



» ROTARY BURRS





## Rotary burrs

The high-performance tungsten carbide rotary burrs provide maximum cutting edge stability with a simultaneous high tenacity of the cutting edge.

### **Tungsten carbide rotary burrs Alu**

High-performance tungsten carbide rotary burrs with aluminium toothing. Fields of application: non-ferrous metals, aluminium, brass, copper, zinc, diecasts and plastics. To debur, break edges, trim and surface processing.

### **Tungsten carbide rotary burrs TC**

High-performance tungsten carbide rotary burrs with cross toothing. The cross toothing provides a higher cutting capacity compared with the simple toothing. This particularly has a positive effect on materials which are difficult to cut. Fields of application: for high-alloy steels, non-rusting steels, acid-resistant steels, heat-resistant steels, die casts and plastics. To debur, break edges, trim, process welding seams, surface processing.

### **Tungsten carbide rotary burrs TiCN**

Like tungsten carbide rotary burrs TC with titanium carbon nitride coating. The TiCN wear-resistant coating increases the surface hardness of the tool to approx. 3,000 HV / micro-hardness and the heat resistance to 400° C. This increases service life and productivity. Fields of application: for high-alloy steels, non-rusting steels, acid-resistant steels, heat-resistant steels, die casts and plastics. To debur, break edges, trim, process welding seams, surface processing.



## Overview of symbols



Tungsten carbide



Cross tothing  
CT 4



bright surface



Shank:  
cylindrical



DIN 8033



Tothing ALU



TiCN coating



Speed



Average  
air consumption



Air pressure



Weight



Tool adapter



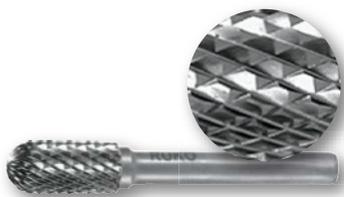
Hose size



Noise level



## Cutting



With cross tothing

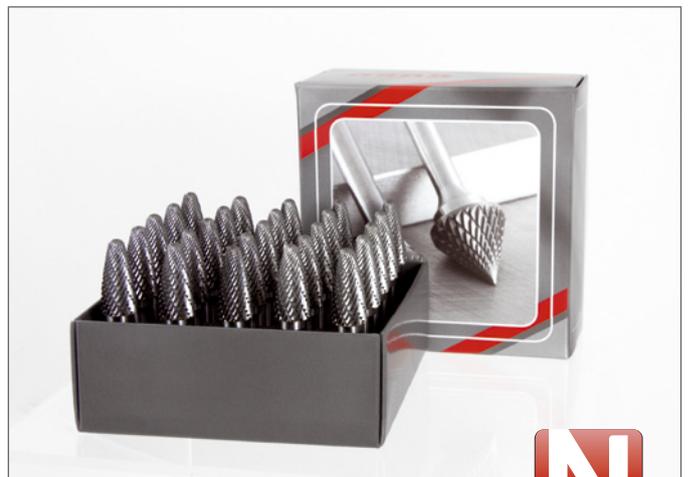


With aluminium tothing

Packing unit: each in plastic packaging



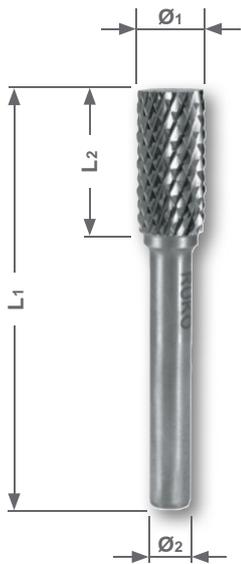
Packing unit: 25 units per carton



## Product information



DIN 8033	A	ZYA		Shape A cylinder (ZYA) without end tothing	
DIN 8033	A	ZYA		Shape A cylinder (ZYA) with end tothing	
DIN 8033	C	WCR		Shape C oval (WCR)	
DIN 8033	D	KUD		Shape D ball type (KUD)	
DIN 8033	E	TRE		Form E Tropfen (TRE)	
DIN 8033	F	RBF		Shape F ball nose tree (RBF)	
DIN 8033	G	SPG		Shape G tree (SPG)	
DIN 8033	H	FHL		Shape H flame (FLH)	
DIN 8033	J	KSJ		Shape J cone 60° (KSJ)	
DIN 8033	K	KSK		Shape K cone 90° (KSK)	
DIN 8033	L	KEL		Shape L round cone (KEL)	
DIN 8033	M	SKM		Shape M cone (SKM)	
DIN 8033	N	WKN		Shape M cone (SKM)	



