

Near miss – a ‘riveting’ lesson learned



Description of Process:

Side liners were to be fastened on to PVC reels using a pneumatic rivet gun

Description of Incident:

During the process of applying side liners to the PVC reels, the pneumatic rivet gun used to fasten the liners in place failed when the operator engaged the trigger. When the components failed, the plunger, housing, etc. hit the operator in the thigh. No injuries or first aid was required.

Investigation revealed that the plant air was set at 115 psi but the gun is rated for a maximum of 90 psi. No regulator was in place at the time of the incident to lower the pressure to the tool.

- Employees were utilising an older style pneumatic rivet gun that is rated at a maximum of 90 psi
- Newer style rivet guns had been purchased and received but not yet placed in the workshop which are rated for a maximum of 120 psi
- Available ‘plant’ air is conditioned and available at 115 psi throughout the facility
- Employees were attempting to install liners utilising stainless steel rivets which required a higher pressure requirement than the traditional aluminium ones used on previous installations
- A site survey of pneumatic tools indicated a maximum working pressure of 90 psi on a majority of the equipment

SAFETY ALERT

- Regulators are available onsite however, they are typically not set to the maximum allowable working pressure (MAWP) for the tool being utilised
- Currently no process exists for HSSE review and approval for hand and power tools prior to arrival for use onsite

Good Practice Guidance:

- Review 'plant' air requirements to determine if all air systems can be regulated below 90 psi without affecting equipment downstream (tensioners, pneumatic HFL reel motors etc.)
- Conduct a review of all pneumatic tools in-house to determine MAWP of each tool and clearly identify it with a visual label adhered to it
- Complete STOP Work meetings with all affected areas to convey pneumatic tool safety and MAWP requirements
- Implement a system for approval of hand and power tools after a thorough review and risk assessment process.