

## CNC Turret Punch & Cut To Length Rig For The Production of Purlin Cleats (450 Wide)



### Performance

Line speed : 60 M/min Max velocity  
: subject to punching.  
Max component length : 100mm—15 metres  
Coil - 3.2mm Galv. Mild Steel Z50 grade

### CNC TURRET PUNCH & CTL RIG

A heavy duty punching rig comprising of:-

#### FRF100-450 SERVO ROLLFEED

Servo rollfeed unit for feeding punch station with accurate lengths for punching operations carried out periodically along components.

#### SERVO POSITIONING TURRET PUNCH

A Servo Driven Heavy Duty Power Frame system utilising Amada Thick Turret punch Tooling. Each frame has a separate high speed H+L Block Cylinder & control valve.

#### HEAVY DUTY DIE SET SHEAR

A 3 plate 4 pillar die set shear of robust construction to crop the punched sections to length (450 x 3mm). The crop tool has a separate high speed H+L Block Cylinder & control valve.

An entry guide assembly is mounted prior to the punching head section. This guides the strip centrally from the Decoiler.



## CNC Turret Punch & Cut To Length Rig For The Production of Purlin Cleats (450 Wide)



### LINE CONTROLS

The line control system accepts an information packet presented to it by the customers Ethernet via a Drop-link directly to the machine. This means the machine has less chance of operator error when programming as this done via a production system and is downloaded to the machine as a database file \*.mdb.

The Software system will Fully Automatically set the Punching Head to the correct Axis position for the hole patterns required as dictated in the database file. The software will also Fully Automatically run batches of these components & then move onto other batches all driven from the database file Downloaded to the machine.

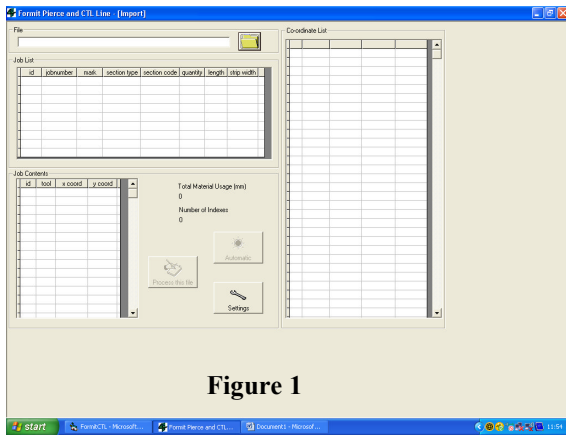
The control desk has a touch screen Industrial PC for the operator to select production from the Ethernet.

Electrical Controls for the machine are housed in appropriate control desk situated at the front of the line.

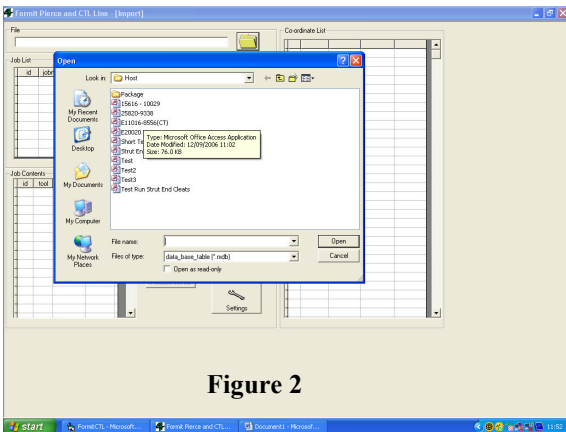
Wiring between machines and enclosures will be via surface mounted trunking.



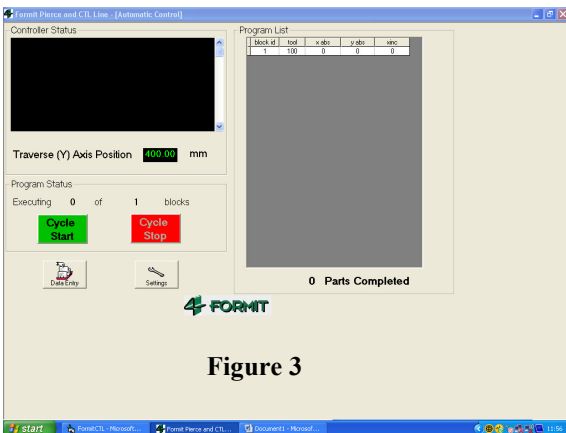
# CNC Turret Punch & Cut To Length Rig For The Production of Purlin Cleats (450 Wide)



**Figure 1**



**Figure 2**



**Figure 3**

**LOADING PROGRAMS**

The Operator PC runs Formit’s own NC Punch Software, using this - the machine operator can load a **single** access database file \*.mdb - this file contains two data tables which are used to program the machine  
STRUCAD & VERTEX decoders are also available.

**Figure 1/2**

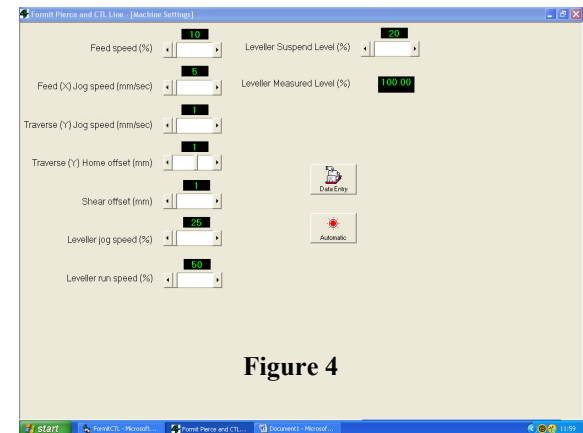
Using the directory browser in the a data base file may be selected from the Operator PC hard drive or over the network  
Once the list of jobs have been selected the operator clicks on the “processes” button which compiles the data into the NC information required by the main controller.

**Figure 3 Automatic mode**

With the panel switch set to automatic when the operator clicks the “Automatic” button. the Automatic control page will be displayed. The operator will start the cycle by clicking on the start button. Whilst the system is performing the selected jobs the current status of the job is displayed in the right hand job list window.

**Figure 4 Machine Parameters**

The run speed etc can be controlled via this screen.



**Figure 4**