### Tungsten carbide rotary burrs shape A cylinder (ZYA) without end tothing

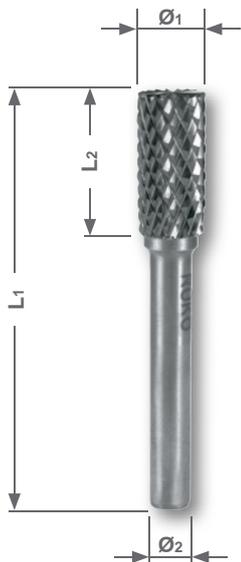


Packing unit: each in plastic packaging

**N** Also available as a set of 25 units per carton  
Article no.: 116 ... -25



Ø1 mm	L2 mm	Total length L1 mm	Ø2 mm	Article no. Alu	Article no. TC	Article no. TiCN
3,0	14,0	38,0	3,0	—	116 046	—
6,0	18,0	58,0	6,0	—	116 010	116 010 TC
8,0	18,0	60,0	6,0	—	116 011	116 011 TC
10,0	20,0	60,0	6,0	—	116 012	116 012 TC
12,0	25,0	65,0	6,0	—	116 013	116 013 TC
16,0	25,0	65,0	6,0	—	116 014	116 014 TC



### Tungsten carbide rotary burrs shape A cylinder (ZYA) with end tothing

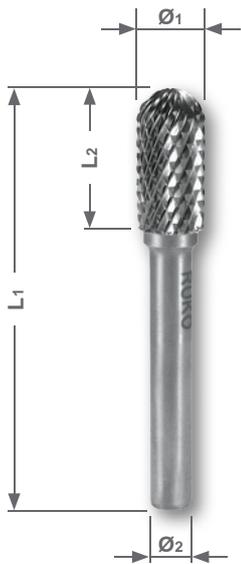


Packing unit: each in plastic packaging

**N** Also available as a set of 25 units per carton  
Article no.: 116 ... -25



Ø1 mm	L2 mm	Total length L1 mm	Ø2 mm	Article no. Alu	Article no. TC	Article no. TiCN
3,0	14,0	38,0	3,0	—	116 047	—
6,0	18,0	58,0	6,0	116 015 A	116 015	116 015 TC
8,0	18,0	60,0	6,0	—	116 016	116 016 TC
10,0	20,0	60,0	6,0	—	116 017	116 017 TC
12,0	25,0	65,0	6,0	116 018 A	116 018	116 018 TC
16,0	25,0	65,0	6,0	—	116 019	—



### Tungsten carbide rotary burrs shape C oval (WRC)

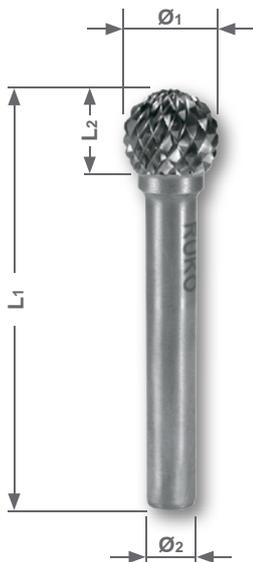


Packing unit: each in plastic packaging

**N** Also available as a set of 25 units per carton  
Article no.: 116 ... -25



Ø1 mm	L2 mm	Total length L1 mm	Ø2 mm	Article no. Alu	Article no. TC	Article no. TiCN
3,0	14,0	38,0	3,0	—	116 048	—
6,0	18,0	56,0	6,0	116 020 A	116 020	116 020 TC
8,0	18,0	60,0	6,0	—	116 021	116 021 TC
10,0	20,0	60,0	6,0	—	116 022	116 022 TC
12,0	25,0	65,0	6,0	116 023 A	116 023	116 023 TC
16,0	25,0	65,0	6,0	—	116 024	—



### Tungsten carbide rotary burrs shape D ball type (KUD)

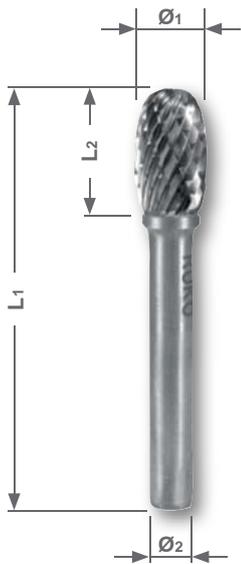


Packing unit: each in plastic packaging

**N** Also available as a set of 25 units per carton  
Article no.: 116 ... -25



Ø1 mm	L2 mm	Total length L1 mm	Ø2 mm	Article no. Alu	Article no. TC	Article no. TiCN
3,0	2,7	38,0	3,0	—	116 052	—
6,0	5,0	56,0	6,0	116 041 A	116 041	—
8,0	7,0	47,0	6,0	—	116 042	—
10,0	9,0	49,0	6,0	—	116 043	116 043 TC
12,0	11,0	51,0	6,0	116 044 A	116 044	—
16,0	15,0	54,0	6,0	—	116 045	—



