

profit from mooij is our new email newsletter about the storage of potatoes and onions.

It is a free monthly issue.

As the storage technique is in full swing, there is a lot to tell and learn about it.

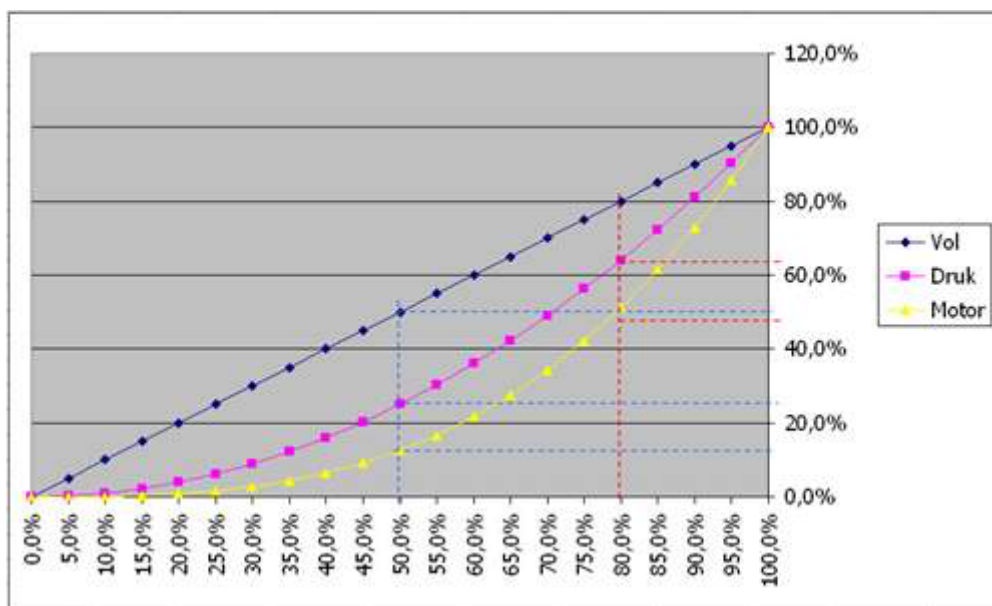
Sense and nonsense about frequency converters.

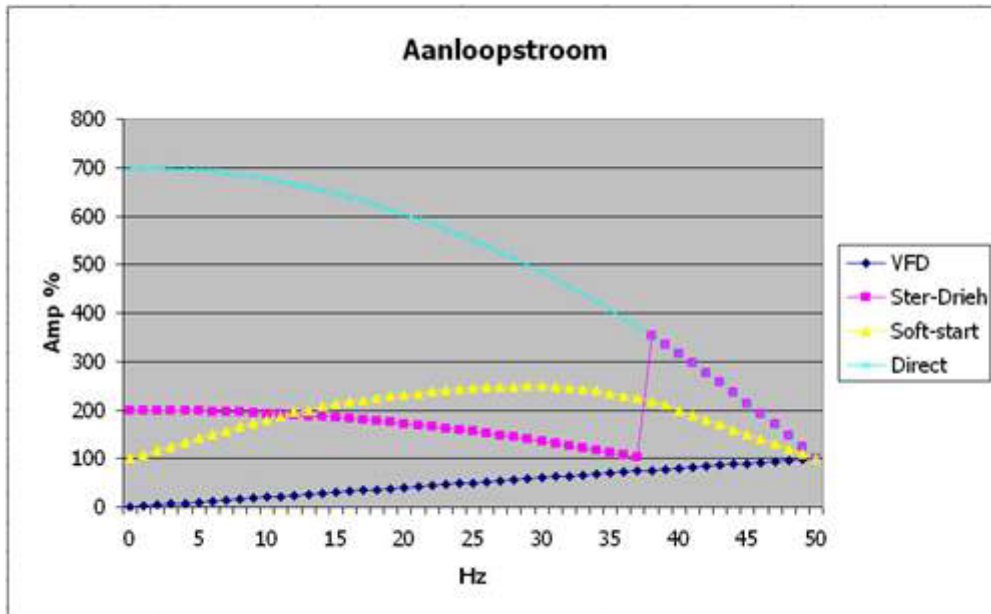
When ventilation systems are installed in new storage rooms, more often than not frequency converters are built into them.

Why, you wonder?

Sense about frequency converters:

1. The required amount of air can be adjusted to the amount needed. *During the process of drying and cooling with external air, the fans use their full capacity. During the process of internal ventilation and mechanical cooling, the fans run on low capacity.*
2. Better quality, less pressure spots, less weight loss. *Longer periods of internal ventilation, more uniform product conditions. Less warming up by the heat of the motor of the fan.*
3. An energy reduction of 30% to 40%. *At 80% capacity the energy consumption is only half. At 50% capacity, the energy consumption is only 13%.*
4. Frequency converters are ideal to reduce the level of noise at night. *Thus you always comply with regulations.*
5. There is no question of excessive demand while starting up, so that there is an optimum use of current connection. *That is right, and much more air per kWh!*
6. Air distribution in the pressure chamber remains perfect because all fans are used. *The distribution in the ducts does not alter.*





Nonsense about frequency converters

1. The air is not conducted through the product at lower air capacity. *Nonsense! If this would be the case, how to explain the storage of 60 m³/tons/h with a minimum of 25 m³/tons/h in many countries.*
2. The fan uses its own air at low revolutions per minute. *Nonsense! Even at low revolutions per minute, the fan supplies air.*
3. The power of the frequency converter must be higher than the power of the motor. *Nonsense. Full motor capacity must be delivered by the frequency converter, extra additional capacity is unnecessary.*
4. Frequency converters are subject to technical troubles. *Nonsense. We have been using Danfoss frequency converters for over 18 years. Even at 2 phases, the fans remain operational.*
5. Frequency converters use a lot of energy. *Danfoss frequency converters show a 98% return. Only 2% is lost on heat. This 2% loss can be neglected considering the energy reduction.*

Do you have any remarks, additional information or do you want to share experiences, please let me know. Would you like to learn more about this subject, please contact me.

Kind regards
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