

Safety

Compressed air in its basic state or in its more sophisticated applied forms can result in accidents if it is not properly used. We therefore draw your attention to the following paragraphs:

The Health and Safety at Work Act (1974) makes specific requirements on suppliers and users. To conform with these requirements Norgren Martonair Limited has, so far as it is reasonably practicable, designed, constructed and tested its products so as to be safe when properly used. Many of our customers, being suppliers as well as users, are reminded of the imposed duties of the above Act and when expediting these duties our technical staff will be pleased to advise.

We cannot accept responsibility for the design of plant which might use our equipment and would recommend the use of BS 5304 (1988) "Safety of Machinery" and BS 4575:Part 3 (1988) "Fluid Power Transmission and Control Systems", both of which we have found to be an invaluable aid in designing control systems requested by customers. (Note compliance with a BS does not in itself confer immunity from legal obligation).

We also suggest the guidance booklet by the Health and Safety Executive HS(G) 39 "Compressed Air Safety" that offers advice on the safe use of compressed air.

Application

Take note of any existing standards and regulations which must be adhered to in respect of particular classes of equipment. Particular attention is drawn to regulations concerning the use and testing of items such as hoists, presses and impact presses, also pressure vessels or receivers.

In cases of doubt consult your local Factory Inspector. Note that all equipment should only be used within the published operating limits for pressure and temperature. Care should be taken to guard against accidental valve operation either by the operator or a third party, e.g. cover for a foot-operated valve.

Where a valve, or other component, performs a critical function in a system, it should be used in such a manner that any failure in the component will cause the circuit to revert to a safe condition.

For specific advice on circuit safety requirements consult our Technical Service.

Installation

Check that all cylinder tie-rods and mountings are firmly fixed. End cover screws, valve mechanisms, piston rod nuts etc. must be fully tightened before pressure is applied to any component.

It is important that all plastic and other types of port dust caps, fitted for transportation purposes, are removed prior to connecting the units to the air supply. Ensure that all air connections are mechanically tight. Loose pipework can be dangerous. Double check that all pipe connections have been made to the correct ports.

Take great care when connecting electrical wiring to solenoid valves and pressure switches that the equipment is properly installed. Make sure that all electrical devices are suitably fused, insulated and earthed.

When checking the installation make sure that this is done under fully safe conditions, i.e. with any guards and other safety arrangements in operation.

If checking cylinder movements for mechanical alignment, whether under pressure or not, make sure that hands, fingers or other parts of the body cannot be trapped.



If the machine design allows it, pressure should first be introduced slowly into the system. A manually operated pressure regulator or smooth start valve will prove useful in these circumstances.

Operation

On no account must the human body ever be subjected to compressed air, e.g. do not attempt to occlude exhausting orifices by hand. Especial care should be taken where compressed air is used for 'blow gun' applications. We recommend either the use of a Safety Blow Gun or the fitting of a 'Norgren' type R16 Safety Blow Gun Regulator in the air supply. We draw your attention to a booklet entitled 'Compressed Air Safety Code' by the British Safety Council.

Take care when making operating adjustments to flow regulators, cushion screws etc. that threaded components do not blow out under pressure.

Silencers, exhaust port filters and other types of port fittings should not be removed whilst the system is pressurised.

Important

Before commencing any maintenance, shut off the air supply and exhaust downstream pressure, this can be done with an exhaust type ball valve. Switch off the electrical current.

Our policy is one of continuous research and development. We therefore, reserve the right to amend without notice the specifications given in this document.