



# 30,000 - 65,000 rpm - power to 0.80 hp (0.60 kW) Now your Brother Machine delivers faster production 24/7





Air Turbine Spindles® make your Brother Machine a high speed machine!

Constant Governed High Speed and **Power** 

No Duty Cycle

Fully automated loading from magazine

# Automatic Loading to Save Time and Money.



Contact Us for a Demonstration



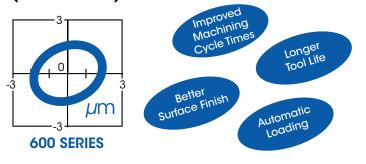
Dramatically reduce your cycle times, optimize cutting tool performance and life.

Keep continuous tool path engagement on your existing CNC at high speed even in angles and hard material. Ideal for micro machining. 30,000 - 65,000 rpm < 0.80 hp (0.60 kW)

#### **Accuracy**

Most of the problems that occur in micro machining come from a lack of RPM and poor dynamic runout. Air Turbine Spindles® use the highest quality runout and balancing systems on the market today. This creates the best dynamic runout accuracy and governed high speed precision.

#### Runout measured at the nose of spindle. (refrence value)



#### **Super Low Vibration Design**

Powerful, totally oil-free low friction motor produces extremely low vibration and heat in continuous 24/7 operation. No thermal expansion, great reliability.

Ultra Precision ER 11 collets standard.

#### **Environmentally Clean**

No oil required, and maintenance free.

Air Pressure: Dry, Clean Air @ 90 psi (6.2 bar)

Air Consumption (Working): 602X: 7 - 10 cfm (3.30 - 4.27 L/s) 625X: 22 - 30 cfm (10.38 - 14.16 L/s)

Low Noise Design: Under 67 dBA

**Standard Equipment:** 0.3 µm High Flow Filter/Extractor

### **Automatic Toolchanger**

No need for operator downtime.

Automatically load *Air Turbine* Spindles® with our wrap around Toolchanger Mounting Assembly.



## Superior Technology

- Unique patented direct drive with no vanes, gears or brushes to wear, burn or break.
- Cooled by turbine air for 24/7 operation. No oil or control system required. No Duty Cycle.
- Governor keeps Constant High Speed + Torque on tool path in angles and corners.

# **Spindle Selection**

 $\sqrt{}$  = Optimum ∞ = Acceptable ! = Dependent upon cutting conditions

x = Not recommended for use

		602(	X)	625(X)
Drill	Ø 0.1 - 0.3mm	√		√
	Ø 0.3 - 0.5mm	∞		√
	Ø 0.5 - 1.0mm	!		$\checkmark$
	Ø 1.0 - 1.5mm	×		8
	Ø 1.5 - 2.0mm	1.5 - 2.0mm ×		!
Endmill	Ø 0.1 - 1.0mm	√		√
	Ø 1.0 - 2.0mm	$\checkmark$		√
	Ø 2.0 - 3.5mm	!		$\checkmark$
	Ø 3.5 - 5.0mm	×		∞
	Ø 5.0 - 6.0mm	×		!
Jig Gr	inding	×		!
Specifications	602)	,		625X
	5 0027	•		025A
Governed	40,00	0		30, 000
	40,00 50,00	0 0		30, 000 40,000
Governed	40,00	0 0		30, 000
Governed	40,00 50,00	0 0 0	(	30, 000 40,000
Governed Speed (rpm)	40,00 50,00 65,00	0 0 0		30, 000 40,000 50,000 0.80 - 0.90
Governed Speed (rpm) Power (hp)	40,00 50,00 65,00 0.30 - 0	0 0 0 .47	an 1 <i>µ</i> m	30, 000 40,000 50,000 0.80 - 0.90
Governed Speed (rpm) Power (hp) T.I.R. at Nose	40,00 50,00 65,00 0.30 - 0	0 0 0 .47 Less the	an 1 <i>µ</i> m -6mm	30, 000 40,000 50,000 0.80 - 0.90
Governed Speed (rpm)  Power (hp) T.I.R. at Nose Collet Range	40,00 50,00 65,00 0.30 - 0	0 0 .47 Less the 1mm -	an 1 <i>µ</i> m - 6mm Bar (0.6	30, 000 40,000 50,000 0.80 - 0.90







