DYNABRADE®

# SANDING SOLUTIONS

## FOR ELECTROSTATIC DISCHARGE (E.S.D.)

NEW

WE LISTEN. WE OBSERVE. WE OPTIMIZE.

MADE IN USA

# WHAT IS ELECTROSTATIC DISCHARGE?

The ESD protective symbol is used to identify items that are specifically designed to provide ESD protection.

ESD is the sudden discharge of an accumulated electrical charge between two objects as they separate or brush against each other. Discharges at elevated voltages can often be observed in the form of a visible spark and felt by a person. Secondary events caused by ESDs, like a fire or short circuited equipment, are responsible for billions of dollars in losses for manufactures each year.

## WHAT CAUSES ESD?

Static buildup generated by the rapid movement of particles over composite, fiberglass, wood and metallic surfaces, or by rubbing and sanding across different materials is a major cause of an electrostatic discharge. Environments with low humidity increase the likelihood of a charge buildup and discharge.

## WHY IS ESD AWARENESS IMPORTANT?

The importance of ESD awareness extends beyond the adverse effects to an employee experiencing a mild shock as they sand. An electrostatic discharge can also:

- Ignite flammable gases, vapors and dusts.
- Cause pinholes in coatings, leading to surface imperfections.
- Damage electronics and mechanical equipment.
- Present a health hazard if static shock is great enough.

## PREVENTING E.S.D.

The key to preventing an electrostatic discharge while working is providing an avenue for the charge to dissipate away from the operator, sensitive equipment, or combustible material. A copper ground wire, being an excellent conductor, is used to create an alternative path away from the operator for any voltage buildup.

Each Dynabrade ESD tool is equipped with a copper ground wire that must attach to the earth ground of a vacuum system or directly to the ground of the electrical outlet for the electrostatic dissipating capabilities to function properly. In addition, (2) 1 Megaohm resistors are placed in line with the copper wire to dissipate current upstream and downstream in the event of contact with an electrical current.

NEW

## CAUSES OF ESD

Sanding applications have a high likelihood of generating static electricity.

## POTENTIAL ESD ENVIRONMENT

Dry, dusty areas or areas with certain vapors can compound ESD complications.

## AFTER ESD IS HANDLED WITH CORRECT TOOLS

Dynabrade tools and vacuums contribute to the optimization of applications and environments.

# DYNORBITAL® EXTREME RANDOM ORBITAL SANDER

## FINISHING & DETAIL SANDING


(MODEL X62ESD SHOWN)

**MINI-RAPTOR VAC®**
61105V *(North America)*
61110V *(Europe)*

MADE IN USA

| | FEATURE | BENEFIT |
|---|---|---|
| 1 | (2) 1 MEGAOHM RESISTORS | *Prevents high-current shock* |
| 2 | RECESSED THROTTLE LEVER | *Eliminates pressure point on palm* |
| 3 | INTEGRATED COMFORT PLATFORM | *Provides enhanced ergonomic comfort* |
| 4 | COMFORT GRIP | *Tactile ambidextrous design* |
| 5 | LIP SEAL SHROUD | *Enhanced vacuum performance* |
| 6 | WEIGHT-MATED SANDING PAD | *Reduced vibration for consistent finishes* |
| 7 | INTEGRATED SWIVEL CUFF | *Secure maneuverable vacuum connection* |
| 8 | INCREASED PORT SIZE | *For improved vacuum capture rate* |

RAPTOR VAC VACUUM SYSTEMS

It is the operator's responsibility to verify proper ground connection prior to sanding.

### IDEAL INDUSTRIES

**TECH TIP** Ergonomic 1" diameter vacuum hose with integrated airline is lightweight and flexible providing operators with greater maneuverability.

## VACUUM HOSE ASSEMBLY

### FOR CONNECTION TO MINI-RAPTOR VAC® VACUUM

**31978** 20 Ft (6 M)

- 1" vacuum hose
- 5/16" air line
- 1" tool connection, 1" vacuum connection for use with Dynorbital® Extreme

