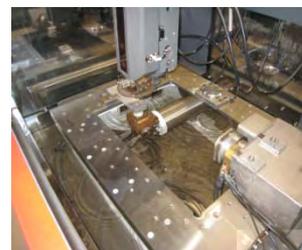


Capability/Need

- New fabrication/machining capabilities:
 - FADAL 4525 5axis CNC Mill
 - Enables **machining in 3D**, superior finishes and tolerances
 - Mitsubishi EA12V Sinker EDM
 - **First** such machine at PNNL
 - Mitsubishi FA 20S Wire EDM
 - Insulator, ceramics machining
 - Monarch EE Toolmakers Lathes (2)



Science/Benefits

- Machine shop redesign, reconfiguration, with ergonomic, space efficiency advantages
- Upgrades will provide **30-50% increase** in shop capacity and turn-around
- Lathes will have **50% longer beds** (larger projects)

EMSL Strategy Alignment; Specifics

- Science themes: Biological Interactions/Dynamics; Geochemistry/Biogeochemistry and Subsurface Science; Science of Interfacial Phenomena
- Cross-cutting challenges: All
- EMSL capability area: Support
- Anticipated availability: December 2009
- Technical POC: Mark Townsend