### Tungsten carbide rotary burrs shape E tear drop (TRE)

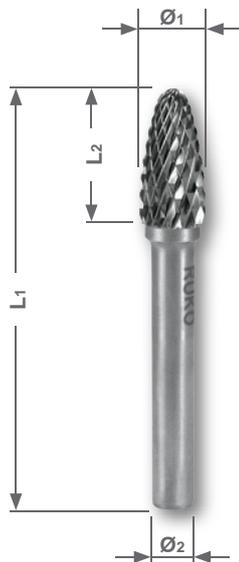


Packing unit: each in plastic packaging

**N** Also available as a set of 25 units per carton  
Article no.: 116 ... -25



Ø1 mm	L2 mm	Total length L1 mm	Ø2 mm	Article no. Alu	Article no. TC	Article no. TiCN
3,0	6,0	38,0	3,0	—	116 210	—
6,0	10,0	50,0	6,0	—	116 211	—
8,0	15,0	60,0	6,0	—	116 212	—
10,0	16,0	60,0	6,0	—	116 213	—
12,0	22,0	67,0	6,0	—	116 214	—
16,0	25,0	70,0	6,0	—	116 215	—



### Tungsten carbide rotary burrs shape F ball nose tree (RBF)

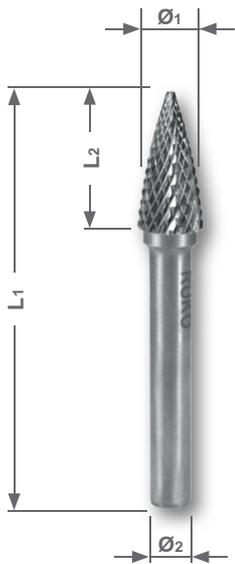


Packing unit: each in plastic packaging

**N** Also available as a set of 25 units per carton  
Article no.: 116 ... -25



Ø1 mm	L2 mm	Total length L1 mm	Ø2 mm	Article no. Alu	Article no. TC	Article no. TiCN
3,0	13,0	38,0	3,0	—	116 050	—
6,0	18,0	58,0	6,0	116 030 A	116 030	116 030 TC
8,0	18,0	60,0	6,0	—	116 031	116 031 TC
10,0	20,0	60,0	6,0	—	116 032	116 032 TC
12,0	25,0	65,0	6,0	116 033 A	116 033	116 033 TC
16,0	25,0	70,0	6,0	—	116 034	116 034 TC



## Tungsten carbide rotary burrs shape G tree (SPG)

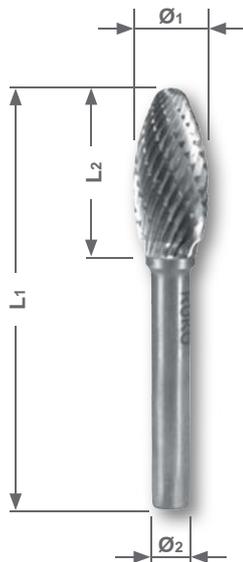


Packing unit: each in plastic packaging

**N** Also available as a set of 25 units per carton  
Article no.: 116 ... -25



$\varnothing_1$ mm	L <sub>2</sub> mm	Total length L <sub>1</sub> mm	$\varnothing_2$ mm	Article no. Alu	Article no. TC	Article no. TiCN
3,0	13,0	38,0	3,0	—	116 049	—
6,0	18,0	58,0	6,0	116 025 A	116 025	116 025 TC
8,0	18,0	60,0	6,0	—	116 026	116 026 TC
10,0	20,0	60,0	6,0	—	116 027	116 027 TC
12,0	25,0	65,0	6,0	116 028 A	116 028	116 028 TC
16,0	25,0	70,0	6,0	—	116 029	116 029 TC



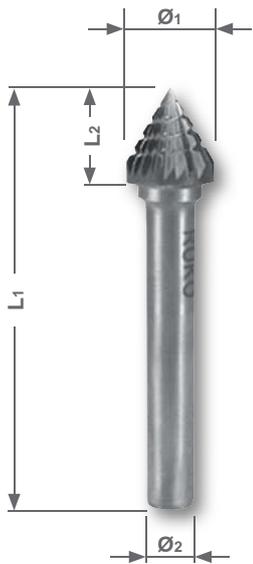
## Tungsten carbide rotary burrs shape H flame (FLH)



Packing unit: each in plastic packaging

**N** Also available as a set of 25 units per carton  
Article no.: 116 ... -25

$\varnothing_1$ mm	L <sub>2</sub> mm	Total length L <sub>1</sub> mm	$\varnothing_2$ mm	Article no. Alu	Article no. TC	Article no. TiCN
3,0	6,0	38,0	3,0	—	116 216	—
6,0	14,0	50,0	6,0	—	116 217	—
8,0	20,0	65,0	6,0	—	116 218	—
10,0	20,0	65,0	6,0	—	116 219	—
12,0	32,0	77,0	6,0	—	116 220	—
16,0	36,0	82,0	6,0	—	116 221	—



