



Meet the team behind the FD innovation

The FD120-285, which was launched one year ago, sets a new benchmark in features, performance and customer value. This very energy efficient dryer uses a refrigerant (R410a) never used in the dryer industry before, together with a specially designed rotary compressor and a patented low pressure drop heat exchanger. On top of the superb energy efficiency, this range of dryers contains many features, like the patented regulation algorithm "Saver Cycle Control", the Flow Switch and the low velocity/low pressure drop water separator unique in the dryer industry. In next paragraphs, the people responsible for this innovation talk about their challenging task.

Vladimir Kozlovski, the Product Manager responsible for the FD 120-285 range explains why the new dryer was designed: "The old FD Dryers were very good robust dryers. But we wanted to give salespeople and distributors the opportunity to differentiate them from the competition. The aim

was to develop the best dryer in the market, with the best features, for the same price. And thanks to a fantastic team, we succeeded. Now our salespeople and distributors can make an unbeatable proposal to the customer. They can sell the best dryer today available, at a very sharp price."

Designing the groundbreaking FD dryer range was very challenging. According to Tine Hellebuyck, team leader refrigerant dryers Industrial Air, the biggest challenge was the choice of the new refrigerant. "It was a major and very difficult decision as this refrigerant was never used in the dryer industry before. We are constantly monitoring similar industries, like airco, and saw during the project R410a becoming more and more popular in new products of leading manufacturers of these industries. This reconfirmed that our choice for R410a was the right one." Choosing a new refrigerant was a major step, and at the end it proved to be a brilliant move. "Its energy efficiency

even exceeded our highest expectations" says Tine.

The technical feasibility of the FD 120-285 was done by Alessandro Fantacone and Wouter Van Dijck. Not an easy task: "It was like switching from a petrol engine to a diesel", says Wouter, "the whole technology had to change. Although the R410a refrigerant was being used in air-conditioning, we were the first in the dryer industry to choose this refrigerant. This meant that not all the necessary components existed. Once suppliers knew that Atlas Copco was interested in ordering those new components, they began developing them. But because we were working with brand new

components and a refrigerant never used in a dryer, all norms and every good practice had to be checked and double-checked"

Wouter was also responsible for the calculations. "Although we worked with a brand new refrigerant and components, the calcu-



Wouter Van Dijck and Tine Hellebuyck

lations were not that difficult, because I could rely on Atlas Copco's excellent know-how of the production of dryers" says Wouter.

Patrick Dresen and Stefaan Boel (Autodesk award winning designer) were in charge of the FD 120-285 mechanical design. "The biggest challenge was to integrate the filters and the OSD in the canopy, while making the footprint of the FD smaller than the previous version," says Stefaan. The footprint of the new dryer is 9% smaller compared to the previous generation of FD dryers.

Also the purchasing was a difficult task.

Because the new FD range needed a completely new component base, every component price had to be renegotiated. Kurt Andries put a lot of effort in purchasing the components, especially those of the flow switch.

When the prototype was build, Kurt Hertsens and Danny Van Den Driessche began fine-tuning the energy saving algorithm. Because the dryer has to work at even the highest ambient temperatures (40-50°C) this also had to be tested profoundly.

Ruggero Vencato was in charge of the difficult assignment to set up a production line for the new dryer range. Every method and every rule had to be reconsidered. Now the production line is fully operational, short lead times can

be guaranteed.

Frederik Van Nederkassel was responsible to make sure that the dryers are service friendly and reliable in real life conditions. He has not only given his input to serviceability of the unit, but also improved the regulation algorithm to reduce the starting current peaks through the refrigerant compressor. The patent for this soft start feature implemented on the one phase dryers is filed and waiting for approval.

Today the FD 120-285 has two patents granted for the Flow Switch and the Saver Cycle Control.

The unique value proposition for the customers and the many features to differentiate it from any competitor, makes the FD 120-285 easy to sell. In fact, the launch of the FD 120-285 resulted in a significant increase in sales and profitability. The demand was so high that the first months after the launch our suppliers and the pro-



Kurt Hertsens and Danny Van Den Driessche



Stefaan Boel (right) and Patrick Dresen

duction line couldn't follow the demand, which resulted in long lead times and late deliveries. It took time to bring a new chain and production line up to a new speed, but now we are ready for a boost in sales. Thanks to changes made in the assembly processes and the logistics chain, we can accept double the order income compared to the beginning of 2007.

To support sales, all necessary marketing materials are fully updated, including two leaflets, a product presentation, a detailed 3D animation, energy consumption data at partial load, a new set of correction factors, a new selection tool and a set of questionnaires to test and develop sales peoples' knowledge.

knowledge.

So you have now the possibility to sell the best dryer in the industry, all the sales material is there to support you and lead times are short... Go for it!

Vladimir Kozlovski



Marian Sanspeur and Dirk De Reys are ready to accept your orders

The reactions from the field are very promising:

Guillermo May, Spain:

We appreciate the reliability of the new dryers. We have no issues with their quality, although this was our concern in the beginning as so many things were changed in FD 120-285. Our sales grow, but in percentage it does not sound very impressive because today our refrigerant dryer ratio is already above 100%. We plan to increase our refrigerant dryer ratio with another 2% this year, but year-to-date our free standing dryers' turnover increased by 27% thanks to FD 120-285!

Johan Wiberg, Sweden:

The Elektronikon added sophistication to the look which was missing in the previous generation of dryers. Also the monitoring possibilities differentiate the FD range from the competition. It is not a surprise for us the dryers are performing well, but when one of the dryers passed special tests at customer's side, we discovered that these dryers are working well even at 85% of the nominal voltage! Easy installation with connections on the top is also appreciated both by sales people and our customers.

Stephane Huby, France:

Our distributors just got the AirConnect training. They clearly see an opportunity to use AirConnect with FD 120-285 dryers. We will push this idea in direct sales as well. We are convinced that all our competitors have major difficulties to match

our offer in case we offer the dryer with AirConnect.

Another good feature of FD 120-285 is the small amount of refrigerant used: below 2 kg. This means that the dryer is not subject to French regulations requiring yearly checks of refrigerant leaks. This keeps our dryer cost of ownership even more competitive compared to other dryer manufacturers.

Joerg Zielinski, Germany:

Year-to-date sales of FD 120-285 dryers are already 40% higher compared to similar capacity old dryers' full year sales. This means that by the end of this year we will double our dryer sales in this capacity range!

Our distributors and sales people appreciated the fact that the transfer price level for new dryers stayed unchanged. Unique features (energy saving, electronic condensate drain and the Elektronikon, ...) help to sell more units. Though Saver Cycle Control helps a lot during the sales process, the dryer is so efficient even at 100% load, that most of our customers select Constant Dew Point operation.

The most appreciated feature for FD 120-285 dryers in Germany is a Flow Switch. With every installation I have seen I noticed that this function was activated, as most of these capacity customers run their production 8-10 hours a day. This feature saves a lot of energy without affecting PDP.