

Hartmetallwerkzeuge zum Innendrehen kleinster Dimensionen **System Tip Bar**

Outils en carbure p. le tournage intérieur de dimensions minces **System Tip Bar**

Carbide tools for internal turning of micro dimensions **System Tip Bar**



**Vorteile**

- Ausgezeichnete Spanabfuhr wegen der flachen, ebenen Konstruktion des Schneideinsatzes
- aussergewöhnliche Feinstbearbeitung, ohne Oberflächenverletzung, Riefen

**Avantages**

- très bonne évacuation des copeaux à cause de la géométrie plate des burins très bonne qualité
- d'usinage, excellent état de surface

**Advantages**

- excellent chip evacuation due to complete flat top face of insert
- superior finishing without chips scratching or biting

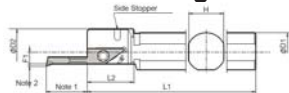
**3741..**

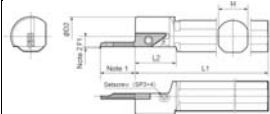





Halter für Tip-Bar-Innendrehesystem AR mit rundem Schaft

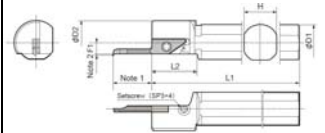
Porte-burin pour système Tip Bar pour le tournage intérieur à tige ronde

Insert holder for Tip-Bar-carbide inserts with round shank

**374100..**



Beschreibung Désignation Description	Art.Nr./no.cde. order no	Dimension [mm]						Ersatzteile, pièces de rechange, spare parts				
		D1	D2	H	L1	L2	F1	Sp.-Schraube Vice de serr. Clamp screw	Schlüssel vice Wrench	Anschl.-Schraube vice p. arrêt screw stopper	Setz-Schraube vice p. poser Setscrew	Schlüssel vice wrench
												
<b>S12F-SVNR12N</b>	374110.050	12	20	11	80	23	4	SB-3080TR	FT-10		SP3X4	3.74110215
<b>S14G-SVNR12N</b>	374110.100	14	20	13	90	23	4					
<b>S16H-SVNR12N</b>	374110.150	16	24	15	100	23	6					
<b>S20H-SVNR12N</b>	374110.200	20	24	18	100	24	6					







Mit rechteckigem Schaft

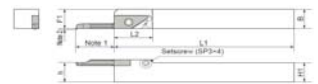
À tige rectangulaire

With rectangular shank

**374110..**



Beschreibung Désignation Description	Art.Nr./no.cde. order no	Dimension [mm]						Ersatzteile, pièces de rechange, spare parts		
		H1=h	B	L1	L2	F1	F3	Sp.-Schraube Vice de serr. Clamp screw	Schlüssel vice Wrench	Setz-Schraube vice p. poser Setscrew
										
<b>SVNR 1010H-12N</b>	374112.050	10	10	100	22	10	-	SB-3080TR	FT-10	SP3X4
<b>SVNR 1212K-12N</b>	374112.100	12	12	125	22	16	-			
<b>SVNR 1616K-12N</b>	374112.150	16	16	125	22	16	-			
<b>SVNR 2020K-12N</b>	374112.200	20	20	125	22	20	-			
<b>SVNR 2525M-12N</b>	374112.250	25	25	150	22	25	-			



