



PREMIUM INDUSTRIAL ABRASIVE POWER TOOLS

FOR THE AEROSPACE INDUSTRY



WE LISTEN. WE OBSERVE. WE INNOVATE.



MANUFACTURING AND MAINTENANCE

SURFACE CONDITIONING AND MATERIAL REMOVAL SOLUTIONS

Since 1969, Dynabrade has earned a reputation for excellence and a position of leadership in the innovative design and manufacturing of unique portable pneumatic abrasive power tools, related accessories, and clean air solutions.

Dynabrade products are used in a variety of industrial applications on nearly any material that requires surface preparation and finishing.

Dynabrade offers an incredible variety of tools for use in the aerospace industry that reduces production time as they improve your final product.

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DYNABRADE PREMIUM ABRASIVE POWER TOOLS IN THE HANGER

OEM & MRO
SURFACE CONDITIONING

ACRYLIC REFRESHING
& POLISHING

MACHINE PART DEBURRING
& PRECISION POLISHING

MANUFACTURING APPLICATIONS

- Finishing of turbine blades
- Turbine radius work
- Blending and finishing of small blades and parts
- Blending of inner curves
- Deburring of aerotubes
- Removal of weld residue
- Large burr removal
- Cast finishing
- Inlet hole deburring

MAINTENANCE & REPAIR

- Blade repair
- Impellor repair and blending
- Vane repair
- Refurbishing of brake rotors
- Grinding and leveling welds
- Engine repair
- Surface conditioning under lap joints
- Repair of landing gear
- Corrosion removal in hydraulic pipe joints
- Cutting down hard-to-reach rivet backs or heads

CONTACT ARMS

- Over 100 unique Contact Arms available for a multitude of applications
- Visit Dynabrade.com for additional information, accessories and abrasives



ABRASIVE BELT TOOLS

Dynabrade offers the most complete range of Abrasive Belt Tools in the world. As the inventor of "The Original" Dynaflex®, Dynabrade is the market leader in the designing, engineering and manufacturing of abrasive belt tool technology.



"THE ORIGINAL" DYNAFLEX®

- .5 hp, 20,000 RPM, for 24" long belts.
- World-famous Dynaflex® replaces tedious hand filing and sanding.
- Grind, deburr, blend, polish, finish and more!
- Grind from contact wheel or platen pad; finish and polish using slack of belt.
- Accepts a variety of additional Contact Arms.



DYNAFLEX® II & MINI-DYNAFLEX® II

- 40320 Dynaflex® II – .5 hp, 20,000 RPM, for 18" long belts.
- 15002 Vacuum Mini-Dynaflex® II – .4 hp, 25,000 RPM, for 12" long belts.
- Lightweight, ergonomic 7° offset design. Grinding head pivots 360° for securing in most efficient position.
- Belt guard easily detaches for quick abrasive change; simple belt tracking adjustment knob.



DYNAFLEX® III

- .7 hp, 20,000 RPM, for 18" long belts.
- Offers all the versatility of the Dynaflex® II, while serving up more power for faster material removal.

FINISHING TOOLS

Dynabrade offers the most complete range of finishing tools for grinding, sanding and polishing.



DYNABUG® & DYNABUG® II

- 57814 Dynabug® - .28 hp, 10,000 RPM, 3/32".
- 58500 Dynabug® II - .11 hp, 10,000 RPM, 3/32".
- Non-Vacuum, Self-Generated Vacuum and Central Vacuum configurations.
- Dynabug® models accept traditional 3-2/3" x 9" abrasive sheets.
- Dynabug® II models accept a variety of smaller abrasive sheets, for sanding in tight areas, 90° corners and odd angles.



DYNAFINE® DETAIL SANDER

- 58017 - Central Vacuum, .12 hp, 7° Offset, 15,000 RPM, 1/32" Diameter Orbit, Rear Exhaust.
- 57900 - Non-Vacuum, .12 hp, 7° Offset, 13,000 RPM, 1/32" Diameter Orbit, Rear Exhaust.
- Includes backup pads in tear-drop and triangular shapes, and accepts optional round backup pads.



DYNASTRAIGHT®

- 13502 - 1 hp, 3,400 RPM, includes 13016 Arbor for up to 2" wide x 1/2" I.D. wheels.
- 13521 - 1 hp, 1,800 RPM, includes 13015 Threaded Arbor (5/8"-11).

