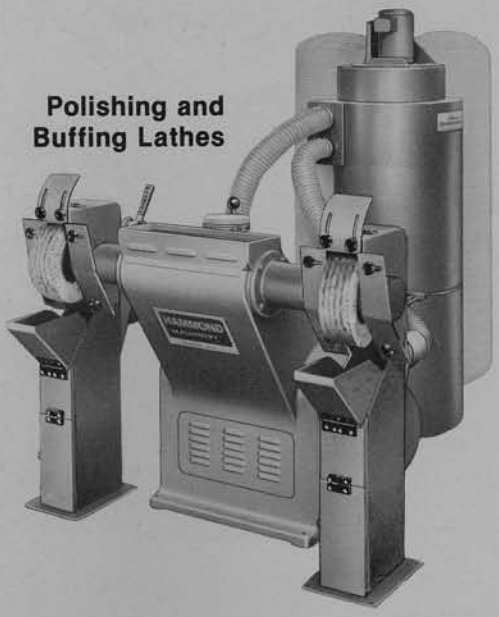
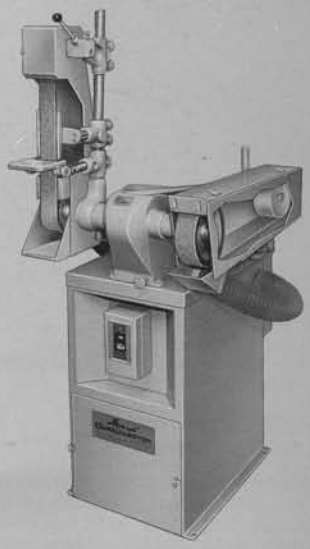
Polishing and
Buffing Lathes

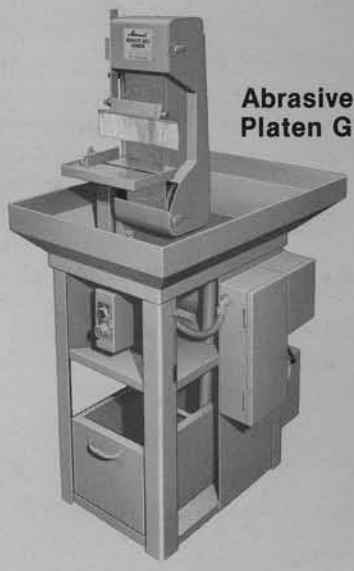


Hammond

# ABRASIVE BELT GRINDERS POLISHING AND BUFFING LATHES



Universal Abrasive
Belt Grinders



Abrasive Belt
Platen Grinders

Hammond Machinery Inc
KALAMAZOO • MICHIGAN

Catalog BP-315

# FINISHING INFORMATION

## ABRASIVE BELT GRINDER Operations—

Abrasive Belt Grinders cover three broad finishing areas:

- *Contact Wheel* for polishing, deburring and chamfering.
- *Flexible Belt* for contours.
- *Platen* for flat surfaces.

Sometimes too much is expected of a platen grinder with a pressure grinding mechanism. Relative to platen size, only a small area of ferrous material can be ground. The area increases with softer materials. Carbide is the only highly wear resistant facing for pressure grinding. Platen grinders do not provide the precision of surface grinders or stock removal of milling machines. These few limitations are mentioned to discourage the occasional and not obvious overuse of belt machines with power feed. For handwork, belt grinder limitations are very few and are very obvious.

In general, abrasive belt grinding will perform a host of operations faster than any other method. For instance, a contact wheel belt grinder will remove metal twice as fast as a wheel grinder. Actually, most contours, edges and flats can be finished in the fastest possible way with abrasive belt machines.

## POLISHING and BUFFING Operations—

The polishing and buffing trade uses certain terms and equipment for its basic operations. These are described as follows:

**ROUGHING** (or Grinding) means coarse polishing with a coarse abrasive belt. This is usually done to remove excess material or to remove defects before final polishing.

**POLISHING** means surface improvement with a fine or medium abrasive belt. This is usually in preparation for final finishing.

**BUFFING** is often the final finishing operation. Usually a cloth or sisal wheel is used with a buffing compound. Sometimes buffing is two operations — cut buffing to remove polishing scratches and color buffing for high luster. Some materials and surfaces can be buffed without prior polishing.

**HP for POLISHING or BUFFING.** The first consideration in choosing a lathe is horsepower. For polishing this can be estimated as follows:

For Roughing — 2 to 4 HP per inch of abrasive belt width;

For Medium Polishing — 1 to 2 HP per inch of belt width.

For Buffing — bear in mind that buffing generally requires twice the HP as roughing for the same application.

When in doubt about HP for either polishing or buffing, choose the next highest HP.

**SINGLE or VARIABLE SPEED.** Both roughing and polishing can be done on a single speed lathe if the spindle RPM is correct for the application and if the contact wheels are the same diameter. For using different diameter wheels, choose a variable speed lathe.

Buffing is more efficient with a variable speed lathe because the buff surface speed can be maintained as the buff wears. Consequently the production rate and quality of finish are maintained, and the cost of buffs and compounds is minimized.

Buffing usually requires higher speeds than roughing or polishing. When these operations are mixed together, a variable speed lathe is necessary.

**SINGLE or DOUBLE SPINDLE.** A single spindle lathe is always satisfactory for one man but only for two if they are both doing the same job with the same size wheel. Time is lost when one has to stop the lathe to change a buff or abrasive belt. For two men, a two spindle variable speed lathe is the best choice so that each can always operate independently and at the proper wheel speed.

**ABRASIVE BELTS, BUFFS, Etc.** for more information about belts, wheels, compounds, etc., please contact the specialists who supply them.

# OPERATE SAFELY

Everyone wants to operate safely and for that purpose we mount Caution plates on our machines.

The Guard and Wheel Danger plate provide warnings about polishing and buffing. Attention must always be given to guarding, safe wheel speeds (see chart below) and eye protection during operation. Electrical switches must be turned off during wheel or belt changing and maintenance. Further, a grinding (hard) wheel must never be used on any machine described in this catalog.

The Combustion Danger plate warns about the ignition, combustion and explosion hazards of collected particles. The danger is particularly great with non-metallic and non-ferrous particles and flammable substances.

The introduction of heat, sparks or fire must be strictly avoided. Also there could be unforeseen ignition. Accumulations must be avoided. Thus the collection system and collector must be cleaned often.

It is common practice to connect abrasive belt machines and polishing or buffing machines to independent dust collectors or to a central collecting system. In either case the warnings of the Combustion Danger plate must be heeded. Also, never connect a lathe for combined polishing and buffing to a single dust collector. Mixing hot grindings with lint can cause fire.

Everyone wants safe operation. Heed the warnings on our Caution plates, such as the following:

**CAUTION**

**GUARD AND WHEEL DANGER**

- KEEP ALL MACHINE GUARDS IN PLACE AND CLOSED DURING OPERATION.
- KEEP WORK REST ADJUSTED LESS THAN 1/8 INCH FROM ABRASIVE SURFACE. SPARK DEFLECTOR WITHIN 1/16 INCH.
- MOUNT GRINDING (HARD) WHEELS IN GUARDS DESIGNED FOR THEIR USE. NEVER IN AN EXHAUST HOOD OR ON OPEN SPINDLE.
- DO NOT EXCEED WHEEL MANUFACTURER'S MAXIMUM SAFE RPM.
- FLEXIBLE WHEELS (BUFFS) CAN SEIZE WORK-PIECE FROM OPERATOR'S CONTROL. WHERE PRACTICAL—USE SAFEGUARDS.

---

- DISCONNECT POWER FOR: WHEEL/BELT CHANGE OR MAINTENANCE.
- EYE PROTECTION MUST BE USED WHEN THIS MACHINE IS OPERATING.
- COMBUSTIBLE DUSTS (LIKE ALUMINUM) CAN EXPLODE—PREVENT IGNITION SOURCES—CLEAN COLLECTION SYSTEM FREQUENTLY.
- FAILURE TO HEED THESE WARNINGS CAN RESULT IN SERIOUS INJURY.

**CAUTION**

**COMBUSTION DANGER**

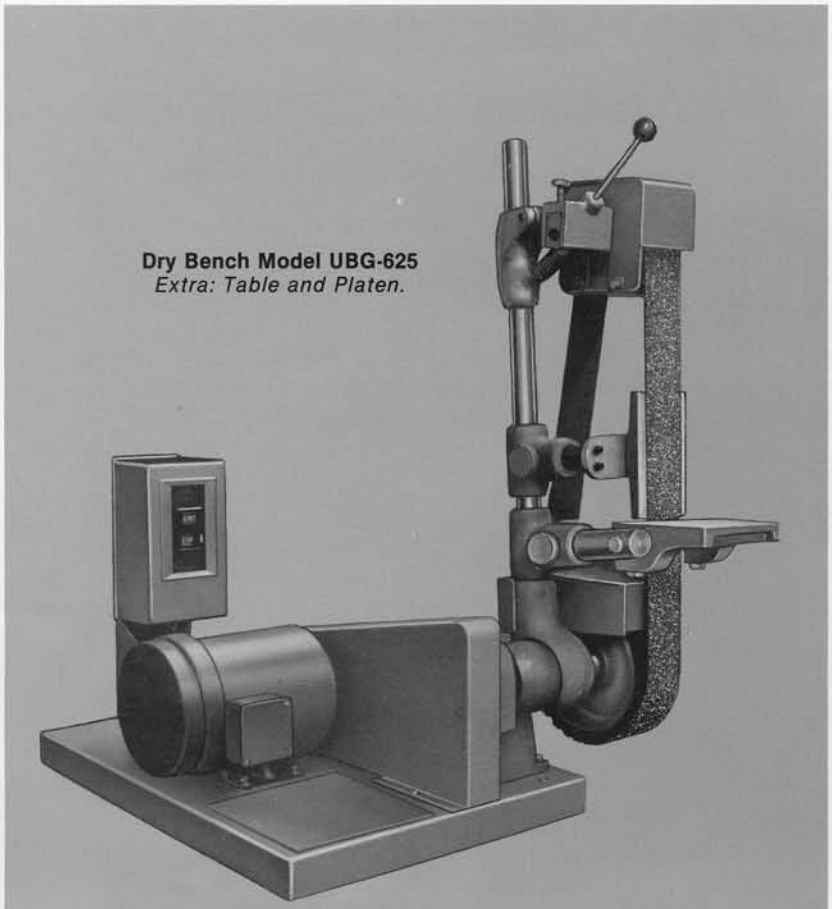
- MOST DUSTS ARE COMBUSTIBLE. SEE MATERIAL SAFETY DATA SHEETS FOR COMBUSTIBILITY OF A SPECIFIC DUST.
- NON-FERROUS METAL DUSTS ARE PARTICULARLY HAZARDOUS. EXAMPLES: ALUMINUM, MAGNESIUM, TITANIUM, ZIRCONIUM. (NEVER COLLECT MAGNESIUM IN A DRY DUST COLLECTOR).
- NEVER COLLECT SPARK-GENERATING MATERIAL IN THE SAME DUST COLLECTOR WITH COMBUSTIBLE MATERIAL. EXAMPLE: COLLECTING BOTH STEEL AND ALUMINUM DUST.
- NEVER USE SPARK-GENERATING WORK-HOLDERS. EXAMPLE: POLISHING ALUMINUM PARTS HELD IN STEEL FIXTURES.
- NEVER USE FLAMMABLE FINISHING LUBRICANTS.
- NEVER USE FLEXIBLE HOSE FOR LONG DUCT RUNS.
- NEVER ALLOW UNUSUAL SOURCES OF IGNITION TO ENTER THE COLLECTION SYSTEM. EXAMPLES: CIGAR BUTTS, WELDING SPARKS OR FIRE.
- EMPTY DUST COLLECTOR BINS, DRUMS AND BAGS VERY FREQUENTLY.
- CLEAN HOODS, DUCTS AND MACHINERY REGULARLY.

## Abrasive Belt Polishing Lathes
## Recommended Speed Ranges for Metal Working

| Contact Wheel Diameter | Recommended Spindle RPM Range | SFPM |
|---|---|---|
| 6" | 1500 - 3000 | 2356 - 4712 |
| 8" | 1500 - 3000 | 3142 - 6283 |
| 10" | 1200 - 2500 | 3142 - 6545 |
| 12" | 1200 - 2500 | 3769 - 7854 |
| 14" | 1000 - 2000 | 3665 - 7330 |
| 16" | 1000 - 2000 | 4189 - 8378 |

**CAUTION: Do Not Exceed Wheel Manufacturer's Maximum Safe Speed.**

# UNIVERSAL ABRASIVE BELT GRINDERS



**Dry Bench Model UBG-625**
*Extra: Table and Platen.*

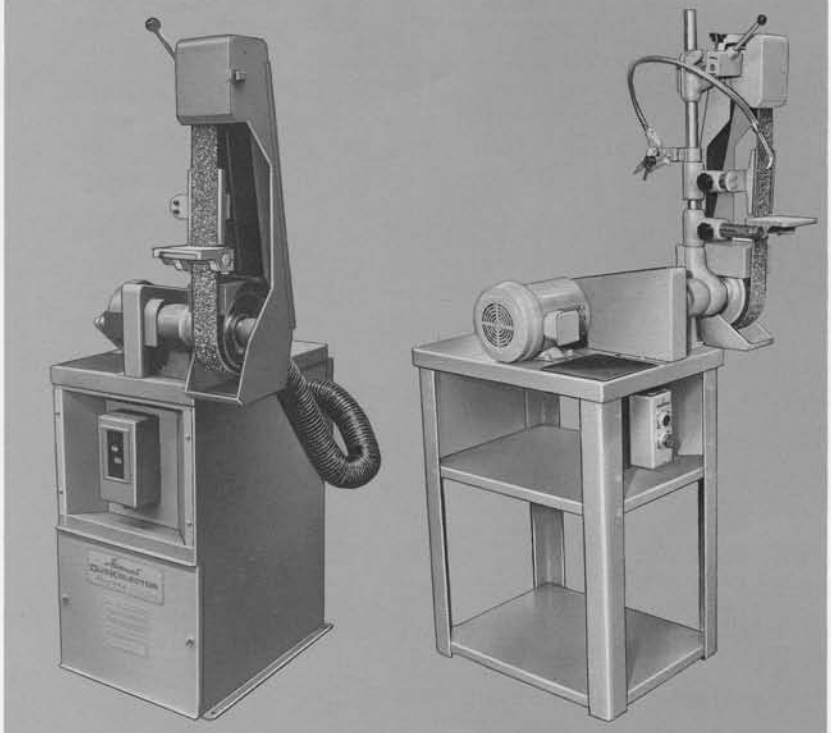
## SINGLE HEAD MODELS

The dry bench Model UBG-625 can operate vertically, horizontally or any angle in between. Free belt and contact wheel grinding operations can be performed. The grinding head is off-set from the bench plate to allow greater access to the contact wheel.

A close abrasive belt guard is available as extra. The guard shown in the lower left is designed to give the operator as much access to the work areas as possible. The adjustable dust scoop has a friction hinge so it falls away if a part is accidentally dropped.

Other Extra Equipment includes: Table, platen and FDK-4 DusKolector Base Unit.

The wet floor model UBG-625W is shown at lower right. An air pump, coolant tank, closed belt guard, floor stand and magnetic control are standard.



