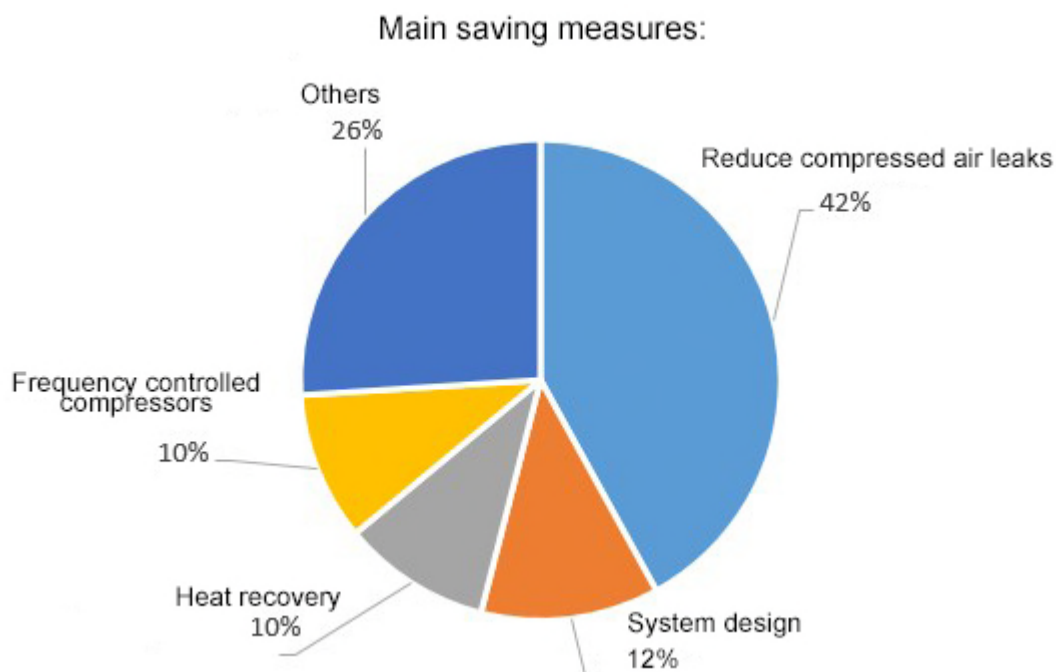


What is compressed air?

Compressed air is a widely used medium in industry. In Europe, an estimated 10 percent of all industrial energy consumption goes to the production of compressed air. In Belgium, this corresponds to 3800 GWh. However, compressed air is a very expensive and energy-consuming technology. Through this website we try to give some tips on how you can waste less compressed air. Studies show that 5 to 50% energy can be saved in a compressed air installation. The main savings opportunities are shown in the figure below.



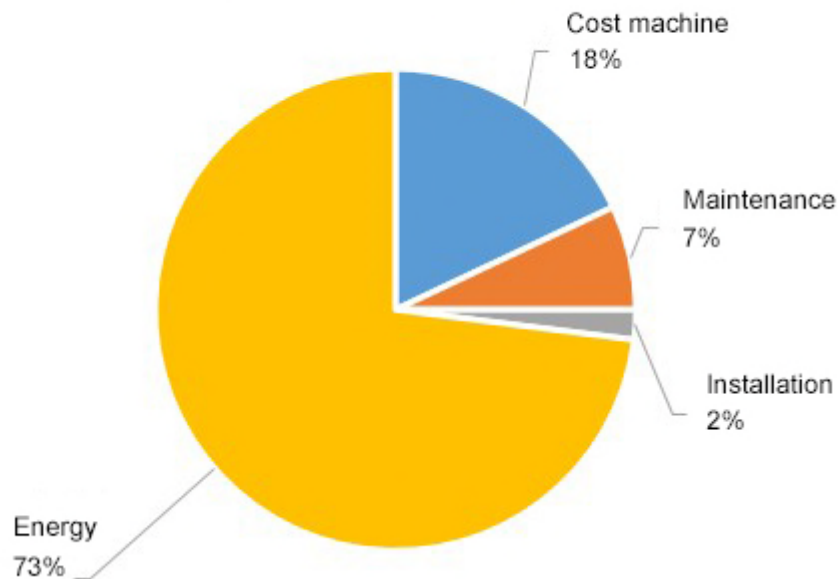
Why compressed air?

Pneumatic actuators are typically cheaper and easier to install than their electrical equivalent. Power tools are often heavier than pneumatic tools due to built-in electric motors. Compressed air can be easily stored and used when needed. In hazardous areas, compressed air can offer a way out.

Compressed air expensive?

Despite its cheap and easy installation, compressed air is a very expensive medium. The figure below shows the cost distribution of compressed air. The energy cost is more than 70% of the full cost. The cost savings we propose on this website are always intended to minimize energy costs.

Cost breakdown compressed air generation:



Compressed air is indeed expensive, this is due to several factors. A lot of energy during the compression of air is lost as heat. As a result, the efficiency of a compressor is very low. The choice of the type and size of the compressor obviously has a very large influence on this efficiency. A compressed air installation with an oversized compressor that runs unloaded for a large part of the time will have a much lower efficiency. In a compressed air installation there are always a lot of compressed air leaks. Compressed air leaks can quickly reach 20% of the entire production. The workload is often adjusted too high, which means that a lot of energy is lost. Compressed air must be treated, dried and filtered. Of course, this treatment also costs energy. All these factors ensure that compressed air is an expensive medium where there are still many savings opportunities.