

# THE G & P APPROACH TO ROLL GRINDING

Adapt your lathe for grinding rolls — with a grinder from G & P — standard models — or special models custom built for your specific needs.

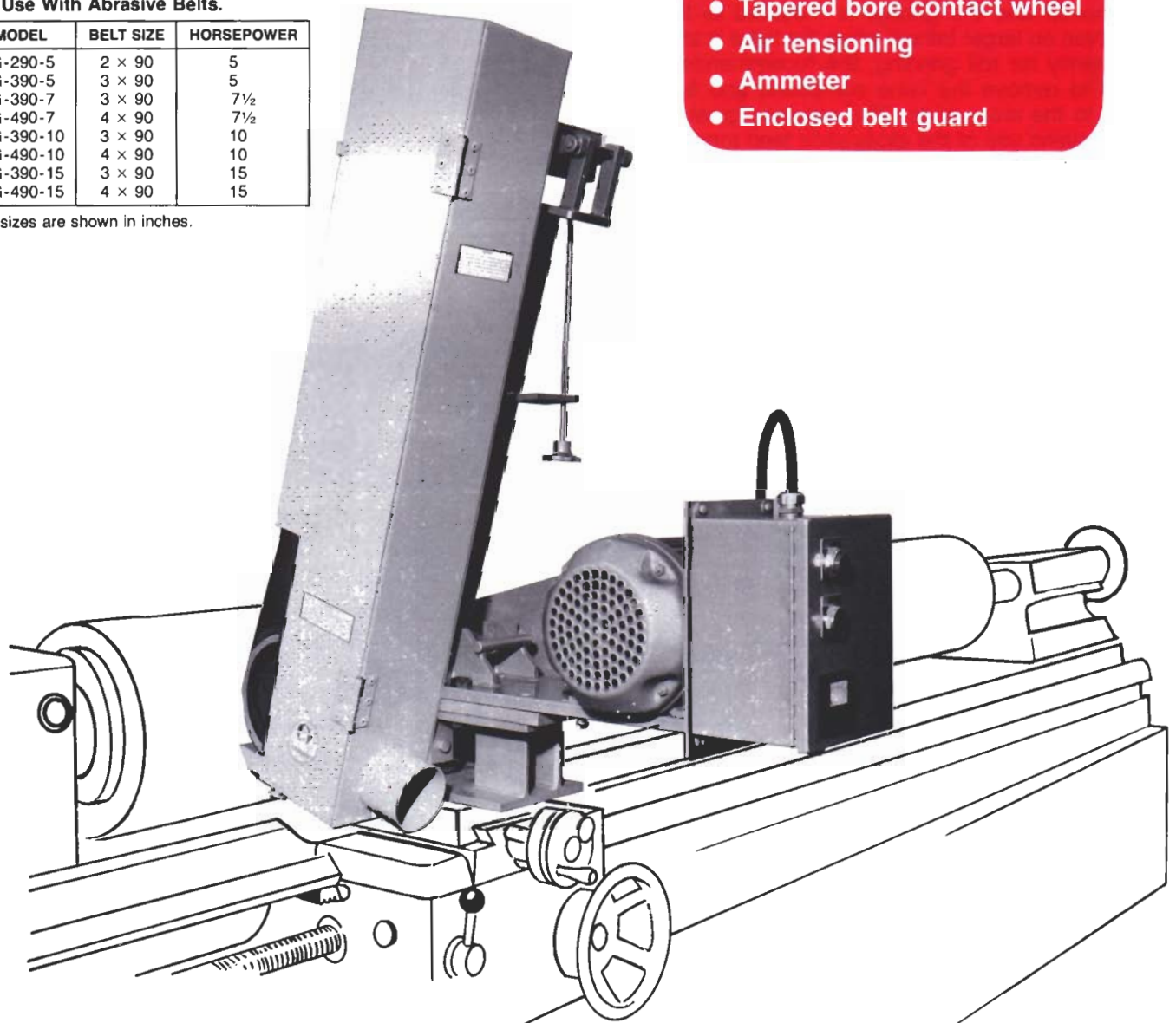
## Standard Models For Use With Abrasive Belts.

MODEL	BELT SIZE	HORSEPOWER
RG-290-5	2 × 90	5
RG-390-5	3 × 90	5
RG-390-7	3 × 90	7½
RG-490-7	4 × 90	7½
RG-390-10	3 × 90	10
RG-490-10	4 × 90	10
RG-390-15	3 × 90	15
RG-490-15	4 × 90	15

Belt sizes are shown in inches.