**Dry Model UBG-625**
*Extra: FDK-4 DusKolector Base Unit, including Closed Belt Guard, Table and Platen.*

**Wet Vertical Model UBG-625**
*Extra: Table and Platen.*

## Standard Equipment and Specifications

Abrasive Belt Size (belts not furnished) . . ½ to 2½ x 60"
Abrasive Belt Speed . . . . . 4300 SFPM
Arbor . . . . . ¾ dia. x 2" between flanges
Rubber Contact Wheel . . . . . 8 dia. x 2½" face
Bench Plate
Motor . . . . . 1 HP, 1800 RPM, TEFC, 230/460v, 3ph, or 115/230v, 1 ph, 60 Hz Motor
Controls . . . . . Dry Model-Manual PB with overload and low voltage protection
Wet Model-Magnetic with 115v, control circuit
Floor/Bench space . . . . . 26 x 31"
Shipping Weight Lbs. . . . . Bench 130, Floor 180, with FDK-4 340, Wet 220

## Extra Equipment

For Dry Model Only:

- Closed Abrasive Belt guard and Dust Scoop with 3" Exhaust Outlet.
- Floor Stand.
- Cabinet Model FDK-4 DusKolector Base Unit including Closed Abrasive Belt Guard and Dust Scoop.
- Magnetic Control with 115v control circuit (Mounted on Floor Model Only).

For Both Dry and Wet Models:

- 8 x 4" Table, 3 x 6" Platen, Rubber Contact Wheel 8 dia. x 3" face.
- Special Electrical Specifications.

**FOR SAFETY INFORMATION SEE PAGE 3**

# UNIVERSAL ABRASIVE BELT GRINDERS

## DOUBLE HEAD MODELS

The dry UBG Double Head Models at right have 2 HP motors, closed abrasive belt guards and floor stand as standard equipment.

The Cabinet Model FDK-4 DusKolector/Base Unit is available as an extra on the Model UBG-62-65 only.

These models provide many ways of using abrasive belts including contact wheel grinding, platen grinding and flexible belt finishing. One machine takes care of the grinding or polishing of flat or contour surfaces, edges, corners and the removal of burrs.

Also a double head machine can be equipped with different grit belts for both grinding and polishing. Or it can be equipped with a head for buffing and a head for abrasive belt polishing.

A belt grinder will remove stock twice as fast as a wheel grinder, also it will polish and finish much more smoothly.

## Standard Equipment and Specifications

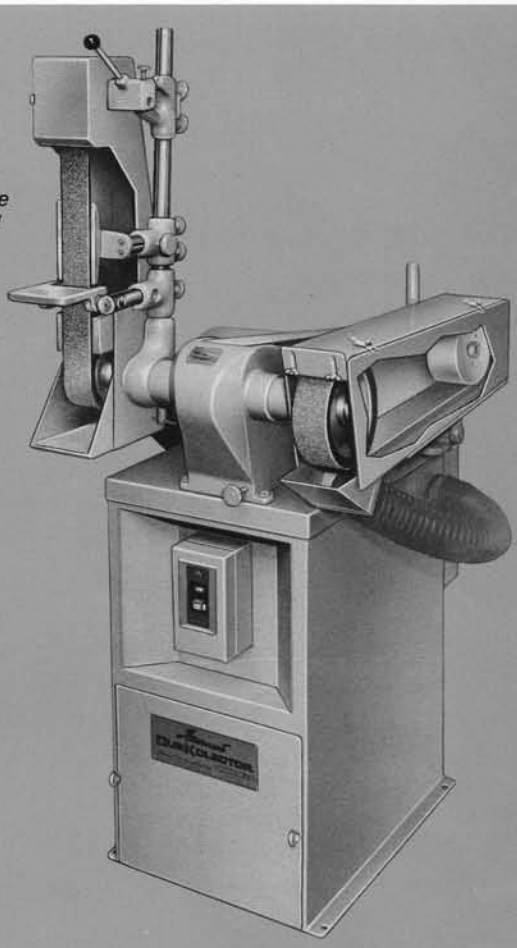
Abrasive Belt Size (belts not furnished) . . . . . 2½ x 60"
Abrasive Belt Speed . . . . . 5500 SFPM
Buff (not furnished) . . . . . 8" dia.
Arbor . . . . . ¾ dia. x 2" between flanges
Distance Between Wheels . . . . . 17"
Rubber Contact Wheel . . . . . 8 dia. x 2½" face
Floor Stand.
Closed Guards and Scoops with 3" dia. Exhaust Outlets.
Motor . . . . . 2 HP, 1800 RPM, TEFC, 230/460v, 3 ph, 60 Hz and Manual PB with overload and low voltage protection.
Floor Space . . . . . with Floor Stand - 31 x 33"
with FDK-4* - 37 x 33"
Shipping Weight Lbs. . . . . with Floor Stand 340
with FDK-4* 450

## Extra Equipment

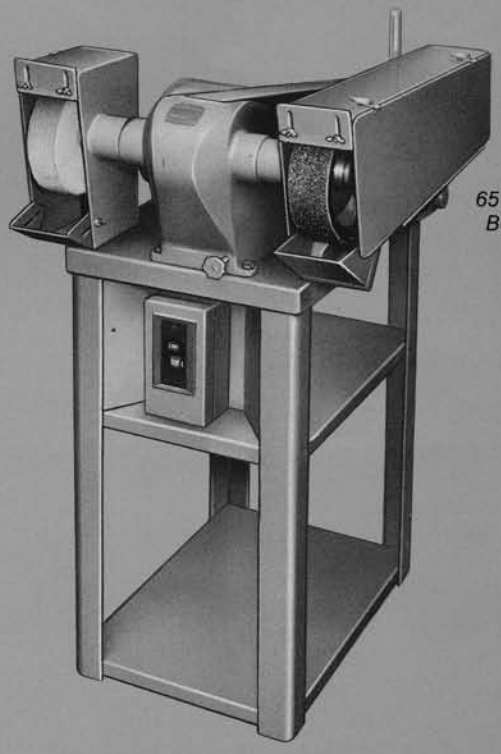
- 5 x 8½" Table**.
- 3 x 6" Platen**.
- Rubber Contact Wheel - 8 dia. x 3" face.
- Cabinet Model FDK-4 DusKolector/Base Unit.*
- Magnetic Control with 115v control circuit.
- Special Electrical Specifications.

*UBG-62-65 only.
**62 Head only.

**Independent DusKolectors are available for all Dry Abrasive Belt Grinders**

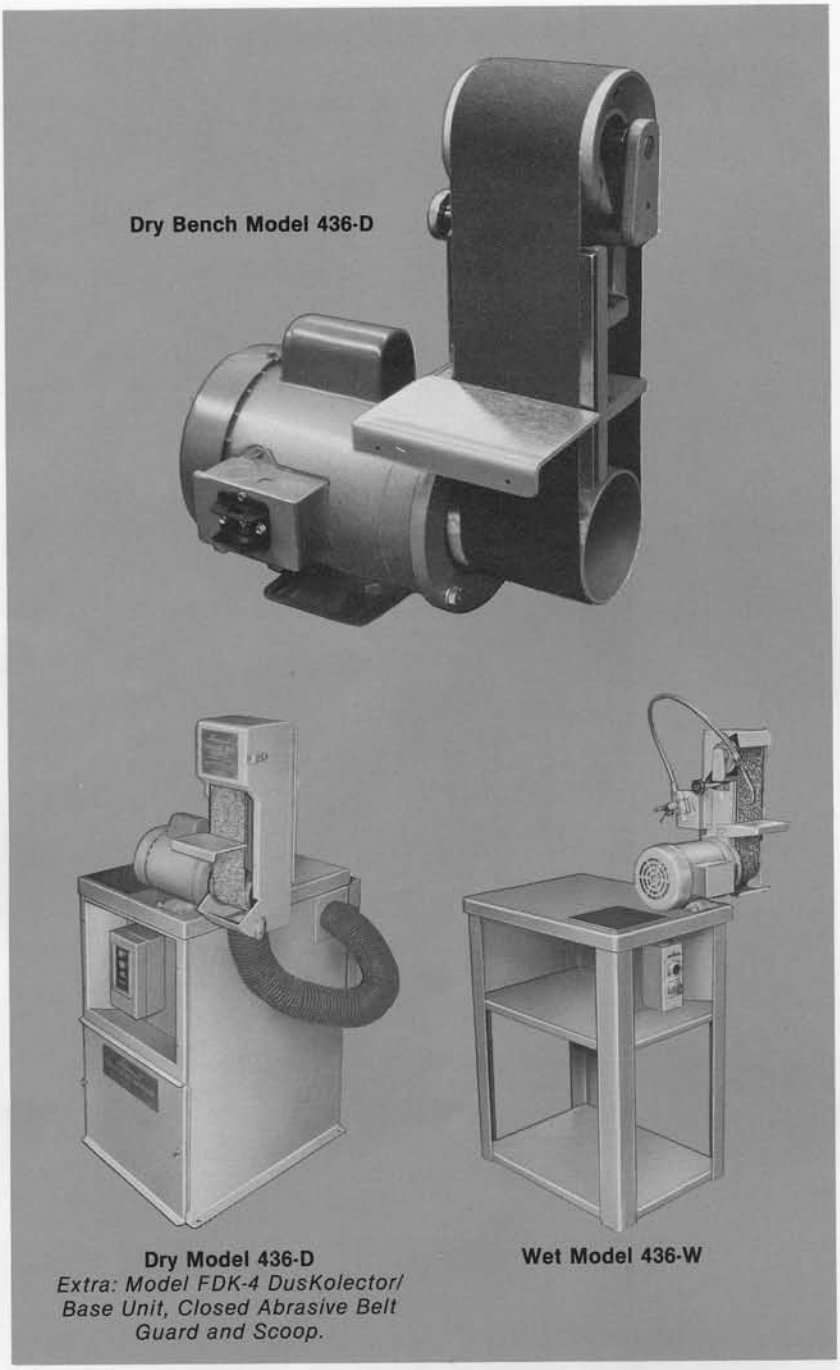



**Model UBG-62-65**
*Extra: Model FDK-4 DusKolector/ Base Unit, Table and Platen.*




**Model UBG-8-65**
*Do not attach this Model UBG-8-65 to a single dust collector because of the danger of fire from mixing hot grindings with buffing lint.*

# 4"ABRASIVE BELT PLATEN GRINDER




**Dry Model 436-D**
*Extra: Model FDK-4 DusKolector/ Base Unit, Closed Abrasive Belt Guard and Scoop.*

**Wet Model 436-W**

The Model 436-D is a rugged 4" abrasive belt platen grinder. The cast iron frame can be positioned in the vertical or horizontal position. The steel platen is reversible front to back and top to bottom for maximum use. The abrasive belt is spring tensioned and the stainless steel tracking mechanism is quick, positive and conveniently located. The 1/2 HP, 3600 RPM motor produces 3600 SFPM.

The 436-W wet model has the same basic features as the 436-D. In addition, the 436-W comes with a floor stand, air pump, coolant tank and magnetic control.

## Standard Equipment and Specifications

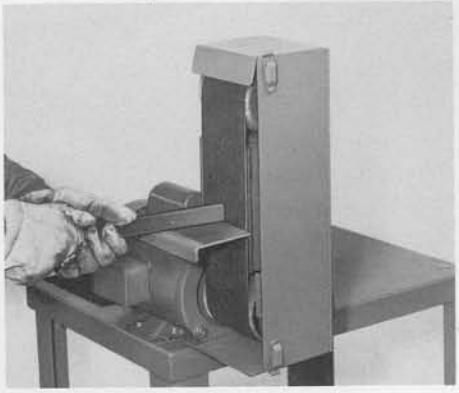
Abrasive Belt Size (belts not furnished) . . . . . 4 x 36"
Abrasive Belt Speed . . . . . 3600 SFPM
Abrasive Belt Working Surface . . . . . 4 x 6"
Tilting Table . . . . . 3 x 5½"
Motor . . . . . 1/2 HP, 3600 RPM, TEFC,115/230v, 1 ph, or 230/460v, 3 ph, 60 hz
Controls . . . . . Dry Models-1 ph, Toggle Switch, 3 ph, Manual P.B. with overload and low voltage protection. Wet Model-Magnetic Control with 115v Control Circuit
Floor Space . . . . . Bench 24 x 21" Floor 24 x 25", with FDK-4 36 x 29"
Shipping Weight Lbs. . . . . Bench 65, Floor 160, with FDK-4 320, Wet 170

## Extra Equipment

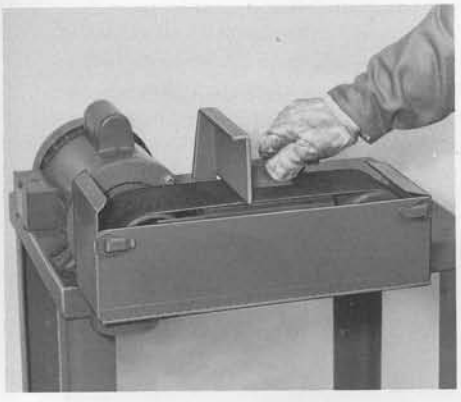
For Dry Model Only:
- Closed Abrasive Belt Guard.
- Bench Plate.
- Floor Stand.
- Cabinet Model FDK-4 Combination DusKolector/Base Unit including Closed Abrasive Belt Guard.
- Manual P/B with overload and low voltage protection (1 ph model only).
- Magnetic Control with 115v control circuit, (Mounted on Floor Model only.)

For all Models:
- Special Electrical Specifications.

## Applications



**Platen Grinding**
*In vertical position*



**Platen Grinding**
*In horizontal position*

# 4"ABRASIVE BELT PLATEN GRINDER WITH CONTACT WHEEL

The Hammond Model 448-D Dry Abrasive Belt Grinder provides 6" of platen grinding above the table. It also provides contact wheel grinding. These types of grinding can be done in either the vertical or horizontal position. Has 1 HP motor.

