

## Supfina – Press Information

PI 184 –11/2006

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### *Superfinishing Abrasives from Supfina*

Remscheid, **Supfina Grieshaber** is a leading machine producer and Know-how consultant when the topic is cost-effectively producing the highest quality surfaces and geometries. An integral part of the superfinishing process is the abrasive itself because it not only influences quality, but also costs.

In superfinishing we are working in the sub-micrometer range. For a reference point, 1µm is 60 times smaller than the diameter of a human hair. It quickly becomes clear that you cannot get away simply by having all the correct parameters like surface speed, pressure and coolant flow. It is also absolutely critical to choose the right abrasive for your manufacturing strategy.

The superfinishing abrasive comes in two basic forms: in a solid bond as a stone or in a flexible bond backed with a tape. There are several characteristics to look at when choosing the correct abrasive such as grain quality, grain size, concentration of the grains, hardness of bond material, etc. There are also tolerances in these specifications. Example: Diamond abrasive D30 has a tolerance of grain sizes that range from 26 – 36 µm.

Every abrasive manufacturer has the possibility to produce all sorts of specialty compositions that within technical & economical limitations and industry standards; ex. FEPA P 43-D-1984 R 1993. This allows abrasives with completely different wear and abrasive properties to be produced from the same materials.

Through many years experience Supfina Grieshaber knows the manufacturer-specific advantages of the different abrasives and can specifically narrow in on the absolute best abrasive for the application. It is not uncommon that a two-step process is needed in that two different abrasives from two different manufacturers will be the solution that brings success.



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