EDITORIAL

Dear Reader,

It was not all that long ago that you read here that a stand has to be taken against the "crisis in the mind". We at Diametal have now also reached a point where we are forced to adapt ourselves to the economic facts of life in order to secure the continued existence of our company. The necessary adaptation of our existing structures entails that some of our staff and colleagues will be losing their jobs without their performance and achievement giving any cause for that to happen.

As if all of that wasn’t enough of a burden, we have recently had to part company from two highly esteemed companions: our joint owner and Supervisory Board President Ernst Siegrist and our field representative François Sauvage have succumbed to their serious illnesses. We have had to endure both of these painful losses within the space of a week. All of these upsetting experiences are things we would all too gladly do without. But we are left with no other choice but to resign ourselves to these unhappy events. The task now is to face up to the challenges of the future so as to emerge in a strengthened position from these business and private crises.

I wish you interesting and rewarding reading and lots of confidence in the future.

Daniel Brügger, CEO Diametal Ltd.

GETTING READY NOW FOR THE UPTURN.

How can one make the best of the present difficult situation? By making one’s company fit today for tomorrow’s upswing. Diametal offers training courses in all product areas that help you move forward.

How can existing machining processes be optimised or new processes be elaborated? How can a company get the best out of its machines and tools? Diametal provides you with answers. In our instruction courses and further training schemes, we give your employees important know-how that they can apply directly at the machine. In so doing, we always work extremely close to your specific needs and requirements: we provide you with training units on every topic and for every production group. We give you the benefit of our knowledge either in our own premises or on-site within your company and at your machines.

Thanks to our broad range of products, there is practically no application that our specialists are not be familiar with. Our training and our Engineering and Consulting services are subject to the strictest confidentiality and are manufacturer-neutral.

90% of the manufacturing costs of a product are determined during the construction phase. That’s why it’s especially worthwhile taking a very close look at this stage. Our specialists support you in the process with Engineering and Consulting services. With the help of their input, you can already lay the basis for future success before the production stage begins.

MORE INFORMATION

info@diametal.ch
Tel. + 41 32 344 33 33
Contact: André Seiler
How can the hold be optimised during gripping? Coating the gripping systems is the right answer to this question. Without extensively modifying the existing systems, you massively improve the holding force with the electroplated diamond coating from Diametal. That also applies to clamping: by decreasing the effective surface of contact, the coating provides a much improved clamping force – without deformation of the component. In both applications, the diamond coating from Diametal enables you to profit from more efficient processes because the machining times decrease.

**For steel, aluminium and carbide.** Diametal coats practically all steel qualities as well as aluminium and carbide components in top quality. The standard is the diamond coating D46 – D126; we would be happy to look into other grit sizes for you. With a rim depth of 2 mm, the minimum bore diameter that can be plated is 5 mm. In the construction of the collets, the resulting layer thicknesses have to be correspondingly corrected or taken into account.

### Layer thickness of the electroplated standard grinding rim G 1 in mm

<table>
<thead>
<tr>
<th>Diamond</th>
<th>Layer thickness in mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>D91</td>
<td>0.135</td>
</tr>
<tr>
<td>D54</td>
<td>0.080</td>
</tr>
<tr>
<td>MD25</td>
<td>0.040</td>
</tr>
</tbody>
</table>

**MORE INFORMATION**

We would be happy to answer your questions about optimised gripping and clamping. Please also specify the material number (DIN norm) when making your enquiry:

abrasives@diametal.ch
Tél. + 41 32 344 33 33
Contact: Beat Gilomen
The expert preparation of a diamond and CBN grinding tool creates the preconditions for perfect true running or concentricity, precise forms, and an optimally prepared coating topography. Only those who pay the necessary attention to these points can exploit the full potential of their tools.

Yes to optimisation – but how?
It is well-known enough that dressing diamond or CBN grinding tools is a somewhat elaborate procedure. A suitable machine is needed along with precisely calibrated dressing and sharpening wheels and appropriate know-how. Many firms lack the proper facilities to do the job. The dressing intervals are often so far apart that the job-specific know-how cannot be developed and the investment in a machine is difficult to justify financially.

