CREATIVE PULTRUSIONS, INC.

DYNAPUL 3024

Powerful Machines for Structural Profiles

Pultrusion Machinery Specifications

DYNAPUL 3024 - The Best Pultrusion Machine Built for Multi-Cavity Production of Standard Structural Size Profiles

Envelope, width x height	30 x 24 in / 762 x 609 mm
Pull Capacity	70,000 lbs / 31,751 kg
Gripper Capacity	70,000 lbs/ 31,751
Gripper Length	45 in / 1,143 cm
Mold Stand Capacity	15,000 lbs / 6,804 kg
Speed Range	.5 - 49 ipm / 1.27 - 114 cpm
Heating System	
Number of zones	10 at 13 Amp max. per zone
Heater receptacles/zone	1
Watts per zone	6,000
Control Platform	Allan-Bradley PLC
Operator Interface	A-B 6180 Industrial Computer
Cut-Off Saw	Automatic flying cut-off
Blade diameter	2-31 in / 787.4 mm (continuous rim diamond)

Utilities

Voltage	480/3ph/60Hz
	Disconnect of 200 amps capacity fused at 150 Amps
Cooling System, water	8 gpm
	(for die cooling and hydraulic heat exchanger)
Air	20 cfm @ 80 psi
	Filter/Regulator and Lubricator supplied
Length	50 ft / 15.2 m
Width major line	58 in / 147.3cm
Width at saw	142 in / 360.7 cm
Process Centerline	52 in / (1,320 mm)
Height maximum at saw	76 in / 193 cm
Weight	36,000 lbs / 16,329 kg

Exclusive *DYNAPUL* Machine Features

General

- Tubular steel frame construction controls stress and deflection

Die Station

- Hydraulically selectable heights control center line position
- Open bed design supports various length dies
- Dual load cell system measures pull force
- Cooling circuits provide entrance- and exit-end die cooling

Hydraulic Power Unit

- Input is typically 480 volts/3 phase/60Hz (International voltages available)
- Speed and position control with closed-loop proportional valves
- Isolated pump motors and puller clamp functions eliminate pressure surges

Controls

- Allen-Bradley PLC is the standard control system
- Optional computer-based controls for operator interface, data acquisition and archiving
- Sequential control with digital analog inputs and outputs
- Digital puller speed selection synchronized through the PLC
- Closed-loop puller cylinder stroke
- Puller speed is insensitive to process pull load changes
- Touch-sensitive monochrome display screens
- Control sequences provided for "start up"; run modes include puller cycles of "Jog", "Intermittent Single Clamp", "Continuous Dual Clamp" and "Tandem Dual Clamp"
- All temperatures are established from the touch screen and controlled by PLC PID logic loops
- Temperature control zones sufficient for machine die loading
- Solid state relays to control temperature zone power with power flow indication
- Automatic digital encoder inputs, mechanical limit switches, or two-wire sensor outputs control cut-off cycles
- Controls located in NEMA 12 enclosures

Puller Units

- Top-mounted hydraulic cylinders
- Slotted puller block attachment rails
- Recirculating linear ball bushing bearings
- Hardened, fully supported bearing ways
- Puller stroke range: 30 inches - 36 inches
- Puller speed: .5 - 49 inches/minute for models
- Clamp opening height control
- Full sheet metal enclosure for finished appearance
- Shielded clamp units that are also accessible for set-up functions

Cut-Off Saw

- Synchronized with pneumatic power and clamps
- Continuous-rim diamond style blade; powered for optimum profile cutting RPM and torque
- Blades enclosed with sheet metal above tables and drives
- Cross-cutting actions on envelopes
- Fully-enclosed blades for dust containment; dust containment chutes
- Dust collection unit connects to customer's main collection system
- 30' long run out table