Safety Alert
Re Use of Lathes in TS Operations

Background
Lathes are a common machine tool used in a variety of industrial settings and workplaces including specialized applications like thermal spraying. This Safety Alert advises of a recent accident where a thermal spray operator was fatally injured. The accident warrants a review of certain thermal spray operations to evaluate what, if any, additional precautions can be taken to further reduce or eliminate risk of injury when using lathes.

Accident Facts
An experienced thermal spray operator was fatally injured working in a booth where hand thermal spraying is performed on a rotating steel shaft being turned by a large engine lathe. At the time of the accident the thermal spray process was not operating, however it is believed the accident occurred when the neck and shoulder shroud segment of the employee's supplied air helmet assembly became entangled around the rotating shaft, pulling his entire body into the machine, resulting in fatal head and chest injuries.

Accident Learnings
The hand thermal spraying process and numerous other machining applications may involve close operational proximity to rotating work or components on lathes.

The turning force produced by a lathe's head stock, which may rotate at high speed, contains sufficient energy to draw an employee's clothing, jewelry, hand, arm or entire body into the rotating mechanism, presenting a risk of serious injuries, amputation or death.

Each site that utilizes lathes should conduct a detailed hazard analysis to identify the extent of unacceptable risks associated with their use of lathes and select appropriate means of controlling or eliminating these risks.

Issued by the Thermal Spray Society Safety Committee

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