The Diametal service – fast, uncomplicated and professional.
Diametal stands by its customers with a professional dressing, profiling and sharpening service. Within one working week, our specialists bring your grinding wheels into an optimal condition. We have the capability to perfectly condition almost all diamond and CBN wheels in terms of form, concentricity and sharpness and thus make an important contribution to the efficient deployment of the tools. We can even effectively accomplish the profiling of grinding rims up to a wheel diameter of 300 mm. Take advantage of our offer and profit from our service – we provide it not only for our own products but also for those of our competitors.

OPTIMISE WITH US
Get advice and active support from our specialists – and then get the maximum out of your machines!
abrasives@diametal.ch
Tel. +41 32 344 33 33
Contact: Beat Gilomen
WATCHES, JEWELLERY AND ACCESSORIES: AN UNLIMITED COMBINATION OF MATERIALS.

Imagination has no use for rules. Especially when new watch and jewellery models or accessories are launched, it is often the extravagant creations that are adored by the public. Diametal plays its part in making dreams come true.

The fashion industry is just as creative as it is ambitious: new materials are constantly being sought, new combinations concocted, and new forms designed. Diametal has been a reliable and accomplished partner for the watch and jewellery industry for a long time now. We provide new hard materials and high-tech materials along with special adaptations. The more exotic the idea presented by our customers, the more passionately we support them in realising their conception.

Curtain Up!

We would like to transport you into a world of dreams - and invite you to visit the fascinating world of our materials:

tooling@diametal.ch
Tel. +41 32 344 33 33
Contact: Stefan Rötheli

Ceramic, carbides, silicon – inspiring stuff.
Whether we’re talking about watch housings, watch crystals and watch crowns or armband elements, accessories and pieces of jewellery, materials from Diametal give all these objects a sense of style and uniqueness. Our offers embrace high-quality high-tech ceramic (coloured, black or white), particularly light and corrosion-resistant carbides, and new materials based on silicon or fibre-reinforced ceramics. In combination with the specially developed Diametal CVD coating, fascinating new possibilities are opened up for designers. But that’s not all: with the help of our super-abrasive processes, every conceivable surface structure and a thousand and one different effects can be achieved.

Solid basis for creative flights of fancy.
Diametal accompanies its customers with specific developments from the prototype series right up to full series production. Strict confidentiality is a matter of course in the process. Our customers value the highly precise and constant execution and trust our long years of experience and our self-developed production technologies. We also have a strong network of qualified raw material suppliers and our own rich fund of know-how about decorative coatings.
INJECTING PLASTICS –
MORE ECONOMICAL WITH CARBIDE PARTS.

The plastics industry knows the problem: technically, it would be optimal to use parts made of carbide instead of steel when injecting reinforced plastics, but the steel parts have been more readily available up to now. Diametal has an alternative.

The injection of reinforced plastics such as glass fibre or carbon fibre causes considerable wear on certain steel parts in the tool. Up to now, there has been no choice but to accept this wear and the resulting shorter tool life because the wear-resistant carbide parts could only be obtained with what were often unacceptable delivery times. That does not have to be the case: Diametal delivers these sought-after parts quickly, reliably and in top quality.

Just-in-time instead of long waits.
Time is money in the plastics sector – and the key to good customer relations: depending on its degree of complexity, a plastics injection tool is designed, produced and tested nowadays within eight weeks; the customer is presented with a pre-production model or advanced prototype. Diametal knows the requirements of this industry exactly. What’s more: we also react flexibly in emergencies so that you have the right part on hand at the right time. Whether you need full-production runs, small series, or even single items, we are used to the narrowest tolerances and the tightest deadlines in production and deliver to you "just in time".

If you want, we also provide engineering services for designing the parts, for the choice of material and for special adaptations.

Full production scope.
Why can Diametal respond faster than other providers? We have a great width of production on our premises – including wire and plunge EDM processes or profile grinding. As a result, we are independent of external suppliers and have enhanced flexibility. We use tools from our own production for grinding – the guarantee that we are always fully up-to-date technologically.

MORE INFORMATION
Would you like to optimise your injection processes? We’ll be happy to help you there:

tooling@diametal.ch
Tel. +41 32 344 33 33
Contact: Stefan Rötheli
Palm groves, white beaches, a turquoise-coloured sea, and a tropical climate: whoever thinks of Mauritius quickly starts revelling in holiday dreams. The island state in the Indian Ocean – nestling between Africa and India – is easily seen as small paradise on Earth. A little known fact is that, apart from tourism and sugar cane cultivation, gemstone cutting is also one of the island republic’s key economic branches.

