

***NEW & IMPROVED!***  
***Chip and Coolant Fans***  
***FAST...SAFE...AUTOMATIC!***

***As the Machine Spindle Turns,  
the blades deploy to provide  
high volume air cleaning power!***

- Clean-Tec Chip and Coolant Fans provide a *safer and faster* method of removing chips and coolant from your tables, fixtures and workpieces
- No more dripping coolant and flying chips from conventional air hose blasts
- A *quieter* workplace environment
- Less spindle downtime for cleaning results in increased profits
- Saves expensive compressed air



***New with Version 260:***  
***Two cleaning operations in one***

First the coolant goes through for thorough cleaning of drilled holes, threads and milled pockets. Afterwards the propeller moves over the workpiece at 120" - 400"/min. at up to 8,000 RPM. No coolant drops or chips will remain.

## In-Process Cleaning without stopping Production



### Clean-Tec Ø 160 mm

for revolutions of 6,000 to 12,000 RPM (max) with coolant channel, clockwise rotation.

Rinse internally with coolant and blow even narrow spaces and milling pockets locally with small diameter rotor-blades (160 mm).

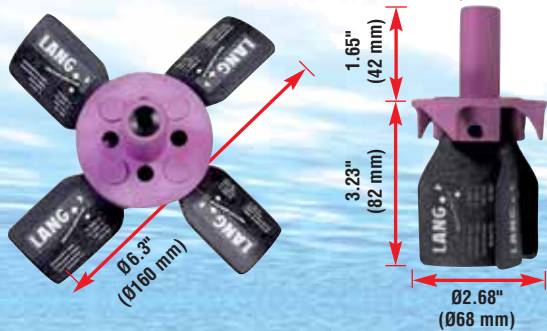
Ø0.75"  
(Ø20 mm)



### Clean-Tec Ø 330 mm

for revolutions of 5,000 to 8,000 RPM (max), clockwise rotation.

Full blowing of workpieces and work surfaces quickly and efficiently.



**NEW!**  
Now Available  
**Clean-Tec Ø 260 mm**  
Operating Ø 10.2" (260mm)  
Length 5.12" (130mm)  
5,000 – 8,000 RPM

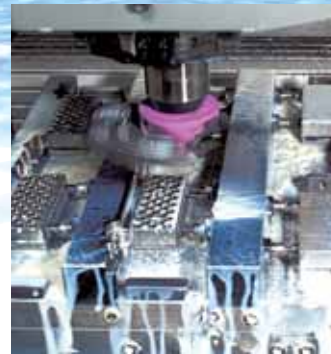


All operators/users of this product should be informed of and must read these instructions.

- Clean-Tec Fans can **ONLY** be used in **ENCLOSED MACHINING CENTERS!**
- Clean-Tec Fans equipped with either a 0.75" O.D. or 20mm straight shank should be securely mounted in either a collet chuck or end mill holder.
- Rotational direction **clockwise** only.
- Optimum feed rate for cleaning is between 120-390 in/min.
- Distance from workpiece should be between 4"-6"
- Upon rotational start-up, program an initial speed of 2,000 RPM (max) before obtaining running speed to reduce the possibility of blade failure due to excessive centrifugal force.

Please note the clearance dimensions with Clean-Tec Fans for optimum performance and to avoid collisions upon cycle starts and stops.

SHANK DIAMETER	CATALOG NUMBER	DESCRIPTION	BLADE DIAMETER	SPEED (RPM)	
				MIN.	MAX.
20 mm	24.303.202	Chip Fan 20 mm x 160 mm	160 mm	6,000	12,000
	24.303.203	Chip Fan 20 mm x 260 mm	260 mm	5,000	8,000
	24.303.201	Chip Fan 20 mm x 330 mm	330 mm	5,000	8,000
3/4"	24.313.202	Chip Fan 3/4" x 160 mm	6.3"	6,000	12,000
	24.313.203	Chip Fan 3/4" x 260 mm	10.2"	5,000	8,000
	24.313.201	Chip Fan 3/4" x 330 mm	13.0"	5,000	8,000
REPAIR KITS	24.303.206	Chip Fan Repair Kit 160	6.3" (160 mm)		
	24.303.207	Chip Fan Repair Kit 260	10.2" (260 mm)		
	24.303.205	Chip Fan Repair Kit 330	13.0" (330 mm)		



Local cleaning of parts with Clean-Tec version 160



Clean-Tec may be utilized in all horizontal and vertical machining centers by using a normal chuck with clamping diameter 20 mm or 3/4".



### Repair Kit:

4 rotor-blades\*, springs, screws and pins.

\*Blades will wear with normal use and may require replacement. Maintain & replace as needed.

In the event of a collision or breakage of the Clean-Tec Fan, discontinue use and contact: **BIG Kaiser Precision Tooling, Inc.** at 1-888-TOOLPRO (866-5776)