

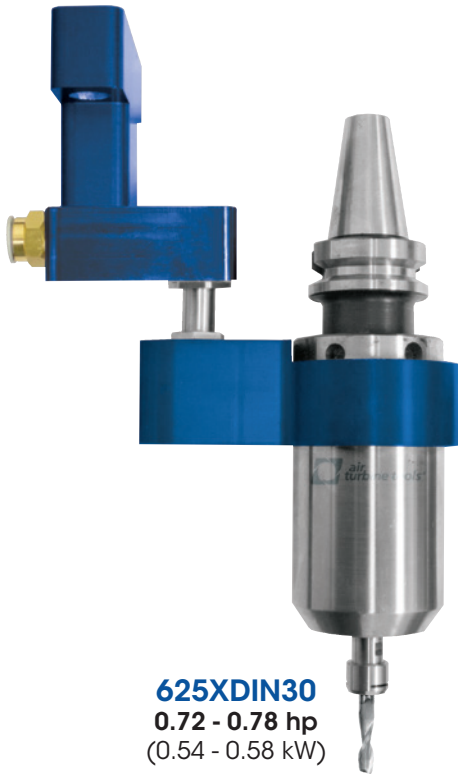


**air turbine spindles® for**



**30,000 – 65,000 rpm – power to 0.78 hp (0.58 kW)  
Constant Governed High Speed and Torque**

*Now your Brother Speedio delivers faster production 24/7*



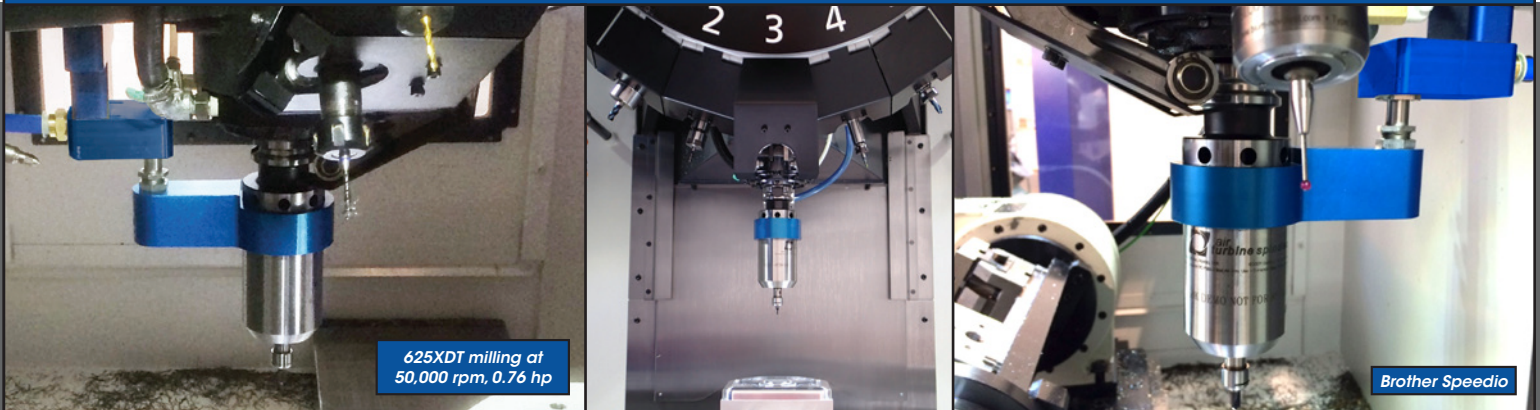
**625XDIN30**  
0.72 - 0.78 hp  
(0.54 - 0.58 kW)

*With patented governed high speed and torque Air Turbine Spindles®, your Brother Speedio is a high speed machine!*

*No Duty Cycle  
Call for a Demonstration*

*Fully automated loading from Magazine*

**Automatic Loading to Save Time and Money**



**625XDIN30 milling at 50,000 rpm, 0.76 hp**

**Brother Speedio**



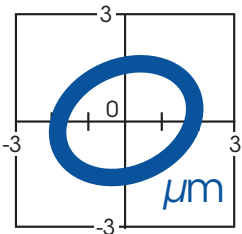
*Dramatically reduce your cycle times, optimize cutting tool performance and life.*

*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 < 0.78 hp (0.58 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.  
(reference value)



**600 SERIES**

Improved Machining Cycle Times

Better Surface Finish

Longer Tool Life

Automatic Loading

## 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):**

**625X:** 22 - 30 cfm (10.38 - 14.16 L/s)

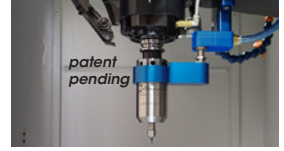
**Low Noise Design:** Under 67 dBA (cutting noise of endmills can be heard).

**Standard Equipment:** 0.3μm 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

√ = Optimum

! = Dependent upon cutting conditions

∞ = Acceptable

x = Not recommended for use

		625X
Drill	∅ 0.1 - 0.3mm	√
	∅ 0.3 - 0.5mm	√
	∅ 0.5 - 1.0mm	√
	∅ 1.0 - 1.5mm	∞
	∅ 1.5 - 2.0mm	!
Endmill	∅ 0.1 - 1.0mm	√
	∅ 1.0 - 2.0mm	√
	∅ 2.0 - 3.5mm	√
	∅ 3.5 - 5.0mm	∞
	∅ 5.0 - 6.0mm	!
Jig Grinding		!

Specifications	625X
Speed (rpm)	30,000
	40,000
	50,000
	65,000
Power (hp)	0.72 - 0.78
T.I.R. at Nose	Less than 2μm
Collet Range	0.5mm - 7mm
Air Pressure	Less than 6.2 Bar (0.62 MPa)
Air Flow	22 - 30 CFM (10.38 - 14.16 L/s) [ANR]

