

Gewindewerkzeuge *Threading Tools*

6

Drehen
Turning

Fräswerkzeuge
Milling Tools

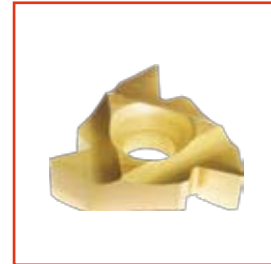
HDS-/VHM-Fräser
HDS-/ Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

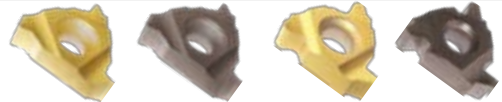
Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendeplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills



... Qualität schafft Vertrauen

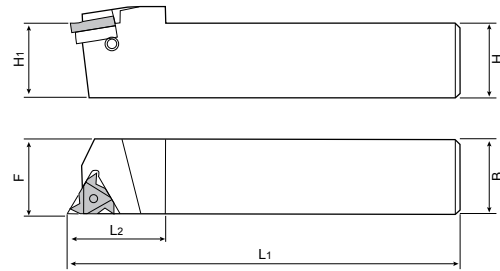
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AL NL

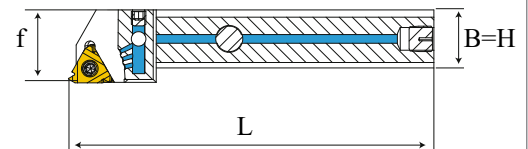
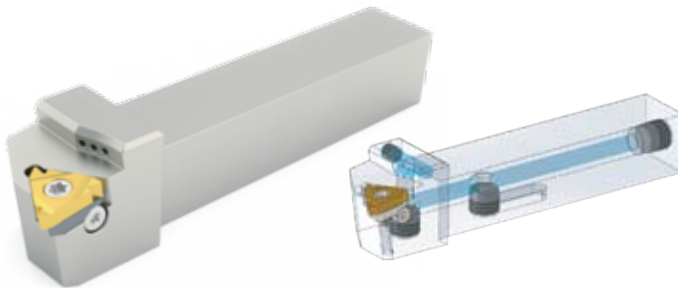
zum Außen-Gewindedrehen / for External Threading



Bezeichnung Part Number	Lager Stock	Bezeichnung Part Number	Lager Stock	Maße [mm] Dimensions					Ersatzteile Spare Parts				
				H ₁ = H=B	F	L ₁	L ₂						
NL 08 - 2	●	NL 08 - 2 LH	●	8	11	100	17	11 ER/EL	75.20.118	-	-	-	56.33.612
NL 10 - 2	●	NL 10 - 2 LH	○	10	11	100	17						
NL 12 - 3	●	NL 12 - 3 LH	○	12	16	100	22	16 ER/EL	75.20.119	-	-	-	75.20.618
AL 16 - 3	●	AL 16 - 3 LH	●	16	16	100	22						
AL 20 - 3	●	AL 20 - 3 LH	●	20	20	125	30						
AL 25 - 3	●	AL 25 - 3 LH	○	25	25	150	30						
AL 32 - 3	●	AL 32 - 3 LH	●	32	32	170	30	22 ER/EL	75.20.120	16 ER: 75.10.201 +1,5°(Standard) 16 EL: 75.20.201 +1,5°(Standard)	+4,5° +3,5° +2,5° Standard +0,5° -0,5° -1,5°	75.20.128	56.33.614
AL 25 - 4	●	AL 25 - 4 LH	○	25	25	150	36						
AL 32 - 4	○	AL 32 - 4 LH	●	32	32	170	36						
AL 40 - 4	●	AL 40 - 4 LH	○	40	40	200	36	27 ER/EL	75.20.122	22 ER: 75.10.203 +1,5°(Standard) 22 EL: 75.20.202 +1,5°(Standard)	+4,5° +3,5° +2,5° Standard +0,5° -0,5° -1,5°	75.20.129	56.33.613
AL 25 - 5	○	AL 25 - 5 LH	○	25	25	150	36						
AL 32 - 5	○	AL 32 - 5 LH	●	32	32	170	40						
AL 40 - 5	○	AL 40 - 5 LH	○	40	40	200	40	27 ER/EL	75.20.124	27 ER: 75.10.204 +1,5°(Standard) 27 EL: 75.20.203 +1,5°(Standard)	+4,5° +3,5° +2,5° Standard +0,5° -0,5° -1,5°	75.20.127	56.33.613

SER-IK

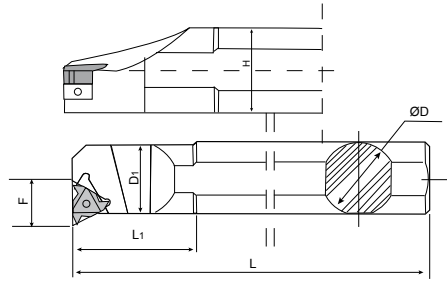
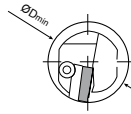
Außen-Gewindedrehhalter mit Innenkühlung External Threading Toolholder with Internal Coolant



Bezeichnung Part Number	Lager Stock	Maße [mm] Dimensions					Ersatzteile Spare Parts				
		H	B	L	f						
SER 2020 K16 IK	●	20	20	125	25	16 ER/EL	56.44.113	48.33.211	48.33.503	48.13.306	56.33.613 (T15)
SER 2525 M16 IK	●	25	25	150	25						

