



**air  
turbine spindles®**

**brother TC**

**FANUC**

**Haas**

**MATRIX**  
CNC TECHNOLOGIES

**625XDT**

**Speed Up** *your FANUC RoboDrill, Brother TC  
and Haas DT Drill-Tap Machines with the*  
**602XDT and 625XDT Series Spindles**

**Constant Governed 30,000 - 75,000 rpm, up to 0.90 hp / 0.67 kW**

**602XDT**

+1.561.994.0500  
[www.airturbinetools.com](http://www.airturbinetools.com)

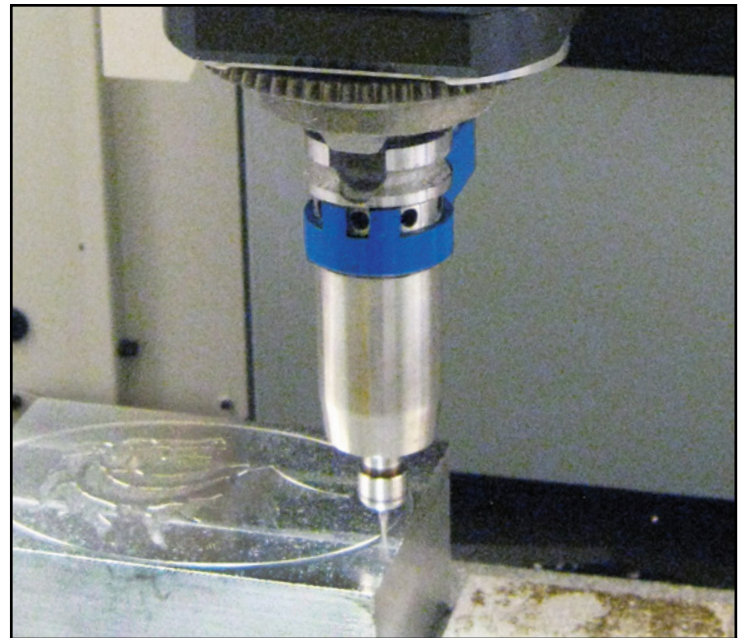


## 500%+ Faster Feed Rates, No Duty Cycle with the **602XDT Series**

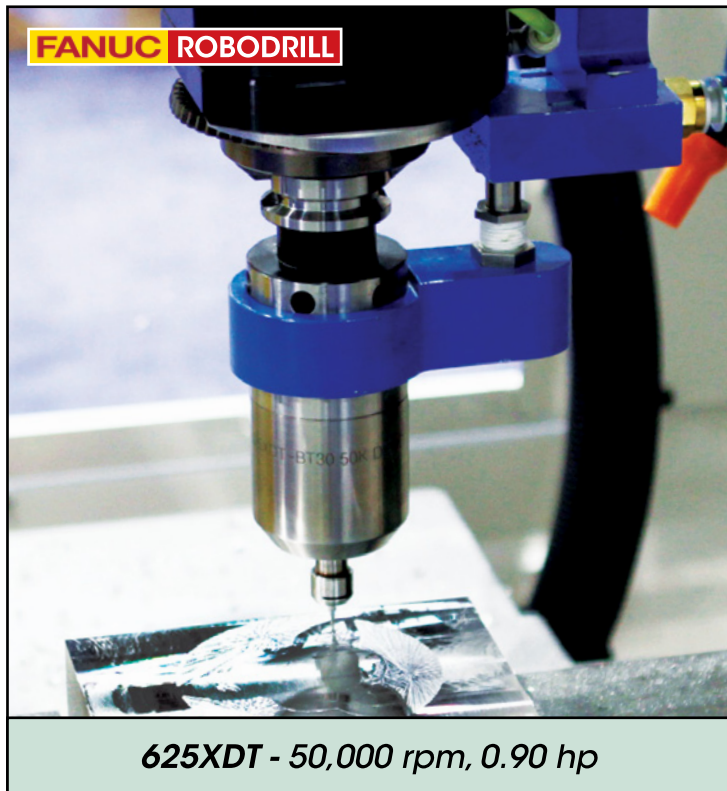
Retrofit your Drill-Tap machine with the double turbine **602XDT Series** for governed constant high speeds. Select 40,000, 50,000, 65,000 or 75,000 rpm. *Ideal for milling, drilling, engraving, marking, slotting and finishing with small tools.*

Patented **Air Turbine Spindles®** maintain high speed and torque while cutting with no gears, vanes or brushes to burn up. The **602XDT** requires no lubrication and emits no oil mist.

