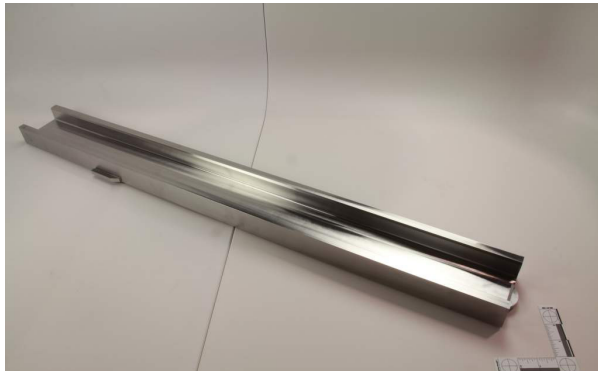


# Machine Shop Capabilities

## Background

At its nuclear parts operations shop in New Stanton, Pennsylvania (USA), Westinghouse provides full machine shop capabilities, offering both computer numerically controlled (CNC) and manual machine lathes as well as vertical milling machines (two-axis and three-axis CNC machining). The full-time tool and die makers who operate the machine shop have a combined 250 years of experience and can accommodate prototyping, one-piece runs and both low- and high-quantity production runs. The Westinghouse machine shop is certified for American Society of Mechanical Engineers (ASME) machining.

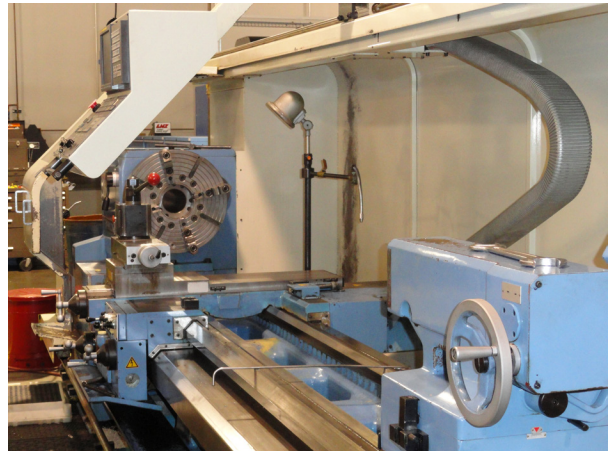


Loop stop isolation valve (LSIV) guide channel machined by Westinghouse

## Description

Westinghouse offers full inspection capabilities and is experienced in machining materials, including the following:

- All carbon steels, series 300 and 400 stainless steels, and inconels
- All types of aluminum
- Brass, bronze and VascoMax®
- Acetal resins and plastics
- Ceramics (e.g., glass mica ceramic)



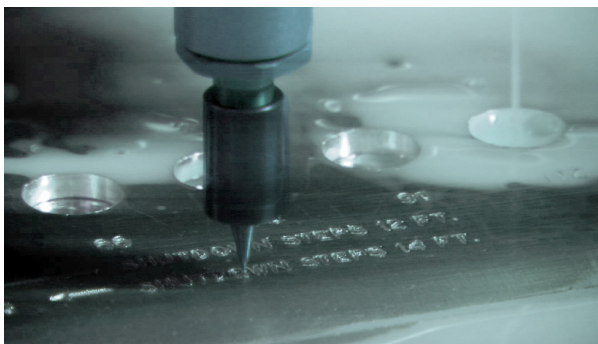
Westinghouse machining lathe

## Benefits

- Lathe capabilities from 28-inch (71 cm) diameter x 100-inch (254 cm) between centers to smaller; milling capabilities from 26-inch (66 cm) diameter x 50-inch (127 cm) table size with maximum height of 24 inches (61 cm) to smaller
- Sheet metal fabrication with 4-foot (1.2 meter) brake capacity, 5-foot (1.52 meter) sheer capacity and corner notcher
- CNC engraving capabilities (from lettering to graphics)
- Welding (metal inert gas welding, tungsten inert gas welding, stick welding)



Machining lathe



Westinghouse provides precision CNC engraving on a variety of materials.

## Experience

In 2011 Westinghouse completed a steam generator repair program that achieved the following:

- Machining of 66 specimens (four types) from two 900-pound weldments
- 300 machining hours within seven days
- 100 percent specimen retrieval and 100 percent inspection acceptance

Below are examples of AP1000® reactor support:

- **AP1000** reactor internals ASME code work
- **AP1000** reactor Joint Project Management Organization modifications
- **AP1000** top plates
- Seismic test fixtures
- Steam generator plugs
- Eddy current standards
- Core Exit Thermocouple Nozzle Assembly seal carrier assemblies
- Reed switch position transmitter tubes
- Replacement Rotating Equipment Services shafts, runners and seals

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