

UNISCAN[®] II

Dual-Spindle, Vertical-Scanning Precision Induction Hardening System

Features/Benefits

- Scans part lengths of 44 in., with maximum scan heated length of 40 in. on standard model
- Self-contained to support stand-alone workcell requirements
- A wide variety of power and frequency ratings for application matched precision hardening
- User-friendly controls simplify set-up, changeover and diagnostics
- Single utility connection for fast installation and relocating

Mid-Volume Production Hardening System

UNISCAN[®] II is a dual-spindle, vertical-scan hardening system for mid-to-high volume operations. It's also easy to reprogram for static and lift-and-rotate applications. Eight (8) standard power ratings are offered from 100 to 300 kW at 10 or 30 kHz depending on the application.

Self-Contained Design With Built-in Power Supply

The UNISCAN[®] II system features a built-in UNIPOWER[®] or STATIPOWER[®] solid state power supply with heat station, programmable scanner controls, quench and water recirculating systems. All interconnections, wiring and plumbing are factory installed and tested. This unitized construction reduces floor space requirements by 20% to 50%.

Programmable For Maximum Workpiece Flexibility

The UNISCAN[®] II is easily programmed to process one part at a time on either spindle or two parts at the same time. Process parameters are keyboard-entered using manual data input. To further simplify set-up, the upper tooling carriage can be adjusted up/down without tools.

Rugged Design For Long-Life Performance

Scanning towers on the UNISCAN[®] II are heavy-duty, anodized aluminum castings with 2 in. diameter hardened chrome plated shafts. Oversized, heavy-duty, sealed carriage bronze bearings are standard. A DC rotation motor and AC servo motor scan for repeatability and positioning accuracy.

Inductoheat has been building scanning systems for over 40 years.



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SPECIFICATIONS:

Power & Frequency Ratings	100-150-200-300 kW @ 10 and 30 kHz. Other sizes available upon request.	
Workpiece Capacity	Length: 44 in. (1120 mm), Weight: 100 lbs./spindle (45 kg/spindle)	
Scanning Distance	40 in. (1020 mm)	
Workpiece Loading	Manual load/unload	
Scanning Speed	Five user-determined, precision-set speeds from 0.06 to 10 in./sec. (1.5 to 255 mm/sec)	
Spindle Rotation	0 to 350 RPM	
Quench Systems	Water-to-water heat exchanger with centrifugal pump, digital temperature controller, quench heater and front-mounted pressure gauge and valve.	
Cooling Systems	Closed-loop, nonferrous, recirculating system with centrifugal pump.	
Control	Panelmate/PLC with memory storage standard for 40 programs or optional upgrade for 260 programs. Also available as PC HMI/PLC program storage depending on hard drive system.	
Machine Dimensions	Width: 74 in. (1,870 mm) Depth: 64 in. (1,620 mm) Height: (tower down) 86.25 in. (2,200 mm) Height: (tower up) 130.25 in. (3,300 mm)	
Shipping Weight	4,000 lbs. (1,800 kg)	
Power Requirements 480 V, 60 Hz, 3 phase	100 kW	140 kVA
	150 kW	210 kVA
	200 kW	280 kVA
	300 kW	420 kVA
Plant Water Requirements (@ 11°F Rise) 85°F max. (29°C)	100 kW	65 gpm (250 lpm) min
	150 kW	98 gpm (370 lpm) min
	200 kW	130 gpm (490 lpm) min
	300 kW	195 gpm (740 lpm) min
Safety Features	Inductor ground sensor; Door interlocks; Pressure switches on all water cooled capacitors; Temperature switches on all critical water paths.	
Options/Accessories	Quality assurance system; Energy monitor; Overhead gantry or Pick & Place robotic parts handling system; Insta-Change coil adapter; CRT servo control; 50 in. scan; 52 in. workpiece capacity; Automatic doors; Single spindle tower.	
* Specifications are subject to change without notice.		



Uniscan® II can be easily relocated to another workcell



Insta-Change coil adapter



PC controlled operator screen



ISO 9001:2000 Certified