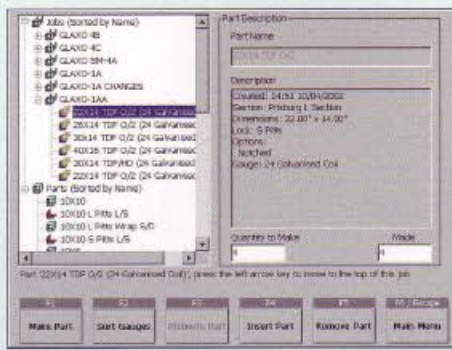
The computer system fully controls the machine through flow valve technology; this allows the software to independently control each valve thus allowing speeds on the machine to be set through the controller. This gives the machine incredible accuracy and for example the ability to slow down folding on large ducts in order not to damage the duct.

AUTOFOLD CONTROL SYSTEM

At the heart of all Autofold machines is the AF control system.

This has been specifically designed for the Autofold Range of machinery and has been in production for 20 years. In this time it has evolved into the control system used today.

The AF7 controller is based around a single board computer system, running custom software, with an easily understandable user interface. The machine software, along with the customers job and parts data is stored on a solid state flash memory, thus removing the need for fragile hard disc drives that are not reliable in a harsh industrial environment.



A separate embedded processor handles all machine controls, advanced systems diagnostics give clear on screen information status. All Drive to hydraulic solenoid valves is by fully protected intelligent output devices. The system is housed under a rugged freestanding console.

The same control system is fitted to all Autofold machines and is configured to the particular machine configuration.

All Autofold machines only require one 3-phase power supply.

An in-built transformer allows the power supply to range from 208 volts to 480 volts.

This machine requires NO AIR.

CONTROLLER FEATURES

- Optional connection to remote controller via serial link for off-line machine programming.
- Optional connection to MAP PM2000 plasma software via serial link.
- Printer option for printing duct labels.
- Colour 14" display, 17" monitor on special order.
- Full manual machine control for set up and tooling adjustment.
- Multi station emergency stop.
- User input via keyboard, mouse or optional Touch Screen Monitor.
- Rapid production of one-off parts using the Make Quick facility.
- Customer defined lists of locks and section-types.
- Jobs can be part completed. The control system will remember the state of a job for completion at a later date.
- Option to remove a job from memory when it is completed.
- Automatic monitoring of machine solenoids, limit switches and incoming power supply. Any failure is reported with a clear diagnostic message.
- Three level (user, service and engineer) password protected machine configuration utility.
- Custom language option.



COIL HOLDERS

The Autofold can accommodate upto as many as 6 coil holders, available in 3 different types:-

1. I beam type overfed
2. I beam type underfed
3. Independent coil stations

Each type is optional depending on coil handling equipment



1. I beam type underfed.
(Powered under or over)
Max coil weight 5Tons/10,000pounds
2. Independant Coil Stations
Max coil weight 5Tons/10,000pounds



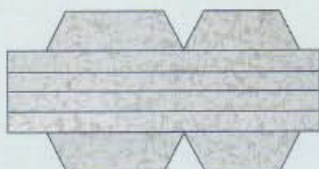
COIL LEVELLING AND BEADING STATION

Metal straightening and beading is standard on all Autofold machines. The leveller drives the coils through a hydraulic gearbox assembly. All leveller and beading rolls are solid steel machined to precise tolerances.

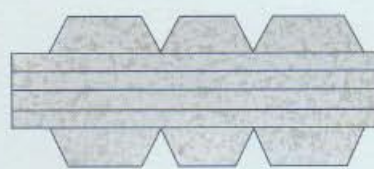


NOTCHING STATION (OPTION)

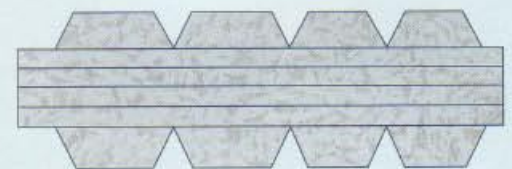
Hydraulically operated notchers can be requested either on both sides of the machine for notching drive cleats or roll on flanges or can be supplied on 1 side for slip end. All notching is fully automated and uniquely can be programmed to multiple notch thus eliminating the need for extra notch tooling for different lock seams.