**VNB../VNB-S**

Innendrehen

**VNB../VNB-S**

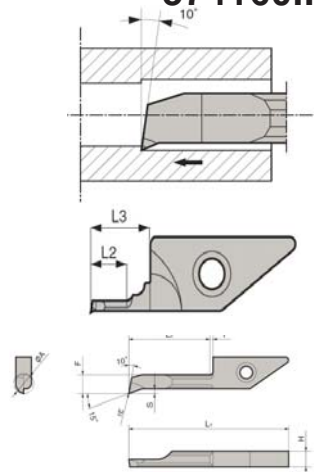
Tournage intérieur

**VNB../VNB-S**

Boring

**374160..**

Beschreibung Désignation Description	Art.Nr./no.cde. order no	Dimension [mm]										Hartmetall/métal dur/ grades		
		Min.Dreh- $\phi$ $\phi$ min.tourn.										PVD-besch revêtue PVD	unbeschicht pas revêtue	
		Min.bore $\phi$ $\phi A$ [mm]	H	L1	L2	L3	F	S	re			PR930	KW10	
<b>VNBR</b>	<b>0105-0055</b>	<b>374160.105005</b>	<b>1.0</b>	3.9	26.5	5	7	0.9	0.2	0.05			●	
	<b>0206-02</b>	<b>374160.20602</b>	<b>2.0</b>	3.9	26.5	6	-	1.8	0.3	0.20			●	
	<b>0311-02</b>	<b>374160.31102</b>	<b>3.0</b>	3.9	30.8	11	-	2.6	0.4	0.20			●	
	<b>0411-02</b>	<b>374160.41102</b>	<b>4.0</b>	3.9	30.8	11	-	3.5	0.5	0.20			●	
	<b>0420-02S</b>	<b>374160.42002</b>	<b>4.0</b>	3.9	39.8	20	-	3.5	0.5	0.20			●	
	<b>0511-02</b>	<b>374160.51102</b>	<b>5.0</b>	3.9	30.8	11	-	4.5	0.7	0.20			●	
	<b>0630-02</b>	<b>374160.63002</b>	<b>6.0</b>	3.9	49.8	30	-	5.3	1	0.20			●	3.74160215

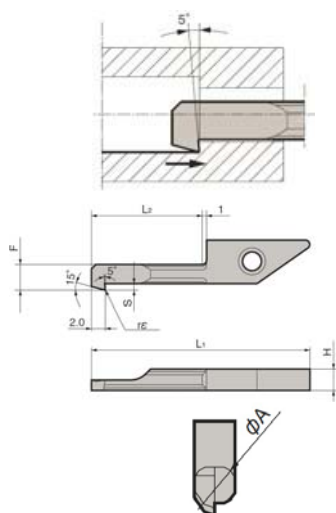


**374165..** 

Rückwärtsinnendrehen

Micro-alésage inverse

Backboring



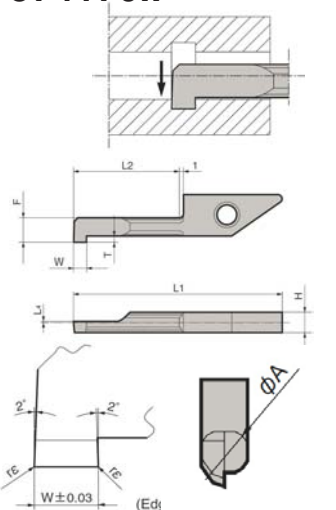
Beschreibung Désignation Description	Art.Nr./no.cde. order no	Dimension [mm]										Hartmetall/métal dur/ grades		
		Min.Dreh- $\phi$ $\phi$ min.tourn.											PVD-besch revêtue PVD	unbeschichtet pas revêtue
		Min.bore $\phi$ $\phi A$ [mm]	H	L1	L2	L3	F	S	re	PR930	KW10			
<b>VNBTR</b>	<b>0411-003</b>	<b>374165.0411003</b>	<b>4.0</b>	3.9	30.8	11	-	3.6	1.0	0.03			●	
	<b>0420-003</b>	<b>374165.0420003</b>	<b>4.0</b>	3.9	39.8	20	-	3.6	1.0	0.03			●	
	<b>0511-003</b>	<b>374165.0511003</b>	<b>5.0</b>	3.9	30.8	11	-	4.6	1.3	0.03			●	
	<b>0520-003</b>	<b>374165.0520003</b>	<b>5.0</b>	3.9	39.8	20	-	4.6	1.3	0.03			●	
	<b>0411-01</b>	<b>374165.041101</b>	<b>4.0</b>	3.9	30.8	11	-	3.6	1.0	0.1			●	
	<b>0420-01</b>	<b>374165.042001</b>	<b>4.0</b>	3.9	39.8	20	-	3.6	1.0	0.1			●	
	<b>0511-01</b>	<b>374165.051101</b>	<b>5.0</b>	3.9	30.8	11	-	4.6	1.3	0.1			●	
	<b>0520-01</b>	<b>374165.052001</b>	<b>5.0</b>	3.9	39.8	20	-	4.6	1.3	0.1			●	3.74165215