With just 2 moving parts, low friction and low heat, the direct drive **XDT Series** is a powerful, precise and reliable solution to reduce cycle times and increase tool life.



**602XDT - 75,000 rpm, 0.47 hp**



**625XDT - 50,000 rpm, 0.90 hp**

## Dramatically Improve Productivity with the **625XDT Series**

Just fit the new, patented, double turbine **625XDT Series** spindles, from **Air Turbine Spindles®**, to your Drill-Tap machine magazine for automatic tool changing and increase production.

Mill/Drill at Constant High Spindle Speeds –  
**30,000, 40,000 or 50,000 rpm, 0.90 hp/0.67 kW.**

**Air Turbine Spindles®** Air Supply Adaptor manifold block connects to the machine spindle housing, via the automatic tool change, to supply air at 90 psi / 6.2 bar to the powerful, direct drive turbine motor.

Increase milling and drilling feed rates resulting in higher productivity with no duty cycle for true 24/7 unattended production.

**For automatic loading** from the Drill-Tap magazine, install the spindle mounted manifold block and align the nozzle to block connector, which supplies the spindle air, to a clean, dry (90 psi / 6.2 bar) air supply.

**For manual loading** installation of the spindle the side NPT adaptor simply connects to a 1/4" / 6mm ID (602XDT) or 3/8" / 9.5mm ID (625XDT) clean airline. See full User Notes.

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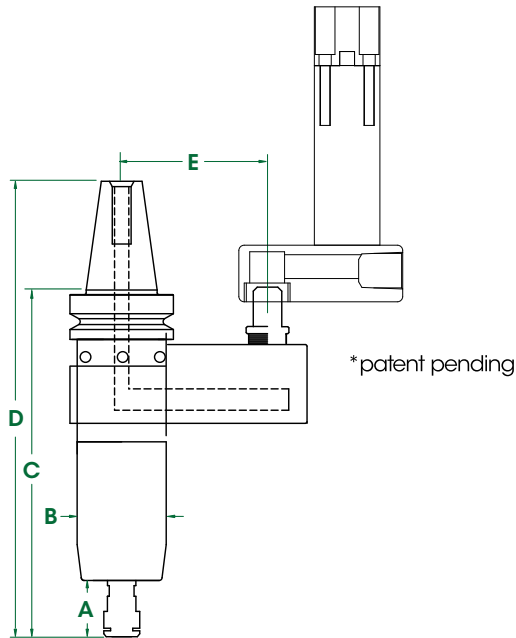
Supply is subject to Air Turbine Technology Inc. (ATT) distributor policies and upon terms and conditions contained in the ATT distributor agreement. Subject to availability, change of specifications, price and terms without notice. Always use a 0.3 micron filter and/or extractor and check specified air flow. Do not restrict airflow to your Air Turbine product by using couplings, hoses, pipes or fittings smaller than 1/4" (6mm) Internal Diameter for 602XDT or 3/8" (9.5mm) Internal Diameter for 625XDT. Ensure all hoses are clean. 6.2 bar / 90 psi clean, dry, oil-free air only. Use eye protection and follow safety instructions. All prices in USD. All specifications approximate. © 2013 Air Turbine Technology, Inc. All rights reserved.

# 602XDT/625XDT Dimensions & Specifications

## 602XDT Dimensions

### Primarily Used For:

- 1/8" (3mm) or smaller diameter end mills (shank can be larger) up to 1/4" (6mm)
- Softer material, ie: rubber, plastic, wood, graphite, etc.
- Lighter machining, ie: deburring, engraving, finishing, etc.

