

## **HR 500 T**

**Solid carbide head reamer  
for Ø 16-39.1 mm**

**NEW!**  
up to Ø 39.1 mm

**EXCLUSIVE**LINE®

**Made by Guhring**

# EXCLUSIVELINE®

HR 500 T – the solid carbide solution

# HR 500 T

With the HR 500 T Guhring now provides solid carbide head reamers from 16 to 39.1 mm diameter as a special solution.

This special solution expands the successful solid carbide HR 500 version up to 39.1 mm diameter. Thanks to the short and compact solution economically efficient manufacturing is ensured. However, it is possible to take advantage of the universal options of the HR 500 in monoblock design.

Thanks to the universal HA shank the HR 500 T can be flexibly combined with standard chucks and numerous extensions. This considerable advantage makes expensive special holders unnecessary. The reaming operation can be carried out cost-efficiently and of high quality.

### Your advantages at a glance:

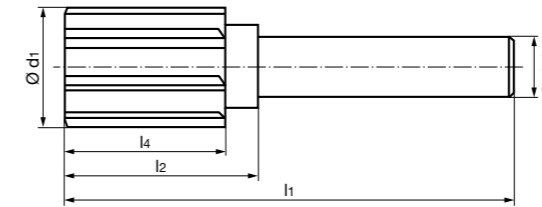
- High-performance reamer ensures economically efficient manufacturing
- flexible holder options thanks to HA shank
- simple extension with shrink fit extension or hydraulic chuck
- design includes universal, cast iron or aluminium options



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HR 500 T – the solid carbide solution

## Solid carbide head reamer for Ø 16-39.1 mm



Tool material **Solid carbide**

Type



Surface finish **a Cb Y Z**

Ø d1 mm	d2 h6 mm	l1 mm	l2 mm	l4 mm	Availability	
15.9 - 19.1	8	66	30	25	○	○
>19.1 - 23.1	10	70	30	25	○	○
>23.1 - 28.1	12	75	30	25	○	○
>28.1 - 33.1	16	78	30	25	○	○
>33.1 - 36.1	20	80	30	25	○	○
>36.1 - 39.1	20	80	30	25	○	○

## GÜHRINGNAVIGATOR

Ream-Ø mm	Feed column no.						
	71	72	73	74	75	76	77
16.00	0.250	0.315	0.400	0.800	1.400	2.200	2.600
20.00	0.315	0.400	0.500	0.800	1.400	2.200	2.600
25.00	0.400	0.500	0.630	1.000	1.600	2.500	3.000
31.50	0.400	0.500	0.630	1.000	2.000	3.000	3.600
40.00	0.500	0.630	0.800	1.200	2.000	3.000	3.600

Vc m/min	Universal			K Cast	N Alu
	Feed column no.			Feed column no.	
	nanoA	Signum	Zenit	Signum	Carbo
Steel machining	120-250	75-76			
Stainless steel sulphured	60-120	74-75			
Stainless steel austenitic	40-80	74-75			
Stainless steel martensitic	60-120	74-75			
Hardened steels up to 63 HRC	30-60	73-74			
Titanium and titanium alloys	40-60		74		
Cast iron GG	140-200			76	
Spheroidal cast iron GGG	120-300			72-75	
Aluminium	200-300				76-77

	Example 1	Example 2	Example 3	Example 4	Example 5
Tool	HR500 T Guss	HR500 T	HR500 T	HR500 T Alu	HR500 T
Coating	Signum	nanoA	nanoA	Carbo	Signum
Component	Tappet bore ZKG	Flange	Planetary gear	Housing	Housing
Material	GG25	VA1.4404	20MnCr5	AlCuMg1	42CrMo4 (55 HRC)
Ø	Ø 21.4	Ø 23.09	Ø 16.9	Ø 28	Ø 25
Tol./surface finish	H7/Rz 16 / Rmax. 20	IT8 / Rz 10	IT7	H7 / Ra 0.4	H7
Reaming depth	40 mm Dulo with cross bore	60 mm Dulo	36 mm Dulo	60 mm Salo	60 mm Salo heavily interr. cut
vc	200 m/min	45 m/min	185 m/min	160 m/min	40 m/min
fu	1.6 mm/U	0.8 mm/U	2.0 mm/U	1.2 mm/U	0.6 mm/U
Tool life	96 m	36 m	220 m	180 m	5 m

**a** nanoA   **Y** Signum   **Z** Zenit   **Cb** Carbo   **○** Semi-standard

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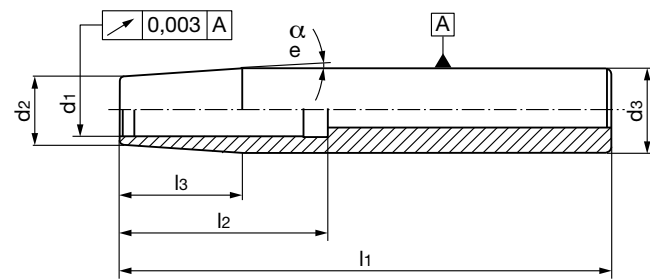
## HR 500 T – versatile combination possibilities

### COMBINATION POSSIBILITIES

Thanks to the universal HA-shank HR 500 T can be flexibly combined with standard chucks and numerous extensions. Expensive special holders are not necessary thanks to this essential advantage. The reaming operation is cost efficient and of very high quality.



### Shrink fit extension



Guhring no. **4719**

for shank-Ø d1 h6 mm	d2 mm	d3 h6 mm	l1 mm	l2 mm	l3 mm	α e	Code no.	Availability
6	10	12	125	38	19.1	3	6.012	●
8	12	14	125	38	19.1	3	8.014	●
10	14	16	160	42	19.1	3	10.116	●
12	16	20	160	47	38.2	3	12.120	●
16	22	25	160	50	28.6	3	16.225	●
20	27	32	160	52	47.7	3	20.332	●

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## HR 500 T – versatile combination possibilities

### Versatile extension possibilities

For the application with large reaming depths and for easy bridging of protrusions the HR 500 T can be combined with a variety of extensions. With a cost-efficient price-performance ratio, the **shrink fit extension (Guhring no. 4719)** scores points, for example. Where a slender holder is required and shrink fitting is not possible, Guhring can provide the new **hydraulic chuck from clamping Ø 10 mm**.

### 3 Designs

the universal design is optionally available with either Nano-A, Signum or Zenit coating

- K** cast iron option with Signum-coating for the application in GG and GGG
- N** aluminium option with Carbo-coating for the application in aluminium wrought alloys or AlSi-cast iron-alloys

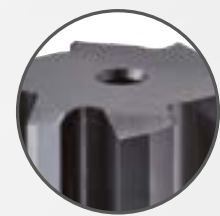
**NEW!**

hydraulic chuck from clamping Ø 10 mm.



### Concentricity control point

### Internal cooling



**Blind hole option**  
with central  
coolant exit



**Through hole option**  
with radial  
coolant delivery

### Flexible combination possibilities

Thanks to the standardised shank to DIN 6535-HA, with short reaming depths HR 500 T can be clamped in conventional hydraulic chucks, shrink fit chucks or other precisely concentric clamping chucks.

Shrink fit extension (Guhring no. 4719)



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