

## **Compressed Air Doctor Prescribes New Valves**

Per-Åke Wahlberg's discovery lowers air consumption

Compressed air systems are one of the largest energy uses in industry. But the inventor and entrepreneur Per-Åke Wahlberg from Harads, Sweden knows how one can tighten the leakage.

Stopping energy waste

Per-Åke Wahlberg is the winner of the Venture Cup Nord competition and also came in third place in the Swedish finals with his energy saving device X-Block. It can be installed on existing pneumatic cylinders and make them run faster, smoother and quieter with only half as much compressed air. It lowers energy costs by at least one half.

Per-Åke Wahlberg's own tests show that optimal cylinder configurations with X-Block can lower air consumption between 30-70 percent.

"How has it gone since the Venture Cup win"?

"Even better than one could hope for. We have completed an Agreement with a distributor in England. They have made preliminary installations of X-Block in 8 large factories. We also have a distributor working with us in Ireland as well as a Company being formed in the USA. But ahead of everything else, I have a good customer SCA Timber in Munksund, Sweden's largest saw mill. There we are in the process of installing X-Block in a diverse number of production machines, which feed in wood from the saw mill," says Per-Åke Wahlberg.

"Where is the market for X-Block"?

"Everywhere in industry. 70% of all industry has compressed air cylinders in their production. Compressed air systems are simpler than electric motors and tolerate rougher conditions. On the other hand it is expensive to produce compressed air and there is a lot to be gained from making air use more efficient. The finesse with X-Block is can manage a group of cylinders".

"If you succeed worldwide, what is the market worth?"

"There is a market potential of 35 million X-Blocks in Europe and the USA. This is a market worth of around 300 billion kroner, which is solely for the X-Blocks. In addition, there are the installation, accessories and consulting fees".

"What calculations are you showing your customers?"

“At SCA Timber in Munksund outside of Piteå, for example, we are saving 62% in air consumption with X-Block. This results in a lowering of energy consumption at the air compressor of between 60-70 percent. In addition, X-Block provides for softer and smoother pneumatic cylinder strokes, which reduces the wear on the machines the cylinders drive thereby decreasing maintenance costs”.

“How long have you worked on the invention”?

“It has now been 5 years. One and a half years for product development and patents and the rest of the time to find customers and test X-Block and prove it works. My background includes 35 years in the mechanical world including head of product and development for a Company in Harads, which developed energy saving pneumatic cylinders, which went bankrupt in 2002”, says Per-Åke Wahlberg.

But Per-Åke Wahlberg is not alone. The Swedish Department of Energy has assisted in the first installations and two years ago he included an international partner to develop internationally.