## Features:

- Precision ball bearings
- Tapered spindle
- Tapered bore contact wheel
- Air tensioning
- Ammeter
- Enclosed belt guard



**WEAR EYE, EAR & RESPIRATORY PROTECTION WHEN GRINDING**



**GRINDING & POLISHING MACHINERY CORPORATION**

**MACHINERY**

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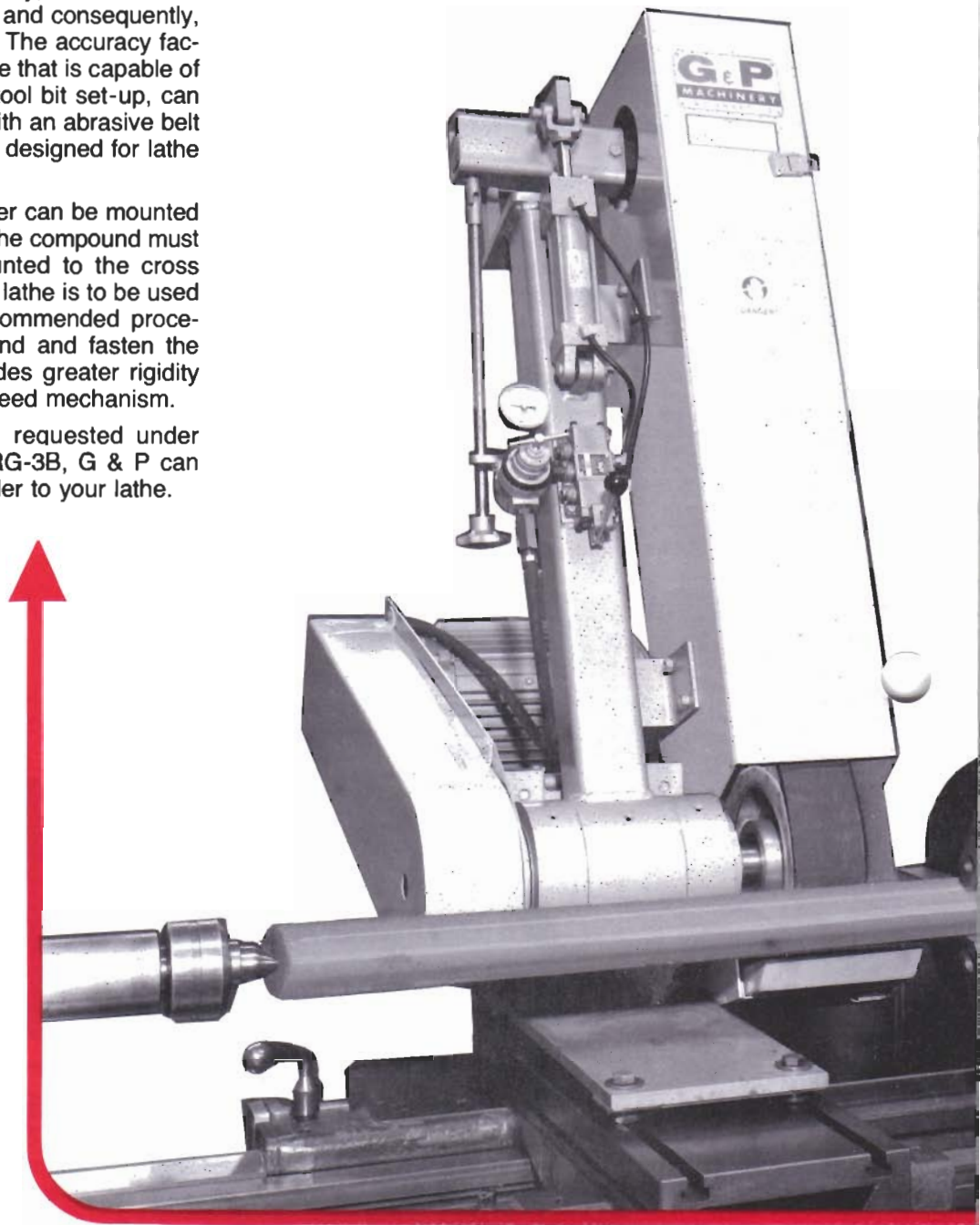
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# CONVERT YOUR LATHE INTO A ROLL GRINDER

Abrasive belt roll grinding and polishing principles and machine requirements do not differ widely from established grinding wheel procedures. Mainly, the difference lies in the ability of a belt to cut faster and consequently, to be used at higher traverse speeds. The accuracy factor is in the machine itself. Thus a lathe that is capable of producing tolerances to .001" with a tool bit set-up, can be expected to perform equally well with an abrasive belt attachment — the G & P Belt Grinder designed for lathe mounting.

On large lathes, the G & P Belt Grinder can be mounted on the compound. On smaller lathes, the compound must be removed and the grinder is mounted to the cross slide. Even on larger lathes, when the lathe is to be used permanently for roll grinding, the recommended procedure is to remove the lathe compound and fasten the grinder to the cross slide. This provides greater rigidity and maintains use of the cross slide feed mechanism.

