



Charmilles supplies high-quality EDM systems to discerning clients all over the world. The company's dedication to excellence and innovation makes it a perfect business partner for Grundfos

Streamlining processes together

– how a leading EDM system manufacturer
went from 30 pump types to 6 with Grundfos

Charmilles is part of the Agie Charmilles Group, the world's leading supplier of systems to the tool and mould-making industry. Specialising in superior solutions for electrical discharge machining (EDM) and wire cutting, dedication to quality is a Charmilles hallmark. This shared passion for excellence made Grundfos a natural choice when Charmilles went looking for a partner to supply the pumps used in their systems. And the partnership has yielded many benefits for both companies.

Grundfos provided

- › Flexible partnership
- › Customised solutions
- › Recommendations for improved efficiency

The situation

With a history going all the way back to 1861, Charmilles Technologies has succeeded in remaining a pioneer within the sector of electrical discharge machining (EDM). Today, the company continues to patent one new example of innovative technology every year on average and is recognised as a supplier of high-quality EDM systems all over the world. Success on this scale is the result of a dedication to quality and innovation which ties in perfectly with the Grundfos spirit and values.

It was only natural, then, that Charmilles should turn to Grundfos for pump solutions to place inside their EDM and wire-cutting systems. This led to a long-standing relationship that has introduced new solutions and development to the two technology specialists. And of course the net result of these combined efforts enables all Charmilles clients to increase their competitive edge in our increasingly global economy.

The Grundfos solution

The complex processes carried out by Charmilles equipment require a great deal of pump technology for a variety of cleaning, cooling, feeding, and flushing purposes. When a company depends on precision to this extent, all suppliers and subcontractors are measured against high standards. Fortunately, Grundfos was able to meet these strict requirements, and co-operation between the two companies began in 1990.

The partnership has spanned two decades of rapid development. Grundfos has introduced several changes in its product portfolio to accommodate the rigorous quality requirements set by Charmilles. During the early stages of the collaboration, Grundfos dedicated a lot of resources to accommodate Charmilles' wishes within a particular field: making all connections just right to meet meticulous quality demands.

Once this initial adjustment was made, the Grundfos and Charmilles teams moved on to address improvements within other areas to promote efficiency and performance.

Charmilles' willingness and ability to re-engineer existing solutions paved the way for constructive co-operation with Grundfos. For example, Charmilles originally used two different pump types – 50 and 60 Hz versions – to cater to European and US market standards. Charmilles wanted to explore the opportunities for using a 50/60 version, as this would greatly improve logistics. Both companies devoted a lot of energy to making it happen, and eventually Grundfos was able to supply exactly the 50/60 Hz pumps that Charmilles needed.

Similar initiatives means that the Grundfos engineers have reduced the number of pumps needed in Charmilles EDM and wire-cutting equipment from 30 (non-Grundfos pumps included) to just six! The advantages in terms of logistics, spare part handling, etc., are obvious.

The outcome

The partnership continues with undiminished vigour and enthusiasm, helping both companies to go from strength to strength. The shared values and focus on delivering the best possible product to the end customer is sure to give rise to even more exciting developments in future.

Pumps used

- > With 3 or 4 pumps used in each machine, Grundfos has supplied very substantial quantities of pumps to Charmilles over the years – approximately 3,300 a year.



The Grundfos machine tool product portfolio meets even the strictest of requirements with unmatched efficiency.



Working behind the scenes, Grundfos pumps contribute to the excellence of Charmilles EDM systems.

- > **Read more about the Grundfos pump range at**
www.grundfos.com
- > **Read more about Charmilles EDM at**
www.charmilles.com

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For further information on this case please contact your local Grundfos office