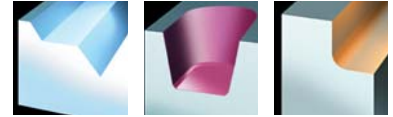




# 5182 VZ 53

## Profile / Pocketing Cutter



### 5182 VZ 53 DIN 69871 Shank\*\*

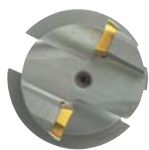
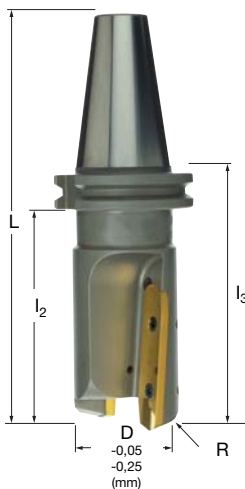
EDP #	Part Number	Dimensions (mm)						No. of Inserts	Spares			
		D	L	$l_2$	$l_3$	$R_{max.}$	a		EDP#		EDP#	
021646	5182VZ 53 GA050R100-4	50	187,5	100	119,1	4	53	a. 2	015264	D5010A	015240	T15
021648	5182VZ 53 GA063R125-4	63	245,85	125	144,1	4	53	a. 2	015264	D5010A	015240	T15
021647	5182VZ 53 GA050R100-8	50	187,5	100	119,1	8	53	b. 2	015264	D5010A	015240	T15
021649	5182VZ 53 GA063R125-8	63	245,85	125	144,1	8	53	b. 2	015264	D5010A	015240	T15

\*\* $\varnothing$  50 = 40 taper,  $\varnothing$  63 = 50 taper.

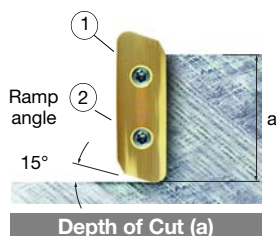
Note: Because the overall length of the insert is reduced, as the corner radius increases, the L,  $l_2$ ,  $l_3$  and a dimensions will reduce/increase as the radius size increases/reduces.

These numbers assume a 4.0 mm corner radius.

Part number ending -4 means 4 mm max radius on insert.  
Part number ending -8 means 5-8 mm radius inserts only.



DIN 69871 Shank



Depth of Cut (a)



## 5182 VZ 53 Technical Advice

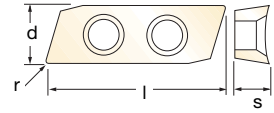
Milling Cutter Order Example: **5182VZ53GA050R100-4**  
Milling Insert Order Example: **ZDCX530430ER-701 SFZ**  
For complete cutting conditions refer to page: **264**

Maximum RPM when balanced = 16,000 RPM for  $\varnothing$  50 mm.  
Maximum RPM when balanced = 12,000 RPM for  $\varnothing$  63 mm.  
Maximum ramp angle = 15°

Fixing screws:

- 1) Loosely tighten screws number 1 and 2.
- 2) Tighten screw number 1 to 5.0-5.5 Nm.
- 3) Tighten screw number 2 to 5.0-5.5 Nm.

## Inserts for 5182 VZ 53



EDP#	Part Number	Grade	Application & Material			Dimensions (mm)				
			Roughing	Semi-Finishing	Finishing	d	l	s	r	h <sub>m</sub> min
017477	ZDCX530402ER-701	SFZ a.	▼	▼▼	▼▼▼	14,8	64,0	4,76	0,2	0,03
017478	ZDCX530425ER-701	SFZ a.	▼	▼	▼▼	14,8	64,0	4,76	2,5	0,03
017576	ZDCX530430ER-701	SFZ a.	▼	▼	▼▼	14,8	64,0	4,76	3,0	0,03
017480	ZDCX530440ER-701	SFZ a.	▼	▼	▼▼	14,8	64,0	4,76	4,0	0,03
022228	ZDCX530450ER-701	SFZ b.	▼	▼	▼▼	14,8	64,0	4,76	5,0	0,03
017481	ZDCX530460ER-701	SFZ b.	▼	▼	▼▼	14,8	64,0	4,76	6,0	0,03
017482	ZDCX530480ER-701	SFZ b.	▼	▼	▼▼	14,8	64,0	4,76	8,0	0,03

**ZDCX 53\_**  
**-701**



\* This cutter can be used for finish profiling in these materials, with a maximum 1 mm radial depth of cut.

\*\* See maximum RPM.

## ZD\_53 Recommended Cutting Conditions

Material	▼ Roughing			▼▼ Semi-Finishing			▼▼▼ Finishing		
	Speed V <sub>C</sub> (m/min)	Feed h <sub>m</sub> (mm)	a max. (mm)	Speed V <sub>C</sub> (m/min)	Feed h <sub>m</sub> (mm)	a max. (mm)	Speed V <sub>C</sub> (m/min)	Feed h <sub>m</sub> (mm)	a max. (mm)
◆ Unalloyed Steels	-	-	-	-	-	-	-	-	-
◆ Alloyed Steels	-	-	-	-	-	-	-	-	-
◆ Stainless Steels	-	-	-	-	-	-	-	-	-
◆ PH Stainless	-	-	-	-	-	-	80 - 100	0,05 - 0,08	0,1 - 53,0*
◆ Cast Irons	-	-	-	-	-	-	200 - 350	0,05 - 0,08	0,1 - 53,0*
◆ Aluminium & Alloys	500 - 2200	0,1 - 0,25	0,1 - 53,0	500 - 2200	0,1 - 0,25	0,1 - 53,0	500 - 2200	0,05 - 0,20	0,1 - 15,0
◆ High Temp. Alloys	-	-	-	-	-	-	45 - 60	0,05 - 0,08	0,1 - 53,0*
◆ Hard Steels (52-56 HRC)	-	-	-	-	-	-	-	-	-

h<sub>m</sub> = average chip thickness

### Star Guide Key to Recommended Tools

Material Designations								
	<b>P</b> ◆	Unalloyed Steels	<b>M</b> ◆	Stainless Steels	<b>K</b> ◆	Cast Irons	<b>S</b> ◆	High Temp. Alloys
	<b>P</b> ◆	Alloyed Steels	<b>M</b> ◆	PH Stainless	<b>N</b> ◆	Aluminium & Alloys	<b>H</b> ◆	Hard Materials

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