



STEEL  
CONSTRUCTION

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



**VALIANT**

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



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

VALIANT represents the latest technological developments in drilling lines for structural steel.

The Valiant product line is a new model three-spindle drilling system for the processing of the complete range of rolled structural steel sections. These new models are the result of the constant commitment by our engineering team to addressing the requirements of the world's structural steel fabricators.



14-position tool changer



Auxiliary axes with 11-3/4" stroke

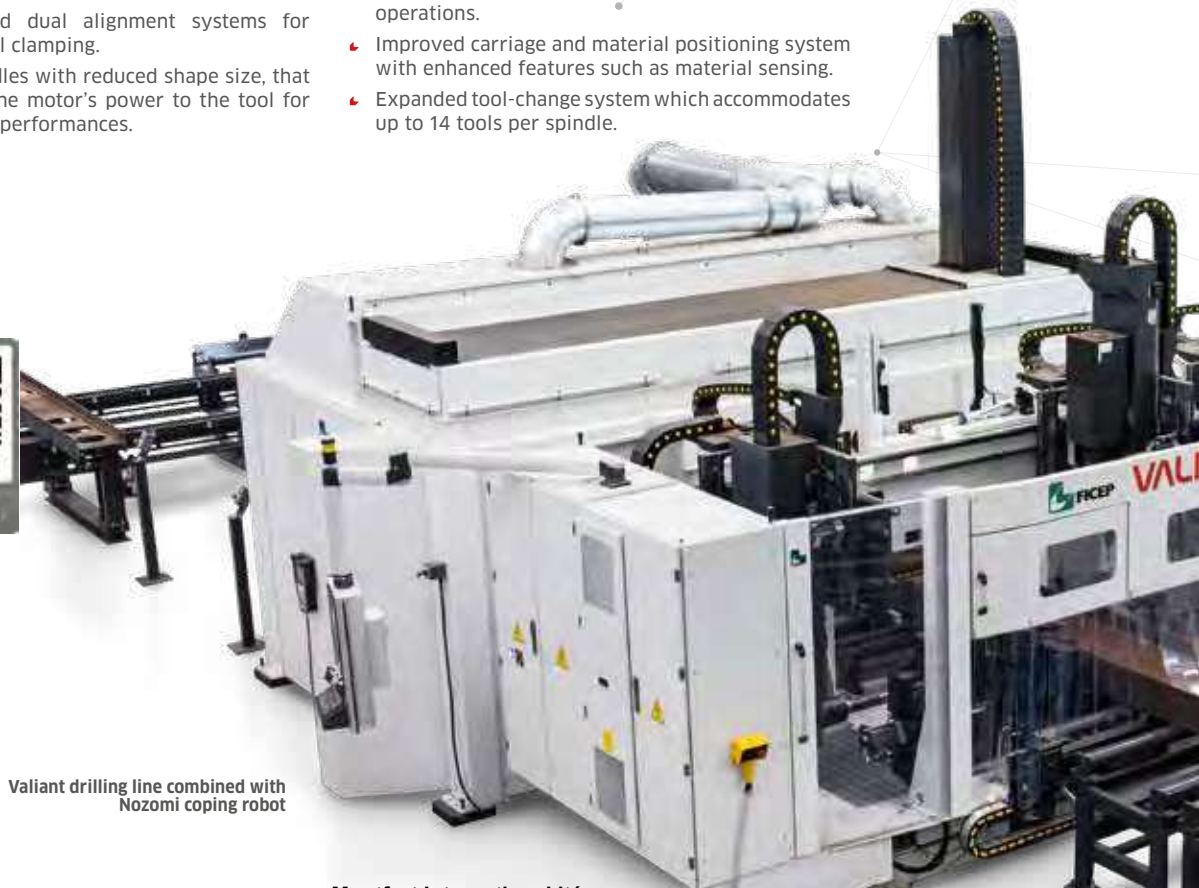


In addition to the many industry leading innovative designs and features of the other structural steel drilling lines in our range engineering of the Valiant, it incorporates several new unique features and benefits such as:

- Double vices and dual alignment systems for improved material clamping.
- Direct Drive spindles with reduced shape size, that deliver 100% of the motor's power to the tool for enhanced drilling performances.
- New increased sub-axis spindle positioning that enables simultaneous drilling on all three surfaces even when the holes are not aligned. The underside scribing device is also with sub-axis positioning to permit up to four-side simultaneous scribing operations.
- Improved carriage and material positioning system with enhanced features such as material sensing.
- Expanded tool-change system which accommodates up to 14 tools per spindle.



