Background
The Omega 9B is a computerized, numerically controlled (CNC) pipe lathe designed for facing, beveling, inside-diameter (ID) and outside-diameter (OD) counter boring and O-ring cutting on various sizes of pipe, pumps and motor housings. Weld preparations that meet all existing conventional and non-conventional pipe may be machined using the Omega 9B to the highest degree of quality.

Description
The Omega 9B portable pipe lathe is an ID-mounting CNC machine tool that is used for a variety of conventional machining applications, including pipe edge beveling, flange facing, boring, turning and single-point thread cutting.

Omega 9B Technical details:
- Machining capabilities are 28-45 inches OD Machining
- Fully functional on all pipe schedules
- Weight: 925 pounds
- Omega 9B Chuck required for use

Omega 9B Chuck:
The Omega 9B Chuck is the key fixture for the setup and alignment of the Omega 9B CNC pipe-beveling machine. It provides a safe and secure attachment point for its work with a variety of adjustments. The Omega 9B Chuck is one of the most used pieces of equipment in the steam generator replacement field.
Technical details:
- 28-inch to 40-inch ID mounting
- Weight: 285 pounds

The package consists of:
- A 4-jaw Chuck, which mechanically clamps into the work-piece
- An X-Y positioning assembly for fine adjustment of the machine head
- A precision ground mast attached to the X-Y assembly that supports the machine head in a cantilevered configuration
- A mast that has a spherical mounting flange that can be adjusted in both pitch and yaw direction to locate the cutting plane to the desired orientation
- A variety of standard cutting tools that can be clamped into the tool slides
- A machine head that consists of a fixed frame driven along the mast, and a rotating faceplate with motorized tool slides
- Closed-loop servomotors under computer control that drive these two axes of motion
- A rotating faceplate powered by hydraulics
- Programmable motion control and complex geometries that can be programmable, and complex geometries can be interpolated and looped
- A CNC controller based on a NUM® Lathe Control specially configured for the application
- A 50-foot control umbilical that allows the machine to be remotely operated

Benefits
The benefits of using the Omega 9B machining tool in conjunction with the Omega 9B Chuck include the following:
- Combines two machines into one
- Machines various pipe sizes
- Machines all metal types
- Remote operation

Experience
The Omega 9B tool has been used successfully by Westinghouse subsidiary WEC Welding and Machining at the following nuclear plant sites:
- San Onofre
- Angra
- Palo Verde
- Comanche Peak
- Fort Calhoun
- Watts Bar
- Beaver Valley