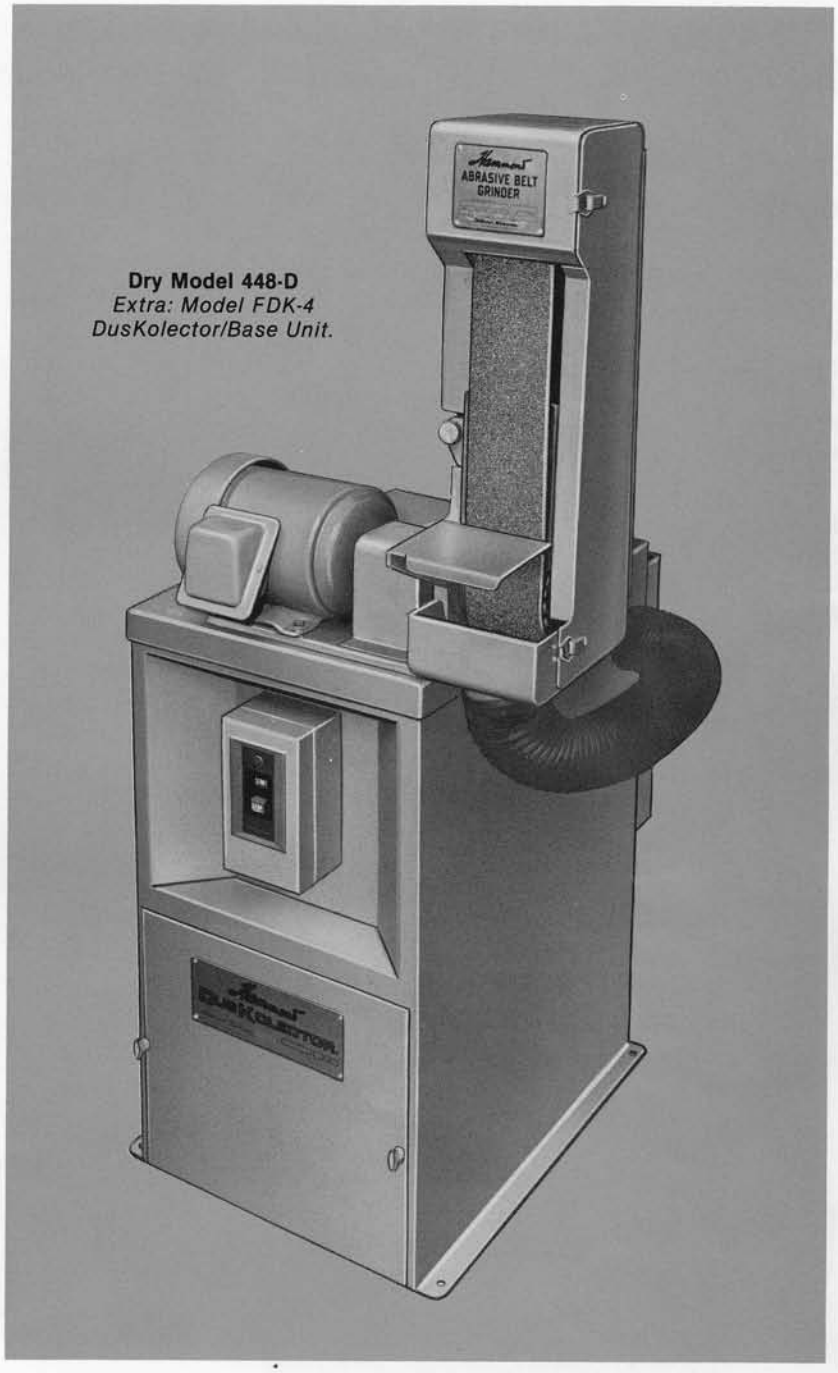
The bench model is available as standard with a closed abrasive belt guard and a bench plate.

## Standard Equipment and Specifications

Abrasive Belt Size (belts not furnished) . . . . . 4 x 48"
Abrasive Belt Speed . . . . . 1800 SFPM
Abrasive Belt Working Surface (Platen) . . . . . 4 x 6"
Rubber Contact Wheel . . . . . 4 x 4"
Tilting Table . . . . . 3 x 5½"
Bench Plate for Bench Model . . . . . 17½ x 24"
Closed Abrasive Belt Guard with 3½" Exhaust Outlet.
Motor . . . . . 1 HP, 1800 RPM, TEFC, 230/460v, 3 ph, 60 Hz or 115/230v, 1 ph, 60 Hz and Manual P.B. with overload and low voltage protection.
Floor Space . . . . . Bench 25 x 28"
Floor 33 x 28, with FDK-4 33 x 36"
Shipping Weight Lbs. . . . . Bench 150, Floor 250, with FDK-4 350

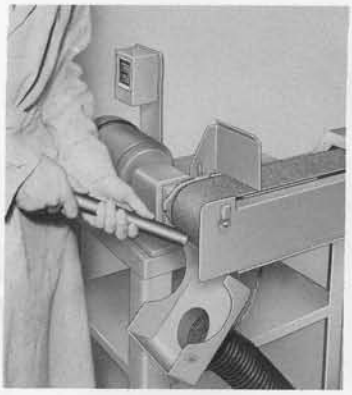
## Extra Equipment

- Floor Stand.
- Cabinet Model FDK-4 DusKolector/Base Unit.
- Magnetic Control with 115v control circuit. (Mounted on Floor Models only.)
- Special Electrical Specifications.




**Dry Model 448-D**
*Extra: Model FDK-4 DusKolector/Base Unit.*

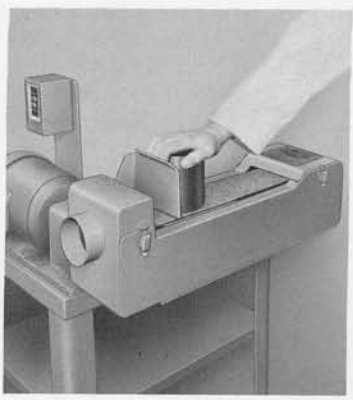
## Applications



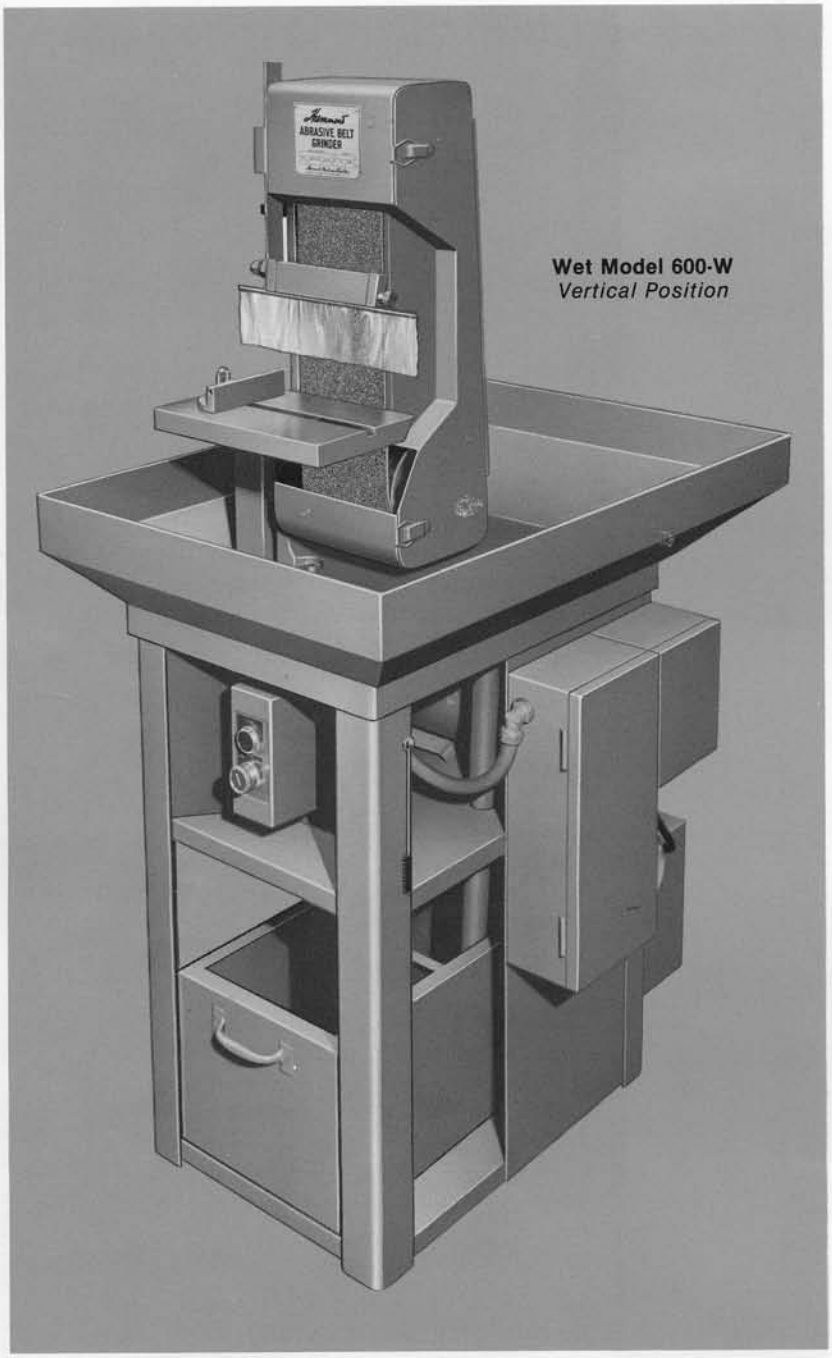
**Contact Wheel Grinding**
*In horizontal position*

**Contact Wheel Grinding**
*In vertical position*

**Platen Grinding**
*In vertical position*



**Platen Grinding**
*In horizontal position*



**Wet Model 600-W**
*Vertical Position*

# 6"ABRASIVE BELT PLATEN GRINDER

The Models 600-D Dry and 600-W Wet Abrasive Belt Grinders are 6" platen grinders with modern grinding features.

Both the dry and wet models have a 2 HP motor and can be operated in either vertical or horizontal position. Also the dry model can be equipped with a cabinet Model FDK-4 DusKolector/Base Unit in place of the floor stand.

The wet model is equipped with a pump and tank. The sprayer lays the water on the belt instead of splashing much of it off and thus keeps the work cooler. The sprayer curtain, pan and guard keep the operator and floor dry.

The guard door is recessed for right angle work. The belt tracking is convenient and a lever provides quick release of the spring belt tensioning for easy changing of belts. The steel platen is reversible top to bottom and front to back for maximum use.

The pulleys are dynamically balanced and the drive is V-belt.

## Extra Equipment

For Dry Model Only:

- Cabinet Model FDK-4 DusKolector/Base Unit.
- Magnetic Control with 115v control circuit.
- Special Electrical Specifications - all Models.

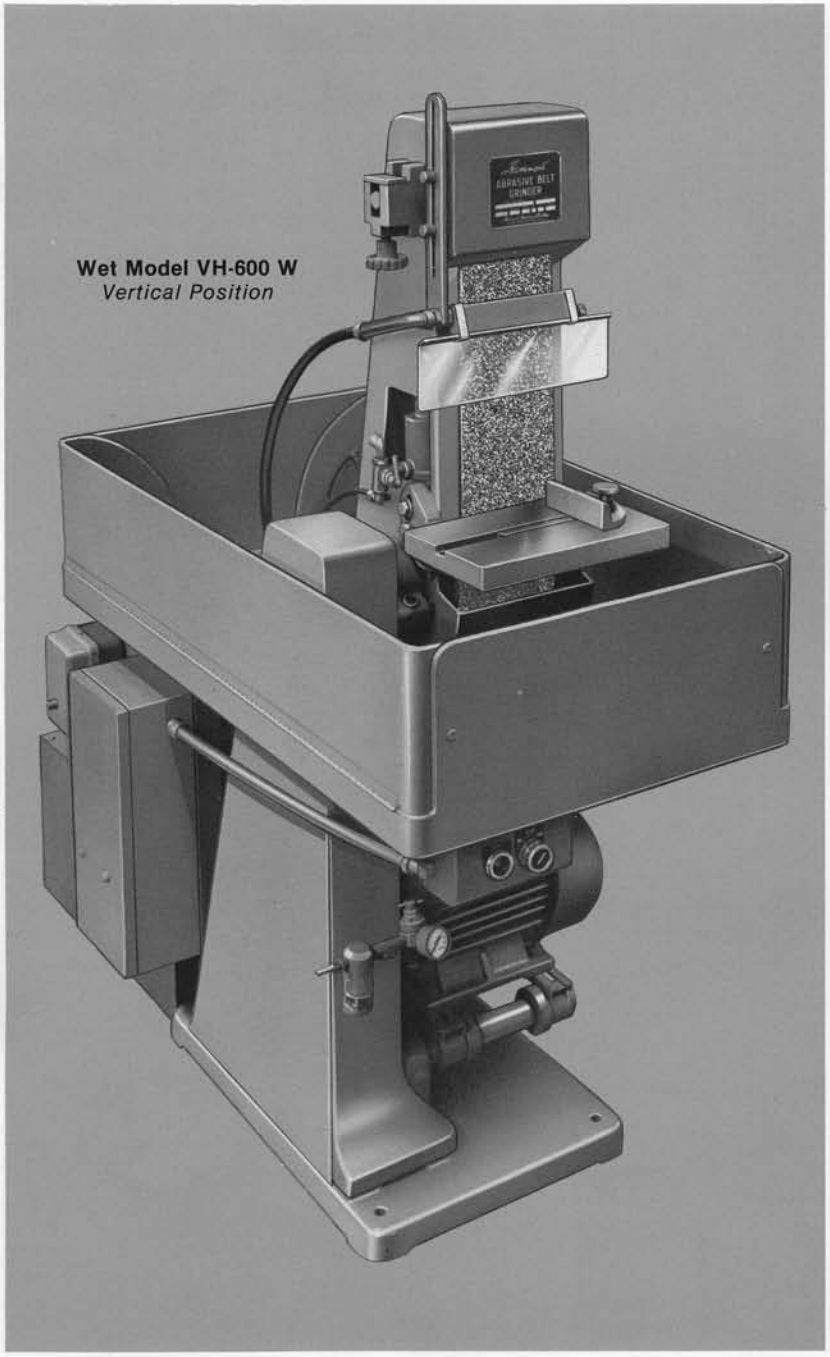
## Standard Equipment and Specifications

Abrasive Belt Size (belts not furnished) . . . . . 6 x 48"
Abrasive Belt Speed . . . . . 3400 SFPM
Abrasive Belt Working Surface . . . . . Dry Model 6 x 10"
Wet Model 6 x 7"
Tilting Table with Protractor . 7 x 11½"; 15° up, 45° down
Floor Stand
Exhaust Outlet, Dry Model . . . . . 4" dia.
Coolant Tank Capacity, Wet Model . . . . . 15 gal.
Motor . . . . . 2 HP, 1800 RPM, TEFC, 230/460v, 3 ph, 60 Hz
Controls . . . Dry Models - Manual P.B. with overload and low voltage protection
Wet Model - Magnetic Control with 115v control circuit

| | Floor Space | Net Wt. Lbs. | Ship Wt. Lbs. |
|---|---|---|---|
| Dry Model | 30 x 30" | 280 | 360 |
| Dry w/FDK-4 | 36 x 36" | 430 | 500 |
| Wet Model | 29 x 36" | 380 | 480 |

**Dry Model 600-D**
*Extra: Model FDK-4 DusKolector/Base Unit.*

# 6"ABRASIVE BELT PLATEN GRINDER



**Wet Model VH-600 W**
*Vertical Position*

The Models VH-600 D Dry and VH-600 W Wet are modern, all around manual platen grinders with air belt tensioning. They can be quickly changed from vertical to horizontal.

The dry model can be connected to a DusKolector. The wet model has a coolant tank, pump and a type of sprayer that lays the coolant on the belt instead of splashing much of it off. This keeps the work cooler. The sprayer curtain, guard and pan keep the operator and floor dry. Platen is reversible top to bottom.

The guard door is recessed for right angle work. Belt tracking and air tensioning are quick and positive. Air tensioning increases belt life. The pulleys are dynamically balanced and the drive is multi-V-belt.

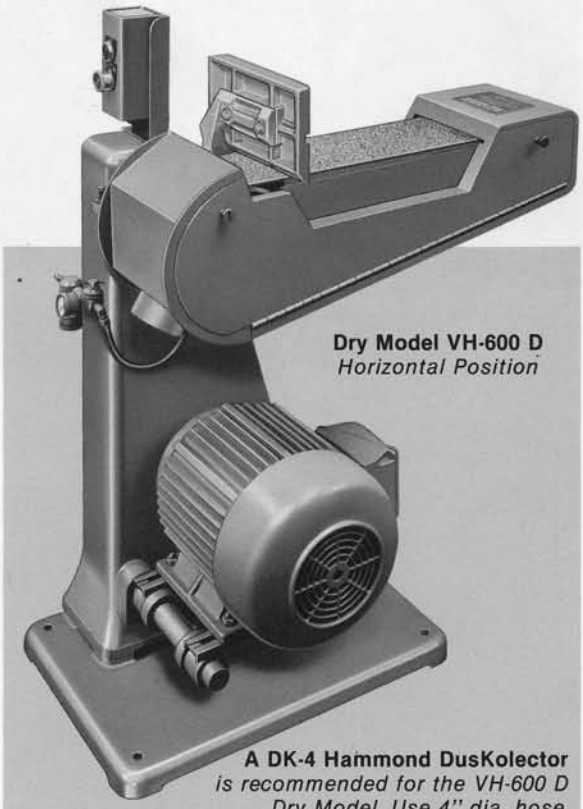
This model is built with a cast iron base and head for heavy duty manual grinding. A 3 HP motor is standard.

