

MACHINE TOOLS



Fig 24-26. Personal protection for a wire brush operation—the chest plate is made of aluminum.

terial, leather gloves, face shields, and goggles should be mandatory (Fig 24-26)

Recommendations by manufacturers of wire brush wheels indicate the following operating procedures should be adopted

- 1 If possible, the workpiece should be held at the horizontal center of the brush
2. Let the wire tips do the work. They are designed for this. Forcing the work into the brush results in (a) merely wiping or dragging the wires across the work with no increase in cutting action, (b) an increase in wire breakage, and (c) a tendency of the work to become snagged
- 3 Small pieces being brushed should be held in a simple jig or fixture which will prevent the operator's hands from contacting the surface of the brush
- 4 A straight, heavy steel rod or bar should be used to clean the wire wheels, never a small ring
- 5 When cleaning small (narrow) brushes, the operator should use a work rest or plate. A work rest cannot be used for wide brushes, but some method should be developed so that the cleaning rod or bar is strongly supported

References

- American Standards Association, 10 East 40th St., New York City
Grinding, Polishing, and Buffing Equipment Sanitation 243
Markings for Identifying Grinding Wheels and other Bonded Abrasives B5.17
National Electrical Code C1. (Also available from National Fire Protection Association)
National Electrical Safety Code C2. (Also available from National Bureau of Standards as Handbook H30)
Safety Code for Use, Care, and Protection of Abrasive Wheels B7.1 (Also available from Grinding Wheel Institute)
Specifications for Standard Shapes and Sizes of Grinding Wheels B74.2
 Grinding Wheel Institute, 2130 Keith Bldg., Cleveland, Ohio
 Lewis, Kenneth B. *The Grinding Wheel* 1959
Safety Recommendations for Grinding Wheel Operation 1958
 National Safety Council, 425 North Michigan Ave., Chicago, Ill
Guards Illustrated 1962
 Industrial Data Sheets.
 Coated Abrasives, Data Sheet 452
 Engine Lathes, Data Sheet 264
 Gear Hobbing Machines, Data Sheet 362
 Horizontal Metal Boring Mills, Data Sheet 269
 Metal Planers, Data Sheet 383
 Metal Saws (Cold), Data Sheet 322
 Metal Shapers, Data Sheet 216
 Metal Slotters, Data Sheet 263
 Metal-Working Drill Presses, Data Sheet 335
 Metal-Working Milling Machines, Data Sheet 364
 Vertical Metal Boring Mills, Data Sheet 347.

U.S. Department of Labor, Bureau of Labor Standards, Washington, D.C.
Suggested Standards for Industrial Safeguards Special Bulletin 7, 1953.