When supplied with the information requested under "mounting information" in bulletin BRG-3B, G & P can provide an adaptor to mount the grinder to your lathe.



## METAL AND RUBBER ROLL GRINDING

To provide a satisfactory finish, all equipment must be in good condition. Loss of rigidity, or presence of wear anywhere in the system will produce a poor finish and cause a loss of accuracy.

## LUBRICANTS AND COOLANTS

A lubricant or coolant is recommended for grinding all types of metal rolls and is sometimes useful in obtaining a fine finish on rubber rolls in the medium to hard range. For 40 and softer durometer rubber, the application of powdered soap stone or powdered zinc stearate at the point of contact is an excellent grinding aid. For chilled or cast iron rolls, a water soluble type coolant is suggested. For

steel and stainless steel, a mixture of water and a good water soluble oil of the heavy duty type containing extreme pressure additives will give substantially better belt life, rate of cut and finish. Coolants which circulate through settling tanks should have an adequate filtering system to remove foreign particles. Good efficient filters are necessary in any stage of roll grinding, but they are vital for high finishes.

## POSITION OF GRINDER

The drawings below show two methods of bringing the abrasive belt into contact with the work roll. For most roughing and finishing, the method shown in Figure A is recommended. If slack of belt polishing is required, a removable front guard section is provided that will allow the grinder to be tilted forward as shown in Figure B.

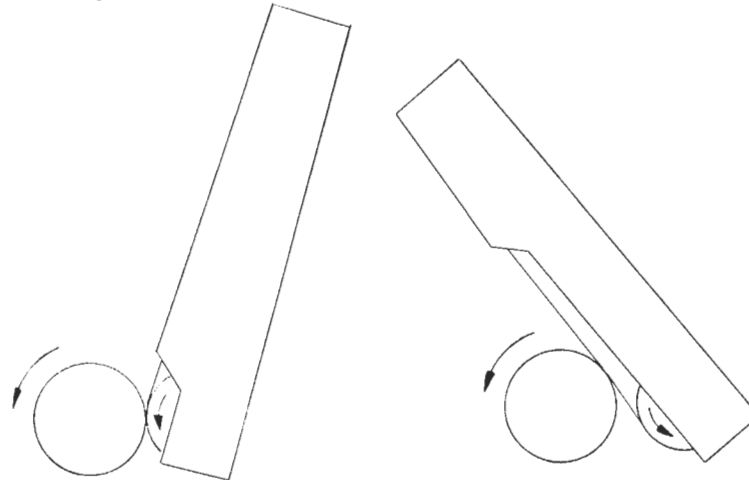


Figure A

Figure B

## Modifications ... to meet your requirements

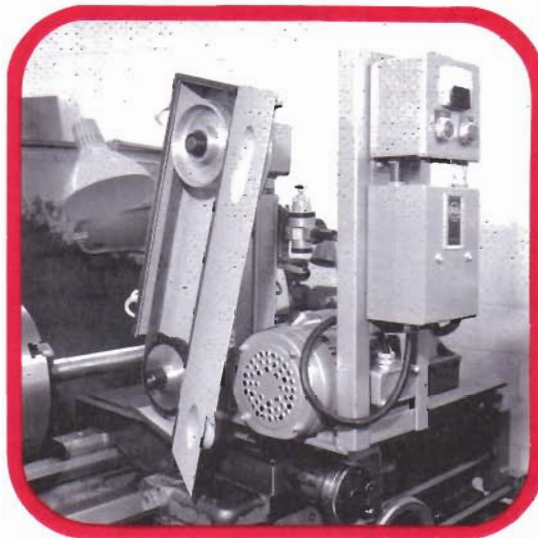


Fig. 1

If you need some changes from the standard models ... such as something smaller ... or larger ... let us know. We will provide a quotation on a model to fit your needs. Figure 1 shows a 2 horsepower model using a 1" x 54" belt. Figure 2 shows a grinder equipped with a tungsten carbide grinding wheel, for grinding rubber, plastic or synthetic materials.

