

Dry Compressed Air in Marking Machines

Moisture in the form of water in compressed air often causes extremely unpleasant faults in pneumatic control systems and in bead-dispensing equipment. The greater the concentration of moisture in the air, the more likely vapour will condense to form water in the compressed air whenever it cools down or the pressure drops.

So-called water separators only remove a portion of the moisture, i.e. only that portion that constitutes vapour already condensed to water when it enters the water separator. **This means that the air passing through is by no means dry.** The moisture, i.e. the vapour still in the air, passes through the water separator and does not condense into water until it cools down at a later point. Even when it cools down further by 1° C, it produces water again.

It is possible to achieve a considerably closer-to-perfect solution by using air-drying apparatus. This entails extracting the majority of the moisture present in the form of vapour, so that the annoying water cannot be produced until it has cooled down considerably further. For the optimum in moisture extraction, we offer service units consisting of a water separator, a dirt trap and an air dehumidifier. First of all, the water separator extracts any water still in the compressed air, and then the air dehumidifier removes most of the vapour still present in the air.

The price of the equipment is high, and the higher the capacity, the more expensive it becomes. For this reason, you should only dry that portion of the compressed air that is used for control purposes and for the bead-dispensing equipment.

It should be borne in mind that the drying equipment use up to as much as 20 % of the nominal drying capacity as so-called scavenging air and draw it off into the atmosphere. This air is to be considered as a loss for other purposes.

The maximum intake temperature must not exceed 60°C.

<u>Order No</u>	<u>Max. capacity</u>	<u>Scavenging-air consumption (loss)</u>
9703771	25 l/min.	4 l/min.
9703772	250 l/min.	39 l/min.
9703773	500 l/min.	77 l/min.

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