## Extra Equipment

- Carbide Platen Facing.
- DK-4 Hammond DusKolector for dry model.
- 5 HP, 1800 RPM, TEFC Motor.
- Special Electrical Specifications.

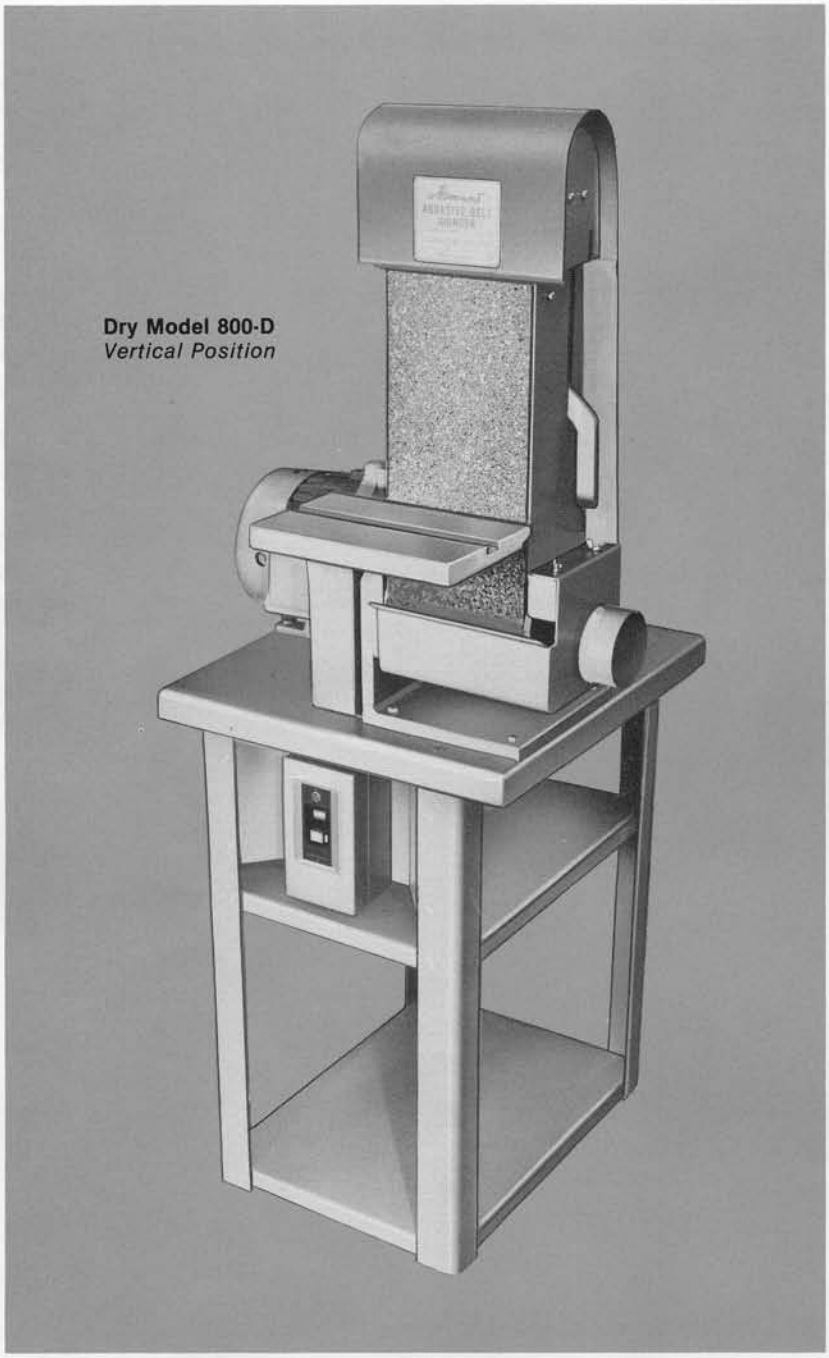
## Standard Equipment and Specifications

Abrasive Belt Size (belts not furnished) . . . . . 6 x 60"
Abrasive Belt Speed . . . . . 3400 SFPM
Abrasive Belt Working Surface . . . . . Dry Model 6 x 13½"
Wet Model 6 x 12"
Tilting Table with Protractor . 7 x 11½"; 15° up, 45° down
Exhaust Outlet, Dry Model . . . . . 4" dia.
Coolant Tank Capacity, Wet Model . . . . . 15 gal.
Motor . . . . . 3 HP, 1800 RPM, TEFC, 230/460v, 3 ph, 60 Hz
Magnetic Control with 115v control circuit.
Floor Space . . . . . Wet - 35 x 52"; Dry - 25 x 32"
Net Weight Lbs. . . . . Wet - 625; Dry - 435
Shipping Weight Lbs. . . . . Wet - 785; Dry - 590



**Dry Model VH-600 D**
*Horizontal Position*

**A DK-4 Hammond DusKolector**
*is recommended for the VH-600 D Dry Model. Use 4" dia. hose.*



**Dry Model 800-D**
*Vertical Position*

# 8"ABRASIVE BELT PLATEN GRINDER

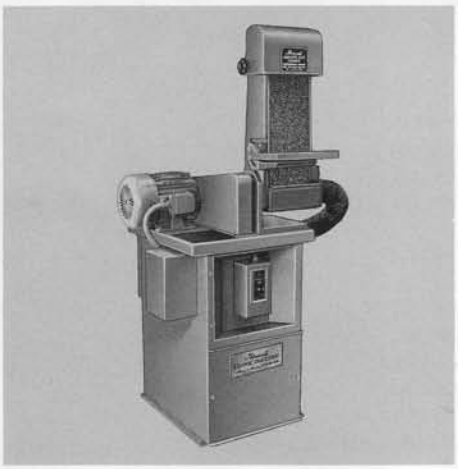
Model 800-D is an 8" manual production abrasive belt platen grinder. The heavy duty 5 HP, V-Belt drive produces 4500 SFPM. Vertical or horizontal operation with a steel platen that is reversible top to bottom and front to back. Both the spring tension and tracking control are quick, positive and conveniently located. The cast iron table tilts 15° up and 45° down and a protractor angle gauge is standard.

## Standard Equipment and Specifications

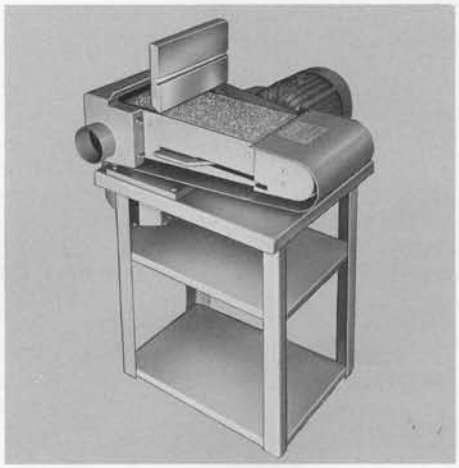
Abrasive Belt Size (belts not furnished) . . . . . 8 x 60"
Abrasive Belt Speed . . . . . 4500 SFPM
Abrasive Belt Working Surface . . . . . 8 x 11"
Tilting Table with Protractor . 7 x 11½"; 15° up, 45° down
Exhaust Outlet, Dry Model . . . . . 4" dia.
Motor . . . . . 5 HP, 1800 RPM, TEFC, 230/460v, 3 ph, 60 Hz
Manual P.B. with overload and low voltage protection.
Floor Space . . . . . 32 x 30"
Net Weight Lbs. . . . . 430
Shipping Weight Lbs. . . . . 500

## Extra Equipment

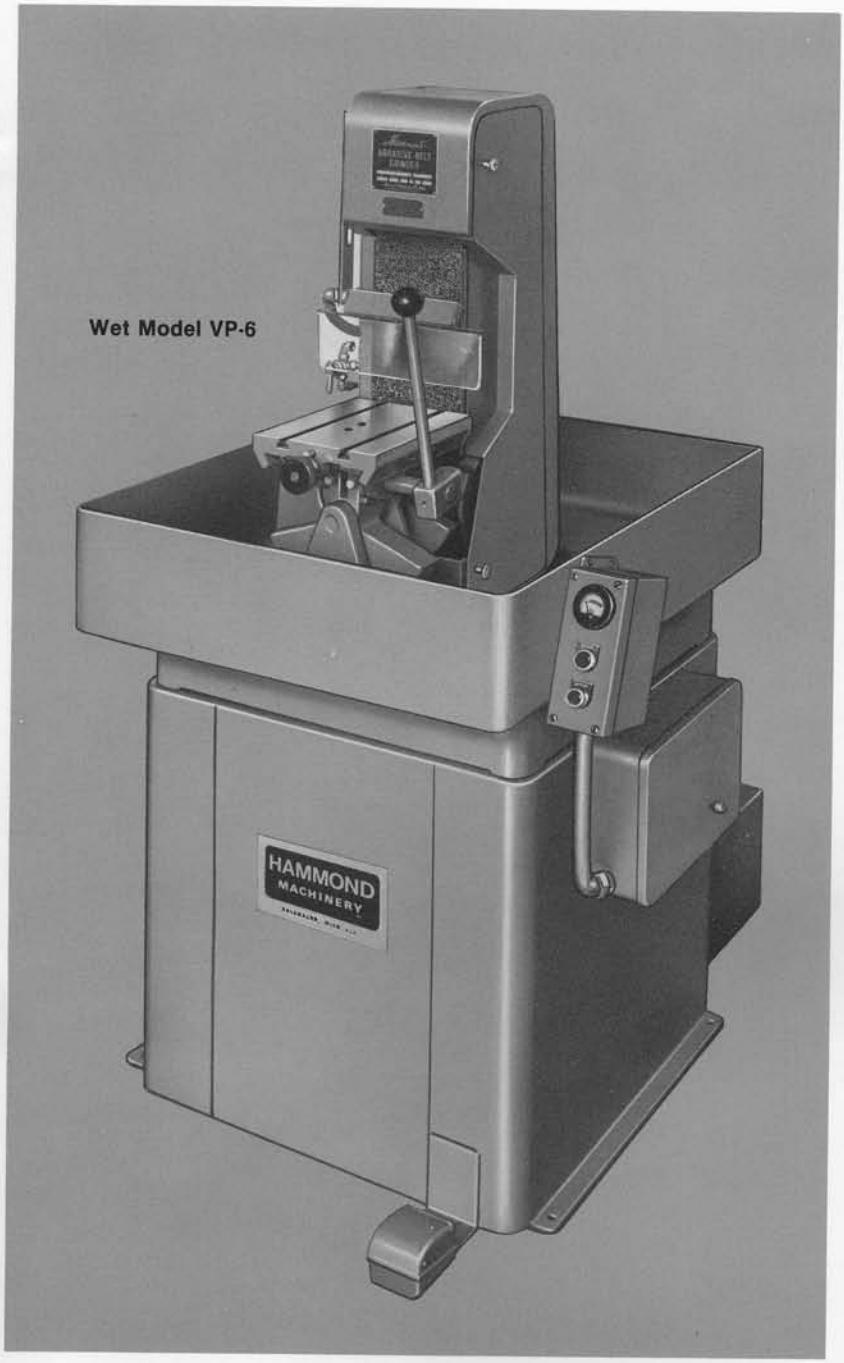
- Cabinet Model FDK-4 DusKolector/Base Unit.
- Magnetic Control with 115v control circuit.



**Dry Model 800-D**
*Extra: FDK-4 DusKolector*



**Dry Model 800-D**
*Horizontal Position*



Wet Model VP-6

# 6" WET ABRASIVE BELT PLATEN GRINDER

The Model VP-6 Vertical Wet Abrasive Belt Grinder has a semi-automatic tilting table as standard. The table has a foot-controlled air infeed and a lever for hand oscillation. The lever also tilts the table for inspection loading and unloading.

It has the exclusive Hammond water-cooled and lubricated platen which substantially reduces friction and heat. Carbide platen facing is available as an extra. Carbide is the only facing which stands up under high work pressure or continuous operation.

The coolant system includes a pump and tank with baffles and a type of sprayer which lays the coolant fully and evenly on the abrasive belt.

Belt tracking is sensitive and quick. Belt tensioning is done with an air cylinder which maintains uniform tension and increases belt life. The guard door is recessed for right angle work.

The main frame is a heavily ribbed cast iron structure, the pulleys are dynamically balanced and the drive is multi-V-belt.

This is a very advanced semi-automatic platen grinder which is a real producer.

## Extra Equipment

- Carbide Platen Facing.
- Special Electrical Specifications.
- 90° Indexing Semi-Automatic Table (see page 12).

## Standard Equipment and Specifications

| | |
|---|---|
| Abrasive Belt Size (belts not furnished) | 6 x 60" |
| Abrasive Belt Speed | 3400 SFPM |
| Abrasive Belt Working Surface | 6 x 9½" |
| Semi-Automatic Table Size | 8 x 10" |
| Table In-Feed Range | 1/2" |
| Coolant Tank Capacity | 25 gal. |
| Motor | 5 HP, 1800 RPM, TEFC, 230/460v, 3 ph, 60 Hz |
| Motor Load Ammeter. | |
| Magnetic Control with 115v control circuit. | |
| Floor Space | 36 x 44" |
| Net Weight Lbs. | 830 |
| Shipping Weight Lbs. | 990 |

