

Buying Compressed Air instead of Compressors



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The number of industrial enterprises choosing to buy their compressed air as a utility rather than investing in its means of production is increasing, with good reason, as can be confirmed by numerous satisfied customers.

The cost of each kilowatt-hour of power consumed, each cubic metre of water used and each kilometre over which goods and materials are transported are fundamental factors of operating costs. Knowledge of these factors is then the basis of cost optimizing measures. In the

case of compressed air, one of industry's most vital energy sources, only about one in ten users is able to state with any accuracy the cost of each cubic metre. This is hardly surprising as the cost of self-produced compressed air varies with circumstances and is often very difficult



Fig.1 Kaeser's „Sigma Air Utility“ offers the highest efficiency and economy in compressed air supply

to assess. Included in the calculation are not only the hard fixed and operating costs but also less tangible figures such as a proportion of labour costs for personnel who are only partially or occasionally involved in the air supply system, including training activities.

A vital criterion for compressed air is permanent availability, as this is directly related to production continuity. Who better to take on the responsibility of uninterrupted air supply than one of the world's leading system suppliers in this field? Taking air as a utility (Fig. 1) from Kaeser means that you get far more for your money than just the air. You also get the security and peace of mind that comes from the solid backup of decades of experience and a wealth of know-how; an economic air supply you can confidently rely on at a transparent fixed price.

‘Fixed price’ compressed air improves cost transparency and liquidity

Users who reject the idea of installing compressors and treatment equipment in favour of buying only the air they need in specific quantity and quality from a spigot in the wall, so to speak, (Fig. 2) improve the cost transparency of their undertaking. Instead of a complicated calculation to arrive at an approximate unit cost they are presented with a contractually agreed, long-term fixed price per cubic metre from which reliable and accurate operating cost calculations

can follow. At the same time, a unit price is also agreed for consumption over and above the base volume. Means are provided for precisely determining consumption, either by calculating from



Fig.2
Compressed air from a spigot in the wall increases cost transparency and liquidity

compressor running time or by means of flow meters, to ensure that the user only pays for what he consumes.

Cost transparency is a powerful managerial argument in favour of 'Sigma Air Utility'. Apart from the obvious attraction of avoiding capital investment that can reduce liquidity or credit line, there are also solid tax advantages. Instead of having to write the cost of bought equipment off over a long period the sums

paid for utility air are fully and directly deductible as operating costs.

Concentration on core business

The engagement of specialists on activities that, although necessary for achieving corporate objectives, do not appertain to the original competence of the company, is only useful when it sets other resources free – either human or financial – that can then be applied to the core business. Experienced Kaeser engineers supervise and coordinate the whole project (Fig. 3) from establishing the user's requirements through to design, installation and initial start-up of the complete air system. Their work also includes making sure that the room

provided for the equipment is suitably ventilated. The user must simply supply a space for the air system. This may already exist if an air system is being replaced, and if a new building must be erected the Kaeser engineers can be called upon to advise on its design.

Automatic 'savings' factor

As well as offering cost transparency the air utility concept also contains an automatic unit cost minimising factor. As the air supply system is run and maintained by Kaeser the initiative is there to ensure that it matches most exactly the operating conditions and demand and includes all the most up-to-date, maintenance-friendly and energy-thrifty devices

