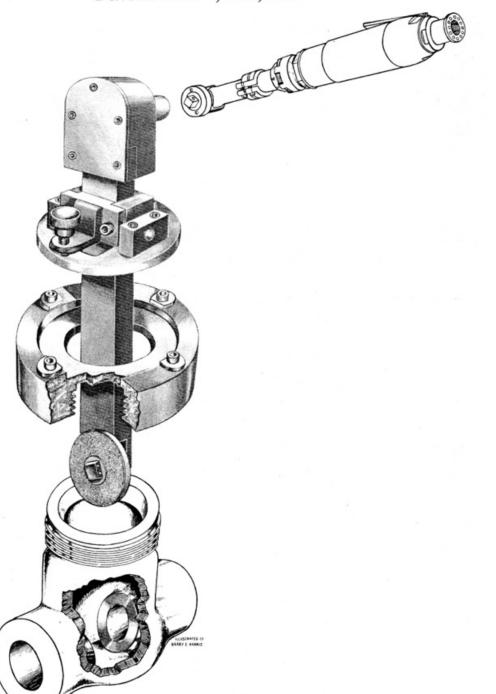
Grimsley's Portable Gate Valve Reseating Machines - VR Series

VR-125: 1" to 2 1/2" Valves

VR-360: 3" to 6" Valves

VR-812: 8" to 12" Valves

Patent No. 4,205,495



GRIMSLEY'S HOUSE OF TOOLS, INC.

Specializing in Portable Tools

GRIMSLEY'S PORTABLE ABRASIVE MACHINES VR SERIES FOR HIGH PRESSURE STEAM GATE VALVES 1" THROUGH 12"

Description

Grimsley's portable abrasive machines are designed especially for reseating high pressure steam gate valves in-line.

These machines eliminate removal of pipe and valve covering for grinding valves in place. However, when valves have been removed to the shop for any reason, using the portable machine is the most efficient method for grinding the seat.

The machines are so constructed as to require an adapter to be used in lieu of clamps, chains, chucks or other devices to hold the machine in place in any position while refinishing the seats. All machines are belt driven.

These machines are made especially for high pressure valves. There is no need to disturb or remove any insulation or other interference from the pipe or valve other than the bonnet and valve operating equipment. They eliminate contamination caused by disturbing or removing asbestos or other types of pipe lagging (insulation).

The set-up time involved after bonnet and other operating equipment has been removed is approximately 10-15 minutes. Actual grinding time will be determined by the amount necessary to be removed from the seats. This can take from 10 to 20 minutes to do both seats. By using these machines contamination can be kept to the very lowest levels. (For decontaminating this equipment use standard methods as outlined in federal regulations and/or nuclear specifications.)

There are three sizes of portable abrasive machines for re-surfacing by grinding high pressure steam gate valves seats in-line.

Machine No. VR-125 is furnished with the necessary discs to grind Anchor, Crane, Velan and Walworth gate valves and a complete set of adapters for Walworth gate valves sizes 1", 1-1/4", 1-1/2", 2" and 2-1/2", carrying case and necessary allen wrenches to operate the machine. (Additional adapters are available for Anchor, Crane and Velan valves.)

Machine No. VR-360 is furnished with the necessary discs to grind Anchor, Crane, Velan and Walworth gate valves and a complete se of adapters for Walworth gate valves sizes 3", 3-1/2", 4", 5" and 6", carrying case and necessary allen wrenches to operate the machine. (Additional adapters are available for Anchor, Crane and Velan valves).

Machine No. VR-812 is furnished with the necessary discs to grind Anchor, Crane, Velan and Walworth gate valves and a complete set of adapters for Walworth gate valves, sizes 8", 9", 10" and 12", carrying case and necessary allen wrenches to operate the machine. (Additional adapters are available for Anchor, Crane and Velan valves).

Operation

- 1. Remove operating gear, bonnet, valve stem and wedge from valve.
- 2. Clean valve threads, if any, remove burs, scale and/or rust.
- 3. Select and install the proper adapter on valve body.
- 4. Select the proper size disc for the valve seat to be ground.
- 5. Measure from valve adapter face down to bottom of valve seat to determine the length the shaft needs to extend down into the valve to match the disc with the valve seat.
- 6. To make the adjustment, loosen the two socket had screws in the arm clamp so that the arm can be adjusted to the proper depth.
- 7. After the adjustment has been made, re-tighten the socket head screws in the clamp.
- 8. Remove the protective paper from the adhesive (stick-on) abrasive and install on the grinding disc by pressing the abrasive to the grinding disc.
- 9. Insert the grinding machine and adjust so that the grinding disc will be parallel to the seat to be resurfaced. This is accomplished by turning the machine back and forth in a circular motion (approximately 1/16 of a turn).
- 10. When the grinding machine is properly set and/or adjusted, tighten the Allen Socket Head Screws to hold the plate clamps.
- 11. Test the machine by hand, i.e., turning by hand to be sure the machine is free and ready for running.
- 12. Insert motor to machine and run for a few revolutions to determine that everything is free (no binding).
- 13. With the machine running, turn the feed screw knob to the right (clockwise) until there is pressure against the seat being ground. Continue applying pressure while accomplished.

Maintenance

There is very little maintenance required for these machines. Keep the VR machines free of grit, grease, burs and other contaminants. Equipment should be thoroughly cleaned after each use and sprayed with water displacing rust inhibiting chemical before storing in storage case. If machine is to be used in a contamination area, clean in accordance with U.S. government specifications.

GRIMSLEY'S HOUSE OF TOOLS, INCORPORATED WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY IMPROPER USE OF STORAGE OF THEIR EQUIPMENT.

CALL FOR DEMONSTRATION OR SERVICE

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