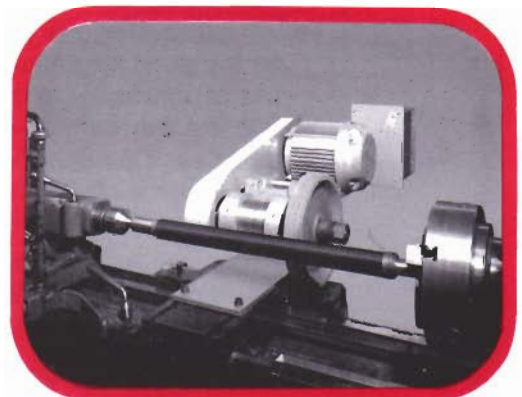
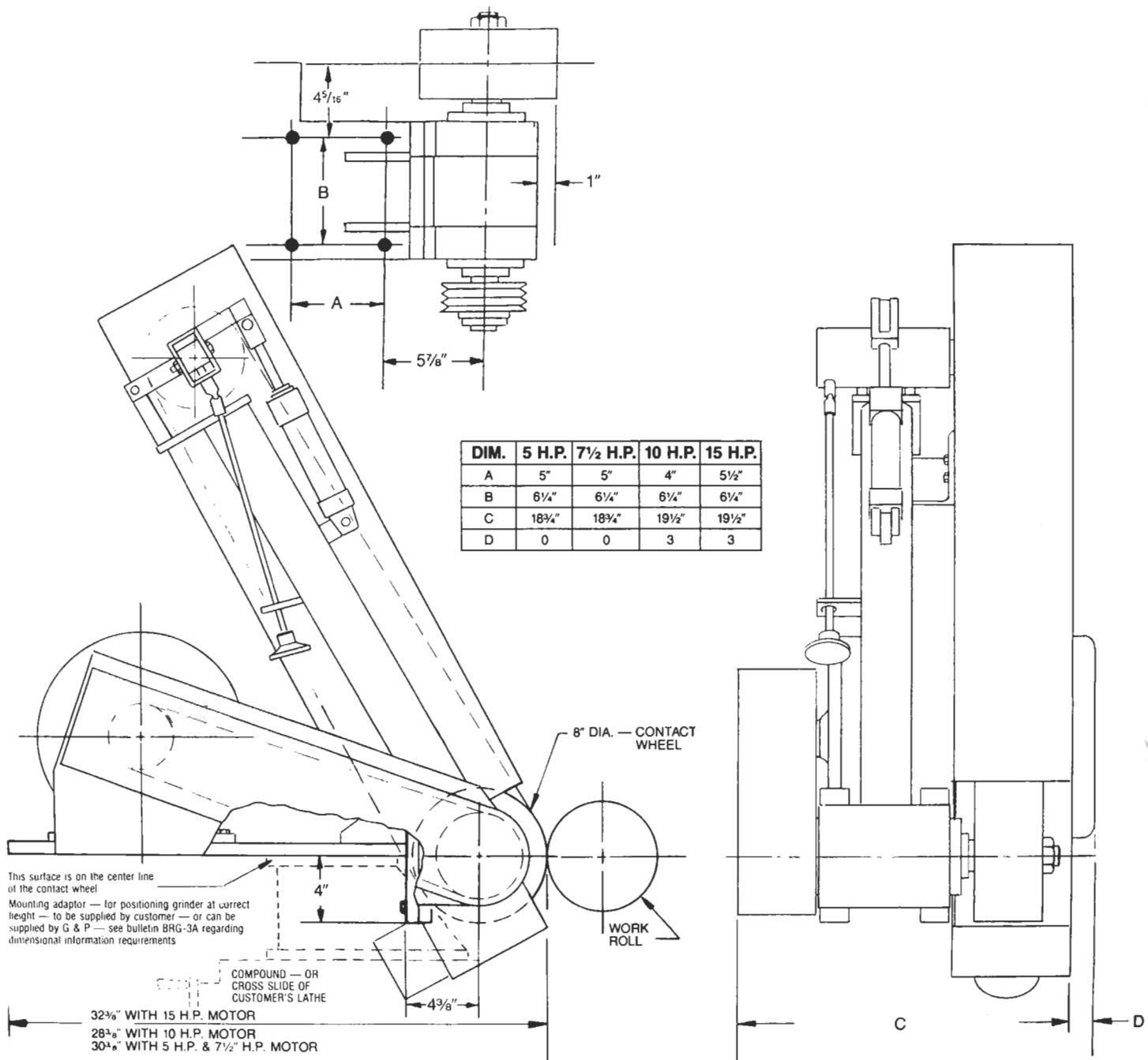


Fig. 2

## CONTACT WHEEL SELECTION

The proper contact wheel is an important factor in any grinding application. For assistance in choosing which wheel is best suited for your application, please refer to the information in bulletin BRG-3B.

The grinding wheel guard has been removed in this picture for clarity.



When mounting this grinder on a lathe, the center line of the contact wheel must be the same height as the center line of the roll. On most lathes this requires the use of an adaptor to bridge the space between the bottom surface of the grinder and the top surface of the compound or slide on which the grinder will be mounted. This drawing may be helpful if you plan to make the adaptor — or G & P can supply it if we have the mounting information from bulletin BRG-3B.

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE



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2801 TOBEY DRIVE / INDIANAPOLIS, IN 46219-1481

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