

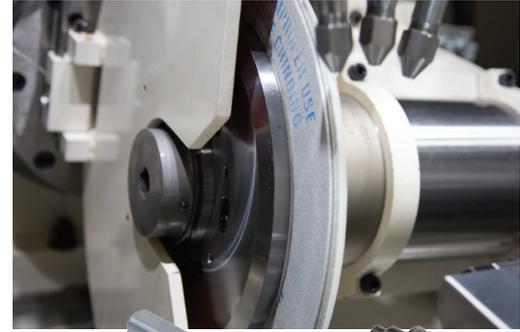
Drake®

**EXTERNAL
THREAD GRINDERS**

DRAKEMFG.COM

DRAKE EXTERNAL THREAD GRINDERS

Drake Manufacturing has revolutionized the thread grinding industry with precision built solutions engineered for your success. Drake GS:TE CNC thread grinders are fully programmed and delivered with a grinding process optimized to run customers' parts. The external thread grinder is typically used when grinding taps, gages, multi-start worms, ball screws, electronic steering components, thread rolls, rotor components and more. Drake machines are designed by a talented team of engineers with several decades of experience.



STANDARD FEATURES

All External Thread Grinders come standard with:

- High-Precision Workhead
- Wheel Helix
- Closed-Loop Precision Feedback
- CNC Servo System
- Motorized Wheel Spindle
- Wheel Spindle Drive
- Diamond Roll Truing
- Assembly & Verification
- Automatic Wheel Balancer

OPTIONAL FEATURES

There are several upgrades available for your External Thread Grinder including:

- SmartForm™
- TouchDress™
- 1m Grind Length
- Part Probe
- Automation
- And More

PARTSMART™ MENU-DRIVEN SCREENS

Simplifies setup and ensures accuracy. The operator simply enters part-specific values into the control and the software does the rest.

AUTOMATION

Drake offers a variety of automation options unique to your specific application. With Drake automation solutions, you will deliver consistent, high-quality results.



LINEAR MOTORS

Machine is built with linear motors and linear roller ways for maximum acceleration and contouring.

CAST-POLYMER BASE

Machine is built on a cast polymer base for vibration damping and thermal stability. Compact, high-mass base allows for high accelerations for minimizing cycle time.

GS:TE EXTERNAL THREAD GRINDERS

Experience GS:TE. View our complete technical specifications and machine capacities.

MACHINE SPECIFICATIONS	GS:TEM	GS:TE240-330MH	GS:TE240-360	GS:TE400-750 GS:TE400-1000	GS:TE400-2000	GS:TE445-4000
Length Between Centers (0° Helix)	150 mm	330 mm	360 mm	750 mm 1000 mm	2,100 mm	4,000 mm
Maximum Part Ø	25 mm	240 mm	240 mm	400 mm	400 mm	445 mm
Lead	Various	Various	Various	Various	Various	Various
Lead Angle (From Horizontal)	±10°	±20°	Various	Various	Various	Various
Diamond Dresser Roll Ø	115 mm	115 mm	115-152 mm	115-152 mm	115-152 mm	115-152 mm
Standard Diamond Dresser Roll (Width)	Up to 32 mm	Up to 32 mm	Up to 32 mm	Up to 32 mm	Up to 32 mm	Up to 32 mm
Wheel Spindle Power	5 kW	12 kW	12 kW/16 kW	12 kW/16 kW	12 kW/16 kW	12 kW/16 kW
Wheel Spindle Speed	12,000 rpm	8,000 rpm	8,000 rpm	8,000 rpm	8,000 rpm	8,000 rpm
Wheel Spindle Surface speed	Up to 100 m/sec	Up to 120 m/sec	Up to 120 m/sec	Up to 120 m/sec	Up to 120 m/sec	Up to 120 m/sec
Standard Wheel Range (Outside Diameter)	≤250 mm	≤350 mm	≤400 mm	≤400 mm	≤400 mm	≤400 mm
Standard Wheel Range (Width)	10-25 mm	10-25 mm Optional: ≤ 60 mm	10-25 mm Optional: ≤ 60 mm	10-25 mm Optional: ≤ 60 mm	10-25 mm Optional: ≤ 60 mm	10-25 mm Optional: ≤ 60 mm
Standard Wheel Range (Bore)	76.2 mm	160 mm	160 mm	160 mm	160 mm	160 mm
Workhead Speed	Up to 300 rpm continuous	Up to 800 rpm continuous	Up to 300 rpm continuous			
Workhead Spindle Nose	A2-4	A2-6	A2-6	A2-8	A2-8	A2-15
Rapid Return Speed	Up to 40 m/min	Up to 40 m/min	Up to 40 m/min	Up to 40 m/min	Up to 40 m/min	Up to 40 m/min
Number of CNC Axes	3	3	4	4	4	4
Linear Positioning Accuracy Over Length of Travel	<0.004 mm	<0.004 mm	<0.004 mm	<0.004 mm	<0.004 mm	<0.004 mm
Linear Positioning Repeatability	<0.002 mm	<0.002 mm	<0.002 mm	<0.002 mm	<0.002 mm	<0.002 mm
Total Electrical Requirements	20-30 kVA	30-45 kVA	30-45 kVA	30-45 kVA	30-45 kVA	40-55 kVA
Voltage	200-600 V	380-480 V	200-600 V	200-600 V	200-600 V	200-600 V
Approximate Weight	3,000 kg	6,125 kg	7,000 kg	9,600 kg to 9,850 kg	16,000 kg	32,000 kg
Machine Dimensions (Overall)	1.45 m W x 1.85 m D	1.9 m W x 2.6 m D	2.2 m W x 2.7 m D	3.2 m W x 2.6 m D	6.5 m W x 2.6 m D	7.5 m W x 2.8 m D
Machine Dimensions (Workholding Height)	1.0 m above floor	1.0 m above floor	1.1 m above floor	1.2-1.3 m above floor	1.2 m above floor	1.5 m above floor

*Machine specifications subject to change contingent on part requirements

SERVICE

Drake protects the value of your investment by offering products and services focused on improving machine reliability and maintainability. service@drakemfg.com

DISCOVER THE DRAKE DIFFERENCE

Call or Email
+1-330-847-7291
info@drakemfg.com

WE BELIEVE IN **ACCURACY.**

Drake®

©Drake Manufacturing LLC

4371 N. Leavitt Road | Warren, Ohio 44485 USA | info@drakemfg.com

Tel: +1-330-847-7291 | Fax: +1-330-847-6323

DRAKEMFG.COM

TE202412E