

Promotional article

## Rotary or piston compressor

The dental profession and surgery and intensive care units need clean, dry, sterile air with no harmful gases. It is well known that calls for tenders for breathable air in hospitals always run like this: **bids are invited for an oil lubricated rotary compressor.** The request for a rotary compressor, rather than a piston one, comes, we assume, from the fact that the rotary one produces a much higher quantity of air than piston compressors, and hospital have always needed a great deal of air; also, no dry rotary compressors existed. Someone checked the air ducts in hospitals using rotary compressors. Despite the filters, they found deposits of blackish oil along the air ducts. It could not be otherwise, as during the compression stage air reaches a temperature of 120°C and filters cannot entirely stop all of the harmful gases and atomized particles coming of the compressor with the air.

## Our project

Half a century ago, when we conceived the idea of a piston compressor for the production of sterile air, we designed a dry compressor in which friction surfaces would not be subject to wear and tear. Pistons and elastic segments that wear out produce a Teflon powder that is then found, at least in part, in the compressed air. Our project seemed impossible to most people, including the most skilled technicians. They thought that oil was indispensable, as in the traditional compressors and combustion engines. Everything, from the cost of the study to that of production, seemed to advise against our idea.

## Our production

We proved that it was not so. With our dry compressor, which we have been producing for almost forty years, we believe to have achieved, and perhaps surpassed, the level of reliability of oil lubricated compressors. From the very beginning, our manuals stated that the friction parts of our compressors are not subject to wear and tear and need never be replaced through the whole life of the compressor. Through forty years of constant improvement, we have reached a level of reliability that has drawn the attention of the whole world: we are exporting to sixty countries, where we have dealers who distribute our products and provide assistance on a regular and continuous basis. The compressor to be used in a clinic or a hospital must produce clean air and only starting from clean compressed air is it possible to obtain sterile air. The dimensions of our compressors have no limits, we design the frame with the



number of heads needed to meet the specific needs of the hospital or clinic in question and then we design the treatment line. You can see examples of these products on our website.



Below we list some of the locations of compressed air systems installed in Hospitals and Universities in Italy and abroad:

Alfonso X El Sabio University, Madrid - Spain Lingotto Dental School, Turin Basso Ferrarese Lagosanto Hospital - Ferrara Federico II University Hospital - Naples Tromsø University - Norway University of Sharjah, Dubai - United Arab Emirates Alfarabi Jeddah College – Saudi Arabia Melbourne University – Australia

> Augusto Cattani Cattani S.p.A.