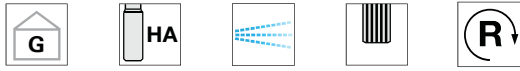


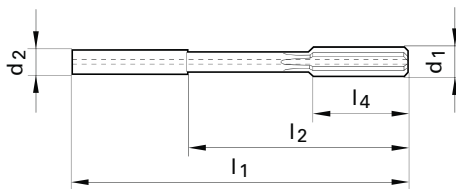
HR 500 solid carbide high-performance reamers

High-performance reamers



The solid carbide HR 500 reamer operates at unbelievably high cutting rates while producing extremely precise holes. Therefore, it offers considerable savings through process improvement and reliability.

Intermediate dimensions from Ø 2.0-20.1 mm can be produced as specials.



HR 500 reamers are stocked in Germany

d1	d2 h6	l1	l2	l4		Code no.
mm	mm	mm	mm	mm		
1.970	4.000	50.00	22.00	8.00	4	1.970
1.980	4.000	50.00	22.00	8.00	4	1.980
1.990	4.000	50.00	22.00	8.00	4	1.990
2.000	4.000	50.00	22.00	8.00	4	2.000
2.010	4.000	50.00	22.00	8.00	4	2.010
2.030	4.000	50.00	22.00	8.00	4	2.030
2.970	4.000	68.00	40.00	12.00	4	2.970
2.980	4.000	68.00	40.00	12.00	4	2.980
2.990	4.000	68.00	40.00	12.00	4	2.990
3.000	4.000	68.00	40.00	12.00	4	3.000
3.010	4.000	68.00	40.00	12.00	4	3.010
3.020	4.000	68.00	40.00	12.00	4	3.020
3.030	4.000	68.00	40.00	12.00	4	3.030
3.970	4.000	68.00	40.00	12.00	4	3.970
3.980	4.000	68.00	40.00	12.00	4	3.980
3.990	4.000	68.00	40.00	12.00	4	3.990
4.000	4.000	68.00	40.00	12.00	4	4.000
4.010	4.000	68.00	40.00	12.00	4	4.010
4.020	4.000	68.00	40.00	12.00	4	4.020
4.030	4.000	68.00	40.00	12.00	4	4.030
4.970	6.000	76.00	40.00	12.00	4	4.970
4.980	6.000	76.00	40.00	12.00	4	4.980
4.990	6.000	76.00	40.00	12.00	4	4.990
5.000	6.000	76.00	40.00	12.00	4	5.000
5.010	6.000	76.00	40.00	12.00	4	5.010
5.020	6.000	76.00	40.00	12.00	4	5.020
5.030	6.000	76.00	40.00	12.00	4	5.030
5.970	6.000	76.00	40.00	12.00	4	5.970
5.980	6.000	76.00	40.00	12.00	4	5.980
5.990	6.000	76.00	40.00	12.00	4	5.990

Solid carbide



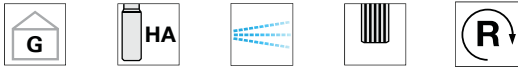
Series no.	1675	1676
Surface finish		
Speeds & Feeds	p. 24 	p. 24



EDP Number	
9016750019700	9016760019700
9016750019800	9016760019800
9016750019900	9016760019900
9016750020000	9016760020000
9016750020100	9016760020100
9016750020200	9016760020200
9016750029700	9016760029700
9016750029800	9016760029800
9016750029900	9016760029900
9016750030000	9016760030000
9016750030100	9016760030100
9016750030200	9016760030200
9016750030300	9016760030300
9016750039700	9016760039700
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HR 500 solid carbide high-performance reamers

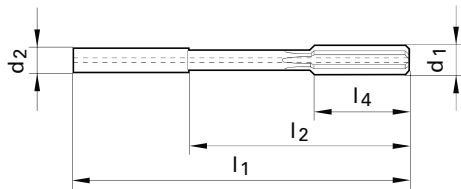
High-performance reamers



Solid carbide

The solid carbide HR 500 reamer operates at unbelievably high cutting rates while producing extremely precise holes. Therefore, it offers considerable savings through process improvement and reliability.

Intermediate dimensions from Ø 2.0-20.1 mm can be produced as specials.



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
6.010	6.000	76.00	40.00	12.00	4	6.010
6.020	6.000	76.00	40.00	12.00	4	6.020
6.030	6.000	76.00	40.00	12.00	4	6.030
7.000	8.000	101.00	65.00	16.00	6	7.000
7.970	8.000	101.00	65.00	16.00	6	7.970
7.980	8.000	101.00	65.00	16.00	6	7.980
7.990	8.000	101.00	65.00	16.00	6	7.990
8.000	8.000	101.00	65.00	16.00	6	8.000
8.010	8.000	101.00	65.00	16.00	6	8.010
8.020	8.000	101.00	65.00	16.00	6	8.020
8.030	8.000	101.00	65.00	16.00	6	8.030
9.000	10.000	101.00	61.00	19.00	6	9.000
9.970	10.000	101.00	61.00	19.00	6	9.970
9.980	10.000	101.00	61.00	19.00	6	9.980
9.990	10.000	101.00	61.00	19.00	6	9.990
10.000	10.000	101.00	61.00	19.00	6	10.000
10.010	10.000	101.00	61.00	19.00	6	10.010
10.020	10.000	101.00	61.00	19.00	6	10.020
10.030	10.000	101.00	61.00	19.00	6	10.030
11.000	12.000	130.00	85.00	19.00	6	11.000
11.970	12.000	130.00	85.00	19.00	6	11.970
11.980	12.000	130.00	85.00	19.00	6	11.980
11.990	12.000	130.00	85.00	19.00	6	11.990
12.000	12.000	130.00	85.00	19.00	6	12.000
12.010	12.000	130.00	85.00	19.00	6	12.010
12.020	12.000	130.00	85.00	19.00	6	12.020
12.030	12.000	130.00	85.00	19.00	6	12.030

HR 500 S	EU	HR 500 D	EU
1675		1676	
Surface finish		Surface finish	
Speeds & Feeds		Speeds & Feeds	
p. 24		p. 24	
+0,005		+0,005	



EDP Number	
9016750060000	9016760060000
9016750060100	9016760060100
9016750060200	9016760060200
9016750060300	9016760060300
9016750070000	9016760070000
9016750079700	9016760079700
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9016750079900	9016760079900
9016750080000	9016760080000
9016750080100	9016760080100
9016750080200	9016760080200
9016750080300	9016760080300
9016750090000	9016760090000
9016750099700	9016760099700
9016750099800	9016760099800
9016750099900	9016760099900
9016750100000	9016760100000
9016750100100	9016760100100
9016750100200	9016760100200
9016750100300	9016760100300
9016750110000	9016760110000
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9016750119800	9016760119800
9016750119900	9016760119900
9016750120000	9016760120000
9016750120100	9016760120100
9016750120200	9016760120200
9016750120300	9016760120300



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

EXCLUSIVELINE®

Made by Guhring

HR 500 high-performance reamers Pictograms

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

Guhring, Inc.
1445 Commerce Ave., Brookfield, WI 53045
(800) 776-6170 (262) 784-6730
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 ²	●	●			○	●
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