### MODELS AVAILABLE:

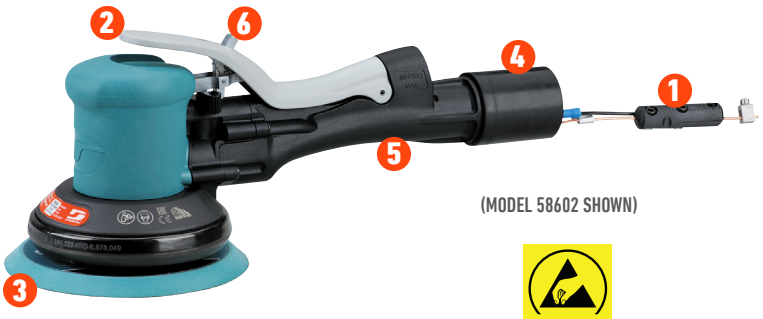
| Model No. | Diameter | Orbit | RPM | Ground Wire | Includes ESD Hose Assy. | Vacuum | Vac. Hose Connection | Hp | Air Consumption |
|---|---|---|---|---|---|---|---|---|---|
| X51ESD | 5" (127 mm) | 3/16" (5 mm) | 12,000 | Yes | No | Raptor Vac® | 1" Threaded Connection | 0.3 (224 W) | 19 SCFM (538 LPM) |
| X51ESD1 | | | | | 59385 | | | | |
| X52ESD | | 3/32" (2.5 mm) | | | No | | | | |
| X52ESD1 | | | | | 59385 | | | | |
| X61ESD | 6" (152 mm) | 3/16" (5 mm) | 12,000 | Yes | No | Raptor Vac® | 1" Threaded Connection | 0.3 (224 W) | 19 SCFM (538 LPM) |
| X61ESD1 | | | | | 59385 | | | | |
| X62ESD | | 3/32" (2.5 mm) | | | No | | | | |
| X62ESD1 | | | | | 59385 | | | | |

**Additional Specifications** Vacuum Port - 1" | Air Inlet - 1/4" NPT | Hose I.D. - 1/4" (6 mm) | ROS Pads have a 5/16"-24 Male Thread

# DUAL-GRIP, RANDOM ORBITAL SANDER

## BLENDING & FINISHING

*Designed for large, high-volume sanding applications, Dual-Grip, Random Orbital Sanders provide an added layer of protection against static shock.*




(MODEL 58602 SHOWN)

**RAPTOR VAC®**

61465V *(North America)*

61466V *(Europe)*


| | FEATURE | BENEFIT |
|---|---|---|
| 1 | (2) 1 MEGAOHM RESISTORS | *Prevents high-current shock* |
| 2 | DUAL-GRIP THROTTLE LEVER | *Throttle activates on housing & handle* |
| 3 | EXTREME SANDING PAD | *Best-in-class capture rate* |
| 4 | INTEGRATED SWIVEL CUFF | *Eliminates hose tangles* |
| 5 | IN-LINE VACUUM PORT | *Improves mobility* |
| 6 | SAFETY-LOCK LEVER | *Prevents accidental startup* |

It is the operator's responsibility to verify proper ground connection prior to sanding.

### IDEAL INDUSTRIES

**TECH TIP**

Vacuum hose assemblies contain a copper ground wire creating a path away from the operator to a ground so no voltage builds up within the operator.

## VACUUM HOSE ASSEMBLY

### FOR CONNECTION TO RAPTOR VAC® VACUUM

**31979** 20 Ft (6 M)

- 1-1/4" vacuum hose
- 5/16" air line
- 1-1/4" tool connection, 1" vacuum connection for use with Dual-Grip tools

## MODELS AVAILABLE:

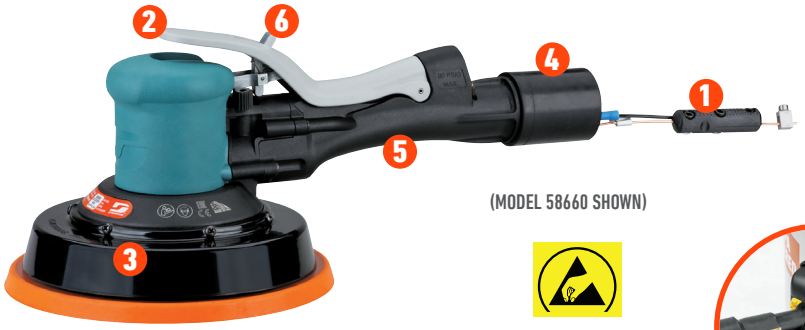
| Model No. | Diameter | Orbit | RPM | Ground Wire | Includes ESD Hose Assy. | Vacuum | Shroud Style | Hp | Air Consumption |
|---|---|---|---|---|---|---|---|---|---|
| 58600 | 6" (152 mm) | 3/16" (5 mm) | 10,000 | Yes | No | Raptor Vac® | Lip | .025 (186 W) | 12 SCFM (340 LPM) |
| 58602 | | | 12,000 | | No | | | .04 (298 W) | 20 SCFM (566 LPM) |
| 58603 | | 3/8" (10 mm) | 12,000 | | No | | | | |
| 58611 | | 3/16" (5 mm) | 12,000 | | No | | Overskirt | | |
| 58651 | | | | | 31927 | Central Vacuum | | | |
| 58652 | | | | | | | Lip | | |