MANUFACTURING APPLICATIONS

- Removal of oxide
- Scuffing before coating of urethane, epoxy or paint
- Removal of milling marks after machining
- Provide uniform matte finish of machined surfaces
- Sanding on struts, spars and ribs
- Featheredging, sanding and blending

MAINTENANCE & REPAIR – DYNASTRAIGHT®

- Finishing of turbine blades
- Cleaning of landing gear
- Removal of defects, scratches and handling marks
- General corrosion removal



MANUFACTURING APPLICATIONS

- Sanding airplane skins
- Polishing windows and windshields
- Finishing on titanium, aluminum, stainless steel, composite materials
- Paint preparation and finishing of fuselage
- Sanding and finishing various parts
- Various applications in paint shop
- Enhance coating adhesion on surfaces
- Scuffing before coating of urethane, epoxy or paint

MAINTENANCE & REPAIR

- Window glass repair and polishing
- Stripping and painting operations
- Curved sidewalls of windows
- Ring refurbishing
- Removal of oxide
- Removing scratches and handling marks
- Removing paint on engine cowling, stabilizers and nose

DYNABRADE SANDING PADS

- Manufactured by Dynabrade in the USA, utilizing state-of-the-art technology.
- Perfectly balanced and weight-mated for smooth performance and swirl-free finishes.
- Features Dynabrade's exclusive single-piece hub design for reduced pad vibration.



Exclusive
Single-Piece Hub



RANDOM ORBITAL SANDERS

Dynabrade is the premier random orbital solution provider with the largest variety in the industry. Achieve superior finishes in less time on a variety of materials. Two-Hand Dynorbital® random orbital sanders are also available.



DYNORBITAL® EXTREME SANDER

- 3", 5" and 6" diameters, 3/16" and 3/32" dia. orbits, 12,000 RPM.
- Non-Vacuum and Vacuum configurations.
- Highest power-to-weight ratio in the industry.
- Most consistent speed under-load in the industry.



DYNORBITAL® SUPREME SANDER

- 3-1/2", 5" and 6" diameters, 3/8", 3/16" and 3/32" dia. orbits, 12,000 RPM.
- Non-Vacuum, Self-Generated Vacuum and Vacuum configurations.
- Superior-quality components for increased durability under extended use.



DYNORBITAL SPIRIT® SANDER

- 3", 3-1/2", 5" and 6" diameters, 3/8", 3/16" and 3/32" dia. orbits, 12,000 RPM.
- Non-Vacuum, Self-Generated Vacuum and Vacuum configurations.
- Lightest palm-syle sander in the world.
- Ideal for vertical applications and operators with smaller hands.

ESD SANDING SOLUTIONS

Dynabrade electrostatic discharge (E.S.D.) tools are equipped with a copper ground wire to dissipate electrostatic discharge away from the operator, directly to an earth ground.



VACUUM ESD DYNORBITAL® EXTREME SANDER

- 5" and 6" diameters, 3/16" and 3/32" dia. orbits, 12,000 RPM.
- Increased vacuum size for enhanced vacuum performance.
- Includes (2) 1 Megaohm resistors to prevent high-current shock.



TWO-HAND ESD DYNORBITAL® SANDER

- 6" diameter, 3/16" and 3/8" dia. orbits, 12,000 RPM.
- Dual-grip locking throttle lever for better control and safety.
- Includes (2) 1 Megaohm resistors to prevent high-current shock.



TWO-HAND GEAR-DRIVEN ESD SANDER

- 8" diameter, 3/16" dia. orbit, 900 RPM.
- Includes 31927 ESD hose assembly.

ELECTROSTATIC DISCHARGE (ESD)



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 manufacturers 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 ESD.

ESD AWARENESS

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 dust.
- Can lead to surface imperfections.
- Damage electronics and mechanical equipment.
- Health hazard if static shock is great enough.

PREVENTING ESD

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.

