



HR 500 CAST

The specialist for optimal surface quality in GG and GGG

NEW!
Also for GGG

EXCLUSIVELINE®

Proven standard – HR 500 CAST for GG

Standard range HR 500 CAST high-performance reamers offer completely new possibilities for highly efficient reaming of grey cast iron with solid carbide:

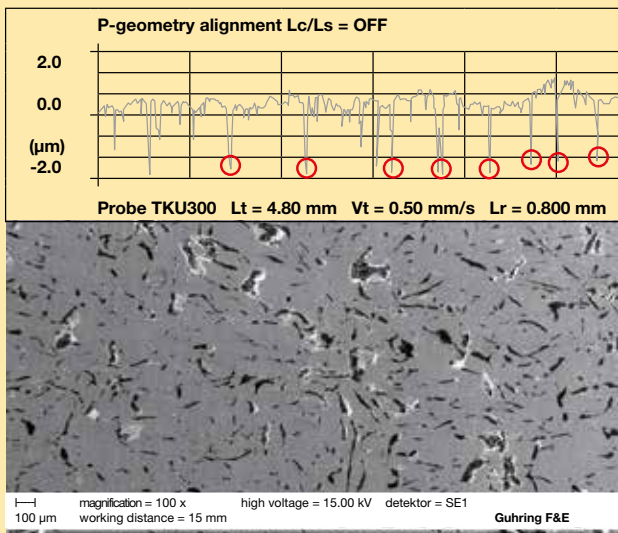
- optimal surface quality below Ra 1.6
- maximum cutting speeds from 200 to 300 m/min
- high feed rates up to 0.25 mm per cutting edge
- maximum tool life
- no built-up edges
- no premature cylindrical land wear
- favourable tooling and production costs

Practical example of optimal surface quality – GG 30 petrol engine

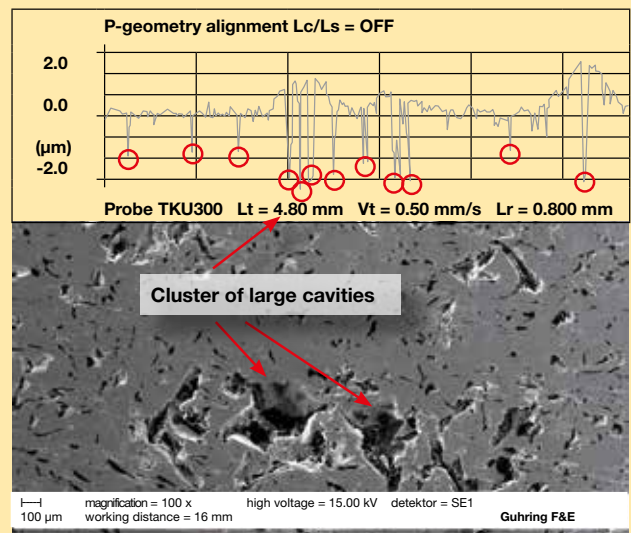
Demanding a surface quality of Rz 10 is a high hurdle to overcome in GG 30. An 8-fluted HR 500 CAST high-performance reamer is applied for machining tappet bores $\varnothing 20.2$ H7 with a feed rate of 6300 mm/min. The tool life exceeds 80 m.



A surface quality of Ra 0.8 is no problem with the new HR 500 CAST. Prerequisite, however, is a minimum average cast quality with homogenous structure and an even distribution of casting cavities.



Homogenous cast structure with even distribution of casting cavities. HR 500 CAST continues to achieve a surface quality of Ra 0.46 after a tool life of approximately 60 m.



Extreme cavity size and distribution: With this structure a compromise on surface quality must be taken into consideration.

HR 500 Cast – as special tool now also for an optimal surface finish in GGG!

The new version of the HR 500 CAST reamer with Signum-coating specially for the machining of GGG offers high performance with

- surface quality: $R_a < 1.2$
- cutting speed: $v_c = 120 - 220$ m/min
- process reliability

Practical example – GGG 40 shift fork:

The GGG version of HR 500 CAST achieves exceptional values thanks to its optimised geometry and the high-strength Guhring Signum-coating. The combination prevents built-up edges and premature cylindrical land wear, typical wear factors when machining cast materials. The new HR 500 CAST for machining GGG is, initially, exclusively available as a special tool. When applying the dimensions according to the Guhring HR 500 ACTIVE program we can produce the customer's special tool at short notice. Please contact us!



HR 500 Active

HR 500 Active – short-term production of HR 500 high-performance reamers

With the HR 500 Active program, special solutions of the HR 500 reamer can be supplied at short notice. The Active program guarantees the proven HR 500 technology for cylindrical and stepped holes. The customer can arrange a suitable HR 500 high-performance reamer to meet his requirements:

- available as long and short version
- all interim dimensions from 3 mm to 20 mm possible
- usual high quality in the shortest time

Please contact us for further information.





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Made by Guhring