

# **ULTIMATECUT**©



FASCINATION 10: PRECISION®

























## **ULTIMATECUT Step drills HSS RUnaTEC,** spiral fluted with turbo tip

The ULTIMATECUT step drill revolutionizes the work process and sets new standards in machining time with time savings of up to 75%. The step drill from RUKO achieves this through its revolutionary cutting edge geometry by combining the most diverse applications and tools. This means less tools needed, no tool changes and ultimate flexibility.

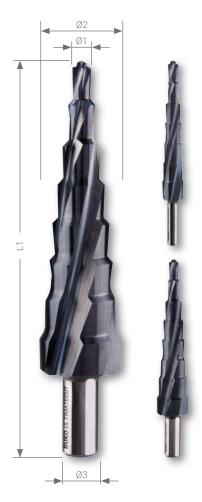
Packing unit: in plastic tubes of 1



- Cooling
- Adjust speed
- Low speeds for hand drills
- Follow table of application for **ULTIMATECUT** step drills
- Pay attention to total length while drilling

Steel (N/mm2) < 900	
Steel (N/mm2) < 1100	
Steel (N/mm2) < 1300	
Rust-resistant steel	
Aluminium	

Brass	
Bronze	
Plastics	
Cast iron	
Titanium alloyed	



Size no.	Ø1 - Ø2 mm	Drilling range Ø mm	L1 mm	Steps	Ø3 mm	HSS RUna TEC	
S1	6,0 - 12,00	6,0 / 7,0 / 8,0 / 9,0 / 10,0 / 11,0 / 12,0	105,0	7	8,0	101 082 P	1
M2	6,0 - 20,00	6,0 / 8,0 / 10,0 / 12,0 / 14,0 / 16,0 / 18,0 / 20,0	120,0	8	10,0	101 083 P	1
L3	6,0 - 27,00	6,0 / 9,0 / 12,0 / 15,0 / 18,0 / 21,0 / 24,0 / 27,0	125,0	8	12,0	101 084 P	1























# **ULTIMATECUT Step drill set HSS RUnaTEC,** in plastic case

HSS

ULTIMATECUT 3-piece set of step drills spiral fluted, sizes S1, M2, L3

101 087 PRO







# Table of cutting speeds for ULTIMATECUT step drills

Material	Application	Working step	Hand drill	Pillar drill	Pillar drill / CNC machine
				manual feed	automatic feed
Structural steel (e.g. S235JR) Non-ferrous metals /		tapping (drilling through 1st step)	up to 1000 rpm cooling recommended	up to 1000 rpm cooling recommended	approx. 750 rpm f = 0,1mm/rev
Plexiglas / Plastics / Wood	_	reaming (from 2nd step)	100 - 250 rpm cooling recommended	250- 350 rpm cooling recommended	cooling necessary
Stainless steel			up to 600 rpm cooling necessary	up to 600 rpm cooling necessary	approx. 600 rpm
up to V2A		100 - 200 rpm cooling necessary	200 - 300 rpm cooling necessary	f = 0,05mm/rev cooling necessary	

# Technically perfected.

The new RUKO



Countersink

- Up to 30% time saving
- Twice as many countersink holes
  - Excellent, smooth countersink results

Information and videos



RUna TEC OUT NOW



















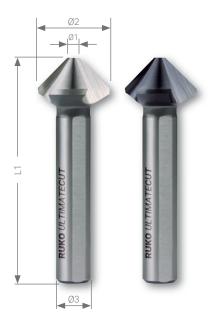




#### **ULTIMATECUT Taper and deburring countersinker** DIN 335 type C 90°

The **ULTIMATECUT** countersink is a high performance tool which stands for best performance: up to 30% time savings, twice as many countersinks as standard tools and excellent, smooth countersinking results in almost all materials.

The specially developed countersink from RUKO achieves this through its unique cutting edge geometry, with the specially developed variably running relief grinding, transition radius and the extra-wide chip flute.



Packing unit: in plastic tubes of 1



- achieves the best performance in almost all materials and applications
- considerably less feed force required
- up to 60% longer service life
- up to 30% faster countersinking
- extremely quiet running
- optimal and smooth surface
- perfect chip removal

	6	É	
Steel (N/mm2) < 900			
Steel (N/mm2) < 1100			
Steel (N/mm2) < 1300			
Rust-resistant steel			
Aluminium			

	É	<b>*</b>	
Brass			
Bronze			
Plastics			
Cast iron			
Titanium alloyed			

Ø2 mm	Ø1 mm	L1 mm	Ø3 mm	Countersinkings as per DIN 74	HSS	HSS RUna TEC	HSSE Co 5	HSSE Co 5 RUna TEC	*
6,3	1,5	45,0	5,0	M 3	102 767	102 767 P	102 767 E	102 767 EP	1
8,3	2,0	50,0	6,0	M 4	102 771	102 771 P	102 771 E	102 771 EP	1
10,4	2,5	50,0	6,0	M 5	102 774	102 774 P	102 774 E	102 774 EP	1
12,4	2,8	56,0	8,0	M 6	102 776	102 776 P	102 776 E	102 776 EP	1
15,0	3,2	60,0	10,0	M 8	102 778	102 778 P	102 778 E	102 778 EP	1
16,5	3,2	60,0	10,0	M 8	102 779	102 779 P	102 779 E	102 779 EP	1
19,0	3,5	63,0	10,0	M10	102 780	102 780 P	102 780 E	102 780 EP	1
20,5	3,5	63,0	10,0	M10	102 781	102 781 P	102 781 E	102 781 EP	1
23,0	3,8	67,0	10,0	M12	102 782	102 782 P	102 782 E	102 782 EP	1
25,0	3,8	67,0	10,0	M12	102 783	102 783 P	102 783 E	102 783 EP	1
31,0	4,2	71,0	12,0	M16	102 785	102 785 P	102 785 E	102 785 EP	1

### **ULTIMATECUT Taper and deburring countersinker sets** DIN 335 type C 90° in plastic case

	HSS	HSS RUna TEC	HSSE Co 5	HSSE RUna TEC
6-piece set of ULTIMATECUT taper and deburring countersinkers (DIN 335) type C 90° Ø 6,3 - 8,3 - 10,4 - 12,4 - 16,5 - 20,5 mm	102 790 RO	102 790 PRO	102 790 ERO	102 790 EPRO
5-piece set of ULTIMATECUT taper and deburring countersinkers (DIN 335) type C 90° Ø 6,3 - 10,4 - 16,5 - 20,5 - 25,0 mm	102 791 RO	102 791 PRO	102 791 ERO	102 791 EPRO