**374170..**

Micro-Inneneinstechen

Micro rainurage interne

Micro internal grooving



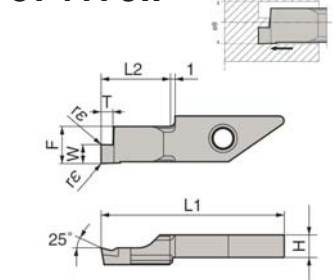
Beschreibung Désignation Description	Art.Nr./no.cde. order no	Dimension [mm]										Hartmetall/métal dur/ grades		
		Min.Dreh- $\phi$ $\phi$ min.tourn.											PVD-besch revêtue PVD	unbeschichtet pas revêtue
		Min.bore $\phi$ $\phi A$ [mm]	W	re	L2	L1	L4	F	T	PR930	KW10			
<b>3.74170215</b>														
<b>VNGR</b>	<b>0410-11</b>	<b>374170.041011</b>	<b>4.0</b>	1.0	0.05	11	30.8	0.1	3.5	0.8			●	●
	<b>0420-11</b>	<b>374170.042011</b>	<b>4.0</b>	2.0	0.10	11	30.8	0.1	3.5	0.8			●	●
	<b>0510-11</b>	<b>374170.051011</b>	<b>5.0</b>	1.0	0.05	11	30.8	0.1	4.4	1.0			●	●
	<b>0520-11</b>	<b>374170.052011</b>	<b>5.0</b>	2.0	0.10	11	30.8	0.1	4.4	1.0			●	●
	<b>0610-20</b>	<b>374170.061020</b>	<b>6.0</b>	1.0	0.05	20	39.8	0.3	5.2	1.8			●	●
	<b>0620-20</b>	<b>374170.062020</b>	<b>6.0</b>	2.0	0.10	20	39.8	0.3	5.2	1.8			●	●
	<b>0710-20</b>	<b>374170.071020</b>	<b>7.0</b>	1.0	0.05	20	39.8	0.3	6.2	2.0			●	●
	<b>0720-20</b>	<b>374170.072020</b>	<b>7.0</b>	2.0	0.10	20	39.8	0.3	6.2	2.0			●	●

**374175..**

Axial-Einstechen

p. gorges frontales

Face grooving



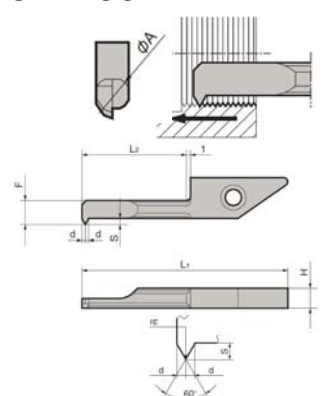
Beschreibung Désignation	Art.Nr./no.cde. order no	Dimension [mm]										Hartmetall/métal dur/ grades			
		Min.Dreh- $\phi$ $\phi$ min.tourn.											PVD-besch revêtue PVD	unbeschichtet pas revêtue	
		$\phi A$ [mm] Min. Max	$W \pm 0.03$	re	H	L1	L2	F	T	PR930	KW10				
<b>3.74175215</b>															
<b>VNFR</b>	<b>0810-10</b>	<b>374175.081010</b>	<b>8.0</b>	$\infty$	1.0	0.05	3.9	29.6	10	7.30	2.00			●	●
	<b>0820-10</b>	<b>374175.082010</b>	<b>8.0</b>	$\infty$	2.0	0.05	3.9	29.6	10	7.30	2.00			●	●
	<b>0830-10</b>	<b>374170.083010</b>	<b>8.0</b>	$\infty$	3.0	0.05	3.9	29.6	10	7.30	3.00			●	●

**374180..**

Micro-innengewinde-drehen

Micro filletage intérieur

Face grooving



Beschreibung Désignation	Art.Nr./no.cde. order no	Dimension [mm]										Hartmetall/métal dur/ grades		
		Mn.Dreh- $\phi$ $\phi$ mintourn.											PVDbesch revêtue PVD	unbeschichtet pas revêtue
		$\phi A$ [mm]	H	L1	L2	F	S	d	re	PR930	KW10			
<b>3.74180215</b>														
<b>VNTR</b>	<b>045-11</b>	<b>374180.04511</b>	<b>45</b>	39	308	11	36	13	060	005			●	●
	<b>060-11</b>	<b>374180.06011</b>	<b>60</b>	39	308	11	46	16	080	005			●	●

Das System für hohe Bearbeitungsgenauigkeit  
**Sytem Tip Bar Kit 2**  
 zum Innendrehen, Rückwärts-Innendrehen, Stechen, Axialstechen & Gewindefschneiden

le système pour une grande précision de tournage  
**Le système Tip Bar Kit 2**  
 p. tournage intérieur, alésage inverse, rainurage, gorges frontals & micro filetage

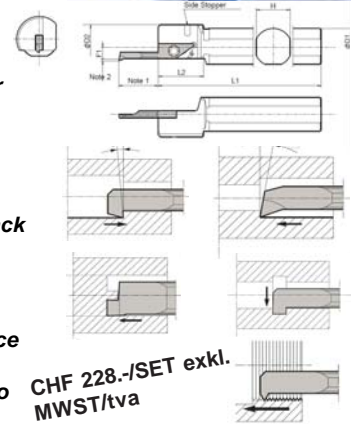
Tool system for a high precision in turning  
**The system Tip Bar Kit 2**  
 for internal turning, back-turning, internal grooving, face grooving & micro threading



- S16H-SVNR12N *Standardhalter rund mit Einspannflächen*
- VNBR0411-02PR930 *zum Innendrehen*
- VNBTR0411-01PR930 *zum Rückwärts-Innendrehen*
- VNGR0420-11PR930 *zum Micro Innen-Einstecken*
- VNFR0820-10PR930 *z. Axial-Einstecken*
- VNTR045-11PR930 *z. Micro-Innengewindedrehen*
- Hartmetallsorte PR930

