

**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

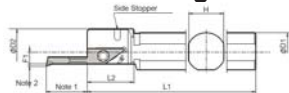
**3741..**

**Halter für Tip-Bar-Innendrehesystem AR mit rundem Schaft**

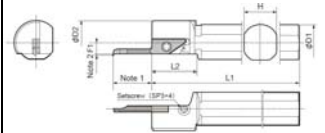
**Porte-burin pour système Tip Bar pour le tournage intérieur à tige ronde**

**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**

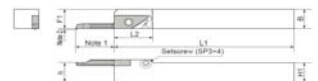
**À tige rectangulaire**

**With rectangular shank**

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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**

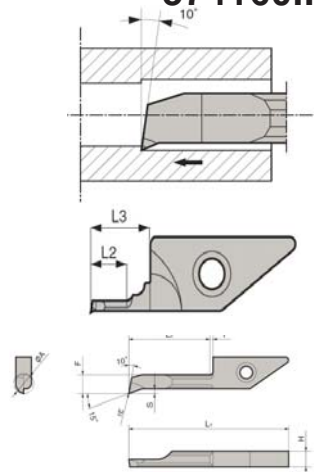
**Tournage intérieur**

**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. Min.bore $\phi$ $\phi A$ [mm]	H	L1	L2	L3	F	S	re	PVD-besch revêtue PVD PVD coated	unbeschicht pas revêtue uncoated		
<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

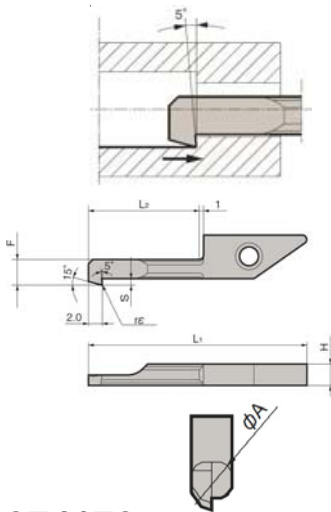


374165.. KYOCERA

Rückwärtsinnendrehen

Micro-alésage inverse

Backboring



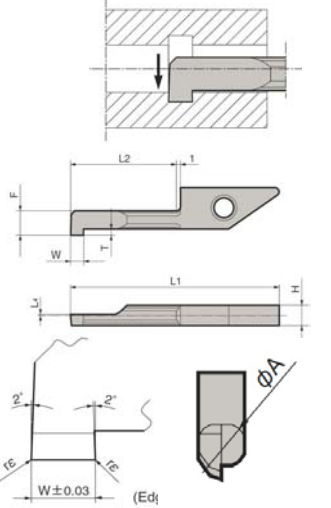
Beschreibung Désignation Description	Art.Nr./no.cde. order no	Dimension [mm]										Hartmetall/métal dur/ grades			
		Min.Dreh- $\phi$ $\phi$ min.tourn.											PVD-besch revêtue PVD	unbeschichtet pas revêtue	
		Min.bore $\phi$ $\phi A$ [mm]	H	L1	L2	L3	F	S	re						
VNBTR	0411-003	374165.0411003	4.0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

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Micro-Inneneinstechen

Micro rainurage interne

Micro internal grooving



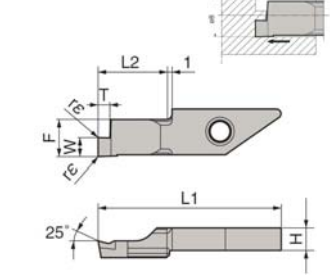
Beschreibung Désignation Description	Art.Nr./no.cde. order no	Dimension [mm]										Hartmetall/métal dur/ grades				
		Min.Dreh- $\phi$ $\phi$ min.tourn.											PVD-besch revêtue PVD	unbeschichtet pas revêtue		
		Min.bore $\phi$ $\phi A$ [mm]	W	re	L2	L1	L4	F	T							
3.74170215															PR930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

374175..

