

# ROBODRILL PC2

Dual Pallet Changer System for Part and Fixture Changing



## The quick changeover flexibility of a stand alone machine plus the productivity of a pallet shuttle

### Lightning Fast Part or Fixture Changes

Designed for RoboDrill T14/E standard-bed and T21/E long-bed machining centers, the RoboDrill PC2 Pallet Changer System is the ideal productivity-enhancing option for medium-volume production of short-cycle parts. The PC2 provides the quick changeover flexibility of a stand alone machine plus the productivity of pallet shuttle.

With a pallet change time of 6.3 seconds (7.2 seconds for the EL model), the dual pallet system dramatically reduces downtime by allowing part loading or fixture changes on one pallet while machining is under way on a second pallet. Large 27.5" x 15.3" pallets accommodate more fixtured parts and larger fixtures.

Designed for quick changeovers on shorter runs, the PC2 is the ideal job shop machine for today's competitive market. Located to the side of the RoboDrill, it has extra wide gull-wing doors that allow easy access to the pallets. It is also much more rigid than "Lazy Susan" type machines.

### Lightning Fast 30-Taper VMC

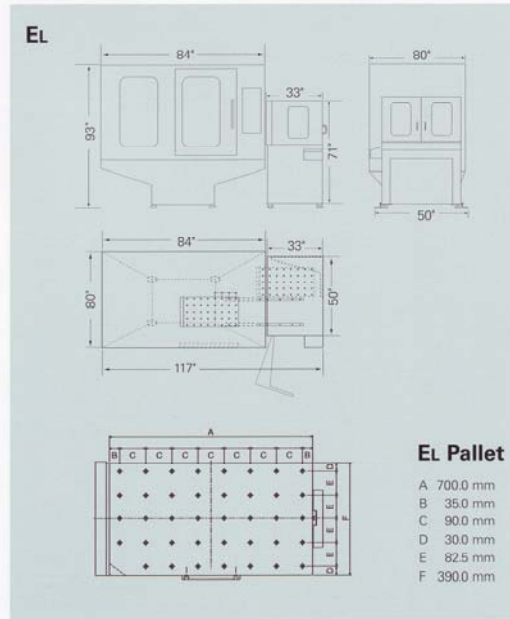
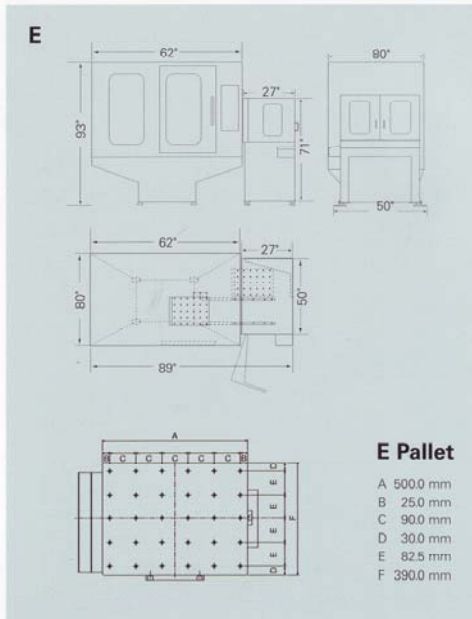
The beefy RoboDrill is the ideal small machining center. With the lightning fast Fanuc 31F-A5 Nano CNC and Big Plus spindle, it is capable of feed rates to 2362 IPM, rapid traverses to 2125 IPM, 1.5 G accelerations, rigid tapping to 8000 rpm, high-speed reverse tapping (at speeds up to 20 times faster than infeed), and 0.9 second tool changes (tool-to-tool) with simultaneous table movement.

With CNC options such as 1000-block "look-ahead," high-speed control software, and NURBS interpolation, the RoboDrill also offers excellent milling capabilities. HRV control, thermal compensation, and thread milling further improve milling speed, accuracy, and flexibility.

Methods nationwide network of dealers and regional offices guarantees technical support; training; and parts, service, and accessories for your RoboDrill.

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## Dimensions



## Specifications

	RoboDrill Model	T-14iE	T-21iEL
<b>Travels</b>	X-axis	19.7"	27.5"
	Y-axis	15.7"	15.7"
	Z-axis	13.0"	13.0"
	Spindle to table	5.9" - 18.9"	5.9" - 18.9"
<b>Pallet System</b>	Pallet size	19.68' x 15.35'	27.6' x 15.35'
	Pallet load capacity	220 lbs	220 lbs
<b>Standard Spindle</b>	HP/Speed range	5.0/7.5 100-10000 rpm	5.0/7.5 100-10000 rpm
	Taper	BT-30	BT-30
<b>Optional Spindle</b>	HP/Speed range	2.0/5.0 120-24000 rpm	2.0/5.0 120-24000 rpm
	Taper	BT-30	BT-30
<b>Feed Rates</b>	Rapid traverse	2125 ipm	2125 ipm
	Cutting	1181 ipm	1181 ipm
<b>ATC</b>	Tool change system	Turret - independent from spindle	Turret - independent from spindle
	Type of tooling	MAS BT-30, MAS P30T-1 (45)	MAS BT-30, MAS P30T-1 (45)
	Tool storage capacity	14	21
	Maximum tool diameter	3.15"	3.15"
	Maximum tool length	9.8"	9.8"
	Maximum tool weight	4.4 lbs/6.6 lbs	4.4 lbs/6.6 lbs
	Method of tool selection	Random shortest path	Random shortest path
<b>PC2 Accuracy</b>	Tool change time	0.9 seconds/1.8 seconds	0.9 seconds/1.8 seconds
	Pallet changer repeatability	±0.0002"	±0.0002"
<b>Installation</b>	Electric power	220 VAC ± 10% 15 kVA	220 VAC ± 10% 15 kVA
	Compressed air	70 psi; 4 cfm	70 psi; 4 cfm
	Machine weight	5,420 lbs	5,640 lbs

Specifications are based on averages; individual results may vary. Specifications subject to change without notice.

## Options

- 24,000 rpm Big Plus spindle
- Coolant through spindle
- Indexers
- Chip flush
- Automatic door opening/closing of splash guard
- Work light
- Additional controlled axis
- Additional part program storage length (640/1280 m)
- Signal lamp
- High column (200 mm, 300 mm)
- Tool position offset (G45-G48)
- Single direction positioning
- Robotic loading
- Turnkeys



**Methods  
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