"L" SECTION NOTCH PATTERN



"U" SECTION NOTCH PATTERN



FULLY WRAPPED NOTCH PATTERN

(NOTCH SIZES ARE EXAGGERATED FOR DESCRIPTION PURPOSES)



MACHINE OPTIONS

COIL SELECTOR STATION

This feature enables the operator to change from 1 coil to another within seconds.

Pinch rolls in the selector station hold the leading edges of the material ready for feeding into the leveller; selector stations come in 4 station and 6 station depending on amount of coils available.



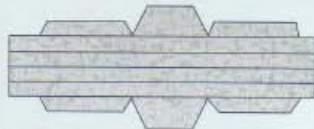
DRIVE CLEAT ROLLFORMING

The in line drive cleat rollforming can be supplied to turn over the drive cleat on the operators specific sides. The operator can pick sides through the control software for e.g. sides 1 + 3, 2 + 4 or drive all 4 sides.

NOTE (This option needs the Notching option also).



"L" SECTION, DRIVE CLEAT ON SIDE ONE.



"U" SECTION, DRIVE CLEAT ON SIDES ONE AND THREE.



"FULLY WRAPPED" SECTION, DRIVE CLEAT ON SIDES ONE AND THREE, OR TWO AND FOUR, PROGRAMMERS CHOICE.



THE PROGRAMMER CAN PUT DRIVE CLEATS ON ALL 4 SIDES OF THE DUCT IF REQUIRED.

DRIVE CLEAT DESCRIPTIONS



DUAL SEAM SYSTEM

The dual Seam System is a rollformer system designed onto the end of the Autofold Head and can be specified for Pittsburgh female Lock, Snaplock Female Lock or a combination of the two.



The Pittsburgh Male can be folded onto the Autofold as standard on any system. The Snaplock Male requires the Male Snaplock tool. The Machine automatically ejects the finished ductwork into the female rollformers. The combination Pittsburgh and Snaplock Female rollformers can be fitted together; and when the required lock is desired the machine automatically changes rollformers without any operator input. This design is one of many unique options only available on the Autofold Range of ductwork machinery.



The design and manufacturing of all mechanical parts are closely controlled to strict ISO 9002 standards. All production uses modern CNC and manual machines with the latest DRO and measuring equipment.

All machining is carried out by apprentice-trained skilled engineers, with designs produced using CAD systems.



The manufacturing departments have been established for over 40 years, with constant updates in both design technology and materials available.

All machines are designed with modular construction and can easily be tailored and manufactured to suit individual customer's requirements.

AUTOFOLD 516 & NOTCH (1 END ONLY)



AUTOFOLD 516



AUTOFOLD 516 D/C (Drive Cleat)



AUTOFOLD 516+NOTCH





AUTOFOLD 516 D/C Shown with Snaplock Seamer Male & Female



AUTOFOLD 516 SIDE EXIT
(PITTSBURGH ROLLFORMER)

OTHER MACHINERY AVAILABLE



BEADER 518
Freestanding Beading Machine.
56" 1500mm wide 18 Gauge Max Mild Steel



CUT & FOLD
Freestanding folder & sheer designed for folding flat ductwork with preformed roll on flange. Hydraulically operated.



PLASMA FEEDER
Feeds plasma table with coiled flat sheet from 2 or 4 coil holders. Max gauge 16 Gauge mild steel.
Beading available at no extra cost. Hydraulically operated. Optional power fed coil holders.

OPERATOR SAFETY

Safety of operation has been a major factor in the design of the Autofold range of machinery, resulting in a number of safety features, such as automatic jam sensor and timed pump shut down when the machine is not in use. The machine has 2 emergency stops as standard, however, more can be requested.

The machine has been assessed for EC Low Voltage Directives
1996 Machinery Directives
Electro Magnet Compatibility Directives

The Machine carries the European CE Mark
The machine has Circuit Fault Directives
The Autofold is fully guarded to CE Standards

SPECIFICATIONS

Maximum Coil Width: 60 inches/1525mm
Maximum Sheet thickness 16 guage.1.6mm

Duct dimensions

Min 150mm x 150mm/6inch x 6inch
Max Unlimited
Dimensions Dependent on machine configuration

Colour Options Black/Red Guards
 Blue/Yellow Guards
 Green/Yellow Guards



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