AVR NVR

zum Innen-Gewindedrehen / for Internal Threading



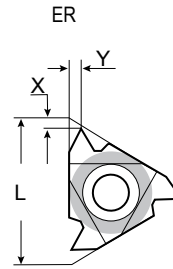
Bezeichnung Part Number	Lager Stock	Bezeichnung Part Number	Lager Stock	Maße [mm] Dimensions								Ersatzteile <i>Spare Parts</i>				
Rechter Halter RH-Holder		Linke Halter LH-Holder		D	D ₁	L	L ₁	F	D _{min}	H						
NVR 05 - 0	○	NVR 05 - 0 LH	○	12	5,1	100	12	4.3	6.0	11	06 IR/IL	75.20.102	-	-	75.20.621	
NVR 07 - 1	○	NVR 07 - 1 LH	●	16	6,6	125	18	5.3	7.8	14	08 IR/IL	75.20.101	-			
NVR 10 - 2 IK	●	NVR 10 - 2 IK LH	○	16	10	125	25	7.4	12	14	11 IR/IL	75.20.118	-	-	56.33.612	
NVR 10 D - 2	●	NVR 10 D - 2 LH	○	10	9,6	100	25	7.4	12	9						
NVR 12 - 2 E	○	NVR 12 - 2 E LH		12	12	170	-	8.4	15	11						
NVR 13 - 2 IK	●	NVR 13 - 2 IK LH	○	16	13	150	32	8.9	15	14						
NVR 13 - 3 IK	●	NVR 13 - 3 IK LH	○	16	13	150	32	10.2	16	14	16 IR/IL	75.20.119	-	-	75.20.618	
NVR 16 - 3 IK	●	NVR 16 - 3 IK LH	○	20	16	170	40	11.7	19	18						
NVR 16 - 3 E	○	NVR 16 - 3 E LH		16	16	200	-	11.7	19	14						
AVR 20 - 3 IK	●	AVR 20 - 3 IK LH	●	20	20	170	-	13.7	24	18		75.20.120	16 IR: 75.20.201 +1,5°(Standard) 16 IL: 75.10.201 +1,5°(Standard)	+4,5° +3,5° +2,5° Standard +0,5° -0,5° -1,5°		75.20.128
AVR 20 - 3 E	○	AVR 20 - 3 E LH		20	20	250	-	13.7	23	18						
AVR 25 D - 3 IK	●	AVR 25 D - 3 IK LH	●	25	25	200	-	16.2	29	22,5						
AVR 32 - 3 IK	●	AVR 32 - 3 IK LH	●	32	32	250	-	19.7	36	29						
AVR 40 - 3	○	AVR 40 - 3 LH	●	40	40	300	-	23.7	44	36						
NVR 20 - 4	●	NVR 20 - 4 LH	○	20	20	170	-	15.6	24	18	22 IR/IL	75.20.121	-	-	56.33.614	
AVR 25 - 4 IK	●	AVR 25 - 4 IK LH	●	25	25	200	-	18.1	29	22,5		75.20.122	22 IR: 75.20.202 +1,5°(Standard) 22 IL: 75.10.203 +1,5°(Standard)	+4,5° +3,5° +2,5° Standard +0,5° -0,5° -1,5°		75.20.129
AVR 32 - 4 IK	●	AVR 32 - 4 IK LH	○	32	32	250	-	21.5	39	29						
AVR 40 - 4	●	AVR 40 - 4 LH	○	40	40	300	-	25.6	46	36						
AVR 32 - 5	○	AVR 32 - 5 LH	○	32	32	250	-	22.6	40	29	27 IR/IL	75.20.124	27 IR: 75.20.203 +1,5°(Standard) 27 IL: 75.10.204 +1,5°(Standard)	+4,5° +3,5° +2,5° Standard +0,5° -0,5° -1,5°	75.20.127	75.20.622
AVR 40 - 5	○	AVR 40 - 5 LH	○	40	40	300	-	26,6	48	36						
AVR 50 - 5	○	AVR 50 - 5 LH	○	50	50	350	-	31,6	58	45						
AVR 60 - 5	○	AVR 60 - 5 LH	○	60	60	400	-	36,6	68	54						

"E" = HM-Schaft mit Innenkühlung
Carbide Shank with Inner Coolant

"IK" = Innenkühlung
Inner Coolant

Außengewinde / External Thread „DP“

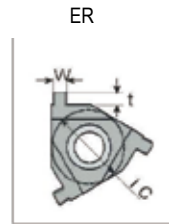
55° / 60°



TU 5125

Profile Profiles	Bezeichnung Part Number	Lager Stock TU 5125	Steigung Pitch mm / TPI	L mm	X mm	Y mm
Teilprofil Partial Profile	60°	16 ER -T- A 60 - DP	● 0.5 - 1.5	16	0.8	0.9
		16 ER -T- G 60 - DP	● 1.75 - 3.0	16	1.2	1.7
		16 ER -T- AG 60 - DP	● 0.5 - 3.0	16	1.2	1.7
		22 ER -T- N 60 - DP	● 3.5 - 5.0	22	1.7	2.5
	55°	16 ER -T- A 55 - DP	● 48 - 16	16	0.8	0.9
		16 ER -T- G 55 - DP	● 14 - 8	16	1.2	1.7
		16 ER -T- AG 55 - DP	● 48 - 8	16	1.2	1.7
Vollprofil Full profile	ISO 60°	16 ER -V- ISO 1.0 - DP	● 1.00	16	0.7	0.7
		16 ER -V- ISO 1.25 - DP	● 1.25	16	0.8	0.9
		16 ER -V- ISO 1.5 - DP	● 1.50	16	0.8	1.0
		16 ER -V- ISO 1.75 - DP	● 1.75	16	0.9	1.2
		16 ER -V- ISO 2.0 - DP	● 2.00	16	1.0	1.3
		16 ER -V- ISO 2.5 - DP	● 2.50	16	1.1	1.5
		16 ER -V- ISO 3.0 - DP	● 3.00	16	1.2	1.6
	BSW 55°	16 ER -V- BSW 19 - DP	● 19	16	0.8	1.0
		16 ER -V- BSW 14 - DP	● 14	16	1.0	1.2
		16 ER -V- BSW 11 - DP	● 11	16	1.1	1.5
	NPT 60°	16 ER -V- NPT 18 - DP	● 18	16	0.8	1.0
		16 ER -V- NPT 14 - DP	● 14	16	0.9	1.2
		16 ER -V- NPT 11.5 - DP	● 11.5	16	1.1	1.5
	UN 60°	16 ER -V- UN 12 - DP	● 12	16	1.1	1.4
		16 ER -V- UN 16 - DP	● 16	16	0.9	1.1
		16 ER -V- UN 18 - DP	● 18	16	0.8	1.0
		16 ER -V- UN 20 - DP	● 20	16	0.8	0.9
	ISO 60°	22 ER -V- ISO 4.0 - DP	● 4.00	22	1.6	2.3
		22 ER -V- ISO 5.0 - DP	● 5.00	22	1.7	2.5
		22 ER -V- ISO 6.0 - DP	● 6.00	22	1.9	2.7

Präzisions-Einsteichen Außen / Grooving External



Bezeichnung Part Number	Lager Stock	Bezeichnung Part Number	Lager Stock	IC	L	W +0,05 +0,10	t ±0,10
Rechte WSP RH Inserts	TU 5330	Linke WSP LH Inserts	TU 5330	mm	mm	mm	mm
60° außen / external		60° außen / external					
16 ER -1.10 - T1.30	●	16 EL -1.10 - T1.30	○			1.10	1.30
16 ER -1.30 - T1.50	●	16 EL -1.30 - T1.30	○			1.30	1.50
16 ER -1.60 - T1.85	●	16 EL -1.60 - T1.85	○	9.525 (3/8")	16	1.60	1.85
16 ER -1.85 - T2.00	●	16 EL -1.85 - T2.00	○			1.85	2.00
16 ER -2.15 - T2.50	●	16 EL -2.15 - T2.50	○			2.15	2.25

