Special Interview

The Future Needs New Standards

— A Talk with Secop about Natural Refrigerants, Inverter Technology, and the Chinese Market

Secop is one of the world's leading refrigeration compressor manufacturers. At China Refrigeration Expo 2015 (CRH 2015) held in Shanghai, JARN interviewed Pieter Boink, Global Business Development and Marketing, Peter Michael Hansen, Global Application Engineering, and John Svane Christensen, Global DC-Powered Application Area Manager, to hear more about its business focus and performance in China.

(Left to right) Pieter Boink, Peter Michael Hansen, and John Svane Christensen

JARN (J): How was business performance in China in 2014?

Secop (S): We had very good results in China. Our growth rate was above expectations. It was quite a surprise since we had planned for a bit of a flat year, due to international export companies moving out of China. But we managed to grow more than 10% so we were very satisfied with the Chinese market last year.

J: Your main business is in Europe, but what percentage of your business is in China?

S: It is true that Europe accounts for approximately 40–50% of our sales. But 15% of our sales are inside China now and the percentage is increasing steadily. Obviously we are putting a lot of effort into the Chinese market in the years to come. With that said we should not forget that we are also very much present in the other global markets: the Middle East and North and South Americas.

J: The penetration of inverter technology is higher than 50% in the Chinese air conditioner market, but what about the refrigeration market?

S: In China we are serving three segments in refrigeration: household, light commercial and DC-powered.

In the DC-powered segment everything is inverter-driven. This has always been the case with the use of DC power. The DC-powered segment is big for us in China, because most of our customers have production here in China.

Since only 2–3% of the light commercial solutions are inverter-driven in China, our involvement is fairly modest. However, in other regions in the world, we offer a wide range of inverter driven solutions to the markets.

In the household segment we see an increasing implementation of inverter products, in order to meet global and local energy regulations.

SLV compressor with forthcoming CCD controller

Our latest solutions for the household segment are presented right here at the CRH 2015 in Shanghai.

J: Where do you see the biggest trend, right now in refrigeration?

S: Compared to last year the main trend, right now, are natural refrigerants. This is where we notice most movement and our highest growth rate. No doubt about that. Down in the exhibition, solutions using natural refrigerants are the ones we are talking about. It is fair to say that the industry is converting refrigerants before converting to inverter-driven technology – from R134a and R404A to propane (R290), isobutane (R600a), and for some specific applications, even 1234yf.

J: What are the main refrigerants used in your products?

S: In China in the light commercial segment, we are selling approximately 90–95% hydrofluorocarbons (HFCs), and then 5–10% hydrocarbons (HCs). But we have a growth rate for HCs of more than 100%. In the mobile or DC-powered segment, maybe 5% of products are HCs today, but it's growing fast too.

The reason why we are focusing so much on this is the F-gas regulation in Europe and upcoming regulations in other parts of the world. The future strategy of the Secop Group is with alternative refrigerants. Not just because they are much more environmental-friendly but also because they ensure much better efficiency. Europe and the United States are, due to their energy regulations, the leading markets where we are spending a lot of our R&D resources. The tough energy regulations in Europe and the United States will take us to the next step.

We don't see that push yet in China. It is still more about natural refrigerants but we are prepared and we feel lucky, because if people want to discuss R290 and R600a, that is what we do every day.

J: Do you see the trend of R290 refrigerant in refrigeration equipment growing?

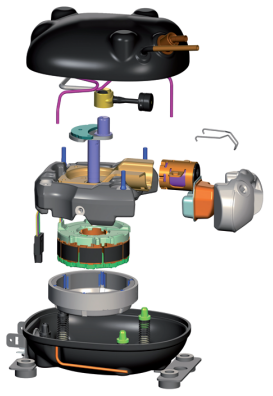
S: Yes. We have seen a huge development in this field in Europe throughout the previous years and now it seems that United States is well on its way, too. We are in no doubt there will be a similar market growth in China. The only thing we wonder about is when Japan will catch up.

J: Is R290 refrigerant suitable for smaller compressors?

S: Sure it is. When R290 compressors get so small, the efficiency drops. So up to 250W, it will most likely be R600a, and after about 250W, it will be R290 for us. That is, for us, basic rules for forward thinking and how we intend to keep on developing future standards for compressors.

J: There are a lot of convenience stores in China and Japan. Do you have products for small stores?

S: Sure. In fact, it is where our biggest success is with inverter-driven technology. Based on the total cost of ownership, inverter makes perfect sense for the convenience stores. We have a large-capacity R290 compressor for big freezers – both for the 220-V market, and the 100-V and 115-V markets. If you take our inverter compressors, we are selling 5–10% of our inverters in China right now, and around 90% in Europe. We are also about to expand the product range in order to get into the Japanese market, where there are moves toward low-global warming potential (GWP), high-efficiency compressors.



Exploded view of XV compressor

J: How do you see the prospects for the 2015 Chinese market?

S: We were expecting a flat growth rate in China, but right now we are at 20% above our budget. So, something positive is going on. In that perspective we feel that the move to HCs is the right solution for us. The sustainable trend is right and we are having success.

Even though China is not expected to grow so fast this year, the part of the market we are in is growing very fast. The main aspect is food safety – Hazard Analysis and Critical Control Point (HAACP) guidelines to maintain a fixed temperature in the cooling chain from farm to fork. Every part in this chain is important, but the last part from warehouse to the store is often not maintained because the small shopkeepers are not able to with their existing equipment. Trollies, using our DC compressors, are becoming a perfect solution in the whole Asian market – ensuring maximum safety and performance. Whatever the challenge, whatever the market we always try, on the basis of insight and innovation, to set a new, future standard.

Redesigned JARN Website & Expanded Newsletter

JARN launched the updated eJARN website (www.ejarn.com) in August featuring a more user-friendly design. With this redesign, eJARN makes it easier than ever to access JARN's latest news as well as extensive archives of HVAC&R industry reports and articles. eJARN subscribers can access all of eJARN's many sections on markets, companies, products, and so on. Please contact **subscribe@ejarn.com** for more information.

Starting in October, the JARN Newsletter, currently distributed in the four languages of Japanese, Chinese, English, and Russian, will add a German-language version. The JARN Newsletter is a completely free service that provides summaries of five articles each week. Please contact **newsletter@ejarn.com** for more information about the JARN Newsletter.

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