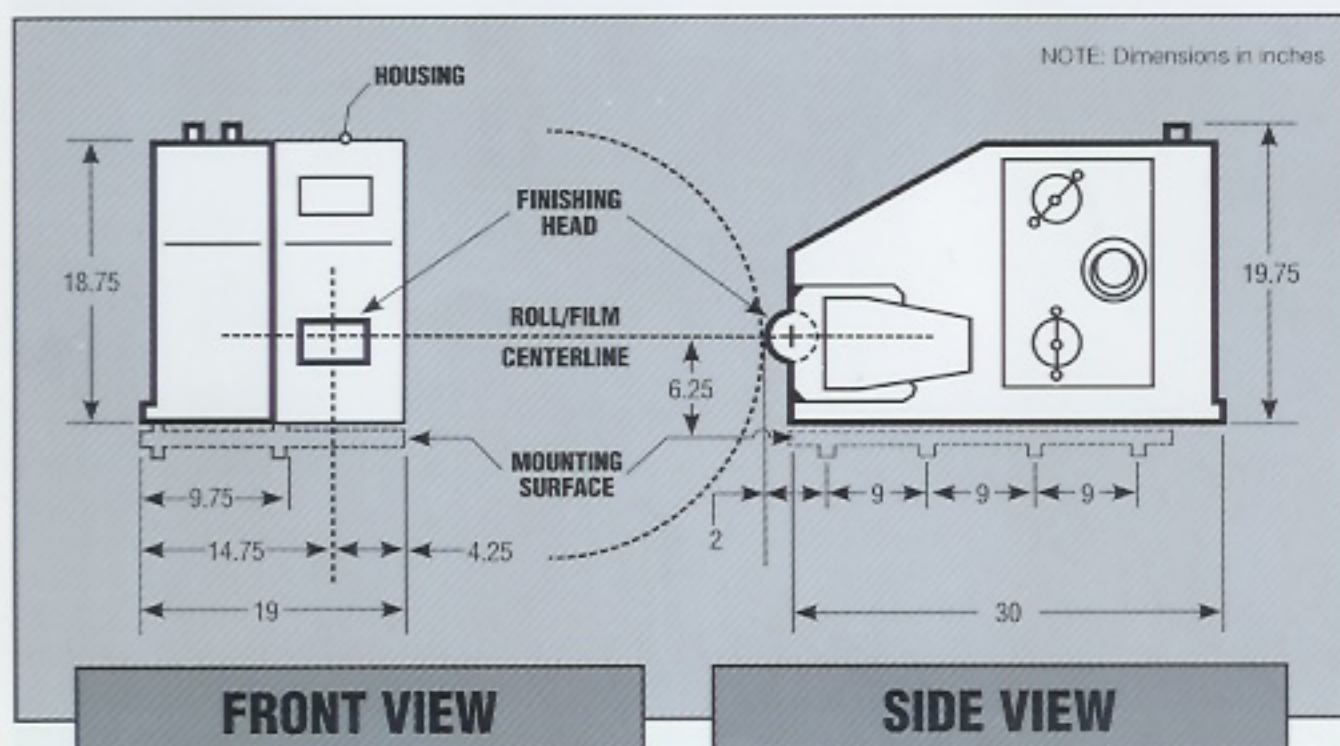


# GEM 04150-S

# 4" FILM CAPACITY



ABRASIVE CAPACITY	WIDTH	4 in.
	LENGTH	150 ft.
ABRASIVE ADVANCE		0-14 in./min.
OSCILLATION FREQUENCY		0-20 c/sec.
OSCILLATION AMPLITUDE		.200 in.
INFEEED PRESSURE		0-200 lbs.
CLUTCH TENSION		0-80 lbs.
POWER SUPPLY		115/230 VAC
TOTAL MACHINE WEIGHT		150 lbs.

Patented Technology

## REPEATABLE, FAST FINISHES

GEM Microfinishers provide an exact surface finish with greater speed and consistency than possible with conventional bonded wheels or honing stones. Surface texture may be optimized for each application: ranging from a uniform scratch pattern to a polished "mirror" surface.

Virtually any material may be finished, due to GEM's combination of precise control and ability to use the full variety of microabrasives. Finishing applications range from hard materials, such as tungsten carbide, tool steel and chrome, to medium and soft materials, including epoxy, copper, nylon and aluminum.

## SIMPLIFIED OPERATION

Designed for ease-of-use, GEM Microfinishers require no special training. Once a sequence is established for a desired finish, the operator simply follows the sequence step-by-step, for predictable results.

Controls for Infeed Pressure, Film Back Tension, Oscillation Frequency and Abrasive Index Speed are conveniently located, allowing a constant view of the work in progress. Filters, regulators and abrasive supply are easily monitored and accessible.

## QUICK, VERSATILE INSTALLATION

Adaptable to any lathe or roll-grinder, the unit is often installed within four hours. Horizontal and vertical mounting is possible, along with an ordered specification of right or left side abrasive loading. The

main control console is a remote unit, connected to the microfinisher by a single cable.

Gauge blocks are provided with each unit for rapid, accurate alignment without specialized tools. The only power requirements are: standard shop air pressure of 80 lb/in<sup>2</sup> and 115 VAC electrical supply.

## RUGGED CONSTRUCTION

A fully welded aluminum housing provides maximum rigidity and corrosion resistance. Consistent use of readily available standard parts ensures productivity.

## RELIABLE OSCILLATION SYSTEM

Designed and built by GEM, the oscillation capability is one of the keys to a successful finish. Oscillation frequency is infinitely adjustable, from 0 to 30 strokes/second, to generate the full range of necessary surface textures: from a straight-line pattern, through varying degrees of cross-hatch.

The sturdy oscillation head supports the abrasive film's snap-in platens and front guide rollers. This lightweight unit allows high oscillation frequencies and rapid reduction rates to be achieved with minimal power requirements.

GEM's snap-in platens are easily changed in less than one minute. Three platen hardnesses are available, which act in tandem with adjustable pneumatic pressure to produce the exact type of surface reduction needed at any stage of finishing.

## FULLY ADJUSTABLE ABRASIVE DELIVERY

A reversible film drive delivers abrasive to the oscillating head at adjustable speeds of 0 to 16 in./min, allowing proper replenishment of abrasive at the work area. A pneumatically adjustable clutch provides proper film tension in both directions of travel.

## INTEGRAL COOLANT SYSTEM

GEM's coolant system delivers a steady, adjustable supply of filtered coolant to the work area. Directional nozzles allow accurate coverage for reduced film loading, enhanced grain penetration and waste removal. Coolant is routed through convenient filter cartridges, available in precise filtration ranges.

## ONE-YEAR WARRANTY

GEM warrants all components and equipment against defects in workmanship or materials for one year after shipment. Prompt repair or replacement of parts is guaranteed.

## CUSTOMER SUPPORT

Each customer receives fully documented installation and operating procedures. Inquiries are welcomed for applications requiring custom designs or specialized finishing sequence development.

Specifications subject to change without notice.

FOR FURTHER INFORMATION:

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# GEM

Innovations in Microfinishing Productivity