

COMPRESSED AIR SAFETY

Purpose: To give guidance on the hazards and precautions when using compressed air.

COMPRESSED AIR CAN KILL

INTRODUCTION

Compressed air is a fact of modern industry. It has numerous useful applications and is a valuable industrial power source.

Despite its harmless appearance, compressed air is dangerous and is responsible for some of the most horrific of all industrial injuries.

This information sheet identifies the most common hazards associated with compressed air and explains how accidents with compressed air can be avoided.

CLEANING WITH COMPRESSED AIR

At the end of a long hard day the temptation to save a few minutes by cleaning the working area with short blasts of compressed air might seem irresistible. Compressed air will inevitably hurl metal, dirt and debris into the air and there is no way of controlling it or its destination. Serious injury to yourself or workmates is a certainty sooner or later.

BLOWING OFF CLOTHES AND HAIR

A jet of air powerful enough to remove the dirt from clothes is also powerful enough to penetrate the skin. Pressure as low as 4 lbs per square inch has been known to rupture intestines, perforate ear drums and damage eyes. Even pressures too low to puncture the skin can prove fatal as any stream of air can work its way in to the body via hair follicles, cuts and scratches posing a threat of death from forcing itself into the blood stream.

INFECTIONS

Impurities in the air jet such as paint, dirt, metal etc. enter the blood stream through natural 'entrances'. These impurities then create and nourish various infections and give rise to complaints which are often serious enough to lead to amputation, notably of fingers and hands.

NOISE

The noise created by the blowing of a compressed air jet can be as high as 130 decibels which is considerably higher than the level that is known to cause hearing loss.

HORSEPLAY

The consequences of accidents involving compressed air are tragic enough, but somehow the pain and anguish of everyone concerned seems heightened when they are the result of a prank. However innocent, 'a bit of fun with an air hose' might seem at the time, there can only

be one possible outcome. Tragedy is never more than one more practical joke.

The courts take a dim view of horseplay incidents and are known to impose particularly stiff sentences.

SAFETY PRECAUTIONS WHEN WORKING WITH COMPRESSED AIR:

- Never direct an air jet at clothes, hair or any part of the body.
- Do not clean work areas with compressed air.
- Make sure that the tool hose and connections are the correct type and free from air leaks.
- Turn off the air supply before changing tools or check that it has an automatic shut-off valve.
- Always close the hose by the valve. Never kink the hose.
- Avoid blowing off sharp edged and into holes.
- Always use the lowest possible pressure for the job.
- Always cover open wounds and wear gloves where practical.
- Wear suitable eye and ear protection when using compressed air tools.
- Do not use defective equipment and report any defects without delay.

Important Notice: Your Health & Safety Information Sheet is for guidance only. It does not replace our written Health & Safety policies and procedures and you must make sure you are fully aware of these.

Training Courses: For more details on our Health & Safety Training courses available, please contact our Learning Zone department via email: learningzone@shrec.org.uk or visit our website: www.shrec.org.uk