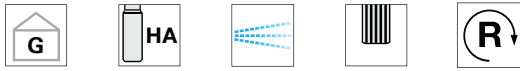


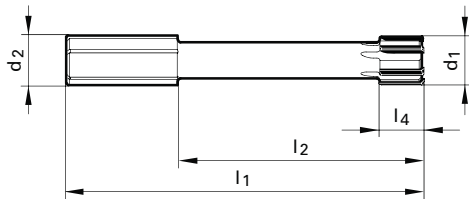
# EXCLUSIVE LINE®

## HR 500 G high-performance reamers

### High-performance reamers



The carbide-tipped and cermet-tipped HR 500 G reamers operate at unbelievably high cutting rates while producing extremely precise holes. Therefore, it offers considerable savings through process improvement and reliability.



HR 500 reamers are stocked in Germany

d1	d2 h6	l1	l2	l4		Code no.
mm	mm	mm	mm	mm		
6.000	6.000	76.00	40.00	12.00	4	6.000
8.000	8.000	101.00	65.00	16.00	4	8.000
10.000	10.000	101.00	61.00	16.00	4	10.000
12.000	12.000	130.00	85.00	16.00	4	12.000
14.000	14.000	130.00	85.00	16.00	6	14.000
16.000	16.000	150.00	102.00	19.00	6	16.000
18.000	18.000	150.00	102.00	19.00	6	18.000
20.000	20.000	150.00	100.00	19.00	6	20.000
22.000	20.000	160.00	110.00	22.00	6	22.000
24.000	25.000	180.00	124.00	22.00	6	24.000
25.000	25.000	180.00	124.00	22.00	6	25.000
26.000	25.000	180.00	124.00	22.00	6	26.000
28.000	25.000	180.00	124.00	25.00	6	28.000
30.000	25.000	180.00	124.00	25.00	6	30.000
32.000	32.000	200.00	140.00	25.00	6	32.000
34.000	32.000	200.00	140.00	25.00	6	34.000
36.000	32.000	200.00	140.00	25.00	8	36.000
38.000	32.000	200.00	140.00	25.00	8	38.000
40.000	32.000	200.00	140.00	25.00	8	40.000

Cermet Tipped			
Series no.	HR 500 G S	HR 500 G D	EU
1682			
Surface finish			
Speeds & Feeds	p. 25	p. 25	



EDP Number	
9016820060000	9016830060000
9016820080000	9016830080000
9016820100000	9016830100000
9016820120000	9016830120000
9016820140000	9016830140000
9016820160000	9016830160000
9016820180000	9016830180000
9016820200000	9016830200000
9016820220000	9016830220000
9016820240000	9016830240000
9016820250000	9016830250000
9016820260000	9016830260000
9016820280000	9016830280000
9016820300000	9016830300000
9016820320000	9016830320000
9016820340000	9016830340000
9016820360000	9016830360000
9016820380000	9016830380000
9016820400000	9016830400000





# HR 500

## HR 500

Solid carbide high-performance reamers up to Ø 20 mm for universal application

## HR 500 T NEW

Solid carbide reamer head for Ø 16-38 mm

## HR 500 Cast

Solid carbide high-performance reamers for the machining of GG and GGG achieving optimal surface quality and efficiency

## HR 500 Alu

Solid carbide high-performance reamers for the machining of aluminium and AlSi-alloys

## HR 500 G

Carbide-tipped or cermet-tipped high-performance reamers from Ø 6 mm up to 40 mm

## HR 500 GT














Carbide-tipped or cermet-tipped high-performance reamers from Ø 40 mm up to 76.2 mm

**USA Edition 2018**

**EXCLUSIVE**LINE®

Made by Guhring

## HR 500 high-performance reamers Pictograms

<b>Tool material</b>	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 2px; text-align: center;"> <b>Solid Carbide</b> </div> <div style="border: 1px solid black; padding: 2px; text-align: center;"> <b>Carbide Tipped</b> </div> <div style="border: 1px solid black; padding: 2px; text-align: center;"> <b>Cermet Tipped</b> </div> </div> <p>Solid carbide    Carbide tipped    Cermet tipped</p>																								
<b>Internal cooling</b>																									
<b>Standard</b>	 <p>to Guhring standard</p>																								
<b>Type</b>	<table border="1" style="width: 100%; text-align: center; font-size: small;"> <tr> <td>HR 500 S</td> <td>HR 500 T S</td> <td>HR 500 Guss S</td> <td>HR 500 Alu S</td> <td>HR 500 G S</td> <td>HR 500 GT S</td> <td>HR 500 D</td> <td>HR 500 T D</td> <td>HR 500 Guss D</td> <td>HR 500 Alu D</td> <td>HR 500 G D</td> <td>HR 500 GT D</td> </tr> <tr> <td colspan="6">Blind hole (S)</td> <td colspan="6">Through hole (D)</td> </tr> </table>	HR 500 S	HR 500 T S	HR 500 Guss S	HR 500 Alu S	HR 500 G S	HR 500 GT S	HR 500 D	HR 500 T D	HR 500 Guss D	HR 500 Alu D	HR 500 G D	HR 500 GT D	Blind hole (S)						Through hole (D)					
HR 500 S	HR 500 T S	HR 500 Guss S	HR 500 Alu S	HR 500 G S	HR 500 GT S	HR 500 D	HR 500 T D	HR 500 Guss D	HR 500 Alu D	HR 500 G D	HR 500 GT D														
Blind hole (S)						Through hole (D)																			
<b>Cutting direction</b>	 <p>Right hand</p>																								
<b>Tolerance</b>	<table border="1" style="width: 100%; text-align: center; font-size: small;"> <tr> <td>H7</td> <td>+0,005</td> </tr> </table>	H7	+0,005																						
H7	+0,005																								
<b>Hole type</b>	<table style="width: 100%;"> <tr> <td style="text-align: center;">  <p>Through hole</p> </td> <td style="text-align: center;">  <p>Blind hole</p> </td> </tr> </table>	 <p>Through hole</p>	 <p>Blind hole</p>																						
 <p>Through hole</p>	 <p>Blind hole</p>																								
<b>No. of cutting edges</b>																									
<b>Shank form</b>																									
<b>Helix angle</b>	 <p>straight-fluted</p>																								
<b>Spacing</b>	 <p>extremely unequal</p>																								