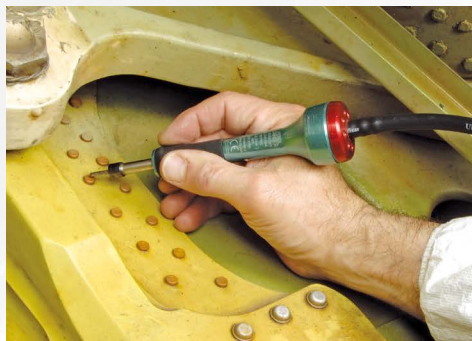


MANUFACTURING APPLICATIONS

- Blending on turbine blades, honeycomb rings and impellers
- Blending and finishing of small parts
- Deburring welds on aero tubes
- Quick removal of weld residue with carbide burrs
- Deburring welds on inconel welds and on titanium

MAINTENANCE & REPAIR

- Work on metallic fluid hoses and cold plates
- Work on cooling systems and leading mesh edge of ice protection systems
- Refurbishing of inner fan case and removal of residue



PENCIL GRINDERS

Dynabrade offers a variety of Pencil Grinders for precision deburring, finishing, and engraving to suit each application. A true time-saver for high production workplaces in the aerospace industry.



TURBINE-DRIVEN & QUICK-CHANGE MODELS

- 51700 - Straight-Line, .1 hp, 60,000 RPM, 1/8" collet.
- 60052 - Straight-Line, Quick-Change, .1 hp, 35,000 RPM, 3/32" collet.
- Accepts optional carbide burrs and mounted points.



VARIABLE SPEED MODELS

- .1 hp, 35-60,000 RPM, 1/8" and 3/32" collets.
- Desired speed stays set as tool is turned off and on.
- Accepts optional carbide burrs and mounted points.
- Precision bearings ensure longer tool life.



STRAIGHT-LINE PENCIL GRINDER

- .1 hp, 100,000 RPM, 1/8" collet.
- Front exhaust and twin turbine air motor.
- Oil-free tool is low maintenance and poses no contamination to the work piece.
- High durability nickel-plated aluminum housing.

DIE GRINDERS

Dynabrade offers a wide range of general-purpose Die Grinders from .4 hp to 1 hp, 950 to 35,000 RPM, in straight-line, right-angle and 7° offset configurations.



STRAIGHT-LINE DIE GRINDERS

- 55520 - .3 hp, straight-line, 25,000 RPM, rear exhaust, 1/4" collet.
- 43515 - .4 hp, 6" extension straight-line, 25,000 RPM, rear exhaust, 1/4" collet.
- 52666 - 1 hp, straight-line, 12,000 RPM, rear exhaust, 1/4" collet.



RIGHT ANGLE DIE GRINDERS

- 55540 - .4 hp, right angle, 12,000 RPM, rear exhaust, 1/4" collet.
- 46002 - .4 hp, right angle, 20,000 RPM, extended rear exhaust, 1/4" collet.
- 55560 - .7 hp, extended right angle, 12,000 RPM, rear exhaust, 1/4" collet.
- 55561 - .7 hp, extended right angle, 18,000 RPM, rear exhaust, 1/4" collet.



7° OFFSET DIE GRINDERS

- 52293 - .7 hp, 18,000 RPM, extended rear exhaust, 1/4" collet.
- 48335 - .4 hp, 25,000 RPM, rear exhaust, 1/4" collet.



MINI ANGLE-HEAD DIE GRINDER

- .4 hp, 3,200 RPM, Planetary-Geared, Rear Exhaust, 1/4" collet.
- 50055 Collet Assembly included.
- Safety-lock lever included.

MANUFACTURING APPLICATIONS

- Blending and flattening on wide blades; grinding and blending on wide blades after welding
- Grinding on titanium parts
- Removing residue on dice block surface
- Grinding and finishing of turbine blades

MAINTENANCE & REPAIR

- Deburring on honeycomb ring
- Refurbishing of inner fan case
- Blending parting lines on cast turbine blades
- Removal of machine blemishes, mill marks on airframe parts
- Maintenance on stainless steel, inconel, nickel alloys, titanium
- Removal of handling marks, light and heavy scratches
- Maintenance on wing ribs, thrust reverse fan compressors
- Landing gear assembly, heat exchangers, cooling systems
- General work in metal shop and composite materials shop
- Corrosion removal in rivet areas, fuel tank, landing gear
- Aluminum castings, high-temperature alloys
- Exfoliation removal



MANUFACTURING APPLICATIONS

- Sanding of fan and compressor structures and case
- Sanding of turbine, combustors and sandwich structures
- Sanding of rings, ducts and low-pressure turbine cases
- Finishing on doors and bulkheads
- General sealant removal
- Scuffing before coating of urethane, epoxy or paint
- Blending in tight pockets

MAINTENANCE & REPAIR

- Various applications in Composite Material Shop
- General use in Engine Repair
- Sanding of landing gear
- Cleaning of seat tracks
- Removal of light and heavy scratches, handling marks
- Sanding of entry and cargo doors



DISC SANDERS

Dedicated low-profile design disc sanders offer the best performance with lowest run-out.