Set Präzisions - Einstechen Grooving

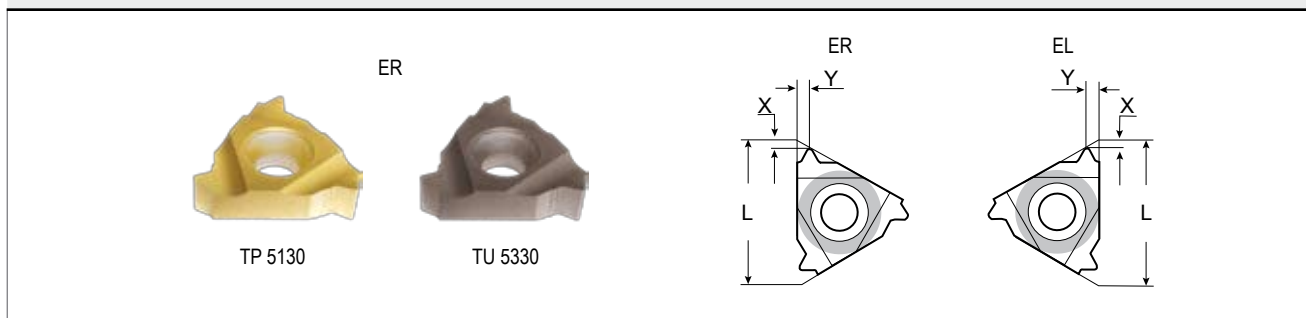


16ER 1.10-2.15/TU 5330

bestehend aus:
consisting of:
 je 2 Stechplatten in den Breiten
each 2 grooving inserts in size
 1.10, 1.30, 1.60, 1.85, 2.15 mm

Außengewinde / External Thread

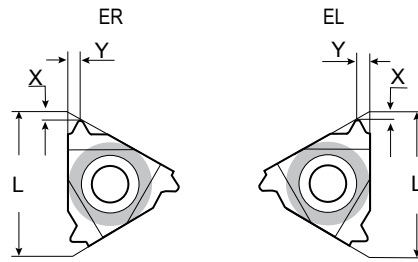
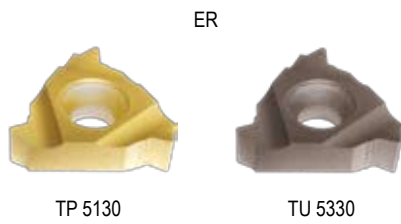
Teilprofil 60° Partial Profile 60°



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	mm	mm	mm	mm
60° außen / external			60° außen / external						
11 ER -T- A 60	○		11 EL -T- A 60			0.5 - 1.5	11	0.8	0.9
16 ER -T- A 60	●		16 EL -T- A 60	●		0.5 - 1.5	16	0.8	0.9
16 ER -T- G 60	●		16 EL -T- G 60	●		1.75 - 3.0	16	1.2	1.7
16 ER -T- AG 60	●	●	16 EL -T- AG 60	●		0.5 - 3.0	16	1.2	1.7
22 ER -T- N 60	●		22 EL -T- N 60			3.5 - 5.0	22	1.7	2.5
27 ER -T- Q 60	○		27 EL -T- Q 60			5.5 - 6.0	27	2.1	3.1

Außengewinde / External Thread

Teilprofil 55° Partial Profile 55°



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	mm	mm	mm	mm
55° außen / external			55° außen / external						
11 ER -T- A 55	○		11 EL -T- A 55			48 - 16	11	0.8	0.9
16 ER -T- A 55	●		16 EL -T- A 55	●		48 - 16	16	0.8	0.9
16 ER -T- G 55	●		16 EL -T- G 55	●		14 - 8	16	1.2	1.7
16 ER -T- AG 55	●		16 EL -T- AG 55	●		48 - 168	16	1.2	1.7
22 ER -T- N 55	●		22 EL -T- N 55			7 - 5	22	1.7	2.5
27 ER -T- Q 55	○		27 EL -T- Q 55			4.5 - 4	27	2.0	2.9

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/ Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

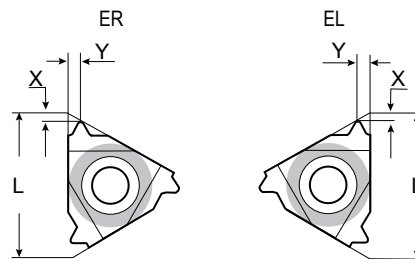
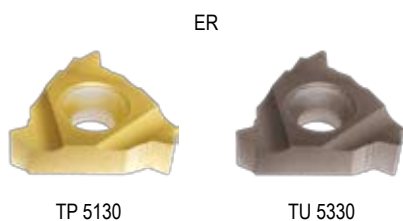
Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Außengewinde / External Thread

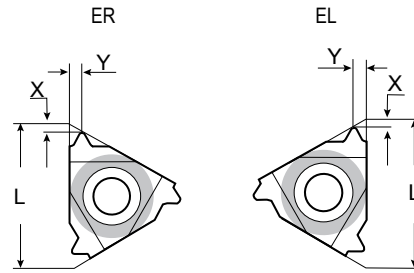
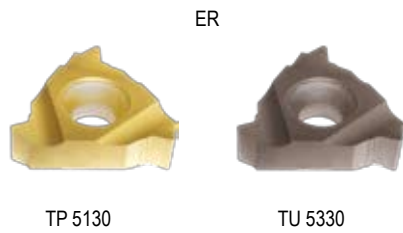
Vollprofil ISO 60° Full Profile ISO 60°



