

## ALL DUTY! NO CYCLE!

Constant Governed High Speed + Torque • 25,000 - 90,000RPM < 1.4HP

602JS 65,000 RPM 50,000 RPM **Faster Production** 

1,500 IPM / 3,800 CMPM Automatic Toolchanger Option

Constant 24/7 High Speed Milling

Only 2 Moving Parts for Super Reliability

Low Heat, Low Vibration Low Thermal Expansion

Improved Cutting Tool Performance and Spindle Life

**Superior Finish Quality** 

Easy Installation Kits - Haas, Fadal, Mazak, Hurco and More

Manual or Automatic Loading to Save Time and Money

**Constant Torque** 

**Heavy Duty** 

**Retrofit Any CNC** 



**602XCAT** 65,000 RPM 0.40HP / 0.30kW



**650CAT** 40,000 RPM 1.4HP / 1kW



**602JS** 90,000 RPM 0.20HP / 0.15kW

Call For a Demonstration +1.561.994.0500



Visit us online at www.airturbinetools.com





Air Turbine Spindles<sup>TM</sup> patented governor increases air flow on demand.

The difference: Spindle speed remains close to rated speeds at 25,000 rpm to 90,000 rpm with power - up to 1.4HP. We accelerate programs by 6 – 10x, accelerating production in hard materials by up to 800% with no duty cycle.

## Speed up your cycles



## Retrofit any CNC

Easy Mounting Options

Automatic Spindle loading from Carousel or

Umbrella for fully automated integration

Mill, drill, engrave + finish

**Tool Steel** 

Aluminum

**Ceramics** 

Graphite

Composites

**Plastics** 

Rubber

**Brass** 

Wood

Governed Direct Drives: 25,000 - 90,000RPM, < 1.4HP (1.04kW)

Installation just requires 90 PSI (6.2bar) air supply.

A filter extractor and ER collet is standard equipment included with every spindle: CAT, BT, HSK, JS, DIN, etc.

View Installation Guide at www.airturbinetools.com.

Air Turbine Spindles™ can be manually installed using a clean airline to the NPT (above), or load automatically from the CNC Magazine using a patent pending TMA Autochanger System (left). Center Airfeed is also possible on 602, 625JS and all HSK spindles.



High Speed Spindles with High Frequency brushes, gears or vane motors are notorious for burn out. Downtime due to overheating and burn out is costly and disruptive. Spindle repairs are costly.

With ceramic grease packed bearings cooled by circulating turbine air and a powerful governed low friction turbine drive with just 2 moving parts *Air Turbine Spindles*<sup>TM</sup> reduce heat, thermal expansion and repairs.

Milling techniques at high speed require a light fast pass with a small speed rated end mill delivering cutting tool optimal performance and accuracy.

View Applications Videos at: www.airturbinetools.com