

DRY CONDENSING

At -28°C , vapour removal becomes less of a problem



Trapped in the ice



Four Dry Condensing Units on the roof at Walter Rau, Neuss, Germany



Dry Condensing Unit on the roof at Cereol, Martfü, Hungary



Two Dry Condensing Units at AAK, Karlshamn, Sweden



Dry Condensing Unit at Cereol, Bordeaux, France

For a seriously cool solution to the problem of vapour removal, consider dry condensing. It's cool, because vapours are literally turned into ice—and, in more general terms, because you save money while protecting the environment.

Unlike conventional “wet” condensing, in which vapour is first compressed and then condensed into water, “dry” condensing is a vacuum system in which vapour is condensed directly into ice. GEA Niro has nearly half a century's experience with the technology and has delivered more than 40 major dry condensing plants over the past two decades.

Moreover, as energy costs rise and environmental awareness grows, engineers everywhere are discovering just how cool dry condensing really is.

Saves energy

Needs only 10-20% of the energy required by conventional “wet” vapour removal systems that employ steam ejectors.

Reduces pollution

Pollutants from the process can be easily separated for environmentally safe disposal, as they are contained in the small volume of water condensed from the process steam.

Cuts water consumption

Uses only one tenth of a percent of the water consumed by conventional steam ejector systems.

Pays for itself

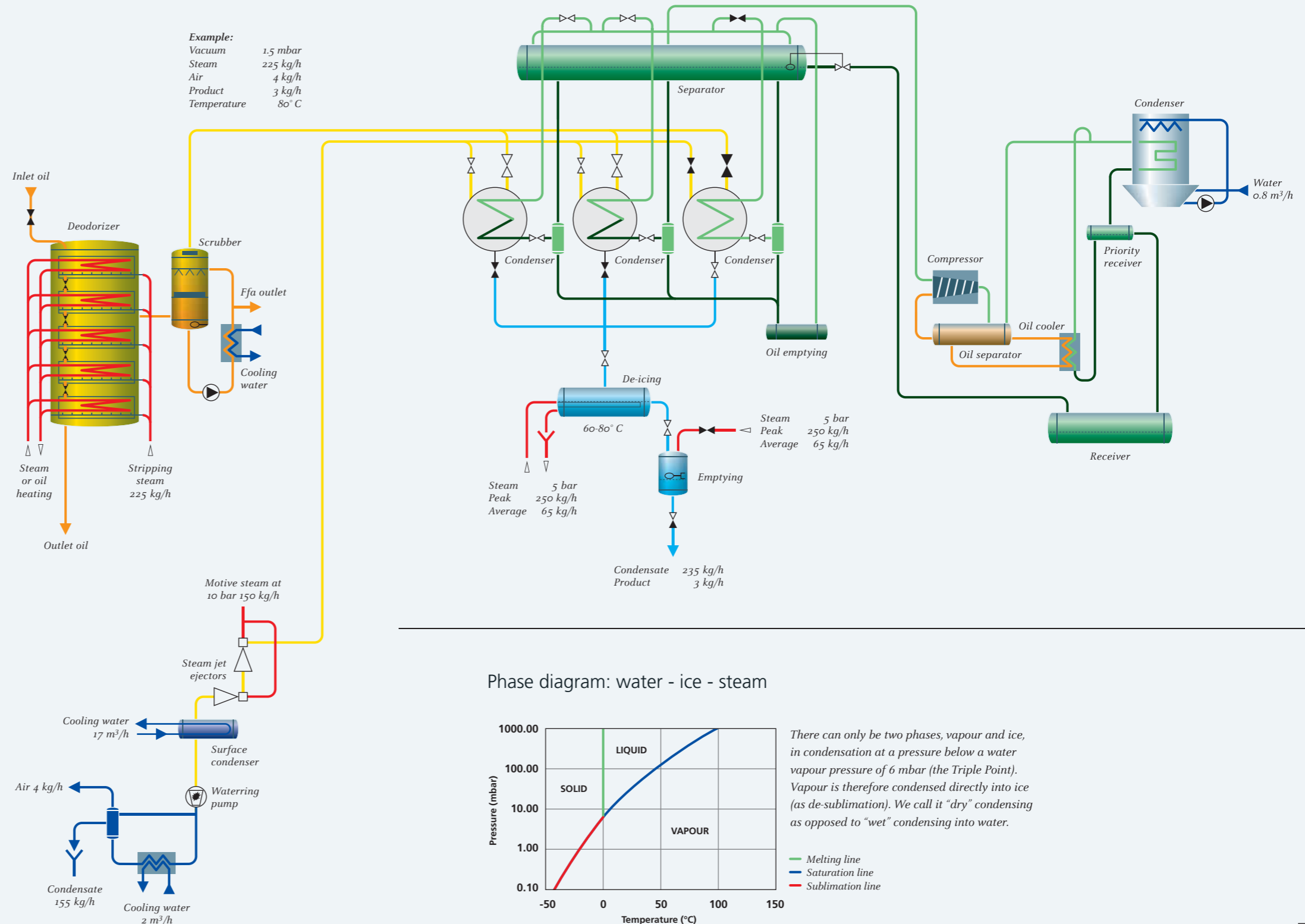
The return on investment period for most installations is less than two years.

Numerous applications

- Oil deodorization
- Fatty acid distillation
- Fatty acid fractionation
- Glycerine distillation
- Freeze drying plants

The Atlas Dry Condensing plant from GEA Niro

An alternative vacuum system





Experience

GEA Niro has contracted and installed more than 10,000 plants worldwide

GEA Niro is a world leader in industrial drying, with spray drying, spray cooling/congealing, flash drying, freeze drying, granulation and fluid bed processing as core technologies. Having installed more than 10,000 plants around the globe, GEA Niro is known for delivering solutions that meet customers' exact requirements. The GEA Niro companies are part of the Process Engineering Division of the GEA Group.



Process Engineering

GEA Niro

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