2" DIA. DISC SANDERS

- 48503 - 7° Offset, .4 hp, 25,000 RPM.
- 47820 - Right Angle, .4 hp, 12,000 RPM.
- Includes 51344 Locking-Type Pad.



3-1/2" DIA., 7° OFFSET DISC SANDER

- 3,200 RPM, high torque planetary-gear air motor.
- Standard models include 50126 Hook-Face Pad, 54486 Sanding Pad and 92096 Sample Abrasives.



4" DIA. RIGHT-ANGLE DISC SANDER

- 1.3 hp (970 W) governor-controlled air motor delivers powerful, efficient performance; speed of 12,000 RPM.
- Convenient Spindle Lock makes changing abrasive disc quick and easy.



7" DIA. RIGHT-ANGLE DISC SANDER

- 2.8 hp, 8,500 RPM, 5/8"-11 spindle thread.
- Best rotor and vane style motor power-to-weight ratio in the industry.
- Convenient Spindle Lock makes changing abrasive disc quick and easy.
- Compatible with fiber discs.

DRILLS

Dynabrade offers a variety of air-powered industrial quality drills ideal for use in the aerospace industry.



RIGHT ANGLE DRILL

- .4 hp, 950 RPM, 2,400 RPM, 3,200 RPM and 5,000 RPM models available.
- Governor-controlled motor maintains speed under load.
- Rotating drill head adjusts to 12 positions, (360°) in relation to the safety throttle lever.
- Head rotates in both clockwise and counterclockwise directions.
- 1/4"-28 and 9/32"-40 spindle attachments available.



1/4" DRILL

- .4 hp air motor, 500 RPM-20,000 RPM.



3/8" DRILL

- 52774 - Reversible, .5 hp, 950 RPM, geared, rear exhaust. 450, 1,800 and 3,700 RPM models also available.
- 53060 - .7 hp, 3,400 RPM, geared, rear exhaust.
- Includes 3/8" drill chuck and key.



1/2" DRILL

- .7 hp, 3,400 RPM, rear exhaust.
- Includes 1/2" drill chuck and key.
- Removable side handle and safety-lock lever.

MANUFACTURING APPLICATIONS

- General assembly
- General use in Metal Shop
- Drilling on landing gear

MAINTENANCE & REPAIR

- Engine repair
- Drilling out rivets



MANUFACTURING APPLICATIONS

- Buffing and polishing wing leading edge to mirror finish
- Buffing and polishing of window glass scratches and defects
- Buffing after repair of dust nibs and "orange peel"



MANUFACTURING APPLICATIONS

- Excellent for removing two-sided adhesive molding tape and decal material
- Removes material without damaging paint or original surface



BUFFING TOOLS



- 51400 - 7° Offset Rotary Buffer, 3" diameter, .4 hp, 3,200 RPM, 3/8"-24 Spindle Thread.
- 49440 - Angle-Head Rotary Buffer, 3" diameter, .4 hp, 3,200 RPM, 1/4"-20 Spindle Thread.
- 51392 - Right Angle Buffer, 1 hp, 2,800 RPM, 5/8"-11 Spindle Thread, for use with 6" - 8" diameter buffing pads.

DYNABRADE NITRO SERIES™ NITROZIP SURFACE PREP TOOL



- .5 hp, Right Angle, 3,500 RPM Rear Exhaust.
- Effectively removes seam sealer, paint, two-sided adhesive molding tape and decal material with excellent power.
- Quickly remove decals and adhesives without harming paint.

CUT-OFF WHEEL TOOLS



- 52439 - Right Angle, Diamond Cut-Off Wheel Tool, 3" diameter, .4 hp, 12,000 RPM.
- 54736 - Extended Right Angle, Type 41 Cut-Off Tool, 4" diameter .7 hp, 13,500 RPM.
- 54730 - Right Angle, Type 41 Cut-Off Tool, 3" diameter, .7 hp, 18,000 RPM.
- 52537 - Straight-Line, Vacuum, 6" Extension Diamond Cut-Off Wheel Tool, 3" diameter, 1 hp, 18,000 RPM.