Highest precision from the other side of the equator.

Stettler produces watch crystals, watchcases and working parts made of sapphire. These products are supplemented by lenses and glasses required for technical applications in the fields of medical and laser engineering. Production includes glass for endoscopy, for the petrochemical industry and for mechanical applications.

In order to achieve an exceptional degree of precision in the production of sapphire parts – coupled with a perfect surface – Stettler relies on tools from Diametal. In combination with the finest abrasive grit, these guarantee a consistently high quality. Our mastery in this showcase discipline has made Diametal the partner of preference for Stettler Sapphire AG for many years.

The sapphire: highly transparent and extremely tough.

In its natural form, the sapphire has enthralled us as a gemstone for centuries. Synthetic sapphires can be fabricated in perfect quality in almost unlimited sizes. They possess outstanding properties, which are taken advantage of by many producers of precision instruments:

- Watch crystals made of sapphire are distinguished by their scratch resistance, their nonporous and shiny polished surface, and their perfect transparency.
- The optical properties combined with a high temperature resistance make sapphires indispensable in laser technology.
- The chemical industry values sapphire for parts that are subjected to aggressive substances (acids or bases) and high pressures or high temperatures.
- As an outstanding isolator, the merits of sapphire can be fully exploited as a wafer in the microelectronics field.
- When used in an endoscope, its optical properties, hardness and resistance against all kinds of chemical products (sterilisation) are key advantages.

(Source: Stettler Sapphire AG)

STETTLER SAPPHIRE AG

A strong tradition in processing hard materials spanning 128 years.

Over 400 qualified employees in Switzerland and in Mauritius make Stettler Sapphire AG the leading partner for noted watch manufacturers and for companies from other branches of industry. Every year, several million sapphires are produced and refined on state-of-the-art machinery in all conceivable forms. The company was founded in 1881 in Biel/Bienne in Switzerland and enjoys an outstanding reputation throughout the world thanks to its innovative strength and the precision of its products.

Stettler Sapphire AG
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www.stettlersapphire.ch

The island paradise of Mauritius: Diametal tools carry out precise grinding work here too.
Diametal was represented at numerous trade fairs and events at home and abroad over the last few months. Here are some impressions:

National Councillor and Biel Mayor Hans Stöckli with Dimitri Jungo at the reception for the European Champion 2009 in Straight Pool Billiards


Marcel Vedana, Beat Kocher, Vedana AG, at the medisiams 2009, Moutier

René Guillaume, K&Y Diamond Ltd, Jacques Golay, Patek Philippe SA, at the EPHJ 2009, Lausanne

Irène Schneeberger, DIAMETAL AG, Thierry Loubry, Christophe Claret SA at the medisiams 2009, Moutier

Stephan Mutter, Urs Mutter, Gomina AG, at the medisiams 2009

Ali Kazma, Achille Borsa, Meco AG, at the medisiams 2009
WE HAVE TO SAY FAREWELL.

ERNST SIEGRIST
Joint owner of many years standing
Supervisory Board President
and former Managing Director

FRANÇOIS SAUVAGE
Field representative in France

Our esteemed colleagues have succumbed to their serious illnesses. We are deeply saddened.
Thank you for the privilege of accompanying you on part of your journey!

EXPERT TIP
Show us who’s the best negotiator around! As of immediately, you’ll find our autumn promotion list on www.diametal.com. This contains articles from all our product groups and divisions that we are offering to you at attractive special prices. The best thing about it: the more skillfully you negotiate with us, the cheaper you’ll get the article you want. We’ll be rewarding the top performances here with up to 80% discount!

TRADE SHOWS

GRINDTEC 2010
DE-Augsburg
17.–20.03.2010
www.grindtec.de
International Trade Fair for Grinding Technology

CCMT
CN-Nanjing
12.–16. April 2010
International Exhibition Center
www.ccmtshow.com

SIAMS 2010
CH-Moutier
04.–08.05.2010
www.siams.ch
Where the Microtechnologies Meet