



Adresse / Address

Datum / Date

Kontakt / Contact

07/2013

Ledermann GmbH & Co. KG
Willi-Ledermann-Str. 1
D-72160 Horb a.N.

Tel. +49 (0) 74 51 / 93 - 0
info@leuco.com
www.leuco.com

Betreff / Subject

Seite / Page

LEUCO Solid Carbide Shank-type Cutters – Machining Plastics with smooth surfaces

01

Inhalt / Content

The LEUCO milling tools are versatile in use and are characterised by high machining quality, long tool life and suitability for high-performance machining.

Bildmaterial / Imagery



LEUCO Solid Carbide Shank-type Cutters for machining plastics

Application

- On CNC machines for the machining of NF-metals and plastics
- Jointing, rabbeting, grooving in aluminium alloys, copper alloys and non-ferrous metals
- Suitable for traveling plunge cut using Z-axis and X- or Y-axis

Design

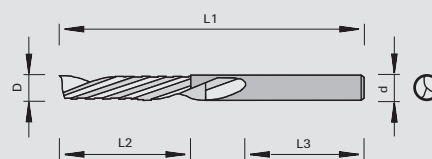
- Positive helix grooves
- Polished chip flutes
- Wear-resistant tungsten carbide HL Board 10

Advantages

- Optimal removal of chips and best cutting quality thanks to especially polished chip flutes and positive helix grooves

Solid Carbide Shank-type Cutters for machining plastics Z=1

Ø D	L2	Ø d	L1	Z	helical sense	Ident-No.
3	12	3	50	1	positiv	184715 o
4	15	4	50	1	positiv	184716
5	17	5	50	1	positiv	184717 o
6	22	6	60	1	positiv	184718
8	22	8	70	1	positiv	184719
8	32	8	70	1	positiv	184720
10	32	10	70	1	positiv	184721 o
12	32	12	80	1	positiv	184722 o
[mm]	[mm]	[mm]	[mm]			



Machining of Plastics

Material	V _c (m/min)	Ø 3-4 mm		Ø 5-6 mm		Ø 8-10 mm		Recommended Coolant
		V _f [mm]	a _p [mm]	V _f [mm]	a _p [mm]	V _f [mm]	a _p [mm]	
Plastics (PMMA), acetates, polycarbonates, thermoplastics	350-450	0,04xDxn	2xD	0,04xDxn	2xD	0,04-0,05xDxn	2,5xD	air; water, 2 % emulsion
PVC polymers	150-250	0,04xDxn	2xD	0,04xDxn	2xD	0,04-0,05xDxn	2,5xD	air; water, 2 % emulsion
Bakelite polymers	100-200	0,04xDxn	2xD	0,04xDxn	2xD	0,04-0,05xDxn	2,5xD	air; water, 2 % emulsion
Aluminum without silicon	200-300	0,02xDxn	1xD					4 % emulsion
Aluminum without silicon	280-350			0,02xDxn	1xD			4 % emulsion
Aluminum without silicon	350-450					0,025xDxn	1xD	4 % emulsion
Brass	150-250	0,02xDxn	1xD	0,02xDxn	1xD			6 % emulsion

The figures given are guidelines. The best values for the application in question should be determined by trials or during the machining process.

Key
V_c – Cutting speed
a_p max. – max. cutting depth
no marking – immediately available
⊗ – modification and/or mounting of stock parts

V_f – Feedrate
D – Diameter
o – available on short notice
s – production per drawing (custom made tool)

n – RPM
– new type in process
\$ – Superstandard

LEUCO

www.leuco.com