- S16H-SVNR12N *porte-plaquette standard ronde*
- VNBR0411-02PR930 *p. tournage intérieur*
- VNBTR0411-01PR930 *p. alésage inverse*
- VNGR0420-11PR930 *p. micro rainurage interne*
- VNFR0820-10PR930 *p. gorges frontals*
- VNTR045-11PR930 *p. micro filletage intérieur*
- Nuance métal dur PR930

- S16H-SVNR12N *standard round tool-holder, flats for clamping*
- VNBR0411-02PR930 *for internal turning*
- VNBTR0411-01PR930 *for back turning*
- VNGR0420-11PR930 *for micro internal grooving*
- VNFR0820-10PR930 *for face grooving*
- VNTR045-11PR930 *for micro threading*
- Carbide grade PR930



**Bestellnummer/ no.commande Tip Bar Set 2: 374100.100 228.-CHF/Set**

**System-Tip-Bar-Set 3 , D=16mm Halter, nur zum Innendrehen. bestehend aus:**

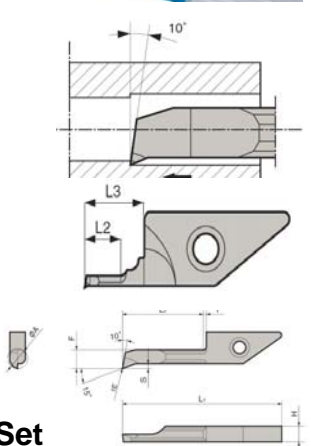
- Halter(16mm) S16H-SVNR12 N
- Ausdreheinsatz 1,0mm : VNBR0105-005S PR930
- Ausdreheinsatz 2,0mm : VNBR0206-02 PR930
- Ausdreheinsatz 3,0mm : VNBR0311-02 PR930
- Ausdreheinsatz 4,0mm : VNBR0411-02 PR930
- Ausdreheinsatz 5,0mm : VNBR0511-02 PR930

**Système-Tip-Bar-Set 3 D=16mm porte outil, p. tournage intérieur existante de:**

- Porte outil(16mm) S16H-SVNR12 N
- Barre 1,0mm : VNBR0105-005S PR930
- Barre 2,0mm : VNBR0206-02 PR930
- Barre 3,0mm : VNBR0311-02 PR930
- Barre 4,0mm : VNBR0411-02 PR930
- Barre 5,0mm : VNBR0511-02 PR930

**System-Tip-Bar-Set 3 D=16mm tool holder, for internal turning, composed of:**

- Bar holder(16mm) S16H-SVNR12 N
- Bar 1,0mm : VNBR0105-005S PR930
- Bar 2,0mm : VNBR0206-02 PR930
- Bar 3,0mm : VNBR0311-02 PR930
- Bar 4,0mm : VNBR0411-02 PR930
- Bar 5,0mm : VNBR0511-02 PR930



**Bestellnummer/ no.commande Tip Bar Set 3: 374100.200 228.-CHF/Set**

**Empfohlenen Schnittdaten für VNB, VNB-NB, VNB**

**Vitesse de coupe et avances recommandées p. VNB, VNB-NB, VNB**

**Recommneded cutting conditions for VNB, VNB-NB, VNB**

3.74160DrehenVNB_SW Material Werkstück matériel de la pièce Workpiece Material	Empfohlene Hartmetallsorten, nuances carbure recom.,recomm.insert grades (Schnittgeschwindigkeit, vitesse de coupe, cutting Speed: m/min)							VNB02 Type		VNB03 Type		VNB04 VNB04 Type		VNB05 VNB06 VNB07 Type VNB05		Remarks
	Cermet	PVD Coated Carbide		Carbide	CBN	PCD		ap	f	ap	f	ap	f	ap	f	
		TC60	PR915			PR930	KW10									
Kohlenstoff-Stähle, legierte Stähle/aciers de construction,aciers alliés/ carbon steel / alloy Steel	60~120	50~150	30~100					~0.3	~0.03	~0.4	~0.04	~0.45	~0.07	~0.5	~0.1	Kühlmittel lubrication
INOX-Stähle, aciers inoxydables,Stainless Steel	50~100	50~150	30~80					~0.3	~0.02	~0.4	~0.03	~0.45	~0.05	~0.5	~0.07	
Nichtmetallische Werkstoffe, matériel non métalliques,non-ferrous metals				~100		~300	~300	~0.3	~0.05	~0.4	~0.06	~0.45	~0.1	~0.5	~0.15	

é/appropriate