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	mm	mm	mm	mm
11 ER - V - ISO 0.35			11 EL - V - ISO 0.35			0.35		0.8	0.4
11 ER - V - ISO 0.4			11 EL - V - ISO 0.4			0.4		0.7	0.4
11 ER - V - ISO 0.45			11 EL - V - ISO 0.45			0.45		0.7	0.4
11 ER - V - ISO 0.5	○		11 EL - V - ISO 0.5			0.5		0.6	0.6
11 ER - V - ISO 0.6	○		11 EL - V - ISO 0.6			0.6		0.6	0.6
11 ER - V - ISO 0.7	○		11 EL - V - ISO 0.7			0.7		0.6	0.6
11 ER - V - ISO 0.75	○		11 EL - V - ISO 0.75			0.75	11	0.6	0.6
11 ER - V - ISO 0.8	○		11 EL - V - ISO 0.8			0.8		0.6	0.6
11 ER - V - ISO 1.0	●		11 EL - V - ISO 1.0			1.0		0.7	0.7
11 ER - V - ISO 1.25	○		11 EL - V - ISO 1.25			1.25		0.8	0.9
11 ER - V - ISO 1.5	●		11 EL - V - ISO 1.5			1.5		0.8	1.0
11 ER - V - ISO 1.75	○		11 EL - V - ISO 1.75			1.75		0.8	1.1
16 ER - V - ISO 0.35			16 EL - V - ISO 0.35			0.35		0.8	0.4
16 ER - V - ISO 0.4			16 EL - V - ISO 0.4			0.4		0.7	0.4
16 ER - V - ISO 0.45			16 EL - V - ISO 0.45			0.45		0.7	0.4
16 ER - V - ISO 0.5	●	●	16 EL - V - ISO 0.5	●		0.5		0.6	0.6
16 ER - V - ISO 0.6	○		16 EL - V - ISO 0.6			0.6		0.6	0.6
16 ER - V - ISO 0.7	●		16 EL - V - ISO 0.7			0.7		0.6	0.6
16 ER - V - ISO 0.75	●	●	16 EL - V - ISO 0.75	●		0.75		0.6	0.6
16 ER - V - ISO 0.8	●	●	16 EL - V - ISO 0.8			0.8	16	0.6	0.6
16 ER - V - ISO 1.0	●	●	16 EL - V - ISO 1.0	●		1.0		0.7	0.7
16 ER - V - ISO 1.25	●	●	16 EL - V - ISO 1.25	●		1.25		0.8	0.9
16 ER - V - ISO 1.5	●	●	16 EL - V - ISO 1.5	●		1.5		0.8	1.0
16 ER - V - ISO 1.75	●	●	16 EL - V - ISO 1.75	●		1.75		0.9	1.2
16 ER - V - ISO 2.0	●	●	16 EL - V - ISO 2.0	●		2.0		1.0	1.3
16 ER - V - ISO 2.5	●	●	16 EL - V - ISO 2.5	●		2.5		1.1	1.5
16 ER - V - ISO 3.0	●	●	16 EL - V - ISO 3.0	●		3.0		1.2	1.6
16 ER - V - ISO 3.5	●	●	16 EL - V - ISO 3.5			3.5		1.2	1.7
22 ER - V - ISO 3.5	●		22 EL - V - ISO 3.5			3.5		1.6	2.3
22 ER - V - ISO 4.0	●		22 EL - V - ISO 4.0			4.0		1.6	2.3
22 ER - V - ISO 4.5	●		22 EL - V - ISO 4.5			4.5		1.7	2.4
22 ER - V - ISO 5.0	●		22 EL - V - ISO 5.0			5.0	22	1.7	2.5
22 ER - V - ISO 5.5	●		22 EL - V - ISO 5.5			5.5		1.7	2.6
22 ER - V - ISO 6.0	●		22 EL - V - ISO 6.0			6.0		1.9	2.7
27 ER - V - ISO 5.5	○		27 EL - V - ISO 5.5			5.5	27	1.9	2.7
27 ER - V - ISO 6.0	○		27 EL - V - ISO 6.0			6.0		2.0	2.9

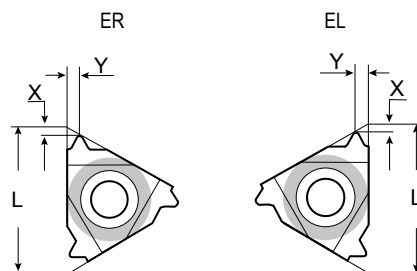
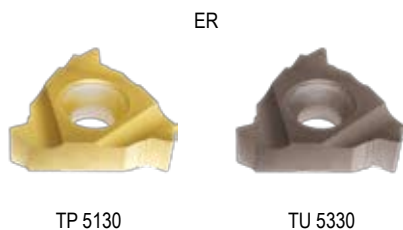
Außengewinde / External Thread

Vollprofil 55° Full Profile 55°
BSW, BSF, BSP, BSB, Whitworth



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	TPI	mm	mm	mm
11 ER - V - BSW 40			11 EL - V - BSW 40			40		0.6	0.6
11 ER - V - BSW 36			11 EL - V - BSW 36			36		0.6	0.6
11 ER - V - BSW 32	○		11 EL - V - BSW 32			32		0.6	0.6
11 ER - V - BSW 28	○		11 EL - V - BSW 28			28		0.6	0.7
11 ER - V - BSW 26	○		11 EL - V - BSW 26			26		0.7	0.8
11 ER - V - BSW 24	○		11 EL - V - BSW 24			24	11	0.7	0.8
11 ER - V - BSW 22	○		11 EL - V - BSW 22			22		0.8	0.9
11 ER - V - BSW 20	○		11 EL - V - BSW 20			20		0.8	0.9
11 ER - V - BSW 19	○		11 EL - V - BSW 19			19		0.8	1.0
11 ER - V - BSW 18	○		11 EL - V - BSW 18			18		0.8	1.0
11 ER - V - BSW 16	○		11 EL - V - BSW 16			16		0.9	1.1
11 ER - V - BSW 14	○		11 EL - V - BSW 14			14		1.0	1.2
16 ER - V - BSW 40			16 EL - V - BSW 40			40		0.6	0.6
16 ER - V - BSW 36			16 EL - V - BSW 36			36		0.6	0.6
16 ER - V - BSW 32	○		16 EL - V - BSW 32			32		0.6	0.6
16 ER - V - BSW 28	●		16 EL - V - BSW 28			28		0.6	0.7
16 ER - V - BSW 26	○		16 EL - V - BSW 26			26		0.7	0.8
16 ER - V - BSW 24	○		16 EL - V - BSW 24			24		0.7	0.8
16 ER - V - BSW 22	○		16 EL - V - BSW 22			22		0.8	0.9
16 ER - V - BSW 20	○		16 EL - V - BSW 20			20		0.8	0.9
16 ER - V - BSW 19	●	●	16 EL - V - BSW 19	●		19	16	0.8	1.0
16 ER - V - BSW 18	●		16 EL - V - BSW 18			18		0.8	1.0
16 ER - V - BSW 16	●		16 EL - V - BSW 16			16		0.9	1.1
16 ER - V - BSW 14	●	●	16 EL - V - BSW 14	●		14		1.0	1.2
16 ER - V - BSW 12	●		16 EL - V - BSW 12			12		1.1	1.4
16 ER - V - BSW 11	●	●	16 EL - V - BSW 11	●		11		1.1	1.5
16 ER - V - BSW 10	●		16 EL - V - BSW 10			10		1.1	1.5
16 ER - V - BSW 9	●		16 EL - V - BSW 9			9		1.2	1.7
16 ER - V - BSW 8	●		16 EL - V - BSW 8			8		1.2	1.5
22 ER - V - BSW 7	○	○	22 EL - V - BSW 7			7		1.6	2.3
22 ER - V - BSW 6	○	○	22 EL - V - BSW 6			6	22	1.6	2.3
22 ER - V - BSW 5	○	○	22 EL - V - BSW 5			5		1.7	2.4
27 ER - V - BSW 4.5		○	27 EL - V - BSW 4.5			4.5	27	1.8	2.6
27 ER - V - BSW 4		○	27 EL - V - BSW 4			4		2.0	2.9

