

Abrasive flow machining of additively manufactured components

The surface qualities of additively manufactured components (rapid prototyping or 3-D printing) fail to meet the latest technology standard and are thus only conditionally usable.

Using the Abrasive Flow Machining process you achieve a significant improvement of the surface quality of these elements. The required grinding medium is called Streamer. It will be individually formulated according to the processed material, the component geometry and the required surface quality.



The process is used ...

- to generate high quality surface finishes on interior and exterior contours
- for targeted precision deburring of intersections
- for the defined edge rounding with reproducible work results

The figure shows an additively manufactured component being successfully processed with AFM.

	Measurements before	Measurements after
Average Ra	5.600 µm	0.560 µm
min. Ra	0.412 µm	0.229 µm
max. Ra	12.027 µm	0.891 µm
Average Rz	27.760 µm	2.650 µm
min. Rz	3.671 µm	1.448 µm
max. Rz	55.259 µm	4.409 µm
Material	Ti6Al4V	
Dimensions	ø 70 x 30 mm	
Process time	90 minutes	

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	Measurements before	Measurements after
Average Ra	10 µm	1.200 µm
Average Rz	50 µm	7.300 µm
Material	1.2709	
Dimensions	∅ 200 x 300 mm	
Process time	120 minutes	

Everything from a single source

Take advantage of the **synergy effects** that result from our integration into the **Pütz Group!**

In addition to surfaces finishing technologies as well as industrial cleaning technologies, we can also offer you the right testing technology to test surfaces and dimensional accuracy.

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