**Additional Specifications** Vacuum Port - 1-1/4" | Air Inlet - 1/4" NPT | Hose I.D. - 1/4" (6 mm) | Pad Thread - 5/16"-24 Male Thread

# DUAL-GRIP, GEAR-DRIVEN SANDER

## LEVELING & STOCK REMOVAL

*Specifically designed for very aggressive material removal applications Dual-Grip, Gear-Driven Sanders are high-torque tools that maintain speed under significant downward pressure and are also ideal for use with coarse grit abrasives.*




(MODEL 58660 SHOWN)

**RAPTOR VAC®**
61440V *(North America)*
61441V *(Europe)*


| | FEATURE | BENEFIT |
|---|---|---|
| 1 | (2) 1 MEGAOHM RESISTORS | *Prevents high-current shock* |
| 2 | DUAL-GRIP THROTTLE LEVER | *Throttle activates on housing & handle* |
| 3 | OVERSKIRT SHROUD | *Enhanced vacuum capability* |
| 4 | INTEGRATED SWIVEL CUFF | *Eliminates hose tangles* |
| 5 | IN-LINE VACUUM PORT | *Improves mobility* |
| 6 | SAFETY-LOCK LEVER | *Prevents accidental startup* |

It is the operator's responsibility to verify proper ground connection prior to sanding.

### IDEAL INDUSTRIES

**TECH TIP** For maximum durability be sure to apply 3 plunges of gear grease to gear housing for every 300 hours of run time when using Dual-Grip, Gear Driven Sanders.

## VACUUM HOSE ASSEMBLY

### FOR CONNECTION TO RAPTOR VAC® VACUUM

**31979** 20 Ft (6 M)

- 1-1/4" vacuum hose
- 5/16" air line
- 1-1/4" tool connection, 1" vacuum connection for use with Dual-Grip tools

### MODELS AVAILABLE:

| Model No. | Diameter | Orbit | RPM | Ground Wire | Includes ESD Hose Assy. | Vacuum | Shroud Style | Hp | Air Consumption |
|---|---|---|---|---|---|---|---|---|---|
| 58660 | 8" (203 mm) | 3/16" (5 mm) | 900 | Yes | 31927 | Central Vacuum | Overskirt | 0.4 (298 W) | 23 SCFM (651 LPM) |
| 58661 | | | | | No | Raptor Vac® | | | |

**Additional Specifications** Vacuum Port - 1-1/4" | Air Inlet - 1/4" NPT | Hose I.D. - 1/4" (6 mm)

DYNABRADE®

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# E.S.D. SANDER ACCESSORIES

## REPLACEMENT VACUUM CUFF

59339

- For use with Extreme E.S.D. Sanders
- 1" Thread

## REPLACEMENT VACUUM CUFF

58628

- For use with Dual-Grip E.S.D. Sanders
- 1-1/4" Thread

## VACUUM HOSE ASSEMBLY

31927

- 10' (3 m) Conductive vacuum hose assembly
- For connection to 2" central vacuum system

## VACUUM HOSE ASSEMBLY

59385

- 10' (3 m) Conductive vacuum hose assembly
- For connection to Dynorbital® Extreme to Raptor Vac®

## 1 MEGAOHM RESISTOR

59395

- Dissipates high current & limits current flow to operator

# DYNABRADE MAINTENANCE PRODUCTS

## FILTER-REGULATOR-LUBRICATOR

10690 1/2" NPT

- Max. 106 SCFM (3,000 LPM)
- 3/8" NPT reducer bushings for 3/8" air systems
- Adjustable oil drip rate
- 5 micron filter


## GREASE & PUSH-TYPE GREASE GUN

95544 2.5 OZ. TUBE GREASE

95541 PUSH-TYPE GREASE GUN

- Multi-purpose grease for all types of bearings, cams, gears
- High film strength, excellent resistance to water


## DYNABRADE AIR LUBE

95842 1 Pint

- 10W/NR, absorbs up to 10% of its weight in water
- Specifically formulated for Dynabrade air tools

## MOTOR TUNE-UP KIT

96576 Dynorbital® Extreme

- Contains high and medium wear parts
- Helps maintain an efficiently running air motor

98220 Dual-Grip Random Orbital Sanders

- Contains high and medium wear parts
- Helps maintain an efficiently running air motor

98221 Dual-Grip, Gear-Driven

- Contains high and medium wear parts
- Helps maintain an efficiently running air motor





Dynabrade, Inc. 8989 Sheridan Drive | Clarence, New York 14031 | 1.800.828.7333