MANUFACTURING and DESIGN

Dedicated to the Design, Manufacturing, and MRO of Aircraft and Aerospace Components



CARR LANE MFG.'s Self-retaining Ball Plungers



MANDELLI SISTEMI's Spark 2100 T Multi-tasking Machining Center



TUNGALOY AMERICA's TungTurn-Jet Turning Tools

How to minimize

Spindle Fig. 5

damage

Collision protection system reduces downtimes and repair costs in the event of a machine tool crash.



Multi-tasking machine

The Spark 2100 T multi-tasking machining center reduces setup time for lean manufacturing practices. The system has an additional turning table fixed in the horizontal machining center's base that configures the machine as a vertical lathe for optimal performance, accuracy, and stability in turning mode.

The machine's automatic tool change system (ATC) has an intermediate buffer for tool pre-setting, providing tool change times in less than 8 seconds. A fixed turning head with ATC is also available for deep internal turning operations. An optional, three-point supported, rigid, robust angle head support is offered for radial operation in the internal side of hollow workpieces. The multi-tasking machine also features a rotary table balance control device and tool management software.

Mandelli Sistemi SpA

www.mandelli.com

Machine	Spark 2100 T	
X-axis travel	2,000mm	78.7"
Y-axis travel	1,700mm	67"
Z-axis travel	1,800mm	70.8"
Swing	2,100mm	82.7"
Max. load (workpiece + fixture)	5,000kg	11,023 lb
Max. tangential torque S1 (S6/40%)	8,000N-m (10,300N-m)	5,900 lbf-ft (7,597 lbf-ft)
Max. power S1 (S6/40%)	70kW (90kW)	95hp (122hp)
Max. table speed	300rpm	
Positioning uncertainty P (VDI 3441), XYZ	0.006mm	0.00024"
Positioning repeatability Ps (VDI 3441), XYZ	0.003mm	0.00012"
Positioning uncertainty P (VDI 3441), B	< 7 arc sec.	
Positioning repeatability Ps (VDI 3441), B	< 3 arc sec.	

Follow the link to watch a video about the Spark 2100 T, https://goo.gl/eHcMFZ.