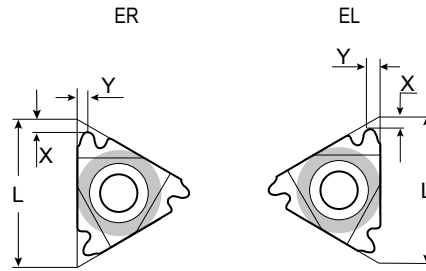
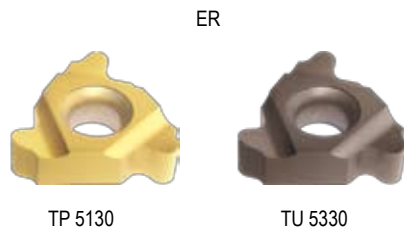
Außengewinde / External Thread

Vollprofil 60° Full Profile 60°
UN, UNC, UNEF, UNS


Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	TPI	mm	mm	mm
11 ER - V - UN 40			11 EL - V - UN 40			40		0.6	0.6
11 ER - V - UN 36			11 EL - V - UN 36			36		0.6	0.6
11 ER - V - UN 32			11 EL - V - UN 32			32		0.6	0.6
11 ER - V - UN 28			11 EL - V - UN 28			28		0.6	0.7
11 ER - V - UN 27			11 EL - V - UN 27			27	11	0.7	0.8
11 ER - V - UN 24			11 EL - V - UN 24			24		0.7	0.8
11 ER - V - UN 20			11 EL - V - UN 20			20		0.8	0.9
11 ER - V - UN 18			11 EL - V - UN 18			18		0.8	1.0
11 ER - V - UN 16			11 EL - V - UN 16			16		0.9	1.1
11 ER - V - UN 14			11 EL - V - UN 14			14		0.9	1.1
16 ER - V - UN 40	○		16 EL - V - UN 40			40		0.6	0.6
16 ER - V - UN 36	○		16 EL - V - UN 36			36		0.6	0.6
16 ER - V - UN 32	○		16 EL - V - UN 32			32		0.6	0.6
16 ER - V - UN 28	○		16 EL - V - UN 28			28		0.6	0.7
16 ER - V - UN 27	○		16 EL - V - UN 27			27		0.7	0.8
16 ER - V - UN 24	○		16 EL - V - UN 24			24		0.7	0.8
16 ER - V - UN 20	○		16 EL - V - UN 20			20		0.8	0.9
16 ER - V - UN 18	○		16 EL - V - UN 18			18	16	0.8	1.0
16 ER - V - UN 16	○		16 EL - V - UN 16			16		0.9	1.1
16 ER - V - UN 14	○		16 EL - V - UN 14			14		1.0	1.2
16 ER - V - UN 13	○		16 EL - V - UN 13			13		1.0	1.3
16 ER - V - UN 12	○		16 EL - V - UN 12			12		1.1	1.4
16 ER - V - UN 11	○		16 EL - V - UN 11			11		1.1	1.5
16 ER - V - UN 10	○		16 EL - V - UN 10			10		1.1	1.5
16 ER - V - UN 9	○		16 EL - V - UN 9			9		1.2	1.7
16 ER - V - UN 8	○		16 EL - V - UN 8			8		1.2	1.6
22 ER - V - UN 7	○		22 EL - V - UN 7			7		1.6	2.3
22 ER - V - UN 6	○		22 EL - V - UN 6			6	22	1.6	2.3
22 ER - V - UN 5	○		22 EL - V - UN 5			5		1.7	2.5
27 ER - V - UN 4.5			27 EL - V - UN 4.5			4.5	27	1.9	2.7
27 ER - V - UN 4			27 EL - V - UN 4			4		2.1	3.0

Außengewinde / External Thread

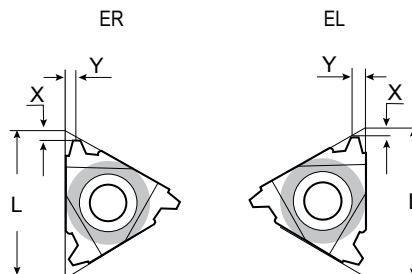
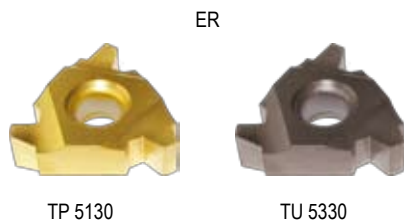
Vollprofil RD DIN 405 Full Profile RD DIN 405



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	TPI	mm	mm	mm
16 ER - V - RD 405 / 10	○		16 EL - V - RD 405 / 10			10		1.1	1.2
16 ER - V - RD 405 / 8	○		16 EL - V - RD 405 / 8			8	16	1.4	1.3
16 ER - V - RD 405 / 6	●		16 EL - V - RD 405 / 6			6		1.5	1.7
22 ER - V - RD 405 / 6	●		22 EL - V - RD 405 / 6			6	22	1.5	1.7
22 ER - V - RD 405 / 4	●		22 EL - V - RD 405 / 4			4		2.2	2.3
27 ER - V - RD 405 / 4			27 EL - V - RD 405 / 4			4	27	2.3	2.3

Außengewinde / External Thread

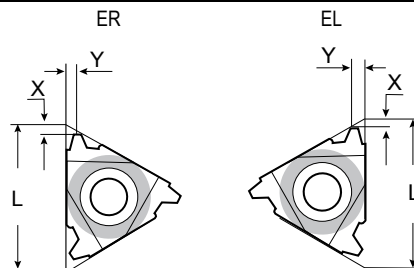
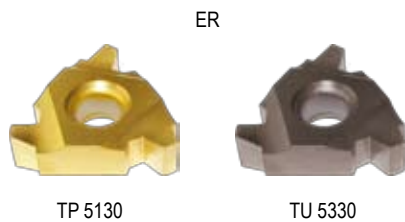
Vollprofil TR DIN 103 Full Profile TR DIN 103