### Tungsten carbide rotary burrs shape J cone 60° (KSJ)

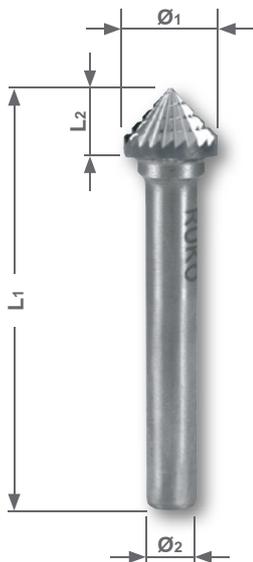


Packing unit: each in plastic packaging

**N** Also available as a set of 25 units per carton  
Article no.: 116 ... -25



Ø1 mm	L2 mm	Total length L1 mm	Ø2 mm	Article no. Alu	Article no. TC	Article no. TiCN
3,0	3,0	38,0	3,0	—	116 222	—
6,0	6,0	50,0	6,0	—	116 223	—
10,0	8,0	56,0	6,0	—	116 224	—
12,0	11,0	60,0	6,0	—	116 225	—
16,0	14,5	62,0	6,0	—	116 226	—



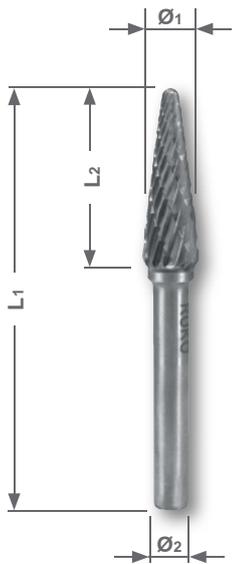
### Tungsten carbide rotary burrs shape K cone 90° (KSK)



Packing unit: each in plastic packaging

**N** Also available as a set of 25 units per carton  
Article no.: 116 ... -25

Ø1 mm	L2 mm	Total length L1 mm	Ø2 mm	Article no. Alu	Article no. TC	Article no. TiCN
3,0	3,0	38,0	3,0	—	116 227	—
6,0	3,0	50,0	6,0	—	116 228	—
10,0	5,0	53,0	6,0	—	116 229	—
12,0	7,0	55,0	6,0	—	116 230	—
16,0	8,0	57,0	6,0	—	116 231	—



### Tungsten carbide rotary burrs shape L round cone (KEL)

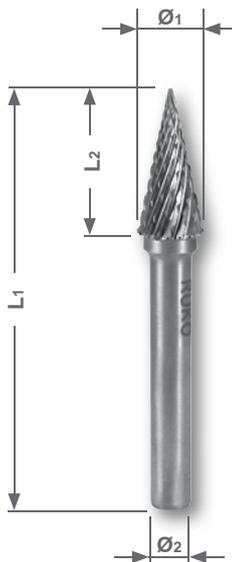


Packing unit: each in plastic packaging

**N** Also available as a set of 25 units per carton  
Article no.: 116 ... -25



Ø1 mm	L2 mm	Total length L1 mm	Ø2 mm	Article no. Alu	Article no. TC	Article no. TiCN
3,0	14,0	38,0	3,0	—	116 232	—
6,0	18,0	50,0	6,0	116 233 A	116 233	—
8,0	25,0	70,0	6,0	—	116 234	—
10,0	20,0	65,0	6,0	116 235 A	116 235	—
12,0	32,0	77,0	6,0	116 236 A	116 236	—
16,0	33,0	78,0	6,0	—	116 237	—



### Tungsten carbide rotary burrs shape M cone (SKM)

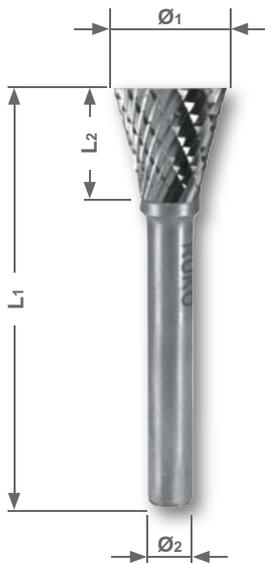


Packing unit: each in plastic packaging

**N** Also available as a set of 25 units per carton  
Article no.: 116 ... -25



Ø1 mm	L2 mm	Total length L1 mm	Ø2 mm	Article no. Alu	Article no. TC	Article no. TiCN
3,0	11,0	38,0	3,0	—	116 051	—
6,0	18,0	58,0	6,0	—	116 035	116 035 TC
8,0	18,0	60,0	6,0	—	116 036	116 036 TC
10,0	20,0	60,0	6,0	—	116 037	116 037 TC
12,0	25,0	65,0	6,0	—	116 038	116 038 TC
16,0	25,0	70,0	6,0	—	116 039	116 039 TC



