DenComp Equipment Ltd

Dental Compressor Specialists

As a general rule, adhering to the Code of Practice compiled by the British Compressed Air Society (BCAS) and endorsed by the British Dental Association (BDA) ensures compliance with current guidelines. What this means in simple terms is that the use of an oil-free compressor fitted with a dryer and coupled to appropriate filtration, will provide clean, dry air to the practice.

The use of compressed air during dental treatment involves the air coming into direct contact with the patient as well as driving pneumatic instruments. A well designed, installed and properly maintained system will contribute to the confidence in the treatment being given to the patient.

There are minimum requirements for air volume at the chair. Generally, an airflow of 50 litres / minute @ 5bar pressure should be provided per chair. DenComp model numbers give an indication of the appropriate model for each application. e.g. DenComp 3 will provide adequate supply for up to 3 chairs.

Location of the compressor is an important factor, not simply in terms of noise, but to ensure efficient operation of the compressor and filtration. Adequate ventilation is vital, as efficiency deteriorates dramatically with increased temperature. This compromises air quality as well as increasing wear on the components. Where the air supply to the compressor may be contaminated, additional care must be taken to eliminate impurities. For example, a compressor sited in a basement near a busstop, will be ingesting highly contaminated air. These impurities are concentrated in the compressor, and must be eliminated prior to use.

Air purity is critical, and in normal conditions, adding a Duplex filter downstream of the compressor eliminates contaminants from the air prior to use. The DenComp D20XAC complies with ISO 8573 Class1- 6-4-3, which is the accepted standard recommendation. In Health Board or Health Authority premises, the addition of a Medical / Sterile filter is mandatory. The DenComp A20MS meets this need, complying with HTM2022. Controlled air purity maximises the life of pneumatic instruments, and protects the patient from harmful effects of airborne bacterial micro-organisms.

It is also recommended that air purity should be checked periodically to determine that it is within the required limits.

It is important that periodic maintenance is carried out on the compressor and filtration system. Generally, an annual service is required, but in extreme conditions, more frequent maintenance may be required. Additionally, Pressure Vessel Inspection is required on the air receiver to comply with insurance regulations.