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	mm	mm	mm	mm
11 ER - V - TR 103 / 1.5			11 EL - V - TR 103 / 1.5			1.5	11	0.8	0.9
16 ER - V - TR 103 / 1.5	○		16 EL - V - TR 103 / 1.5			1.5		1.0	1.1
16 ER - V - TR 103 / 2	●		16 EL - V - TR 103 / 2			2	16	1.0	1.3
16 ER - V - TR 103 / 3	●		16 EL - V - TR 103 / 3			3		1.3	1.5
22 ER - V - TR 103 / 4	●		22 EL - V - TR 103 / 4			4		1.7	1.9
22 ER - V - TR 103 / 5	●		22 EL - V - TR 103 / 5			5	22	2.1	2.5
22 ER - V - TR 103 / 6	●		22 EL - V - TR 103 / 6			6		2.3	2.7
27 ER - V - TR 103 / 6			27 EL - V - TR 103 / 6			6	27	2.3	2.7

Außengewinde / External Thread

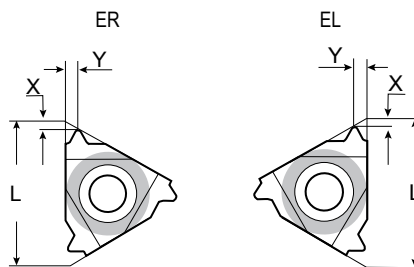
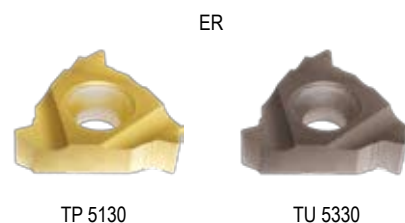
Vollprofil ACME Full Profile ACME



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	TPI	mm	mm	mm
11 ER - V - ACME 16			11 EL - V - ACME 16			16	11	0.9	1.0
16 ER - V - ACME 16	○		16 EL - V - ACME 16			16		1.0	1.1
16 ER - V - ACME 14	○		16 EL - V - ACME 14			14		1.0	1.2
16 ER - V - ACME 12	○		16 EL - V - ACME 12			12	16	1.1	1.2
16 ER - V - ACME 10	○		16 EL - V - ACME 10			10		1.3	1.3
16 ER - V - ACME 8	○		16 EL - V - ACME 8			8		1.5	1.5
22 ER - V - ACME 6	○		22 EL - V - ACME 6			6		1.8	2.1
22 ER - V - ACME 5	○		22 EL - V - ACME 5			5	22	2.0	2.3
27 ER - V - ACME 4			27 EL - V - ACME 4			4	27	2.7	2.7

Außengewinde / External Thread

Vollprofil NPT 60° Full Profile NPT 60°



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	TPI	mm	mm	mm
11 ER - V - NPT 27			11 EL - V - NPT 27			27		0.7	0.8
11 ER - V - NPT 18			11 EL - V - NPT 18			18	11	0.8	1.0
11 ER - V - NPT 14			11 EL - V - NPT 14			14		0.8	1.0
16 ER - V - NPT 27	○		16 EL - V - NPT 27			27		0.7	0.8
16 ER - V - NPT 18	○		16 EL - V - NPT 18			18		0.8	1.0
16 ER - V - NPT 14	○		16 EL - V - NPT 14			14	16	0.9	1.2
16 ER - V - NPT 11.5	○		16 EL - V - NPT 11.5			11.5		1.1	1.5
16 ER - V - NPT 8	○		16 EL - V - NPT 8			8		1.3	1.8

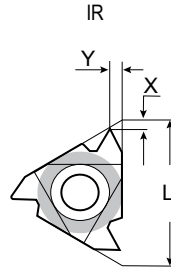


Innengewinde / Internal Thread „DP“

55° / 60°



TU 5125



Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/ Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

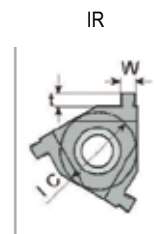
Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Profile Profiles	Bezeichnung Part Number				Lager Stock TU 5125	Steigung Pitch mm /TPI	L mm	X mm	Y mm		
Teilprofil Partial Profile	60°	11 IR	-T-	A 60	-DP	●	0.5 - 1.5	11	0.8	0.9	
		16 IR	-T-	A 60	-DP	●	0.5 - 1.5	16	0.8	0.9	
		16 IR	-T-	G 60	-DP	●	1.75 - 3.0	16	1.2	1.7	
		16 IR	-T-	AG 60	-DP	●	0.5 - 3.0	16	1.2	1.7	
		22 IR	-T-	N 60	-DP	●	3.5 - 5.0	22	1.7	2.5	
	55°	16 IR	-T-	A 55	-DP	●	48 - 16	16	0.8	0.9	
		16 IR	-T-	G 55	-DP	●	14 - 8	16	1.2	1.7	
		16 IR	-T-	AG 55	-DP	●	48 - 8	16	1.2	1.7	
Vollprofil Full profile	ISO 60°	11 IR	-V-	ISO	1.0	-DP	●	1.00	11	0.6	0.7
		11 IR	-V-	ISO	1.25	-DP	●	1.25	11	0.8	0.9
		11 IR	-V-	ISO	1.5	-DP	●	1.50	11	0.8	1.0
		16 IR	-V-	ISO	1.0	-DP	●	1.00	16	0.6	0.7
		16 IR	-V-	ISO	1.25	-DP	●	1.25	16	0.8	0.9
		16 IR	-V-	ISO	1.5	-DP	●	1.50	16	0.8	1.0
		16 IR	-V-	ISO	1.75	-DP	●	1.75	16	0.9	1.2
		16 IR	-V-	ISO	2.0	-DP	●	2.00	16	1.0	1.3
		16 IR	-V-	ISO	2.5	-DP	●	2.50	16	1.1	1.5
		16 IR	-V-	ISO	3.0	-DP	●	3.00	16	1.1	1.5
	BSW 55°	16 IR	-V-	BSW	19	-DP	●	19	16	0.8	1.0
		16 IR	-V-	BSW	14	-DP	●	14	16	1.0	1.2
		16 IR	-V-	BSW	12	-DP	●	12	16	1.1	1.4
		16 IR	-V-	BSW	11	-DP	●	11	16	1.1	1.5
	NPT 60°	16 IR	-V-	NPT	18	-DP	●	18	16	0.8	1.0
		16 IR	-V-	NPT	14	-DP	●	14	16	0.9	1.2
		16 IR	-V-	NPT	11.5	-DP	●	11.50	16	1.1	1.5
	UN 60°	16 IR	-V-	UN	12	-DP	●	12	16	1.1	1.4
		16 IR	-V-	UN	16	-DP	●	16	16	0.9	1.1
		16 IR	-V-	UN	18	-DP	●	18	16	0.8	1.0
		16 IR	-V-	UN	20	-DP	●	20	16	0.8	0.9
	ISO 60°	22 IR	-V-	ISO	3.5	-DP	●	3.50	22	1.6	2.3
		22 IR	-V-	ISO	4.0	-DP	●	4.00	22	1.6	2.3
		22 IR	-V-	ISO	5.0	-DP	●	5.00	22	1.6	2.3
		22 IR	-V-	ISO	6.0	-DP	●	6.00	22	1.6	2.4