## Tungsten carbide rotary burrs shape N angle (WKN)



Packing unit: each in plastic packaging

**N** Also available as a set of 25 units per carton  
Article no.: 116 ... -25



Ø1 mm	L2 mm	Total length L1 mm	Ø2 mm	Article no. Alu	Article no. TC	Article no. TiCN
3,0	5,0	38,0	3,0	—	116 238	—
6,0	8,0	50,0	6,0	—	116 239	—
10,0	10,0	55,0	6,0	—	116 240	—
12,0	13,0	58,0	6,0	—	116 241	—
16,0	19,0	64,0	6,0	—	116 242	—



## Sets of tungsten carbide rotary burrs in steel case

Description	Article no.
10-piece set of tungsten carbide rotary burrs <b>TC</b> 2 x shape A, cylinder (ZYA) without end tothing Ø D1 10,0 / 12,0 mm 2 x shape C, oval (WRC) Ø D1 10,0 / 12,0 mm 2 x shape G, tree (SPG) Ø D1 10,0 / 12,0 mm 2 x shape F, ball nose tree (RBF) Ø D1 10,0 / 12,0 mm 1 x shape M, cone (SKM) Ø D1 12,0 mm 1 x shape D, ball type (KUD) Ø D1 12,0 mm	116 003
10-piece set of tungsten carbide rotary burrs <b>TiCN</b> 2 x shape A, cylinder (ZYA) without end tothing Ø D1 10,0 / 12,0 mm 2 x shape C, oval (WRC) Ø D1 10,0 / 12,0 mm 2 x shape G, tree (SPG) Ø D1 10,0 / 12,0 mm 2 x shape F, ball nose tree (RBF) Ø D1 10,0 / 12,0 mm 1 x shape M, cone (SKM) Ø D1 12,0 mm 1 x shape D, ball type (KUD) Ø D1 12,0 mm	116 003 TC
10-piece set of tungsten carbide rotary burrs <b>ALU</b> 2 x shape A, cylinder (ZYA) with end tothing Ø D1 6,0 / 12,0 mm 2 x shape C, oval (WRC) Ø D1 6,0 / 12,0 mm 2 x shape G, tree (SPG) Ø D1 6,0 / 12,0 mm 2 x shape F, ball nose tree (RBF) Ø D1 6,0 / 12,0 mm 2 x shape D, ball type (KUD) Ø D1 6,0 / 12,0 mm	116 103 A



116 003



116 003 TC

## Sets of tungsten carbide rotary burrs in plastic case

Description	Article no.
10-piece set of tungsten carbide rotary burrs <b>TC</b> 2 x shape A, cylinder (ZYA) without end tothing Ø D1 10,0 / 12,0 mm 2 x shape C, oval (WRC) Ø D1 10,0 / 12,0 mm 2 x shape G, tree (SPG) Ø D1 10,0 / 12,0 mm 2 x shape F, ball nose tree (RBF) Ø D1 10,0 / 12,0 mm 1 x shape M, cone (SKM) Ø D1 12,0 mm 1 x shape D, ball type (KUD) Ø D1 12,0 mm	116 003 RO
10-piece set of tungsten carbide rotary burrs <b>TiCN</b> 2 x shape A, cylinder (ZYA) without end tothing Ø D1 10,0 / 12,0 mm 2 x shape C, oval (WRC) Ø D1 10,0 / 12,0 mm 2 x shape G, tree (SPG) Ø D1 10,0 / 12,0 mm 2 x shape F, ball nose tree (RBF) Ø D1 10,0 / 12,0 mm 1 x shape M, cone (SKM) Ø D1 12,0 mm 1 x shape D, ball type (KUD) Ø D1 12,0 mm	116 003 TCRO
10-piece set of tungsten carbide rotary burrs <b>ALU</b> 2 x shape A, cylinder (ZYA) with end tothing Ø D1 6,0 / 12,0 mm 2 x shape C, oval (WRC) Ø D1 6,0 / 12,0 mm 2 x shape G, tree (SPG) Ø D1 6,0 / 12,0 mm 2 x shape F, ball nose tree (RBF) Ø D1 6,0 / 12,0 mm 2 x shape D, ball type (KUD) Ø D1 6,0 / 12,0 mm	116 103 ARO



116 003 RO



116 003 TCRO

## Sets of tungsten carbide rotary burrs in a convenient table display

Description	Article no.
35-piece set of tungsten carbide rotary burrs <b>TC</b> in a convenient table display each 1 x Ø D1 6,0 mm + 8,0 mm + 10,0 mm + 12,0 mm + 16,0 mm 5 TC rotary burrs shape A, cylinder (ZYA) with end tothing 5 TC rotary burrs shape A, cylinder (ZYA) without end tothing 5 TC rotary burrs shape C, oval (WRC) 5 TC rotary burrs shape G, tree (SPG) 5 TC rotary burrs shape F, ball nose tree (RBF) 5 TC rotary burrs shape M, cone (SKM) 5 TC rotary burrs shape D, ball type (KUD)	116 008
35-piece set of tungsten carbide rotary burrs <b>TiCN</b> in a convenient table display each 1 x Ø D1 6,0 mm + 8,0 mm + 10,0 mm + 12,0 mm + 16,0 mm 5 TC rotary burrs shape A, cylinder (ZYA) with end tothing 5 TC rotary burrs shape A, cylinder (ZYA) without end tothing 5 TC rotary burrs shape C, oval (WRC) 5 TC rotary burrs shape G, tree (SPG) 5 TC rotary burrs shape F, ball nose tree (RBF) 5 TC rotary burrs shape M, cone (SKM) 5 TC rotary burrs shape D, ball type (KUD)	116 008 TC



