



STEEL  
CONSTRUCTION

ANGLES & FLATS  
BEAMS & PIPES  
PLATES  
SURFACE TREATMENT  
ROBOTIC WELDING  
SOFTWARE & AUTOMATION



# ORIENT

Automatic CNC drilling, drilling & band sawing,  
drilling & coping lines for sections



# H ORIENT

Automatic CNC drilling, drilling & band sawing, drilling & coping lines for sections



Second positioning arm for reduced overall dimensions



Optional second drill head with automatic tool changer



6 position tool changer



Pegaso is the latest generation CNC for FICEP lines where the PC, CNC and PLC are all integrated into a single circuit board for maximum reliability. Pegaso is based upon a field bus technology using CanBus and EtherCAT for controlling up to 32 separate CNC axes.

The Orient is the latest generation of single spindle drilling systems for structural steel sections that have been engineered by FICEP over the past decades. This system offers an extremely productive and flexible way to process structural steel at a very desirable price/performance ratio. The Orient has been proven to generate exceptional productivity in numerous installations worldwide. The decades of industry leading experience of engineering drilling lines for structural steel is evident in the simple yet unique design of the Orient. This combination of innovative engineering with simplicity of design makes the Orient an exceptional solution for many applications.

### Fast

- The drill head is positioned at high speed while taking advantage of simultaneous positioning of two axis operated by the CNC and servomotors. The axis motion is guided on precision roller guides;
- The powerful DIRECT DRIVE spindle delivers 100% of the motor's power to the tool and is rotated to either flange or the web position in seconds;
- The drill spindle, with a positive mechanical feed, generates productive drilling operations with high performance tools;
- The material is transported through the line with a CNC controlled positioning device. The roller clamping system is quick and uses different pressures to reduce the clamping cycle.

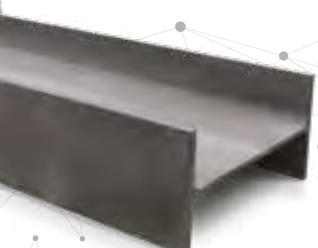




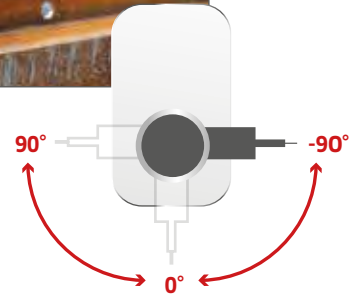


**Cost effective**

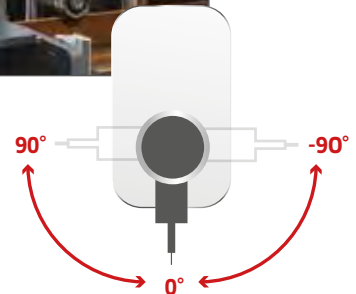
- ▶ In applications where the holes are not aligned between the flanges and the web the Orient can prove to be as productive as three spindle drilling lines without sub-axis positioning at substantial cost savings;
- ▶ Integrated electrical and CanBus technology simplify the installation which does not require a special foundation;
- ▶ The single spindle design of Orient drastically reduces the number of required mechanical and electrical components which enhances reliability. This reduction of the number of required components, in conjunction with the usage of leading edge electronics, achieves a level of simplicity that cannot be achieved by any competing solution.



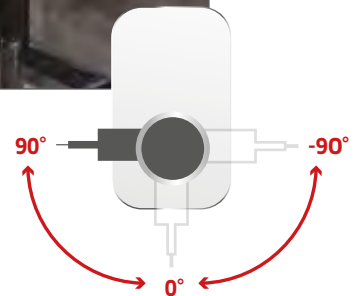
Position -90°



Position 0°



Position 90°





**TECH SPECS**

<b>ORIENT</b> Automatic CNC monospindle drilling line	<b>451 OR</b> <b>451 OR-R</b>	<b>601 OR</b> <b>601 OR-R</b>	<b>1001 OR</b> <b>1001 OR-R</b>	<b>1101 OR</b> <b>1101 OR-R</b>	<b>1201 OR</b> <b>1201 OR-R</b>
Section size [min.mm]	60*x10	60x10	60x10	80x10	80x10
Section size [max.mm]	460x460	610x460	1015x460	1115x510	1220x610
Drilling heads [no.]	1 (2)	1 (2)	1 (2)	1 (2)	1 (2)
Drilling tools per head [no.]	6 (12)	6 (12)	6 (12)	6 (12)	6 (12)
Drilling diameter [max mm]	40	40	40	40	40
Spindle power [kW]	31	31	31	31	31
Spindle speed [max. RPM]	5000	5000	5000	5000	5000
Machine weight [kg]	8500	9500	9500	10000	10000

\*Angles, square and rectangular tubes with min. side of 50 mm only on carriage and pincher feeding models

<b>ORIENT</b> Drilling & band sawing	<b>451 ORB</b>	<b>601 ORB</b>	<b>1001 ORB</b>	<b>1101 ORB</b>	<b>1201 ORB</b>
Motor power [kW]	9	9	9	15	15
Band saw blade speed [max mt/min]	170	170	170	170	170
Band saw blade size [mm]	41x1.3x7250	41x1.3x7250	41x1.3x7250	54x1.6x9920	67x1.6x10500
Machine weight [kg]	13000	14000	14000	21500	16400

<b>ORIENT</b> Drilling & coping	<b>602 ORFRC</b>	<b>602 ORAZ</b>	<b>1202 ORFRC</b>	<b>1202 ORAZ</b>
Oxy-fuel torch [no.]	1	-	1	-
Plasma torch [no.]	1	1	1	1
Machine weight [kg]	18500	18500	19000	19000



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