

What Are ASME and NBBI— and What Does That Metal Plate on My Pot Mean?

ASME, NBBI, and Blast Machines

The American Society of Mechanical Engineers (ASME) is a nonprofit organization. It provides technical information for many engineering fields, including pneumatically powered blast machine pressure vessels—sometimes called pressure pots. ASME Chapter VIII, Division 1 lists the standards that nearly all U.S. states have adopted for the design, manufacture, and inspection of blast machine pressure vessels, such as Clemco pressure vessels. Canadian provinces have adapted similar standards. After a pressure vessel passes an ASME inspection, it receives a certification number that is maintained by the National Board of Boiler and Pressure Vessel Inspectors (NBBI).

Explained Simply

1. ASME writes the standards for pressurized vessels. These standards are accepted just about everywhere in Canada and the United States.
2. A pot is certified as meeting ASME standards after it meets the design, manufacture, and inspection standards in ASME code.
3. The NBBI maintains records on pots that have been certified as meeting ASME standards.

That Metal Plate

If a pot meets ASME standards, either a U or UM is stamped on its metal compliance plate. Larger vessels receive the U stamp while smaller or miniature vessels receive the UM stamp. Likewise, if repairs to a pot meet code, an R is stamped on its compliance plate. Repairs must meet NBBI inspection code and be performed by a welder certified to ASME standards.

Check with Your State's Governing Body

In addition, several U.S. states publish schedules that list which pots must be inspected and which are exempt from inspection for use in the state. Most often, state departments of public safety enforce these requirements.

About Clemco Industries

Clemco Industries is headquartered in Washington, Missouri. It is the world's largest manufacturer of air-powered abrasive-blast equipment used to clean, deburr, shot peen, remove coatings, finish, or otherwise improve surfaces being blasted. The company manufactures abrasive blast machines, blast cabinets, and complete blast facilities, as well as safety equipment and blasting accessories. ●



Every Clemco pot has a U or UM stamped on its compliance plate, which certifies that it has met ASME design, construction, and inspection requirements

Photograph Key

1. ASME certification stamp—either a U or UM. (U for larger vessels, UM for smaller or miniature vessels.)
2. The pot's model number.
3. The pot's NBBI number. It references all NBBI documentation for this blast machine's design, construction, and testing. To retrieve this information, send an email to the National Board of Boiler and Pressure Vessel Inspectors at information@nationalboard.org
4. Maximum operating pressure at highest allowable operating temperature.
5. Maximum operating pressure at lowest allowable operating temperature.
6. Year pot was built.
7. The pot's capacity in cubic feet.
8. Canadian certification number for a pot being used in Canada.