116 008

## Set of tungsten carbide rotary burrs in mini-box

Description	Article no.
3-piece set of tungsten carbide rotary burrs in mini-box each 1 x Ø D1 10,0 mm 1 TC rotary burr shape A, cylinder (ZYA) with end tothing 1 TC rotary burr shape G, pionted arch (SPG) 1 TC rotary burr shape D, cone (KUD)	116 001
10-piece set of tungsten carbide rotary burrs in mini-box each 1 x Ø D1 6,0 mm + Ø D1 12,0 mm 2 TC rotary burrs shape A, cylinder (ZYA) with end tothing 2 TC rotary burrs shape C, oval (WRC) 2 TC rotary burrs shape G, tree (SPG) 2 TC rotary burrs shape F, ball nose tree (RBF) 2 TC rotary burrs shape D, ball type (KUD)	116 002
5-piece set of tungsten carbide rotary burrs in mini-box each 1 x Ø D1 10,0 mm 1 TC rotary burr shape A, cylinder (ZYA) with end tothing 1 TC rotary burr shape C, oval (WRC) 1 TC rotary burr shape G, tree (SPG) 1 TC rotary burr shape F, ball nose tree (RBF) 1 TC rotary burr shape D, ball type (KUD)	116 004



116 002



116 004



1.10



## Pneumatic grinder (short)



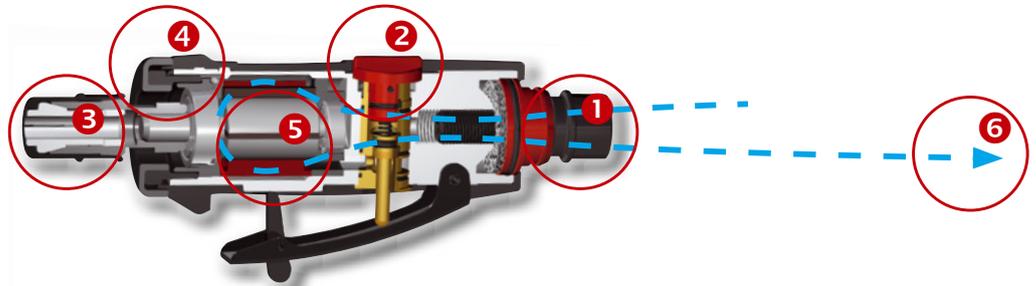
The RUKO pneumatic grinder in the short design - The compact, fast tool for deburring, polishing and machining welding seams!

The RUKO pneumatic grinder has a rubberised, non-slip handle, which absorbs vibration and protects the user from slipping off whilst working. The speed can be adjusted by a governor on top of the handle. It has a tool adapter made of hardened steel. The exhaust air is directed backwards through the handle by means of a 360° rotational principle. The RUKO pneumatic grinder features an integrated air filter, which protects the motor from dirt that could get into the inside with the compressed air.

### Connection adapter included!

Description	L1 mm	Ø	Article no.
Pneumatic grinder (short)	157,0	G 1/4"	116 100 L

- ❶ Air filter
- ❷ Speed control
- ❸ Adapter made of hardened steel
- ❹ Rubberised, non-slip handle
- ❺ Heavy-duty vane motor
- ❻ Exhaust air directed through the handle by means of 360° rotational principle



## Pneumatic grinder (90° angle head)



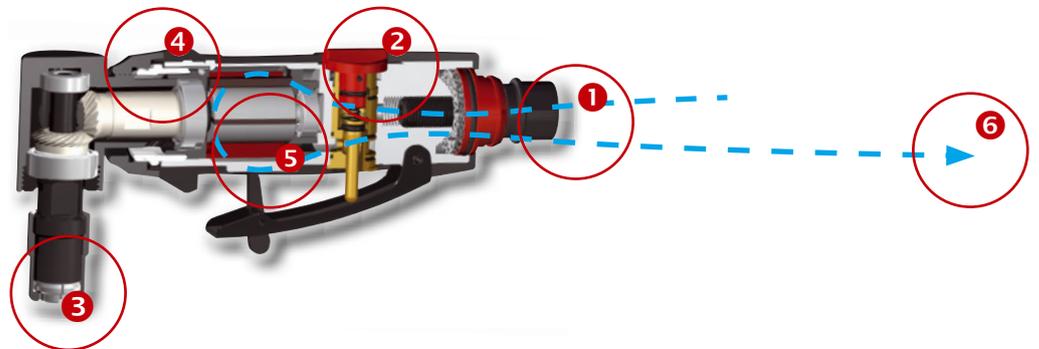
The RUKO pneumatic grinder with 90° angle head - The compact, fast tool for deburring, polishing and machining welding seams!

