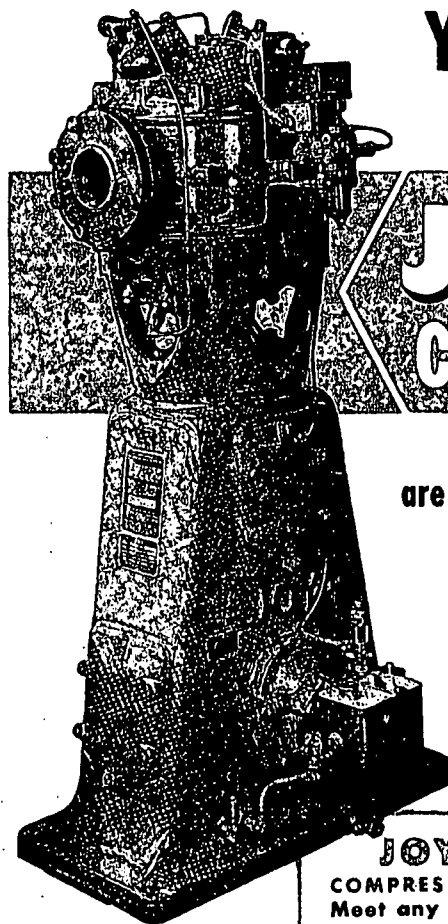




# You'll find them only in the JOY WG-9 COMPRESSOR

## These Exclusive Features are worth Money to you!

Only the JOY WG-9, in its class, offers reliable crosshead guides and cylinder liners, force-feed lubrication—features that will save money in operating and maintenance costs. Truncated pistons and angled over-size "Cushion" valves assure higher valve capacity, heat dissipation, lower air friction and elimination of valve pounding.

The WG-9 is a water cooled, double acting, stage, heavy duty compressor for use where large amounts of air are needed or for supplementary service in high air-requirement industries. Its design minimizes vibration and cuts required space. Foundation is but a simple concrete pad.

15 SIZES • 30 to 150 lbs. psi • 172 to 88

## JOY COMPRESSORS Meet any Need

High and low pressure compressors, oil free compressors, boosters and vacuum pumps—Joy builds a type and size for every need. • Let us handle your air-supply job.

*Consult a  
Joy  
Engineer*



Over 100 Years of Engineering Leadership

## JOY MANUFACTURING COMPANY

GENERAL OFFICES: HENRY W. OLIVER BUILDING • PITTSBURGH 22, PA.  
IN CANADA: JOY MANUFACTURING COMPANY (CANADA) LIMITED, GALT, ONTARIO

A **power** practical manual

# HARD SURFACING

By STEVE ELONKA, Associate Editor

The difference between a new piece of equipment costing thousands of dollars and one that's ready to scrap lies in its design and more than a few pounds of metal worn or corroded from critical places. By applying tough alloys and special techniques, you can lick these losses.

Hard surfacing, at this particular way of saving the surface, is known to be never more valuable than today when costs are high. Used for the manufacture of new products, it boosts working life many times. Perhaps even more important, hard surfacing is a perfect weapon for cutting maintenance costs.

Not only can hard facing restore worn parts, it can give them a life expectancy far greater than that of untreated new ones. And every day, some maker of hard-facing equipment and alloy comes up with new methods and materials for better jobs.

Here is what you need to know to keep in on this timely, fast-growing method of what hard-facing can do, how to pull it work in your plant.

PLANT OPERATION  
and MAINTENANCE  
SECTION  
MARCH 1953