Safe Work Procedure – Air Drill

Authorised by HR Manager

Issue Date: 21.12.17 | Last Review: 21.12.17 | Next Review: **21.12.19**

DO NOT use this equipment unless you are authorised to use it and, have been instructed in its safe use and operation

Safety glasses must be worn at all times in work areas	Rings and jewellery must not be worn
Sturdy footwear must be worn in work area	Close fitting/protective clothing must be worn
Hearing protection must be used when using this machine	Long and loose hair must be contained

POTENTIAL HAZARDS:

- Includes: Noise, cuts, entanglement in rotating parts, debris and particles in eyes and burns.

PRE-OPERATIONAL SAFETY CHECKS

- Do not operate or use the air drill unless you are trained in its use
- Check the drill to ensure it is safe to operate
- Ensure the drill has been lubricated accordingly
- Ensure the drill bits to be used are sharp and correct for the material being drilled
- Drill a pilot hole first, after centre punching
- Drain the water from the air system
- Check the male & female air couplers for wear
- Ensure the drill bit are straight and securely tightened in chuck

OPERATIONAL SAFETY

- Ensure the chuck key is removed from the chuck
- Have a good solid stance & firm grip on tool when using drill
- Notify people around - possibility of noise and metal particles airborne
- Securely mount the part that is to be drilled
- DO NOT drill if the part if held in place by hands only
- Ensure the correct drill size used - start small and work up in size
- Ensure the area is neat and nothing else can be caught in rotating drill
- Be mindful of debris exiting the drilling area
- Be mindful that the drill bit will be hot when exiting drilling area
- Use cutting oil to extend drill bit life
- Disconnect the air supply from drill when the work is completed

POST-OPERATION:

- Return the tool to storage area once work completed
- Report any damages to tool, to your manager
- Put all drill bits into their correct location
- Replace broken bits immediately

TIP - INFORMATION

Air drilling is also known as pneumatic percussion drilling. It is an underbalanced drilling (UBD) technique in which gases, usually compressed air or nitrogen, are used to cool the drill bit and lift the cuttings of a wellbore in place of conventionally used liquids. Because it operates on gases and not electricity, it can be extremely powerful.