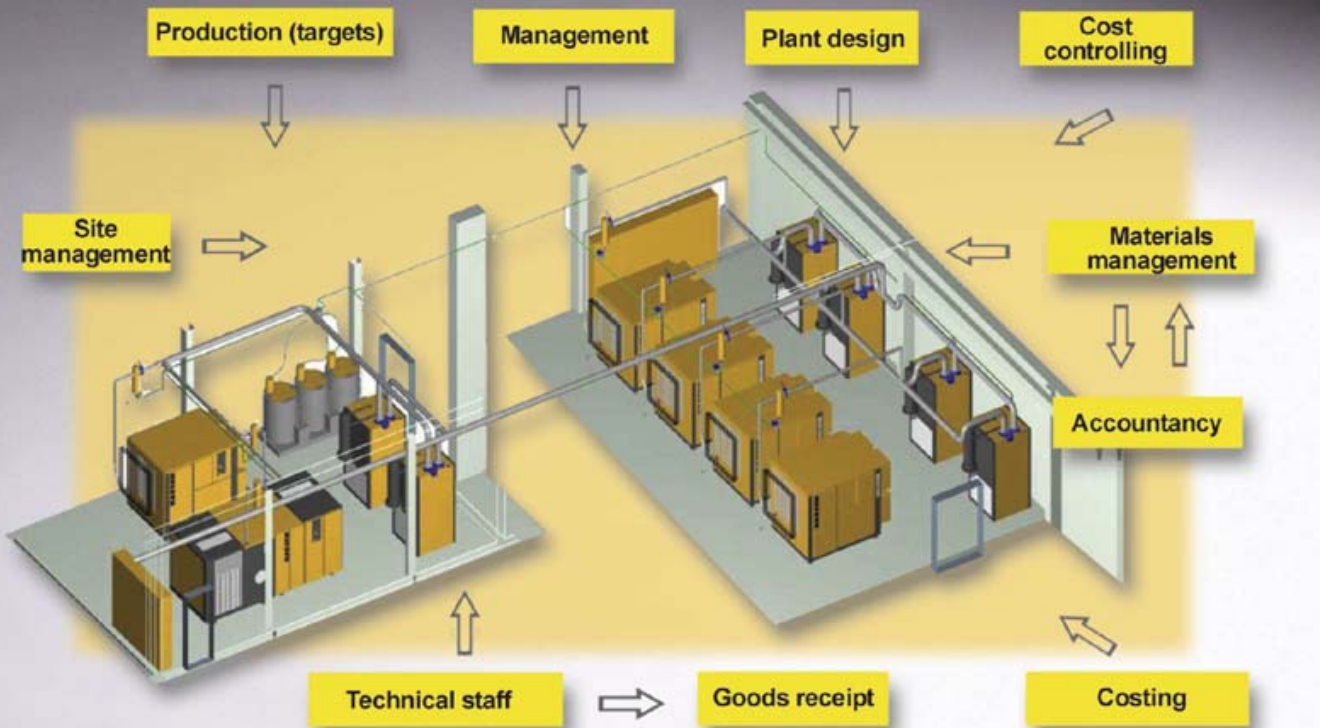


Fig.3 Many departments in a company are involved in the production, treatment and usage of compressed air. When air is taken as a utility, great resources are freed for other tasks

and techniques (Fig. 4). Among these is the facility known as Teleservice that provides a data link between the system and Kaeser's Service Centre where constant supervision by experts ensures smooth and economical running, rapid diagnosis and rectification of faults, and timely preventive maintenance activities. In this way, Sigma Air Utility more than takes into account the fact that consumption of electrical energy is the highest cost-factor by far (around 70 to 80 percent) in the production of compressed air.



Fig.4 The 'Sigma Air Utility' customer can be sure that his air supply system is right up to date with major components replaced by newer versions if technically and commercially advantageous to ensure the most efficient and economical supply.

Users views on utility air

Taking air as a utility and paying for it as it is used is a sensible alternative means of acquiring a production resource. Here

is how three typical users express this in their own words: „Strategic and economical aspects tipped the scales in favour of utility air in our company. Moreover, we wanted to concentrate service resources on true works maintenance. The imminent renewal of our compressed air plant was the chance to change to 'Sigma Air Utility'. The most important factor governing this decision was Kaeser's assurance of consistent volume, pressure and quality. Of particular significance is predictability of energy consumption over the contract period. A point to be regarded as positive is that the analyses and prognoses obtained during the project study regarding energy savings on an old/new comparison were confirmed in full“.

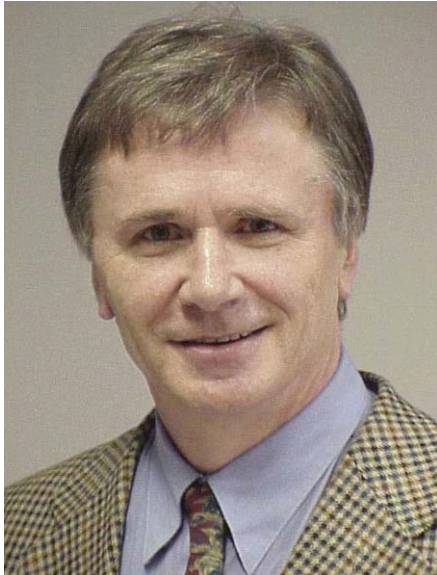
Reinhard W. Ennen, Servicing and Works Engineering Manager BASF Coatings, Münster, Westphalia, Germany

„As well as an offer for the purchase of a new compressed air system there was also an offer to supply utility air. We attach great importance to reliability and economy and after weighing up the pros and cons we decided on Kaeser 'Sigma Air Utility'. How much the savings actually are is difficult to say, because our compressed air consumption has changed constantly over the last couple of years“.



Georg Lichtenberg, Production Engineering Manager Hayes-Lemmerz, Königswinter, Germany

„We took the decision to use the ‘Sigma Air Utility’ because the concept offered by Kaeser was so convincing. The costs incurred in using utility air are running



costs that are directly proportional to air demand. This meant that the quite considerable investment volume set free could be used for further modernisation of our production plant. Another significant criterion for

the decision was the guaranteed operational reliability and included in the price was complete system maintenance. Extremely vital to our operation is the rapidity with which Kaeser's service engineers respond to any calls for help. Their competent service team has fully met our expectations and earned our highest praise“.

Valentin Kumer, Purchasing Manager Mahle Filterwerke, St. Michael, Austria