

Freshline® Inline ingredient chilling solution



Improve product quality
and speed up processing



Air Products' inline chilling system has been specially developed to help food processors with their dry ingredients such as flour, while they are being pneumatically transported within their production plant. This automated system cools down any conveyed ingredient to the needed temperature prior to storing or processing.

Why chill your ingredients with nitrogen?

Some products may suffer from higher temperatures and/or need to be kept at a certain temperature to ensure optimal processing.

For example in the bakery industry, for an optimal dough fermentation and swelling the temperature of the dough should be around 25°C (depending on the product and dough type). The dough can warm up by about 5-8°C during mixing by heat energy intake. Once it is being mixed, the only possibility to influence the dough temperature is to add cold water which has its limitations. As flour is the main ingredient of the dough, controlling its temperature upfront can have a huge impact. The Freshline® Inline ingredient chilling solution allows you to cool and control the temperature of the ingredient precisely. Another benefit is that nitrogen is dry and doesn't add any moisture to the product. It also provides an inert atmosphere avoiding unwanted powder explosions (i.e. flammable dust of powders) during transport.

Easy and reliable operation

The cold nitrogen is injected in the transfer pipe and cools down the product in the air flow within seconds.

Air Products' R&D team has developed special non-invasive nozzles to prevent any clogging or blockage in the pipe.

Our technicians will provide support to fit the Freshline® Inline ingredient chilling solution at the best place for your setup. Automated temperature monitoring and control will ensure you maintain consistent temperatures of your product.

Benefits

- Accurate temperature control
- Preserves the quality of temperature sensitive ingredients
- Prevents yeast overworking
- More consistent texture of the dough ensures better machinability
- Less product waste
- No moisture added
- Reduced exposure to explosion hazard
- No agglomeration/bridge building thus easier dosing
- Simple system, easy to install and operate
- Tailor made solution adapted to your needs



For more information,
please contact us at:

Air Products PLC
T 0800 389 0202
E apukinfo@airproducts.com
airproducts.co.uk

Air Products Ireland Ltd.
T 1800 99 50 29
E ieinfo@airproducts.com
airproducts.ie



tell me more
airproducts.co.uk
airproducts.ie