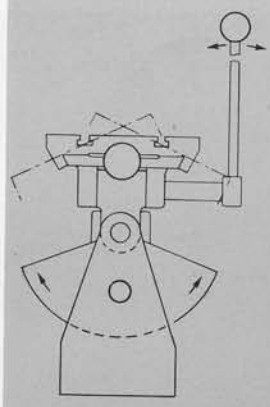


*Table with counter-weight is easily oscillated.*

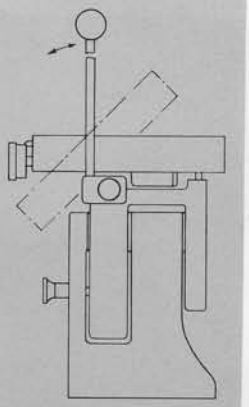


*Table tilts for easy inspecting, loading and unloading.*

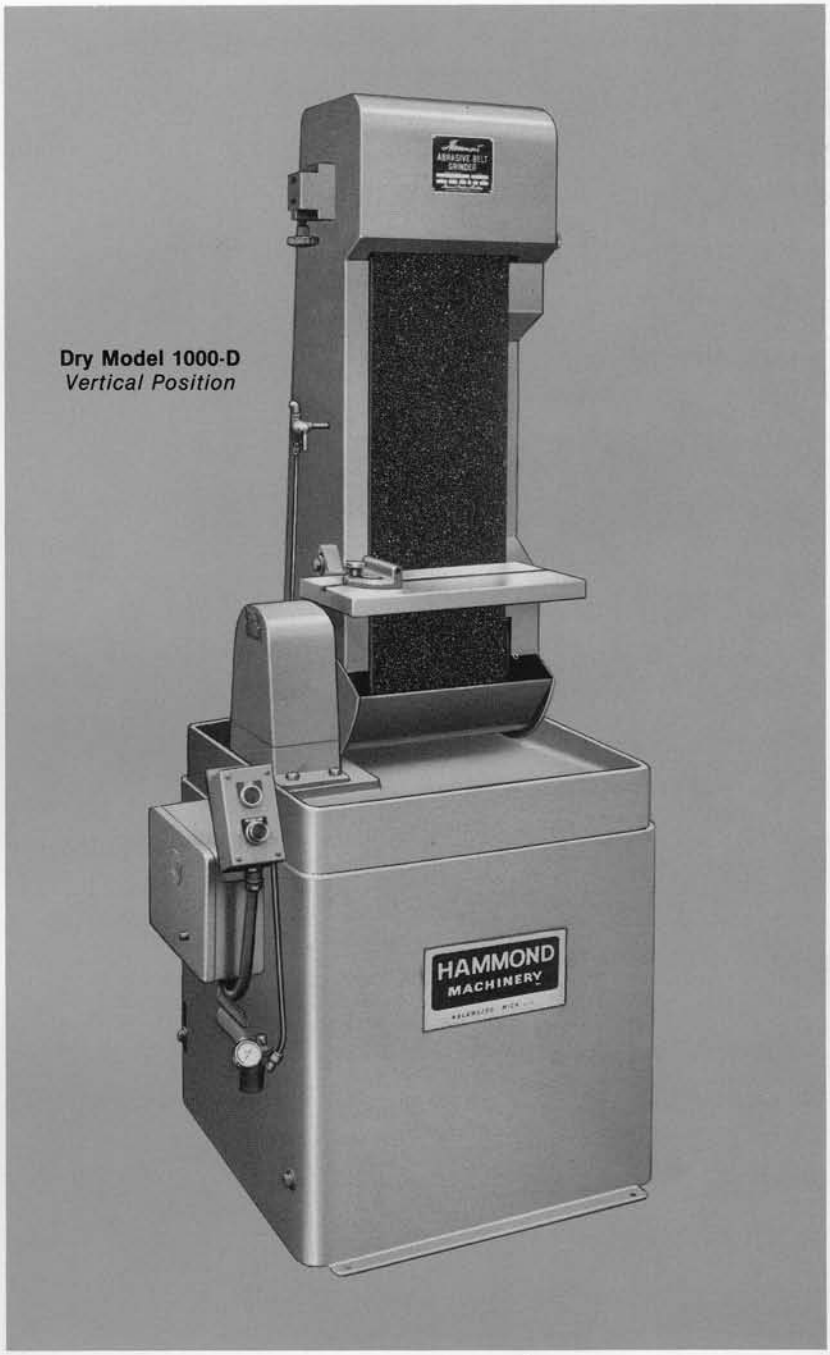
# 10" DRY ABRASIVE BELT PLATEN GRINDER

The Hammond Model 1000-D is a dry platen grinder for vertical or horizontal manual operation. It is equipped with a 7½ HP motor.

The belt tracking is convenient and the positive air tension increases belt life. The steel platen can be turned from back to front and the guard door is recessed for right angle work.

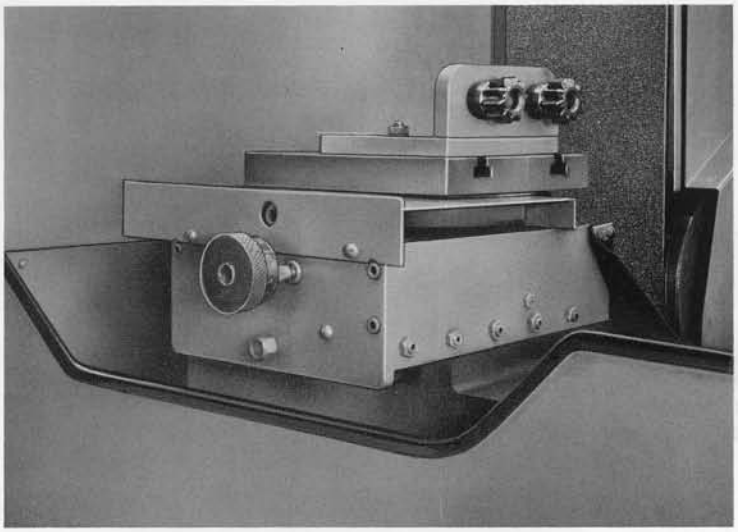
The head casting is heavily ribbed and the entire construction is very rugged. The pulleys are dynamically balanced and the drive is multi-V-belt.

The 1000-D can be connected to a Hammond DusKolector.



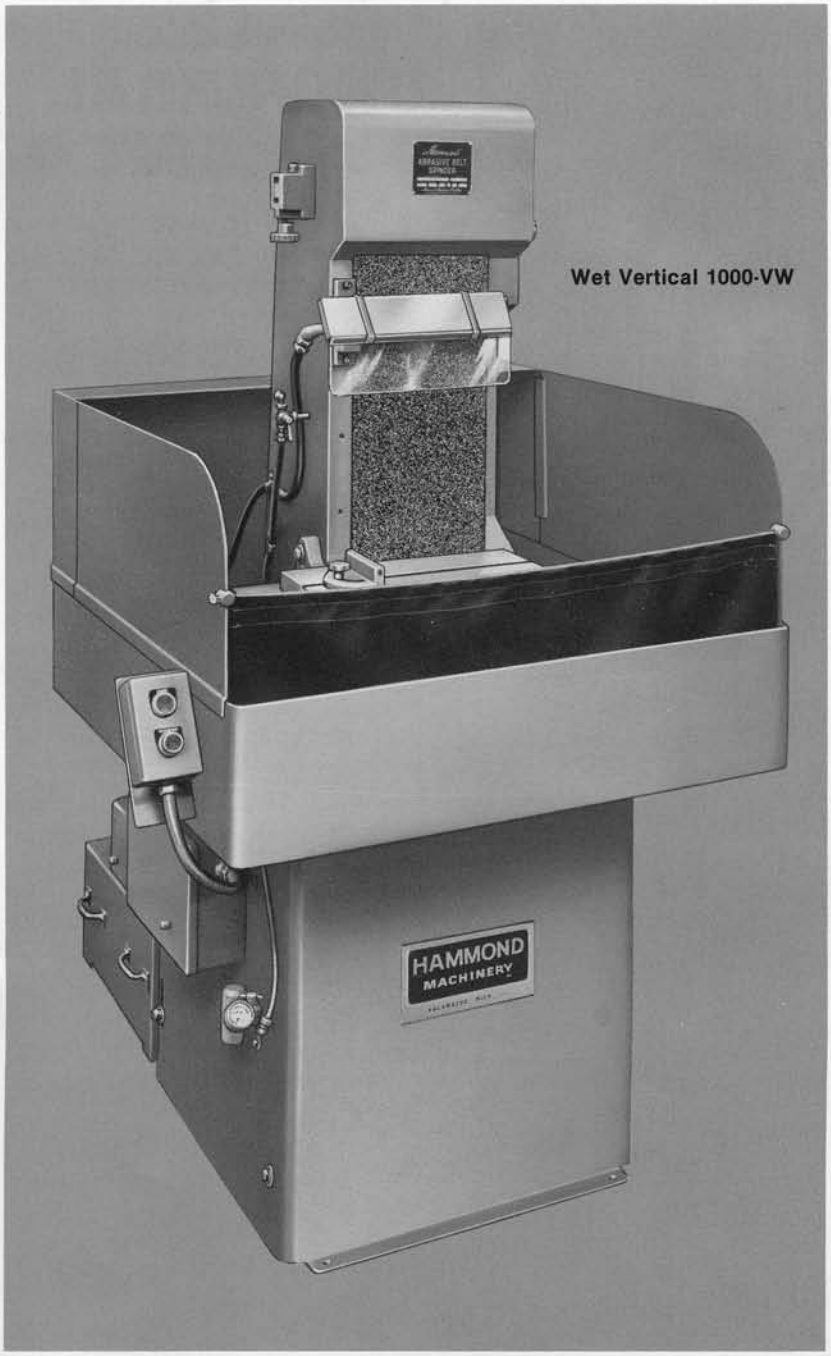

**Dry Model 1000-D**
*Vertical Position*

A power oscillating, automatic infeed, rotating table (90°) is available as extra on both the VP-6 (page 11) and 1000-VW. Shown in load/unload position on VP-6.



## Standard Equipment and Specifications

Abrasive Belt Size (belts not furnished) . . . . . 10 x 90"
Abrasive Belt Speed . . . . . 3400 SFPM
Abrasive Belt Working Surface . . . . . Dry Model 10 x 20"
Wet Model 10 x 16"
Tilting Table with Protractor . . . 9 x 16"; 15° up, 45° down
Exhaust Outlet, Dry Model . . . . . 6" dia.
Coolant Tank Capacity, Wet Model . . . . . 25 gal.
Motor . . . . . 7½ HP, 1800 RPM, TEFC, 230/460v, 3 ph, 60 Hz
Magnetic Control with 115v control circuit.



Wet Vertical 1000-VW

# 10" WET ABRASIVE BELT PLATEN GRINDER

The Hammond Model 1000-VW is a vertical, wet platen grinder for manual operation. The coolant system includes a pump and tank with baffles and a type of sprayer which lays the coolant evenly on the abrasive belt.

An exclusive spring mounted curtain stops splash at the front and flexes easily under the operator's arms. It can be raised or lowered to suit varying conditions.

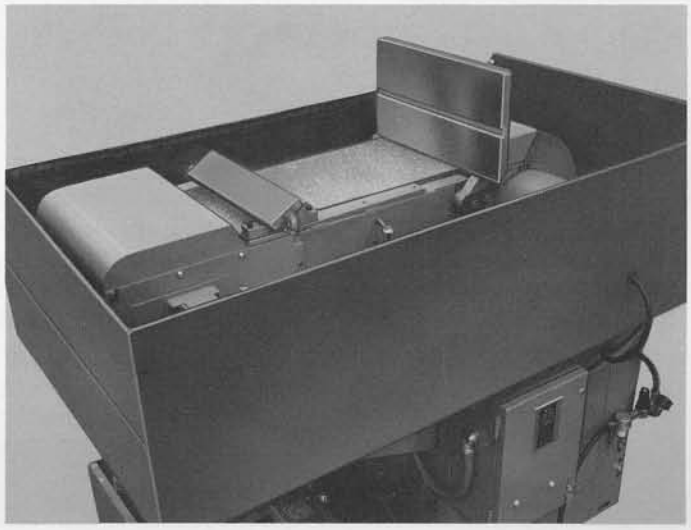
Basically the 1000-VW is the same as the 1000-D dry model plus being built for wet operation.

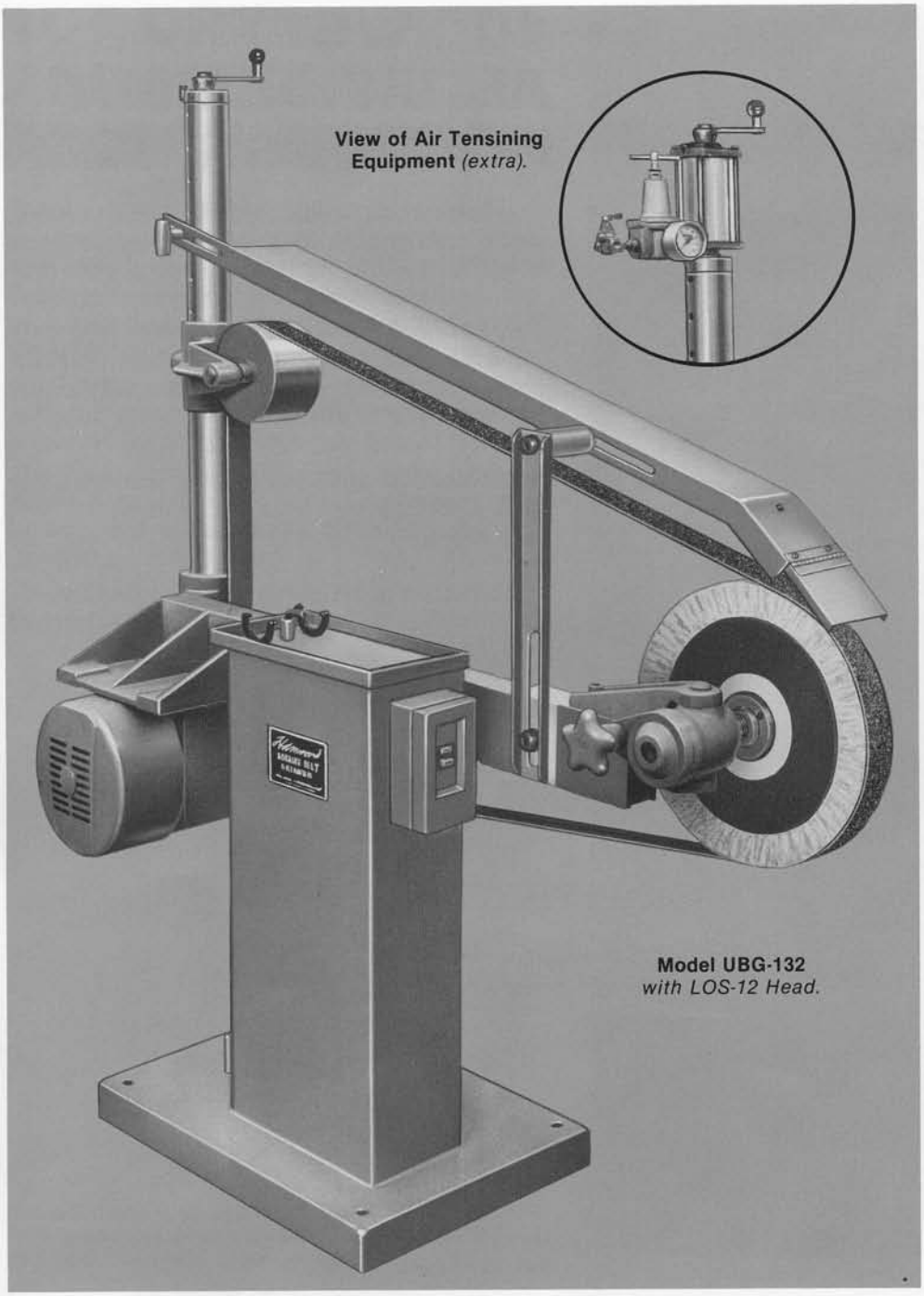
The 1000-HW shown below, is the same as the 1000-VW except it is designed for horizontal operation only.

Floor Space . . . . . Dry Model vert. 29 x 31"; horiz. 53 x 31"
Wet Model 43 x 58"
Net Weight Lbs. . . . . Dry Model 945; Wet Model 1135
Shipping Weight Lbs. . . Dry Model 1085; Wet Model 1375

## Extra Equipment

- DK-6 Hammond DusKolector for dry model, 1000-D.
- Special Electrical Specifications.






**Model UBG-132** *with LOS-12 Head.*

# UBG-132 UNIVERSAL ABRASIVE BELT

The Hammond UBG-132 Universal Abrasive Belt Grinder uses 132" long belt in widths up to 3". Several types of heads are available which have a contact wheel range of from 1" to 16" dia. Heads and contact wheels can be quickly changed. The speed of the belt remains constant because the belt is driven by the motor pulley and the contact wheel is freewheeling.

A 2 HP motor and spring tensioning are standard. The handcrank at top of column applies the spring tensioning and also moves the idler pulley to suit various diameter contact wheels. Air tensioning is available as extra.

The tracking knob is convenient to the operator and the tracking response is both quick and positive. Also, the arm in which the motor and head are mounted can be pivoted to suit sitting or standing work positions.

