

The power of DisCo – a case study.

About two years ago, DaTARIUS released the DisCo cooling unit for injection moulding machines. Since then many major pressing plants all over the world have installed DisCo units on their moulding machines, replacing the standard built-in temperature controllers.

The feedback DaTARIUS Technologies GmbH has received from these replication sites has been very positive. The most important benefits mentioned are: low power consumption, enlarged process window, simple installation and use, low-cost and easy maintenance, and overall disc quality improvements.

Mr. Peter Simon, DaTARIUS process optimisation expert, recently installed DisCo cooling units at one of the largest optical media manufacturers in Europe and returned with an impressive installation report.

After installation of the DisCo cooling units, with the same parameters as before but with a shorter cooling time on the machine and parameter adjustment on the DisCo units, following results were achieved:

- Birefringence value was improved by 15nm
- Yield rate as high as 98% (before: 90%)
- Dishing values remained the same as before
- Energy saving: No pumps are needed, which means savings per injection machine of about 24 kWh per day. Moreover, no cooling energy is needed, since cooling is done with cold process water, which is only supplied when it is needed to cool the mould.
- Cost savings: Two standard mould heaters consume about 17kWh, whereas one DisCo unit, which replaces up to four standard mould heaters, consumes only 0.7-1.5kWh. This means that the company's main power transformer can supply more production lines with the required energy (installed electric power).

More and more replication sites worldwide show interest in this product or order more DisCo units and are very impressed with the results. 'Especially in the US DisCo is a big issue', says Paul Todd, Sales Manager DaTARIUS Technologies GmbH, 'since apart from the advantages concerning quality and speed, also the saving of energy is definitely worth mentioning here. It is a fact that DisCo cooling units use less energy than the standard mould heaters.'