Play video



Valiant drilling line combined with Nozomi coping robot





Valiant drilling line combined with Katana band saw



**Auxiliary axes with extended stroke**

One of the most important innovations of the Valiant is the stroke of the spindle sub axes. The additional auxiliary axis on all three spindles has been increased up to 11-3/4" which allows for a wider independent control of each spindle. With this innovation, the beam remains stationary to maximize the utilization of each spindle within the stroke. For example, when drilling one surface, it is possible to perform on the other surfaces independent drilling or milling-type operations such as helical milling, pocketing, weld prep, slotting, and more.

**Drilling, sawing and coping with combined machines**

The Valiant can easily be interfaced with the range of FICEP band saws and coping robots to create an extremely productive integrated work cell. The production cell is controlled by the same CNC control and software. This permits such typical tasks as straight or mitered cuts with a band saw or the plasma/oxy-fuel cutting of copes, mechanical openings, flange thinning, rat holes, weld prep, beam splitting and more.



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.



TECH SPECS

VALIANT Automatic CNC multi-spindle drilling line	453 VL 453 VL-R	603 VL 603 VL-R	1003 VL 1003 VL-R	1103 VL 1103 VL-R	1203 VL 1203 VL-R	2003/6 VL	2003/8 VL
Section size [min. inch]	2-3/8" (*) x 3/8"	2-3/8" x 3/8"	2-3/8" x 3/8"	3-1/4" x 3/8"	3-1/4" x 3/8"	8" x 3"	8" x 3"
Section size [max. inch]	18" x 18"	24" x 18"	40" x 18"	43-1/4" x 20"	48" x 24"	79-7/8" x 24"	79-7/8" x 31-7/8"
Drilling heads [no.]	3	3	3	3	3	3	3
Drilling tools per head [no.]	6/14	6/14	6/14	6/14	6/14	6/14	6/14
Drilling diameter [max. inch]	1-9/16"	1-9/16"	1-9/16"	1-9/16"	1-9/16"	1-9/16"	1-9/16"
Spindle power [HP]	42	42	42	42	42	42	42
Spindle speed [max. RPM]	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Spindle sub-axis stroke [inch]	11-3/4"	11-3/4"	11-3/4"	11-3/4"	11-3/4"	11-3/4"	11-3/4"
Machine weight [lbs.]	22,050	24,250	24,250	25,350	25,350	31,965	33,070

\*Angles, squares and rectangular tubes with min. surface of 2".

VALIANT Drilling & band sawing	453 VLB	603 VLB	1003 VLB	1103 VLB	1203 VLB	2003/6 VLB	2003/8 VLB
Motor power [HP]	12	12	12	20	20	24	25
Band saw blade speed [max. FPM]	558	558	558	558	558	558	558
Band saw blade size [inch]	1.61" x .051" x 286"	1.61" x .051" x 286"	1.61" x .051" x 286"	2.12" x .063" x 390-1/2"	2-5/8" x .063" x 354"	2-5/8" x .063" x 476-3/8"	2-5/8" x .063" x 476-3/8"
Machine weight [lbs.]	32,000	34,200	34,170	50,700	39,500	68,340	71,650

VALIANT Drilling & coping	604 VLFRC	604 VLRAZ	1204 VLFRC	1204 VLRAZ
Oxy-fuel torch [no.]	1	-	1	-
Plasma torch [no.]	1	1	1	1
Machine weight [lbs.]	44,090	44,090	45,190	45,190