A closed abrasive belt guard is available as extra, as shown at lower right on page 15.

The Hammond UBG-132 is a universal abrasive belt grinder for fast finishing of flat, contour and irregular surfaces.

## Specifications

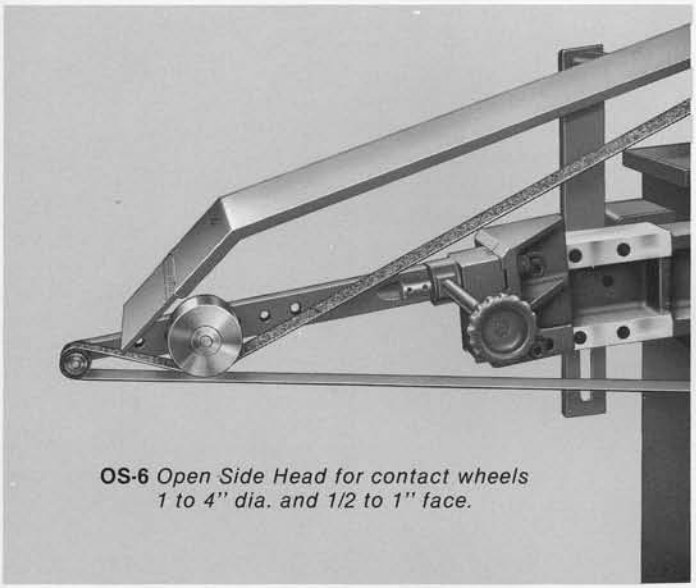
| | Wheel Dia. Min. | Wheel Dia. Max. | Wheel Face Min. | Wheel Face Max. |
|---|---|---|---|---|
| LOS-12 Large Wheel Open Side Head with 1¼" dia. arbor | 4" | 16" | Up to 3" | |
| OS-6 Open Side Head (extra) | 1" | 4" | ½" | 1" |
| OS-12 Open Side Head (extra) | 2" | 4" | 2" | 3" |

Abrasive Belt Size (belts not furnished) . . . . up to 3'wide x 132" long
Abrasive Belt Speed with LOS-12 Head . . . . . 5500 SFPM
Abrasive Belt Speed with OS Heads . . . . . 2300 SFPM

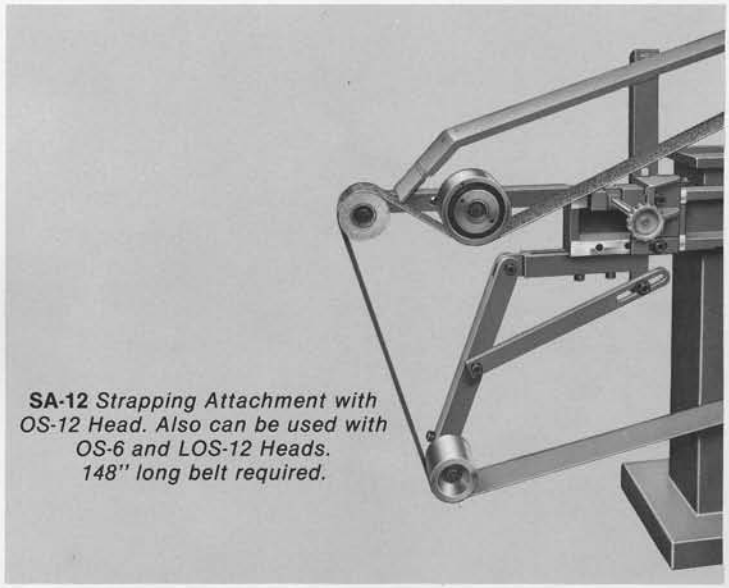
## Standard Equipment

Spring Tensioning.
Open Abrasive Belt Guard.
LOS-12 Large Wheel Open Side Head.
Cloth Contact Wheel . . . . . 14 dia. x 2" face x 1¼" hole
Hex and Spanner Wrenches and Tool Tray.
Motor . . . . . 2 HP, 3600 RPM, TEFC, 230/460v, 3 ph, 60 Hz
Manual Pushbutton with overload and low voltage protection.
Floor Space . . . . . 18 x 55"
Net Weight Lbs. . . . . 300
Shipping Weight Lbs. . . . . 400

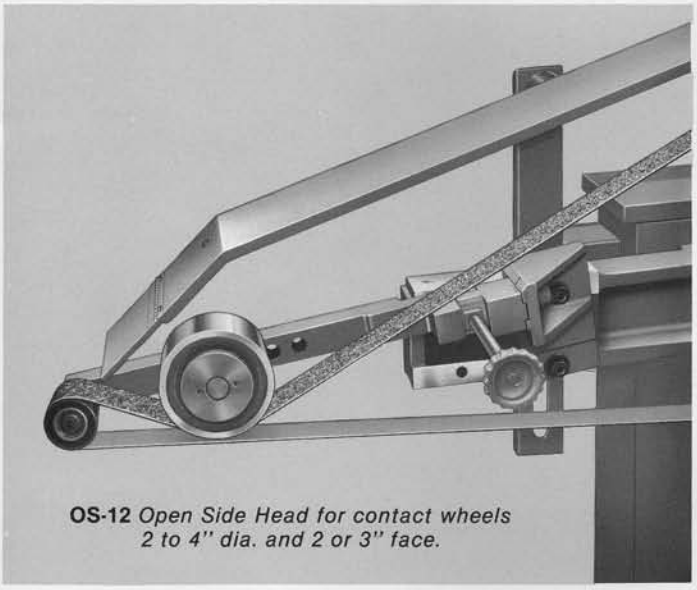
# GRINDER AND HEADS



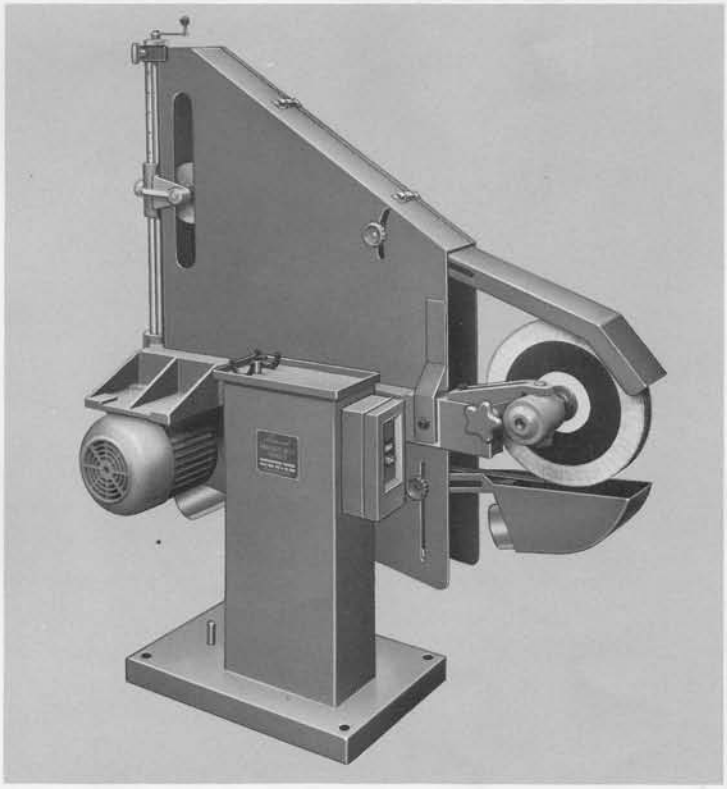
**OS-6** *Open Side Head for contact wheels 1 to 4" dia. and 1/2 to 1" face.*



**SA-12** *Strapping Attachment with OS-12 Head. Also can be used with OS-6 and LOS-12 Heads. 148" long belt required.*



**OS-12** *Open Side Head for contact wheels 2 to 4" dia. and 2 or 3" face.*



## Extra Equipment

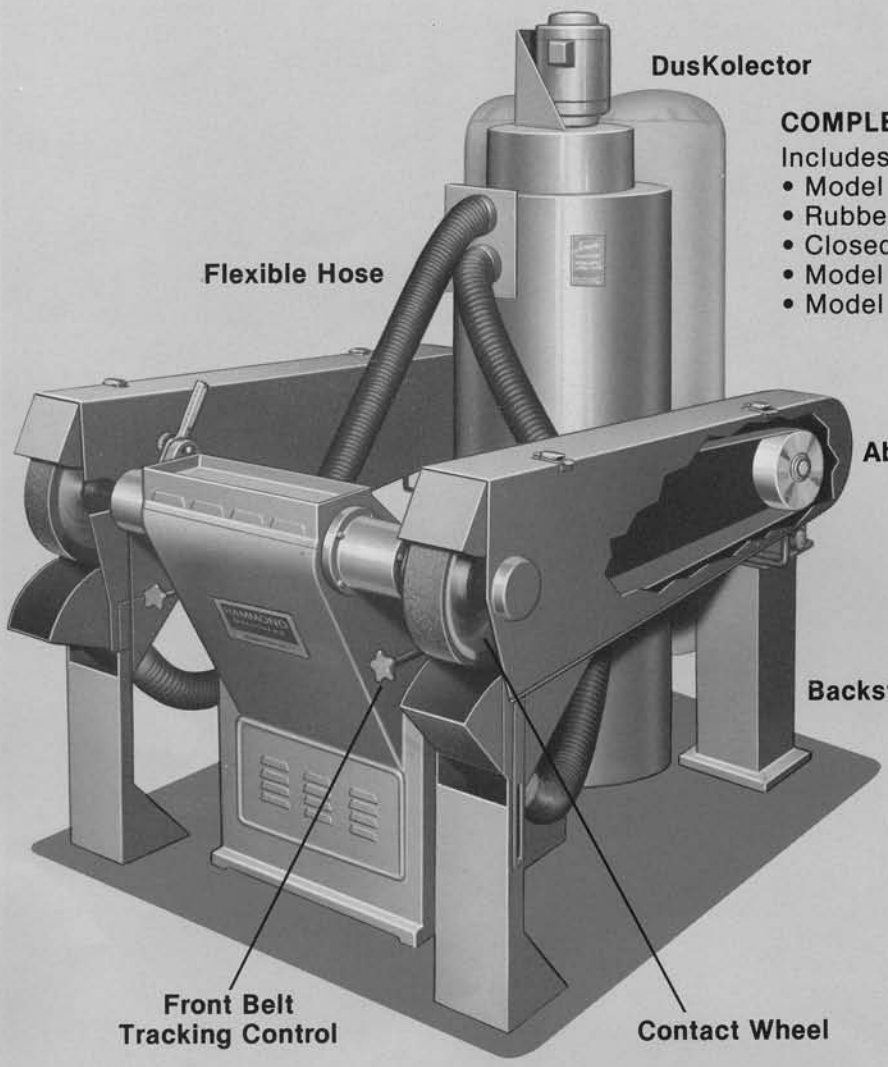
- Air Tensioning Cylinder with Valve, Pressure Regulator and Gauge.
- Closed Abrasive Belt Guard and Dust Scoops with two 4" diameter outlets.
- OS-6 Open Side Head.
- OS-12 Open Side Head.
  (OS Heads have Mounting Bracket and 2½" diameter Motor Pulley).
- SA-12 Strapping Attachment.
- Contact Wheels (with bearings and spindle) for OS Head — see price list.
- DK-6 Hammond DusKolector.
- Magnetic Non-Reversing or Reversing Control with 115v control circuit.
- Special Electrical Specifications.

**Closed Abrasive Belt Guard** has double hinged door on opposite side. It has an adjustable extension over the contact wheel and an adjustable scoop under the contact wheel. Scoop and rear of guard have 4" exhaust outlets.

**A DK-6 Hammond DusKolector** is recommended for the UBG-132 with closed guard. Use a 6" to 4" to 4" diameter Y connection and 4" diameter hose.

**Independent DusKolectors are available for All Dry Abrasive Belt Grinders**

# COMPLETE *Hammond* LATHES




**COMPLETE POLISHING LATHE**

Includes:

- Model ROH Polishing Lathe.
- Rubber faced contact wheels.
- Closed abrasive belt guards.
- Model 6-A Backstands with floor stands.
- Model DK-6 DusKolector.

**COMPLETE POLISHING LATHE**

Includes:

- Model VRRO Polishing Lathe.
- Rubber faced contact wheels.
- Closed abrasive belt guards.
- Model 6-A Backstands with floor mounting bracket.
- Model TDK-6 DusKolector with connecting hoses for non-sparking operations.

## ACCESSORIES

**Abrasive Belt Guards.** These are fully enclosed and have a hinged side for belt changing. The front end includes an adjustable cover, adjustable scoop and floor support.

Exhaust outlets on guards for 6-S and 6-A Backstands are 5" diameter; for 3-A they are 6" diameter. Guards accommodate 12" to 16" diameter contact wheels. They are available for three belt lengths — 132", 148" or 168". Specify belt length with order.

**Backstands.** Complete information about Hammond backstands is given on page 21.

**Front Belt Tracking Control** is a convenient and time saving accessory.

**Abrasive Belt Heads.** See above right.

**Buffing Wheel Guards.** Complete information on Buffing Wheel Guards given on page 20. Illustrated at right.

**Contact Wheels** with rubber face are available — see price list.

**Flexible Hose** for connecting the DusKolector to the abrasive belt guards is available. Hose sizes are listed in the DusKolector catalog.

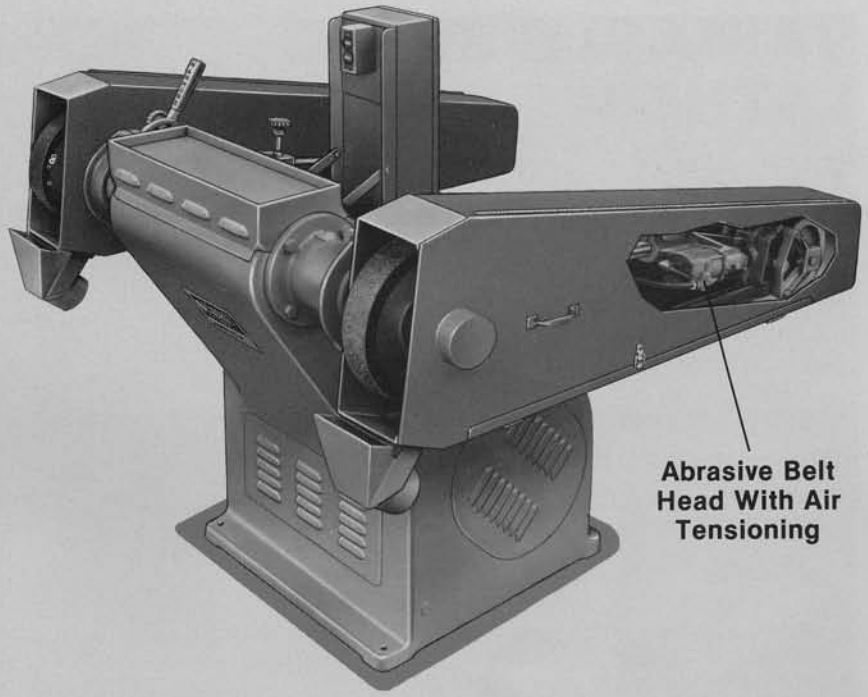
**FOR SAFETY INFORMATION SEE PAGE 3**

**Independent DusKolectors are available for all Polishing and Buffing Lathes**

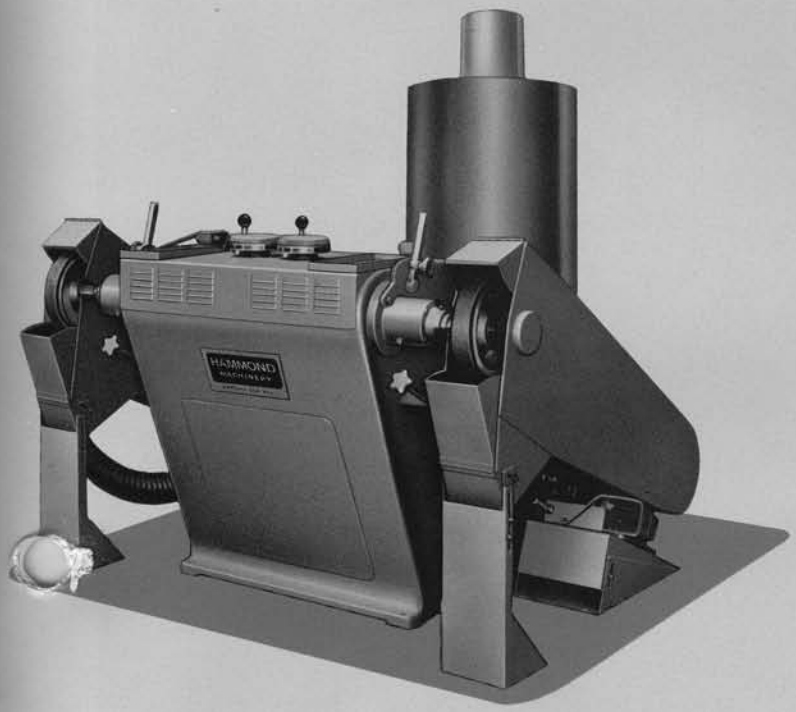
## COMPLETE POLISHING LATHE

Includes:

- Model ROH Polishing Lathe with C-4132 or C-6132 Abrasive Belt Heads for 4" or 6" wide x 132" long abrasive belts.
- Available for lathe models of 5 HP and up.
- Can only be mounted on new lathes and at the factory.