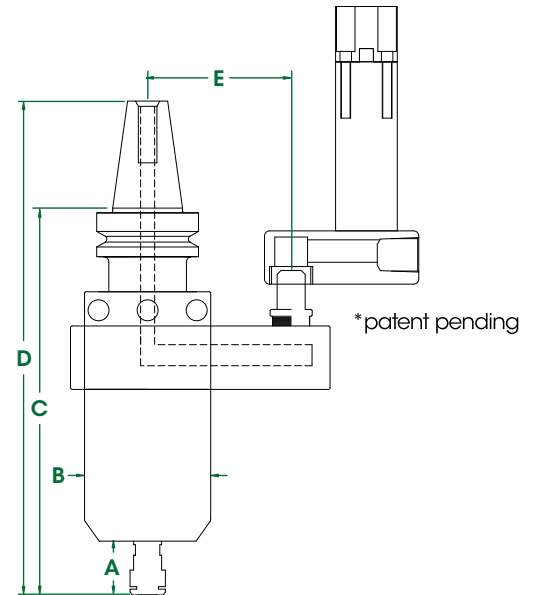


A	0.98" (25mm)
B	1.57" (40mm)
C	6.93" (176mm)
D	8.78" (223mm)
E	FANUC RoboDrill: 2.56" (65.0mm) Brother TC: 3.56" (90.5mm) Haas DT: 2.59" (66.0mm)

## 625XDT Dimensions

### Primarily Used For:

- 1/4" (6mm) or smaller diameter end mills
- All materials, ie: alum, steel, brass, glass, ceramic, titanium and all soft materials.
- Heavier machining, ie: slot milling, drilling, slot, pocket and contour milling, and all lighter operations.



	BT30	DIN30
A	0.87" (22mm)	
B	2.24" (57mm)	
C	6.81" (173mm)	7.24" (184mm)
D	8.74" (222mm)	9.80" (249mm)
E	FANUC RoboDrill: 2.56" (65.0mm) Brother TC: 3.56" (90.5mm) Haas DT: 2.59" (66.0mm)	

## 602XDT Specifications

Governed Speed rpm	40,000 / 50,000 / 65,000 / 75,000
Power Rating hp (kW)	.30 (.22) / .40 (.30) / .45 (.34) / .47 (.35)
Inlet Air Pressure (clean dry air only)	90 PSI (6.2 Bar)
Air Consumption Idle cfm (l/s)	6 (2.8) / 6 (2.8) / 6.14 (2.9) / 6.14 (2.9)
Air Consumption Working Flow cfm (l/s)	7 (3.30) - 10 (4.27)
Sound Level	Less Than 67 dBA
Max Shank Capacity	ER11 - 1/4" (6mm)
Spindle Weight	66.4 oz (1.88 kg)

## 625XDT Specifications

Governed Speed rpm	30,000 / 40,000 / 50,000
Power Rating hp (kW)	0.8 (0.60) / 0.9 (0.67) / 0.9 (0.67)
Inlet Air Pressure (clean dry air only)	90 PSI (6.2 Bar)
Air Consumption Idle cfm (l/s)	19 (8.97) / 20 (9.44) / 20 (9.44)
Air Consumption Working Flow cfm (l/s)	22 (10.38) - 30 (14.16)
Sound Level	Less Than 67 dBA
Max Shank Capacity	ER11 - 1/4" (6mm)
Spindle Weight	96 oz (2.72 kg)

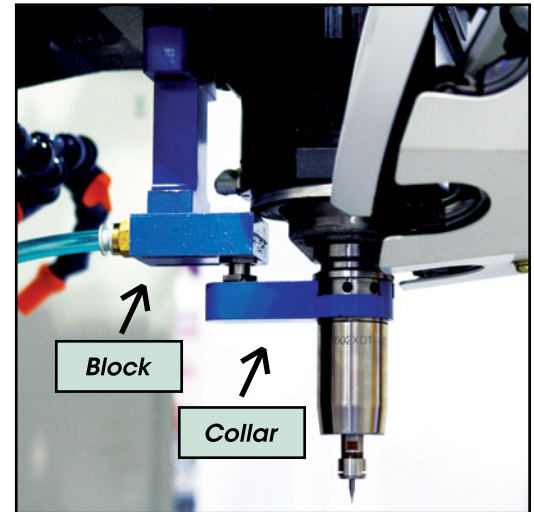
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# 602XDT/625XDT Part Numbers