The RUKO pneumatic grinder has a rubberised, non-slip handle, which absorbs vibration and protects the user from slipping off whilst working. The speed can be adjusted by a governor on top of the handle. It has a tool adapter made of hardened steel. The exhaust air is directed backwards through the handle by means of a 360° rotational principle. The RUKO pneumatic grinder features an integrated air filter, which protects the motor from dirt that could get into the inside with the compressed air. The 90° angle head makes it easier to work in tight and difficult to reach places.

### Connection adapter included!

Description	L1 mm	Ø	Article no.
Pneumatic grinder (90°)	162,0	G 1/4"	116 110 L

- ❶ Air filter
- ❷ Speed control
- ❸ Adapter made of hardened steel
- ❹ Rubberised, non-slip handle
- ❺ Heavy-duty vane motor
- ❻ Exhaust air directed through the handle by means of 360° rotational principle



## Pneumatic grinder (115° angle head)



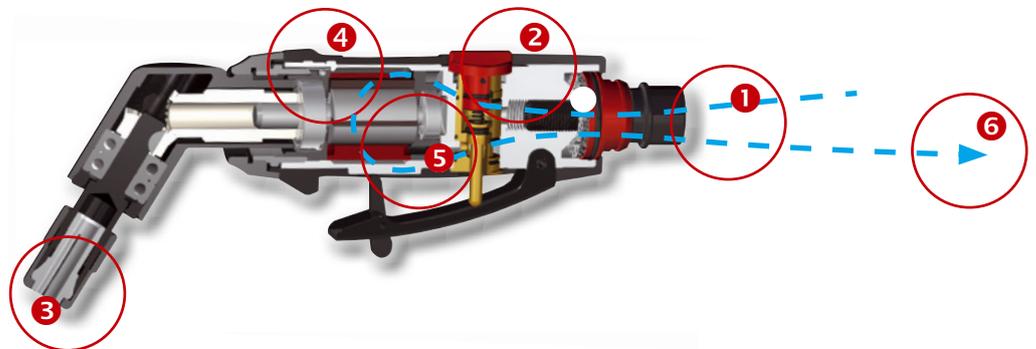
The RUKO pneumatic grinder with 115° angle head - The compact, fast tool for deburring, polishing and machining welding seams!

The RUKO pneumatic grinder has a rubberised, non-slip handle, which absorbs vibration and protects the user from slipping off whilst working. The speed can be adjusted by a governor on top of the handle. It has a tool adapter made of hardened steel. The exhaust air is directed backwards through the handle by means of a 360° rotational principle. The RUKO pneumatic grinder features an integrated air filter, which protects the motor from dirt that could get into the inside with the compressed air. The 115° angle head makes it easier to work in tight and difficult to reach places.

### Connection adapter included!

Description	L1 mm	Ø	Article no.
Pneumatic grinder (115°)	201,0	G 1/4"	116 120 L

- ❶ Air filter
- ❷ Speed control
- ❸ Adapter made of hardened steel
- ❹ Rubberised, non-slip handle
- ❺ Heavy-duty vane motor
- ❻ Exhaust air directed through the handle by means of 360° rotational principle



## Pneumatic grinder (long)



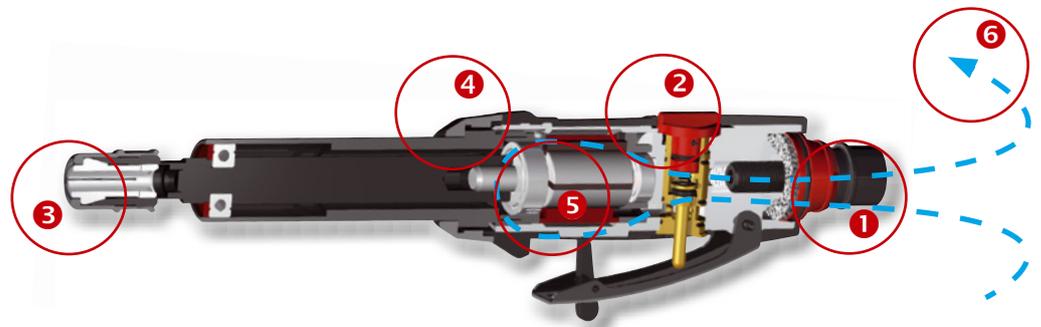
The RUKO pneumatic grinder in the long design - The compact, fast tool for deburring, polishing and machining welding seams!