**Abrasive Belt Head With Air Tensioning**

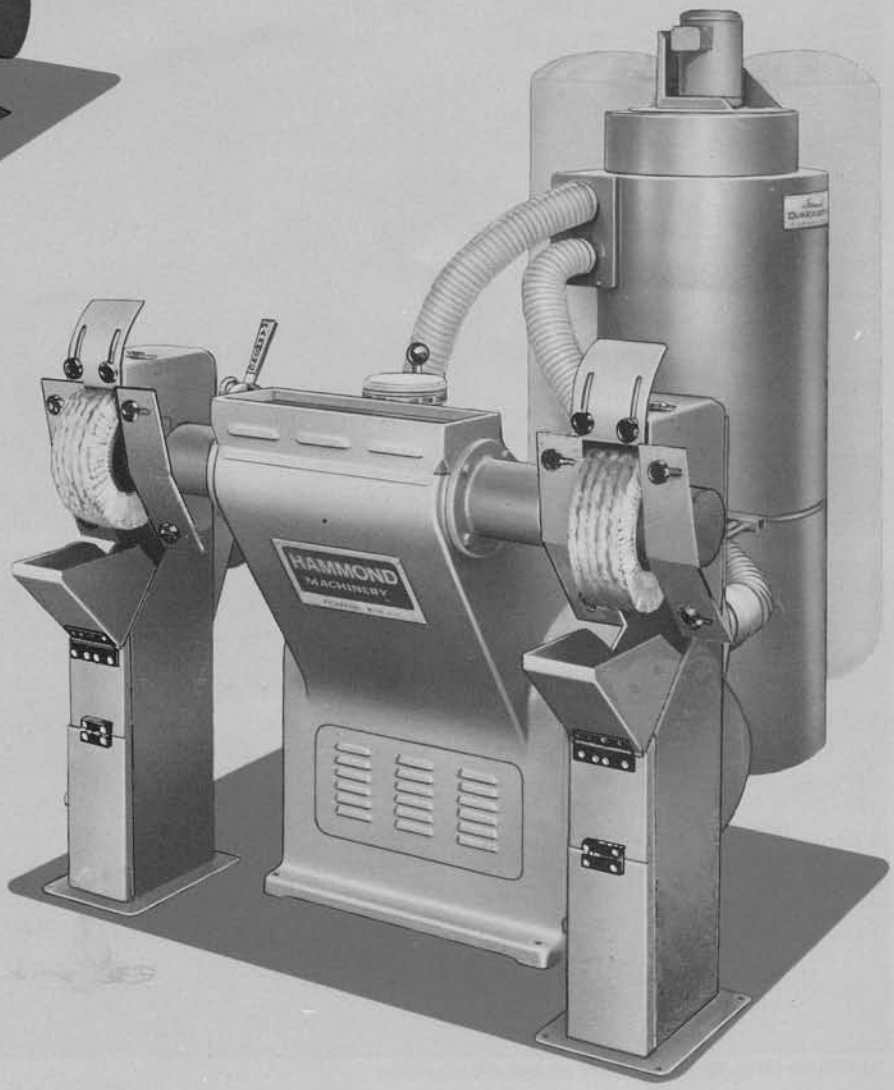



## COMPLETE BUFFING LATHE

Includes:

- Model VRO Buffing Lathe.
- Buffing Wheel Guards (see page 20 for details).
- Model DK-6 DusKolector with connecting hoses.

Machines on pages 18 and 19 are shown with one kind of guarding (BWG) in outline to emphasize that some style of guarding must enclose spindles, wheels and belts, as illustrated on these pages.



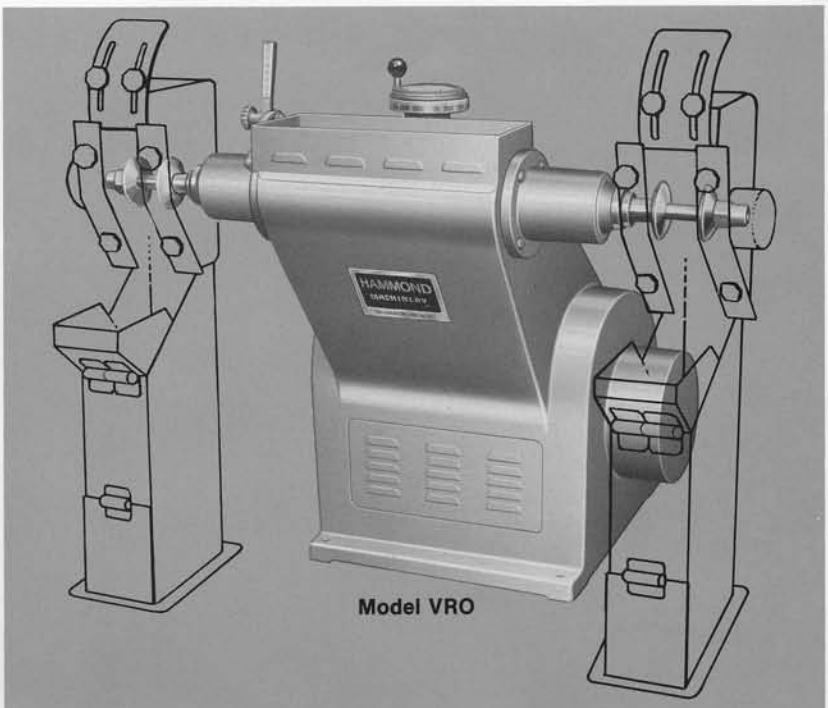
# VARIABLE SPEED LATHES

## VRO - SINGLE SPINDLE
## VRRO - TWO SPINDLE

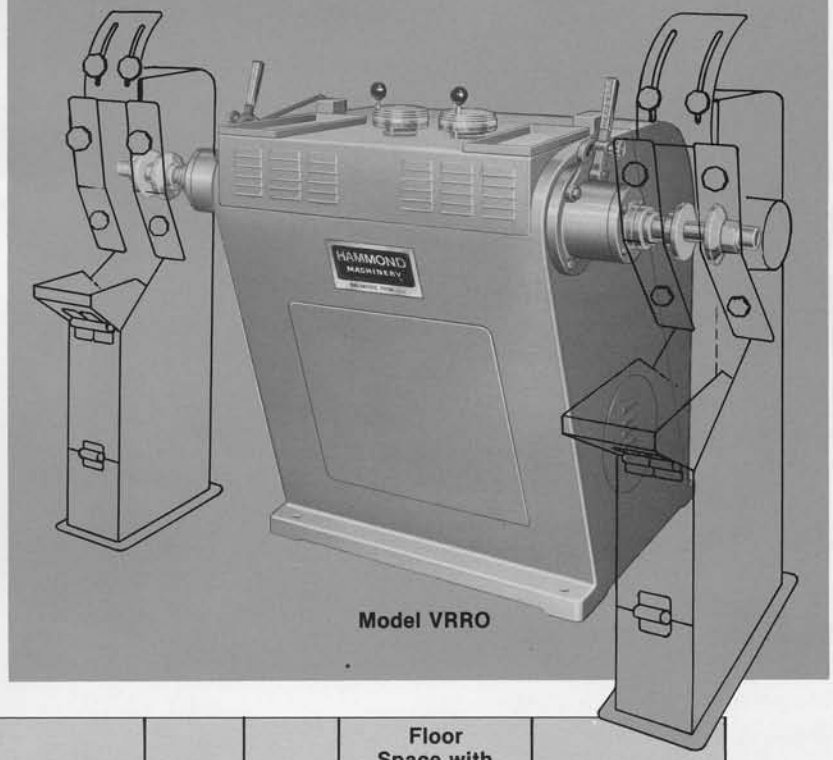
**Guard Safety:** Close attention must be paid to effective point-of-operation guarding. An example of a finishing wheel guard can be seen on page 20.

### Standard Equipment and Specifications

- Cast iron base with 8″ forward overhang.
- Safety spindle nuts.
- Composition tray(s).
- Magnetic control(s) with 115 volt control circuit(s).
- Combination spindle switch brake and lock(s)
- VRO, four spindle ball bearings, VRRO, two ball bearings per spindle.
- Variable spindle speed drive system(s).
- 230/460V, 3 PH, 60 HZ, TEFC motor(s)




Model VRO




Model VRRO

### Extra Equipment

- Special spindles
- Drilling and tapping of spindles for taper points.
- Special spindle speed ranges.
- Abrasive belt heads.
- Backstands.
- Abrasive belt guards.
- Buffing wheel guards.
- DusKolectors.
- Special electrical specifications.

### Specifications

| Model | HP | Spindle Speed Ranges (RPM) | Arbor Diameter and Width between Flanges | | Distance Between Wheels | Base Clear-ance* | Floor Space with Standard Spindle | | Approximate Weight—Lbs. | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Standard | Extra | | | Width | Depth | Net | Shipping |
| 5-VRO<br>7-VRO<br>10-VRO | 5<br>7½<br>10 | 1500 to 3000<br>or<br>1250 to 2500<br>or<br>1000 to 2000 | 1¼″ x 4″ | 1¼″ x 6″<br>or<br>1½″ x 4, 6 or 8″<br>or<br>1¾″ x 4, 6, 8 or 10″ | 47″ | 12½″ | 62″ | 40″ | 1100 | 1350 |
| 5-VRRO<br>7-VRRO<br>10-VRRO | Two 5<br>Two 7½<br>Two 10 | | | | 64″ | 12″ | 79″ | 47″ | 2250 | 2550 |
| 15-VRRO | Two 15 | | 1½″ x 6″ | 1½″ x 8″<br>or<br>1¾″ x 6, 8, or 10″ | 64″ | 12″ | 83″ | 47″ | 2500 | 2800 |

Spindle center to floor is 38″ on all models.

*Distance from base to inside flange face.

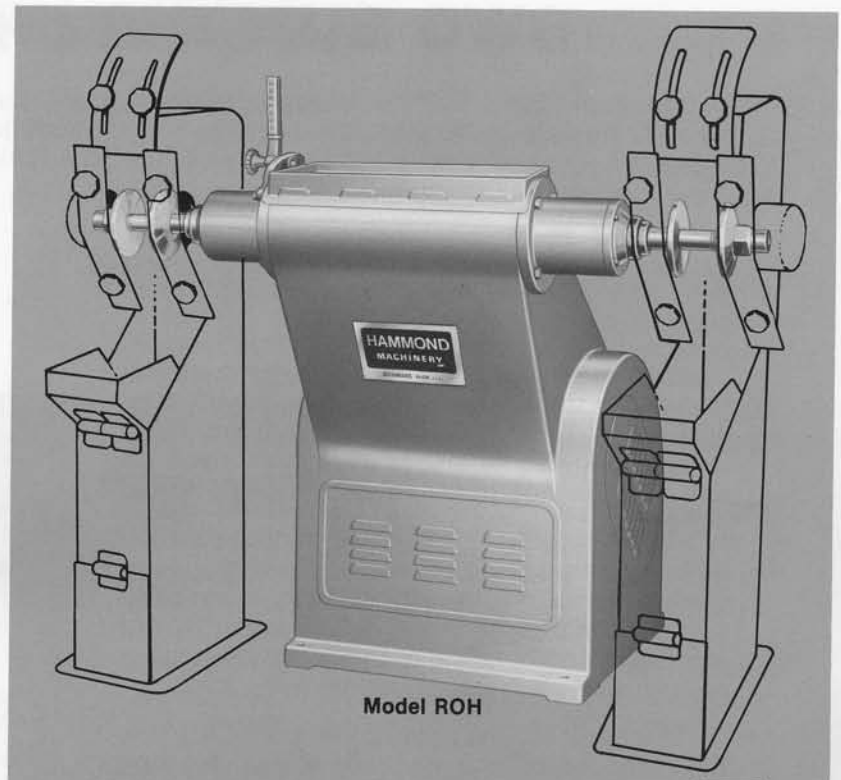
# SINGLE SPEED LATHES

## ROL, ROH - SINGLE SPINDLE
## RRO - TWO SPINDLE

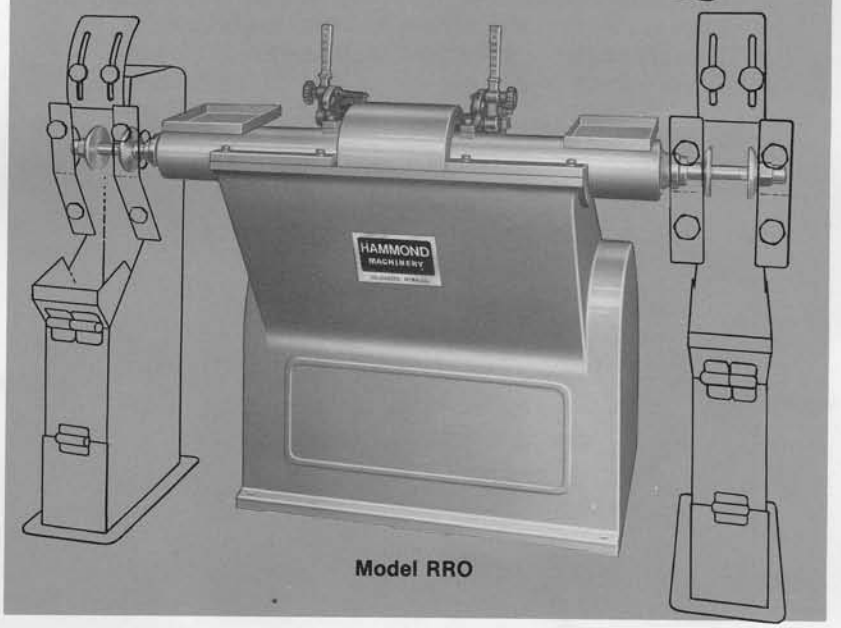
**Guard Safety:** Close attention must be paid to effective point-of-operation guarding. An example of a finishing wheel guard can be seen on page 20.

