



Per Skærbæk Nielsen and Thomas Lund, founders of Cool Partners, at their first public appearance at Danske Køledage in Odense. Photo: Per Jensen.

## New consulting company

**Cool Partners in Århus is focusing on the industrial and large commercial refrigeration segment.**

Cool Partners is a new consulting company in Århus, Denmark, founded by the two refrigeration engineers Per Skærbæk Nielsen and Thomas Lund.

„We are focusing on the industrial and large commercial refrigeration segment”, states Per Skærbæk Nielsen.

The primary focus areas are

trouble shooting, review and optimization of existing systems and new builds, as well as design and development of advanced processes and equipment for the refrigeration segment.

Solutions already developed address well known problems in refrigeration systems with a new approach, with highly efficient and simple operation resulting in savings in service and operating costs.

The founders point out their key competences within:

- CO<sub>2</sub> cascade systems – with or without hot gas defrosting
- Transcritical CO<sub>2</sub> systems
- Handling of air and water in refrigeration systems
- Oil return with built-in purification
- Oil analysis – system diagnostics
- Thermodynamic calculation and design of systems, heat exchangers, vessels etc
- Technical calculation software development
- Design of process equipment.

The Cool Partners name reflects the company's vision to become a valuable partner for contactors, equipment manufacturers and end users.

The name also reflects the working relationship between the two owners, whose different backgrounds and skills combine into a broad coverage of the refrigeration industry.

Extensive product and system know-how combined with a strong theoretical knowledge result in a team that has shown to produce excellent solutions.

Per Skærbæk Nielsen gradu-

ated B.Sc. in Mechanical Engineering from Århus Teknikum 1987. Since 2005 he has been the founder and owner of Cooling Consult. Until then he had solved tasks as technical manager at York Marine, product and marketing manager at Danfoss, as well as different jobs at Sabroe.

Thomas Lund graduated with a Master Degree in Mechanical Engineering from Technical University of Denmark in 1995. After that he worked for seven years as R&D Manager for Sabroe/YORK Marine, and two years with Technical Software Development for YORK Global Contracting, followed by two years as senior consultant at Danish Technological Institute.

In 2007 he founded his own company Cool Advice, now merged with Per Skærbæk Nielsens Cooling Consult to Cool Partners at the address Bøgekildevej 21, Hasselager.

[www.coolpartners.dk](http://www.coolpartners.dk)

## Ny standard til lavtemperatur applikationer

**Danfoss Industri Kompressorer har introduceret en serie af syv nydesignede hermetiske stempelkompressorer.**

De nye NTZ-stempelkompressorer, der erstatter det hidtidige LTZ-sortiment, er mere effektive ved lave fordampningstemperaturer end andre tekniske kompressorplatforme. Den nye motor konstruktion er optimeret til lavtemperaturdrift. Det forbedrer COP-værdierne ved at reducere energiforbruget, samtidig med at kompressorens virkningsgrad øges.

NTZ har yderligere den fordel, at der ikke er behov for ekstra væskeindsprøjtning til at nedkøle kompressoren, da den er 100% sugegaskølet.

### Kompressorer og kondensatoraggregater

Derfor er NTZ-kompressorerne ideelle til applikationer, hvor der kræves hurtigt nedkøling

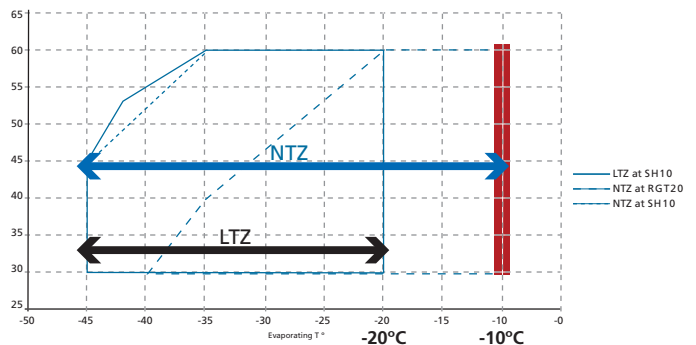
Samtidigt fjernes risikoen for beskadigelse af kompressoren, hvis indsprøjtningssystemet svigter.

NTZ-serien har et udvidet fordampningstemperaturområde fra -10°C ned til -45°C. Dette giver alsidighed i en lang række lavtemperaturapplikationer. De høje fordampningstemperaturgrænser forenkler valg og anvendelse, ligesom de forbedrer pulldown-temperatureffekten ved at indsnævre det generelle temperaturspænd.

### Høj COP-værdi

Takket være den helt nye, optimerede motor og den lille tolerance mellem stempel og ventiler opnås der en høj COP-værdi.

NTZ-serien er udviklet og optimeret til drift ved -35/40°C, hvilket sikrer den bedst mulige ydelse og en høj energivirkningsgrad, hvor behovet er størst, nemlig ved lave fordampningstemperaturer.



Sammenligninger viser, at andre hermetiske kompressormærker ikke kan matche NTZ-kompressorens COP-niveau, oplyser Danfoss.

### Reducerede energiomkostninger

Den nye optimerede motor har også kraftigt forbedrede elektriske egenskaber, såsom lavere initialstrøm (LRA) og maks. jævnstrøm (MCC), hvilket gør det muligt at vælge mindre sikkerhedsanordninger.

Det samlede effektforbrug

ved opstart og under drift er mindre, hvorved energiomkostningerne reduceres.

Den reducerede pull-down tid fremhæves som endnu et plus ved NTZ-kompressorserien. Et hurtigt fald i rumtemperaturen køler og fryser produkter hurtigt og gør det muligt at fryse flere produkter. Dette giver forbedret produktkvalitet og reducerer ligeledes energiomkostningerne.

Den nye kompressorserie kan anvendes til kølemidlerne R404A og R507.