The RUKO pneumatic grinder has a rubberised, non-slip handle, which absorbs vibration and protects the user from slipping off whilst working. The speed can be adjusted by a governor on top of the handle. It has a tool adapter made of hardened steel. The exhaust air is directed backwards through the handle by means of a 360° rotational principle. The RUKO pneumatic grinder features an integrated air filter, which protects the motor from dirt that could get into the inside with the compressed air. The tool extension makes it possible to work in tight, difficult to reach and deep places.

### Connection adapter included!

Description	L1 mm	Ø	Article no.
Pneumatic grinder (long)	257,0	G 1/4"	116 130 L

- ❶ Air filter
- ❷ Speed control
- ❸ Adapter made of hardened steel
- ❹ Rubberised, non-slip handle
- ❺ Heavy-duty vane motor
- ❻ Exhaust air directed through the handle by means of 360° rotational principle





## Compressed air grinder set with coupling plug incl. set of rotary burrs TC in plastic case

Description	Article no.
12-piece set of compressed air grinder 1 Compressed air grinder + Set of tungsten carbide rotary burrs in mini-box, 10 pcs. each 1x Ø D1 6,0 + 12,0 mm 2 TC rotary burrs shape A, cylinder (ZYA) with end toothing 2 TC rotary burrs shape C, oval (WRC) 2 TC rotary burrs shape G, tree (SPG) 2 TC rotary burrs shape F, ball nose tree (RBF) 2 TC rotary burrs shape D, ball type (KUD) + Coupling plug for compressed air grinder	116 100
5-piece set of compressed air grinder 1 Compressed air grinder + Set of tungsten carbide rotary burrs in mini-box, 3 pcs. each 1x Ø D1 6,0 + 12,0 mm 1 TC rotary burr shape A, cylinder (ZYA) with end toothing 1 TC rotary burr shape G, pioned arch (SPG) 1 TC rotary burr shape D, cone (KUD) + Coupling plug for compressed air grinder	116 113



116 100



116 100-1

## Accessories for compressed air grinder set

Packing unit: each in plastic packaging

Description	Article no.
Compressed air grinder solo 116 100 L + Coupling plug 116 101 L	116 100 S
Rotor replacement for compressed air grinder	116 100-1
Coupling plug, nominal size 7,2 mm, external thread G 1/4"	116 101 L
Collet 3,0 mm for compressed air grinder	116 121
Collet 1/4" for compressed air grinder	116 119



116 121



116 101 L

Table of recommended cutting speeds for rotary burrs

Material groups			Machining application	Toothing	Cutting speed
Steel Cast steel	Unhardened, untempered steels up to 1200 N/mm <sup>2</sup> (< 38 HRC)	Structural steels, carbon steels, tool steels, unalloyed steels, case hardening steels, cast steel	Coarse machining= High material removal	CT 4	250 - 350 m/min
	Hardened, tempered steels up to 1200 N/mm <sup>2</sup> (> 38 HRC)	Tool steels, heat-treatable steels, alloyed steels, cast steel		CT 4	250 - 350 m/min
Stainless steel (INOX)	Rust and acid-resistant steels	Austenitic and ferritic stainless steels	Coarse machining= High material removal	CT 4	250 - 350 m/min
Nonferrous metals	Soft nonferrous metals Nonferrous heavy metals	Aluminium alloys, brass, Copper, zinc	Coarse machining= High material removal	Alu	600 - 900 m/min
	Hard nonferrous metals	Bronze, titanium/titanium alloys, hard aluminium alloys (high silicon content)		CT 4	250 - 350 m/min
	Highly heat-resistant Materials	Nickel-based and cobalt-based alloys (engine and turbine construction)		CT 4	300 - 450 m/min
Cast iron	Grey cast iron, white cast iron	Cast iron with lamellar graphite, with nodular/spheroidal graphite white malleable (cast) iron black malleable (cast) iron	Coarse machining= High material removal	Alu	600 - 900 m/min
Plastics, other materials	Fibre-reinforced plastics, thermoplastics, hard rubber		Coarse machining= High material removal  Fine machining= Low material removal	Alu	500 - 1.100 m/min



Cutting speed V <sub>c</sub> = m/min	250	300	350	400	450	500	600	900
Ø mm	r.p.m.							
2,0	40.000	48.000	56.000	64.000	72.000	80.000	95.000	143.000
4,0	20.000	24.000	28.000	32.000	36.000	40.000	48.000	72.000
6,0	13.000	16.000	19.000	21.000	24.000	27.000	32.000	48.000
8,0	10.000	12.000	14.000	16.000	18.000	20.000	24.000	36.000
10,0	8.000	10.000	11.000	13.000	14.000	16.000	19.000	29.000
12,0	7.000	8.000	9.000	11.000	12.000	13.000	16.000	24.000
16,0	5.000	6.000	7.000	8.000	9.000	10.000	12.000	18.000



1.10