### Standard Equipment and Specifications

- Cast iron base with 8" overhang
- Safety spindle nuts
- Composition tray(s)
- Magnetic control(s) with 115 volt control circuit
- Combination spindle switch brake and lock(s)
- ROH, four spindle ball bearings; ROL, two spindle ball bearings; RRO, two ball bearings per spindle
- Set spindle speed(s) from 1600 to 2800 RPM (speed changed by replacing motor sheave)
- Multi-V-belt drive
- 230/460V, 3 PH, 60 HZ, TEFC, motor(s)



Model ROH



Model RRO

### Extra Equipment

- Special spindles
- Drilling and tapping of spindles for taper points.
- Abrasive belt heads.
- Backstands.
- Abrasive belt guards.
- Buffing wheel guards.
- DusKolectors.
- Special electrical specifications.

### Specifications

| Model | HP | Arbor Diameter and Width between Flanges Standard | Arbor Diameter and Width between Flanges Extra | Distance Between Wheels | Base Clearance* | Floor Space with Standard Spindle Width | Floor Space with Standard Spindle Depth | Approximate Weight—Lbs. Net | Approximate Weight—Lbs. Shipping |
|---|---|---|---|---|---|---|---|---|---|
| 3-ROL<br>5-ROL | 3<br>5 | 1¼" x 3" | 1¼" x 4 or 6" | 37" | 12" | 50" | 34" | 700 | 850 |
| 5-ROH<br>7-ROH<br>10-ROH | 5<br>7½<br>10 | 1¼" x 4" | 1¼" x 6"<br>or<br>1½" x 4, 6 or 8"<br>or<br>1¾" x 4, 6 or 8" | 47" | 12½" | 62" | 40" | 1000 | 1200 |
| 5-RRO<br>7-RRO<br>10-RRO | Two 5<br>Two 7½<br>Two 10 | | 1¼" x 6"<br>or<br>1½" x 4, 6 or 8" | 58" | 12" | 74" | 39" | 1500 | 1750 |

Spindle center to floor is 38" on all models.

*Distance from base to inside flange face.

# BWG BUFFING WHEEL GUARD

The Hammond BWG Buffing Wheel Guard is specially built for manual finishing with buffing and other types of "flexible" wheels. It is a combination exhaust guard and protective guard. The design encompasses the national ventilation standards and also additional protective safety features.

- The guard is strongly constructed with 11 gauge (.120") sheet metal. The adjustable curved deflector at the top is made of 3/16" steel and is rigidly mounted.
- The curved deflector remains at the same location at the top of the buff, as it is adjusted for buff wear. Thus the same amount of wheel face, in degrees of arc, is always exposed for use. This is not possible with a flat vertical deflector.
- In its upper position the deflector curves away from the face of the operator. In its lower position the curve to the rear provides a good line of sight. The combination of these two features is not possible with a flat vertical deflector.
- On a guard for the typical 14 x 4" buff, the deflector keeps the opening above the buff covered as the buff wears to smaller diameters. This provides protection above the buff and also directs the air flow downward. Please see Figure 1 and Figure 2.
- In addition, the openings on each side of the buff can be covered when a narrow buff is used. Side plates are furnished for this purpose. They mount easily and provide protection on both sides. Please see Figure 3.
- The curved deflector and the side plates provide two protective barriers for trapping a part which may come free from the buffer's grasp and may be carried around the buff. In addition, a third trap is provided at the rear of the buff. This is a multi-rod barrier which is adjustable to the rear of the buff as it wears. Air freely flows through the rods. See Figures 1 and 2. *Thus, three separate protective devices are provided for trapping a loose part.*
- The angular scoop below the wheel is adjustable and a large clean-out door is provided at the bottom of the pedestal.

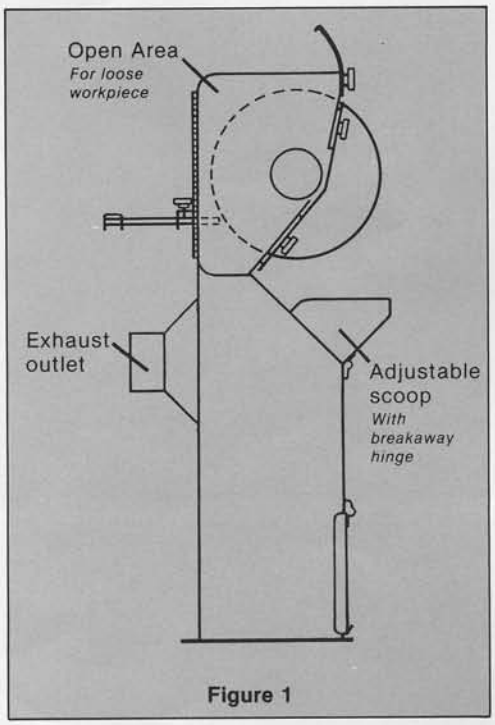


Figure 1

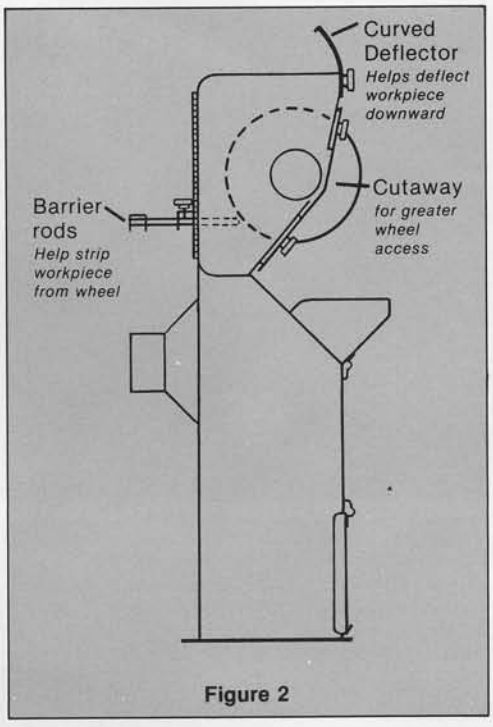


Figure 2

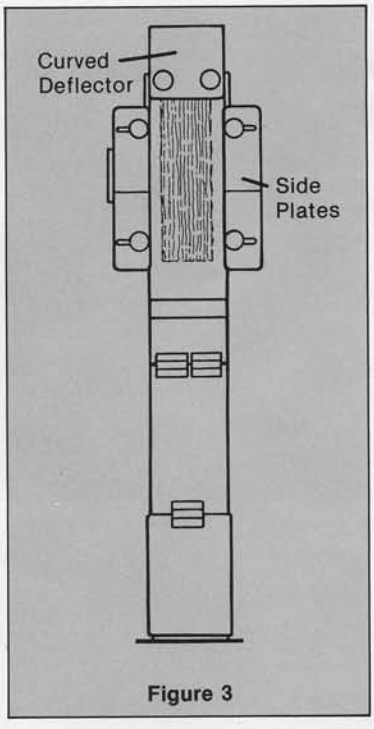


Figure 3

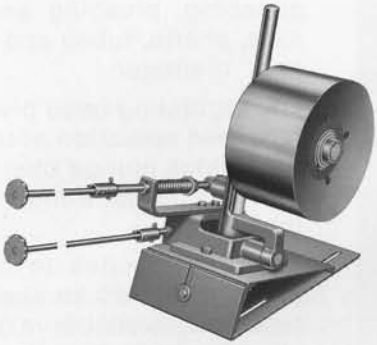
**The BWG Guards** are made for right or left hand use and only for current models of Hammond Polishing and Buffing Lathes. Standard sizes are available for popular sizes of buffs. A range of special sizes are also available. Size specifications are provided on the price lists.

**Safety:** The safety devices have very simple adjustments and must be kept in proper position. A grinding (hard) wheel must never be used with this guard. All warnings on the guard and on our machines must be heeded.

**See Illustration** of Buffing Wheel Guards on page 17.

# BACKSTANDS

Model 52



**Model 524**
*Extra: Floor Mounting Bracket. Front tracking and tension controls.*

**Model 6-S**
*Bench Style*

**Air Tensioning** provides longer belt life by automatically maintaining the same belt tension, regardless of the belt stretch. Also with air tensioning, belts can be changed faster than with spring tensioning. For narrow or soft contact wheels, air tensioned backstands are recommended. The air tensioned models include an air cylinder, release valve, line pressure regulator and pressure gauge.

**Backstands.** All idler pulleys are crowned and are mounted on sealed ball bearings. They have closed sides to prevent entrance of dirt and imbalance. Backstands are supplied for either right or left hand operation.

**Guard Safety:** Backstands shown without guards must be installed with guards. See illustrations on page 16 and safety information on page 3.

**Models 52 and 524**

Low cost spring tensioned backstands for light applications. They are basically the same except for maximum belt width. The idler pulleys are aluminum.

**Specifications:**
**Model 52:** 3½" face x 6" diameter pulley for belts from 1½" to 3" wide. Shipping Weight 25 lbs.
**Model 524:** 4½" face x 8" diameter pulley for belts from 1½" to 4" wide. Shipping Weight 40 lbs.

**Extra Equipment:** Front tracking and tension controls, Floor mounting bracket, Abrasive belt guard.

**Models 6-A and 6-S**

These models are for medium applications. The idler pulleys are aluminum. The 6-A is air tensioned.

**Specifications:** 4½" face x 8" diameter pulley for belts 1½" to 4" wide. Shipping Weight - Bench Style 90 lbs. Floor Stand Style 130 lbs.

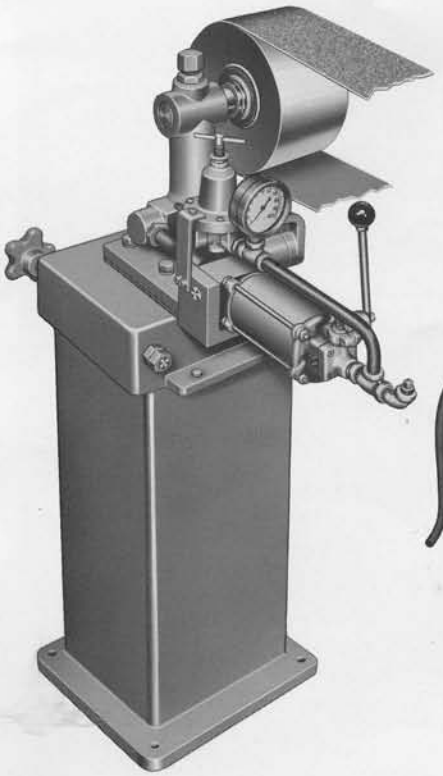
**Extra Equipment:** Abrasive Belt Guard, Front tracking control, Front tensioning control for 6-S, Floor mounting bracket for bench style, Floor stand.

**Model 3-A**

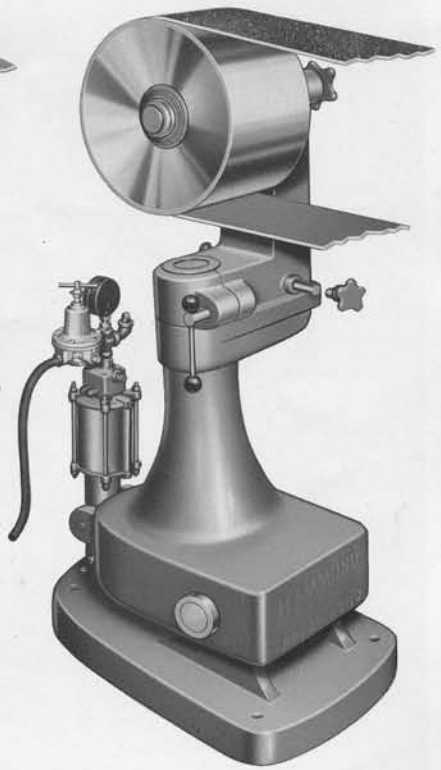
This air tensioned model is for heavy duty applications. The idler pulley is stainless steel. The members of the main structure below the idler pulley are cast iron.

**Specifications:** 7" face x 12" diameter pulley for belts from 2" to 6" wide. Front tracking control. Shipping Weight 360 lbs.

**Extra Equipment:** Abrasive belt guard.



**Model 6-A**
*Extra: Floorstand.*



**Model 3-A**
*Air Tension Left Hand.*

# Hammond-KEF

# BUILT FOR . . . HARD WORK

The new *Hammond-KEF* line of small, manual polishing, buffing and grinding machines present a budget minded solution to finishing problems, for any shop, large or small . . .

**PSD/POD Machines**

Wheels, Buffs, Wire Brush, Flap and other Flexible Finishing Wheels (Diameters: 8", 10", 12").
Abrasive Belts (Widths: 2", 3"), to 2.3 HP.

**Abrasive Belt Grinders**

Contact Wheel and Platen (Widths: 2", 3", 6", 10"), to 7 HP.

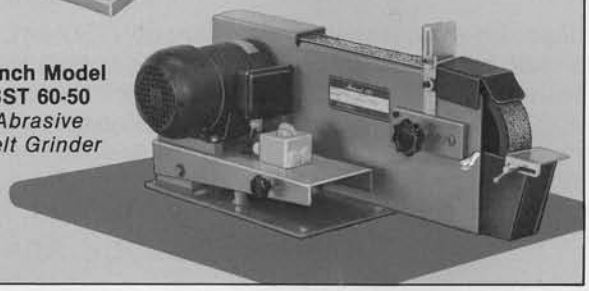
**Bench Machines**

Grinders (6", 7"), Carbide Tool Grinder (6"), Abrasive Belt Units (2 x 60"), to 1 HP.

Durability, Flexibility and Economy; for more information, call or write Hammond Machinery, Inc.

## Abrasive Belt Grinders

**3", 6" and 10"**
*Floor Mounted*
*Abrasive Belt Grinders*



**Bench Model**
**BST 60-50**
*Abrasive*
*Belt Grinder*

## PSD and POD

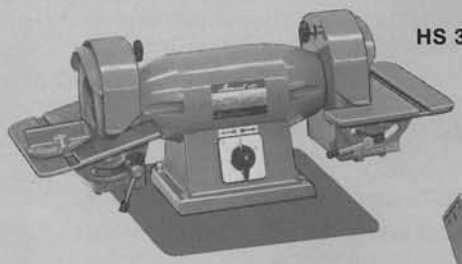
**PSD 5**

**POD 10**

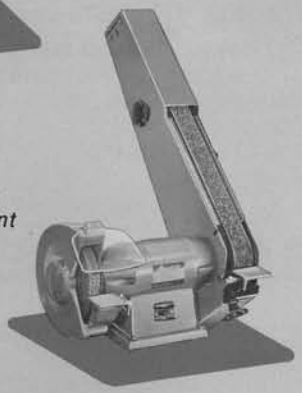
**POD 5**

**PSD 10**

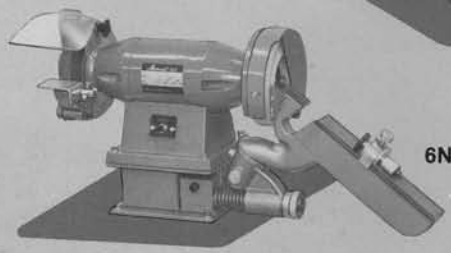
## Bench Machines



**HS 3** *Tool Grinder*



**7N** *Wheel Grinder with Belt Attachment*



**6NE** *Drill Grinder*


Hammond Machinery Inc
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