Axial-Einstechen

p. gorges frontales

Face grooving



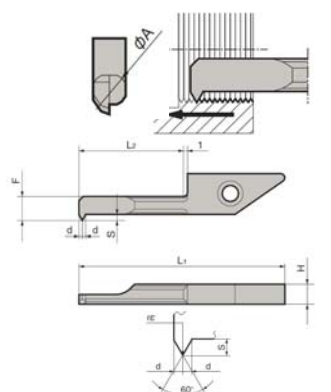
Beschreibung Désignation	order no	Dimension [mm]										Hartmetall/métal dur/ grades				
		Min.Dreh- $\phi$ $\phi$ min.tourn.											PVD-besch revêtue PVD	unbeschichtet pas revêtue		
		$\phi A$ [mm]	W±0.03	re	H	L1	L2	F	T							
3.74175215															PR930	KW10
VNFGR	0810-10	374175.081010	8.0	$\infty$	1.0	0.05	3.9	29.6	10	7.30	2.00					
	0820-10	374175.082010	8.0	$\infty$	2.0	0.05	3.9	29.6	10	7.30	2.00					
	0830-10	374170.083010	8.0	$\infty$	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							
3.74180215															PR930	KW10
VNTR	045-11	374180.04511	45	39	30.8	11	36	13	0.60	0.05						
	060-11	374180.06011	60	39	30.8	11	46	16	0.80	0.05						

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

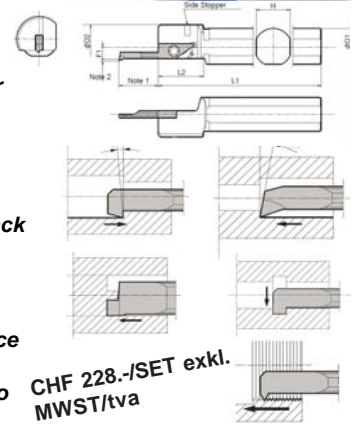
Tool system for a high precision in turning  
**The system Tip Bar Kit 2**  
 for internal turning, back-turning, internal grooving, face grooving & micro threading



- 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** *plâtes pour le serrage*
- 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:**

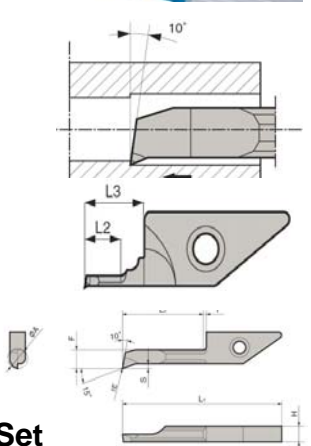
- Halter(16mm) S16H-SVNR12 N
- Ausdreheinsatz 1,0mm : VNBR0105-005S PR930
- Ausdreheinsatz 2,0mm : VNBR0206-02 PR930
- Ausdreheinsatz 3,0mm : VNBR0311-02 PR930
- Ausdreheinsatz 4,0mm : VNBR0411-02 PR930
- Ausdreheinsatz 5,0mm : VNBR0511-02 PR930

**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, VNBTR**

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

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

3.74160DrehenVNB_SW Material Werkstück matériel de la pièce Workpiece Material	Empfohlene Hartmetallsorten, nuances carbure recomm.,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		Cut: ap(mm), Feed: f(mm/rev)								
	TC60	PR915	PR930	KW10	KBN510	KPD001	KPD010	ap	f	ap	f	ap	f	ap	f	
Kohlenstoff-Stähle, legierte Stähle/aciers de construction,aciers alliés/ carbon steel / alloy Steel	☆	☆	★					~0.3	~0.03	~0.4	~0.04	~0.45	~0.07	~0.5	~0.1	Kühlmittel lubrication
INOX-Stähle, aciers inoxydables,Stainless Steel	☆	☆	★					~0.3	~0.02	~0.4	~0.03	~0.45	~0.05	~0.5	~0.07	
Nichtmetallische Werkstoffe, matériel non métalliques,non-ferrous metals				☆		★	☆	~0.3	~0.05	~0.4	~0.06	~0.45	~0.1	~0.5	~0.15	

\*gei gnet /appr cpr i é/appropriate