## 602XDT Series

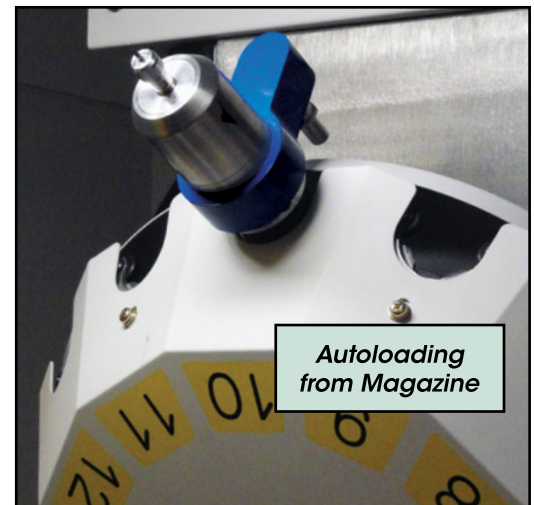
	40,000	50,000	65,000	75,000
Model	P/N	P/N	P/N	P/N
602XDT RoboDrill 1/4" (BT30)	64600	64602	64604	64606
602XDT RoboDrill 6mm (BT30)	64601	64603	64605	64607
602XDT Brother TC 1/4" (BT30)	64608	64610	64612	64614
602XDT Brother TC 6mm (BT30)	64609	64611	64613	64615
602DT Haas DT 1/4" (BT30) **	64616	64618	64620	64622
602DT Haas DT 6mm (BT30) **	64617	64619	64621	64623
602XDT Matrix XR45 1/4" (BT30)	64700	64702	64704	64706
602XDT Matrix XR45 6mm (BT30)	64701	64703	64705	64707
602XDT RoboDrill 1/4" (DIN30)	64670	64672	64674	64676
602XDT RoboDrill 6mm (DIN30)	64671	64673	64675	64677
602XDT Brother TC 1/4" (DIN30)	64678	64680	64682	64684
602XDT Brother TC 6mm (DIN30)	64679	64681	64683	64685
602DT Haas DT 1/4" (DIN30) **	64686	64688	64690	64692
602DT Haas DT 6mm (DIN30) **	64687	64689	64691	64693



**\*\*Single Turbine 602 Version. 602XBT30 with short endcap available upon request.**

## 625XDT Series

	30,000	40,000	50,000
Model	P/N	P/N	P/N
625XDT RoboDrill 1/4" (BT30)	64630	64632	64634
625XDT RoboDrill 6mm (BT30)	64631	64633	64635
625XDT Brother TC 1/4" (BT30)	64636	64638	64640
625XDT Brother TC 6mm (BT30)	64637	64639	64641
625DT Haas DT 1/4" (BT30) **	64642	64644	64646
625DT Haas DT 6mm (BT30) **	64643	64645	64647
625XDT Matrix XR45 1/4" (BT30)	64708	64710	64712
625XDT Matrix XR45 6mm (BT30)	64709	64711	64713
625XDT RoboDrill 1/4" (DIN30)	64648	64650	64652
625XDT RoboDrill 6mm (DIN30)	64649	64651	64653
625XDT Brother TC 1/4" (DIN30)	64654	64656	64658
625XDT Brother TC 6mm (DIN30)	64655	64657	64659
625DT Haas DT 1/4" (DIN30) **	64660	64662	64664
625DT Haas DT 6mm (DIN30) **	64661	64663	64665



**\*\*Single Turbine 625 Version.**

Distributor:

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