Eliminate Working Time Limits • Reduce Arm Stress



Retrofit High Speed on any CNC - CAT, DIN, BT, HSK

# air turbine motors®

Governed High Speed in Robotics and Automation

#### Work safer with the low vibration of Air Turbine Tools®

- · Reduce stress and injury risk
- Effectively eliminates working time limits



#### 310RSV - Router Tool

25,000 - 40,000 RPM • 0.88 HP (0.66 kW) 1/4" / 6mm • 37.3 oz (1.0 kg)

- · Control and Power to 0.88 HP
- Great for high speed routing Wood, plastics and fiberglass

· Light & powerful

- Governed 40,000 RPM with less fiber break-out
- Oil-free mechanism results in no oil mistina
- · Light powerful direct drive turbine with only 2 moving parts
- Low vibration magnitude (just 0.38 mm/s<sup>2</sup>) and low heat

#### 0145SSV - Precision Angle Tool

40,000 - 65,000 RPM • 0.20 HP (0.15 kW)

1/8" / 3mm • 6 oz (0.17 kg)

- Exceptionally fine control necessary for close proximity work
- 45° design conforms to the natural position of your hand
- · Light and comfortable Contrasting traditional pencil tools

#### 201SV - Pencil Tool

40,000 - 90,000 RPM • 0.20 HP (0.15 kW) 1/8" / 3mm • 6 oz (0.17 kg)

- Designed to work reliably in industrial applications
- · Light and powerful, ultra low vibration and weight
- < 65 dBa sound level</p>

#### **206XSV**

30,000 - 50,000 RPM • 0.40 HP (0.30 kW) 1/4" / 6mm • 8.2 oz (0.23 kg)

- Light and quiet with low vibration magnitude at 1.43 m/s<sup>2</sup> r.m.s.
- Stays near rated speed under load at constant 50,000 RPM
- · Superb surface quality and virtually no stress

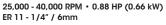
### 625

30,000 - 65,000 RPM 0.5 HP (0.37 kW) ER 11 - 1/4" / 6mm



- Retrofit any CNC for constant high speed performance
- Only 2 moving parts means low heat and no duty cycle
- Excels at Mold making, deburring, super finishing, marking
- Increase your inches per minute
- · Increase reliability + cut repair costs

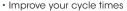
### 650



- · Governed high speed + torque under load for continuous tool path engagement
- · Accelerates cutting action and does not burn up
- Milling, routing, drilling, slotting 24/7 with no duty cycle
- Reliable Double front ceramic bearings for long duration production cycles.

#### 90 Degrees Head

30,000 - 65,000 RPM 0.78 HP (0.58 kW) ER 11 - 1/4" / 6mm



- Maintain continuous high speed engagement in angles and pockets
- The direct drive governed 90°spindle mills with no duty cycle
- Constant high speed with low vibration improving accuracy

### Drill Tap Series 65,000 on Robodrill or Brother

30,000 - 50,000 RPM 0.50 HP (0.37 kW) ER 11 - 1/4" / 6mm

- Retrofit your Drill Tap machine to auto load Air Turbine Spindles®
- Governed constant high speeds at 40,00, 50,000, or 65,000 RPM
- Only requires a 90 PSI, 6.2 bar air connection to install a high speed spindle on any Robodrill or Brother machine

#### **Extended Barrel Series**

625L - 30,000 - 50,000 RPM • 0.50 HP (0.37 kW) 650L - 25,000 - 40,000 RPM • 0.88 HP (0.66 kW)

- Extended barrel for pockets and concave molds
- 50mm and 100mm extended barrel options
- Ideal for close work piece operations and machines with very short z-axis travel
- No thermal expansion accurate 24/7 performance
- Double Turbine 650X Version with up to 25,000 to 40,000 RPM, < 1.40 HP (1.04 kW)



625 50mm 650 100mm

#### **Variable Speed Spindles**

30,000 RPM 0.40 HP (0.30 kW) in single turbine mode 50,000 RPM 0.76 HP (0.57 kW) in twin-turbine mode

25,000 RPM 0.8 HP (0.60 kW) in single turbine mode 40,000 RPM 1.4 HP (1.04 kW) in twin-turbine mode

- · Change power and speed in moments
- Combine the flexibility of variable speed with maintenance-free, governed power
- Switch between 30,000 & 65,000 and 25.000 & 40.000 RPM in one hex key turn

Green Position - Single Turbine Mode. Red Position - Double Turbine Mode.

- 2µ precision and no thermal effect on accuracy
- Flexible, reliable high speed cut for all CNC machines



Patents Issued and Pending

650X\/\$

- Accelerates your production, ideal for micro tools
- Low vibration motor with just 2 moving parts

30,000 - 65,000 RPM • 0.55 HP (0.41 kW)

ER 8 - 1/8" / 3mm • 11 oz (0.31 kg)

·Now available with ER 8 collet system

ER 11 - 1/4" / 6mm • 40 oz (1.13 kg)

Sealed front-end for wet environments

40,000 - 65,000 RPM • 0.20 HP (0.15 kW)

ER 8 - 1/8" / 3mm • 16 oz (0.45 kg)

Cut faster and cleaner

25,000 - 40,000 RPM • 0.88 HP (0.66 kW)

·Oil-free fixture mount motor

• Durable ceramic bearings. Ideal for lathes, swiss automatics, robotics and finishing.

·Stainless steel barrel designed for drilling rubber and plastics

·Maintains high speed rotation under cutting load

Great for routing, milling, deburring, drilling and more

bearings cooled by turbine air for great durability

• The steel barrel, double front and double rear ceramic

•Double turbine option available for up to 1.4 hp / 1.04 kW.

- Mountable area of 22mm by 90mm.
- · Available with 20, 30 and 32 mm outside diameters

#### 740MX

202HD

450HD

722MX

30,000 - 50,000 RPM • 0.95 HP (0.75 kW) ER 11 - 1/4" / 6mm • 64 oz (1.81 kg)

- Cuts your repair costs and downtime
- Ideal for lathes, swiss automatics, robotics and finishing in
- No control system, lubrication or maintenance needed











www.airturbinetools.com





















## Why are Air Turbine Tools® different?



Constant High Cutting Speed Reduces Cycle Times.



Longer Tool Life. Faster Production.



Low Heat. No Thermal Expansion



Mill 24/7. No Duty Cycle.



Direct Drive Reliability. Only 2 Moving Parts. No Maintenance.



Governor Control Constant high Torque. Maintains High Speed Under Load.



Low Vibration. Quiet, Under 78 dBa



Environmentally Friendly (No Oil or Lubrication)



Improved Surface Quali No secondary Finishing.









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All specifications approximate.
www.airturbinetools.com



# High Speed Spindle Series For Horizontal Milling Machines

25,000 - 90,000 rpm • 1.4 hp (1.04 kW)

- Autochange on any CNC
- Turn your CNC into a High Speed Machine Center
- Direct drive governor-controlled high speed and high torque units



#### **Hand Tool Series**

The tools of a new generation™

- •Reduce hand and arm stress
- •Increase productivity with powerful light weight range
- \*Lightweight and ultra low vibration
- Polishing, finishing, part cleaning, engraving, routing, tool & die, weld and flash removal



#### **Motor Mount Series**

For Automation, Robotics, and Turning Centers 25,000 - 65,000 rpm • 1.4 hp (1.04 kW)

- Duty Free Automation with no oil and no maintenance
- •Great reliability with just 2 moving parts.
- Automated finishing, milling, drilling and lathe applications.





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