MANUFACTURING APPLICATIONS

- Cutting in Composite Material Shop
- Cutting of fiberglass and aerospace alloys
- Cutting of honeycomb, sheet metal and frame rails
- Cutting of tabs, clamps and rods



TRIM ROUTERS



- 51854 - .4 hp, 30,000 RPM, Rear Exhaust, 1-1/8"-18 male universal tool adaptor threads.
- 51857 - .7 hp, 20,000 RPM, Rear Exhaust, 1-3/8"-18 male universal tool adaptor threads.
- All models have 1/4" Collets, for use with 1/4" shank bits.

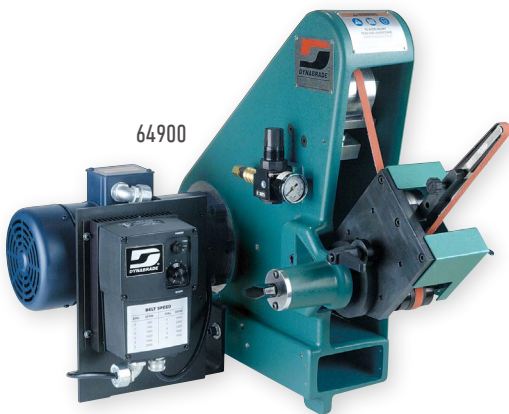
MANUFACTURING APPLICATIONS

- Used with jigs and tooling fixtures to make repeatable cuts with tight tolerances on complex shapes
- Utilized on materials such as carbon fiber, composite and aluminum skins



ELECTRIC VERSATILITY GRINDERS

A bench-mounted belt tool ideal for bringing small workpieces to the sanding belt used for deburring turbine blade segments. Versatility Grinders power 72" abrasive belts in widths from 1/4" to 2", providing a wide variety of finishing solutions. Ideal for use on castings and forgings, turbine blades, medical implants, investment castings and more. Adjustable air belt tensioning provides constant control. Includes efficient through-housing 4" vacuum port for dust control with optional vacuum scoop (64932).



- 64900 - 1 hp, 115 V(AC), 1 Phase, 50/60 Hz, 600 to 4,000 SFPM, for 1/4"-2" wide by 72" long belts.



- 64881 - 1 hp, 230 V(AC), 1 Phase, 50Hz, 600-4,000 SFPM, for 1/4"-2" wide by 72" long belts. CE certified.

DOWNDRAFT SANDING TABLES

The new Dynabrade metal construction Industrial Downdraft Table is an excellent choice for a facility's dust collection needs. Ideal for use with vacuum or non-vacuum tools, this table presents itself as the easy answer to keeping a work cell clean while allowing the operator to breathe in a healthy environment throughout their workday.



METAL CONSTRUCTION DOWNDRAFT TABLE

- Dual filtration - accepts MERV 8 pleated paper filters, 20" wide by 25" long (model 64700 includes 3).
- Each model also includes one pre-filter blanket.
- Sound/vibration isolation system.
- Two convenient dust-tight electric outlets.
- Rhino Linings® coated tabletop surface is durable and anti-slip.

AVAILABLE ACCESSORIES

- Tool and airline storage system
- Light bar assembly (above lighting and surface lighting available)
- Accessory panel with filter/lubricator and manifold
- Magnetic accessory storage shelf
- Disposable glove dispenser
- Towel holder



INDUSTRIAL VACUUM SYSTEMS

CLEAN AIR SOLUTIONS FOR HEALTH, SAFETY & COST SAVINGS

Dynabrade Sanding Systems tackle a variety of applications from everyday shop cleanup to demanding sanding applications. The combination of multi-stage HEPA filtration, vacuum hose conductivity and certified Division 1 and Division 2 vacuums distinguish Dynabrade from competitors. Downdraft systems further contribute to an optimal work environment by assuring the efficient and safe capture of various workplace dust when working on large or oddly shaped pieces. Beyond cleanliness and safety, manufacturers using Dynabrade clean air solutions realize significant savings in abrasive spending, process time improvements, personal protective equipment and other costs savings associated with rework.

MEGA-RAPTOR VAC®

- Designed for dry collection in high-volume industrial applications.
- Self-cleaning HEPA filtration.



DIVISION 2

- Conductive vacuum assembly supports Class II, Division 2 Location - certified.
- Supports two operators simultaneously.



DIVISION 1

- Conductive vacuum assembly supports Class II, Division 1 Location - certified.



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