Possible misprints or any type of intermediate changes do not entitle to any claims. All DIN marked products can be supplied deviating from the catalog dimensions as long as they correspond to the specified DIN standard.

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(800) 776-6170 (262) 784-6730  
[www.guhring.com](http://www.guhring.com)

# EXCLUSIVE LINE®

## HR 500 high-performance reamers Program summary

Standard	Type	Tool illustration	Tool material	Surface finish	d1 (mm)	Gühring Series	Standard range page
	HR 500 S		Solid carbide		2.000 - 20.000	1685	8
	HR 500 S		Solid carbide		1.970 - 12.030	1675	9
	HR 500 D		Solid carbide		2.000 - 20.000	1686	8
	HR 500 D		Solid carbide		1.970 - 12.030	1676	9
	HR 500 T S		Solid carbide		16.000 - 38.000	1548	11
	HR 500 T D		Solid carbide		16.000 - 38.000	1549	11
	HR 500 Guss S		Solid carbide		3.000 - 20.000	1036	13
	HR 500 Guss D		Solid carbide		3.000 - 20.000	1037	13
	HR 500 Alu S		Solid carbide		4.000 - 20.000	1678	14
	HR 500 Alu D		Solid carbide		4.000 - 20.000	1679	14
	HR 500 G S		Carbide Tipped		22.000 - 40.000	1680	15
	HR 500 G S		Cermet Tipped		6.000 - 40.000	1682	16
	HR 500 G D		Carbide Tipped		22.000 - 40.000	1681	15
	HR 500 G D		Cermet Tipped		6.000 - 40.000	1683	16

HR 500 reamers are stocked in Germany

# EXCLUSIVE LINE®

## HR 500 high-performance reamers Program summary

Standard	Type	Tool illustration	Tool material	Surface finish	d1 (mm)	Gühring Series	Standard range page
	HR 500 GT S		Carbide Tipped		41.000 - 76.200	1038	19
	HR 500 GT S		Cermet Tipped		41.000 - 76.200	1040	18
	HR 500 GT D		Carbide Tipped		41.000 - 76.200	1039	19
	HR 500 GT D		Cermet Tipped		41.000 - 76.200	1041	18

### HSK-A hydraulic chucks, extra length, for HR 500 GT

		HSK-A 63	4290	20
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### Shrink fit extension for HR 500 T

		4719	20
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### Tool selection for optimal results

			Ø ≤ 20 mm			Ø > 20 mm		
			Solid carbide HR 500 Universal	Solid carbide HR500 Guss	Solid carbide HR500 Alu	Carbide tipped HR500	Cermet tipped HR500	
			1675	1676	1036	1678	1680/1038	1682/1040
			1685	1686	1037	1679	1681/1039	1683/1041
Steel	P	up to 1200 N/mm <sup>2</sup>	●	●			○	●
Stainless steel	M		●	●			●	
Cast iron	K	GG	○	○	●		●	
		GGG 40/50	○	○	●		○	●
		GGG 60/70	○	○	●		●	
Aluminium	N				●			
Ti-special alloys	S	Ti-Basis	●	●			●	
		Ni-Basis	●	●			●	
Hardened steel	H	up to 48 HRC	●	●			○	
		up to 63 HRC	●	●				

● optimal suitability      ○ limited suitability

### Optimal diameters of pre-drilled holes

Recommended stock allowance, in mm			up to Ø6	up to Ø10	up to Ø16	up to Ø25	up to Ø40	above Ø40
all materials			Ø 0.1 - 0.2	Ø 0.2	Ø 0.2 - 0.3	Ø 0.3	Ø 0.3 - 0.4	Ø 0.4 - 0.5
Hardened steel	H	up to 48 HRC	Ø 0.1 - 0.2	Ø 0.2	Ø 0.2	Ø 0.2	Ø 0.3	Ø 0.3
		up to 63 HRC	Ø 0.1	Ø 0.1	Ø 0.1 - 0.2	Ø 0.2	Ø 0.2	Ø 0.2