Präzisions-Einstecken Innen / Grooving Internal



Bezeichnung Part Number	Lager Stock	Bezeichnung Part Number	Lager Stock	IC	L	W $+0,05$ $+0,10$	t $+0,10$
Rechte WSP RH Inserts	TU 5330	Linke WSP LH Inserts	TU 5330	mm	mm	mm	mm
60° innen / internal		60° innen / internal					
16 IR -1.10 - T1.30	●	16 IL -1.10 - T1.30	○			1.10	1.30
16 IR -1.30 - T1.30	●	16 IL -1.30 - T1.30	○			1.30	1.50
16 IR -1.60 - T1.85	●	16 IL -1.60 - T1.85	○	9.525 (3/8")	16	1.60	1.85
16 IR -1.85 - T2.00	●	16 IL -1.85 - T2.00	○			1.85	2.00
16 IR -2.15 - T2.50	●	16 IL -2.15 - T2.50	○			2.15	2.25

Set Präzisions - Einstechen Grooving

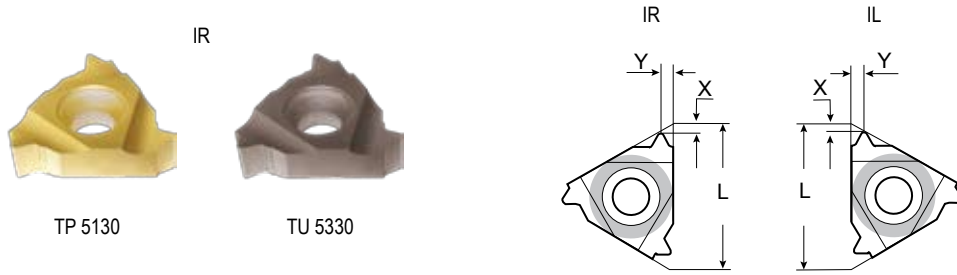


16IR 1.10-2.15/TU 5330

bestehend aus:
consisting of:
je 2 Stechplatten in den Breiten
each 2 grooving inserts in size
1.10, 1.30, 1.60, 1.85, 2.15 mm

Innengewinde / Internal Thread

Teilprofil 60° Partial Profile 60°



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	mm	mm	mm	mm
60° innen / internal			60° innen / internal						
06 IR -T- A 60			06 IL -T- A 60			0.5 - 1.25	6	0.6	06
08 IR -T- A 60			08 IL -T- A 60			0.5 - 1.5	8	0.6	0.7
11 IR -T- A 60	●		11 IL -T- A 60			0.5 - 1.5	11	0.8	0.9
16 IR -T- A 60	●		16 IL -T- A 60	○		0.5 - 1.5	16	0.8	0.9
16 IR -T- G 60	●		16 IL -T- G 60	○		1.75 - 3.0	16	1.2	1.7
16 IR -T- AG 60	●	●	16 IL -T- AG 60	○		0.5 - 3.0	16	1.2	1.7
22 IR -T- N 60	●		22 IL -T- N 60			3.5 - 5.0	22	1.7	2.5
27 IR -T- Q 60			27 IL -T- Q 60			5.5 - 6.0	27	1.8	2.7

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/ Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

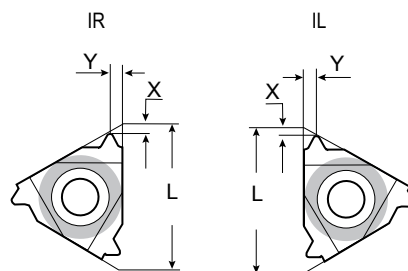
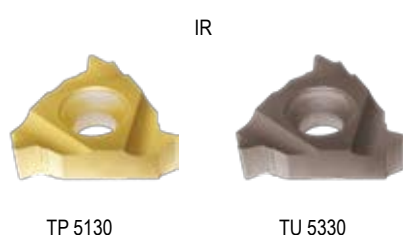
Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepaltenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Innengewinde / Internal Thread

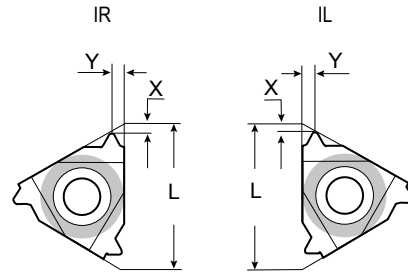
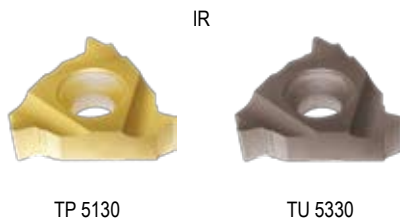
Teilprofil 55° Partial Profile 55°



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	mm	mm	mm	mm
55° innen / internal			55° innen / internal						
06 IR -T- A 55			06 IL -T- A 55			48 - 20	6	0.6	0.6
08 IR -T- A 55			08 IL -T- A 55			48 - 16	8	0.6	0.7
11 IR -T- A 55	●		11 IL -T- A 55			48 - 16	11	0.8	0.9
16 IR -T- A 55	●		16 IL -T- A 55	○		48 - 16	16	0.8	0.9
16 IR -T- G 55	●		16 IL -T- G 55	○		14 - 8	16	1.2	1.7
16 IR -T- AG 55	●		16 IL -T- AG 55	○		48 - 8	16	1.2	1.7
22 IR -T- N 55	●		22 IL -T- N 55			7 - 5	22	1.7	2.5
27 IR -T- Q 55	○		27 IL -T- Q 55			4.5 - 4	27	2.0	2.9

Innengewinde / Internal Thread

Vollprofil ISO 60° Full Profile ISO 60°



Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/ Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

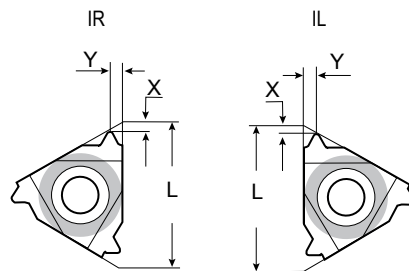
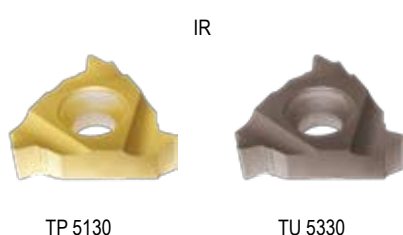
Gewinde-
werkzeuge
Threading Tools

Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Bezeichnung Part Number	Lager Stock	Bezeichnung Part Number	Lager Stock	Steigung Pitch	L	X	Y
Rechte WSP RH Inserts		Linke WSP LH Inserts		TPI	mm	mm	mm
06 IR - V - ISO 0.5		06 IL - V - ISO 0.5		0.5		0.9	0.5
06 IR - V - ISO 0.75		06 IL - V - ISO 0.75		0.75		0.8	0.5
06 IR - V - ISO 1.0		06 IL - V - ISO 1.0		1.0	6	0.7	0.6
06 IR - V - ISO 1.25		06 IL - V - ISO 1.25		1.25		0.6	0.6
06 IR - V - ISO 1.5		06 IL - V - ISO 1.5		1.5		0.5	0.6
08 IR - V - ISO 0.5	○	08 IL - V - ISO 0.5		0.5		0.6	0.5
08 IR - V - ISO 0.75	○	08 IL - V - ISO 0.75		0.75		0.6	0.5
08 IR - V - ISO 1.0	○	08 IL - V - ISO 1.0		1.0	8	0.6	0.6
08 IR - V - ISO 1.25	○	08 IL - V - ISO 1.25		1.25		0.6	0.7
08 IR - V - ISO 1.5	○	08 IL - V - ISO 1.5		1.5		0.6	0.7
08 IR - V - ISO 1.75	○	08 IL - V - ISO 1.75		1.75		0.6	0.8
11 IR - V - ISO 0.35		11 IL - V - ISO 0.35		0.35		0.8	0.3
11 IR - V - ISO 0.4		11 IL - V - ISO 0.4		0.4		0.8	0.4
11 IR - V - ISO 0.45		11 IL - V - ISO 0.45		0.45		0.8	0.4
11 IR - V - ISO 0.5	○	11 IL - V - ISO 0.5		0.5		0.6	0.6
11 IR - V - ISO 0.6	○	11 IL - V - ISO 0.6		0.6		0.6	0.6
11 IR - V - ISO 0.7	○	11 IL - V - ISO 0.7		0.7		0.6	0.6
11 IR - V - ISO 0.75	●	11 IL - V - ISO 0.75		0.75	11	0.6	0.6
11 IR - V - ISO 0.8	○	11 IL - V - ISO 0.8		0.8		0.6	0.6
11 IR - V - ISO 1.0	●	11 IL - V - ISO 1.0		1.0		0.6	0.7
11 IR - V - ISO 1.25	●	11 IL - V - ISO 1.25		1.25		0.8	0.9
11 IR - V - ISO 1.5	●	11 IL - V - ISO 1.5		1.5		0.8	1.0
11 IR - V - ISO 1.75	●	11 IL - V - ISO 1.75		1.75		0.9	1.1
11 IR - V - ISO 2.0	●	11 IL - V - ISO 2.0		2.0		0.8	0.9
11 IR - V - ISO 2.5	●	11 IL - V - ISO 2.5		2.5		0.8	1.2

Innengewinde / Internal Thread

Vollprofil ISO 60° Full Profile ISO 60°



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	TPI	mm	mm	mm
16 IR - V - ISO 0.35			16 IL - V - ISO 0.35			0.35		0.8	0.3
16 IR - V - ISO 0.4			16 IL - V - ISO 0.4			0.4		0.8	0.4
16 IR - V - ISO 0.45			16 IL - V - ISO 0.45			0.45		0.8	0.4
16 IR - V - ISO 0.5	●	●	16 IL - V - ISO 0.5	○		0.5		0.6	0.6
16 IR - V - ISO 0.6	○		16 IL - V - ISO 0.6			0.6		0.6	0.6
16 IR - V - ISO 0.7	●		16 IL - V - ISO 0.7			0.7		0.6	0.6
16 IR - V - ISO 0.75	●	●	16 IL - V - ISO 0.75	○		0.75		0.6	0.6
16 IR - V - ISO 0.8	●		16 IL - V - ISO 0.8			0.8	16	0.6	0.6
16 IR - V - ISO 1.0	●	●	16 IL - V - ISO 1.0	●		1.0		0.6	0.7
16 IR - V - ISO 1.25	●	●	16 IL - V - ISO 1.25	○		1.25		0.8	0.9
16 IR - V - ISO 1.5	●	●	16 IL - V - ISO 1.5	●		1.5		0.8	1.0
16 IR - V - ISO 1.75	●	●	16 IL - V - ISO 1.75	●		1.75		0.9	1.2
16 IR - V - ISO 2.0	●	●	16 IL - V - ISO 2.0	●		2.0		1.0	1.3
16 IR - V - ISO 2.5	●	●	16 IL - V - ISO 2.5	●		2.5		1.1	1.5
16 IR - V - ISO 3.0	●	●	16 IL - V - ISO 3.0	●		3.0		1.1	1.5
16 IR - V - ISO 3.5	●	●	16 IL - V - ISO 3.5			3.5		1.2	1.7
22 IR - V - ISO 3.5	●		22 IL - V - ISO 3.5			3.5		1.6	2.3
22 IR - V - ISO 4.0	●		22 IL - V - ISO 4.0			4.0		1.6	2.3
22 IR - V - ISO 4.5	●		22 IL - V - ISO 4.5			4.5		1.6	2.4
22 IR - V - ISO 5.0	●		22 IL - V - ISO 5.0			5.0	22	1.6	2.3
22 IR - V - ISO 5.5	●		22 IL - V - ISO 5.5			5.5		1.6	2.3
22 IR - V - ISO 6.0	●		22 IL - V - ISO 6.0			6.0		1.6	2.4
27 IR - V - ISO 5.5	○		27 IL - V - ISO 5.5			5.5		1.6	2.3
27 IR - V - ISO 6.0	○		27 IL - V - ISO 6.0			6.0	27	1.8	2.5

Innengewinde / Internal Thread

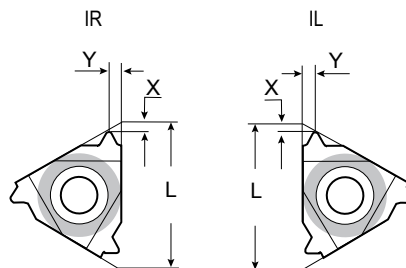
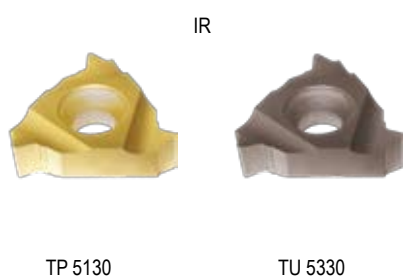
Vollprofil 55° Full Profile 55°
BSW, BSF, BSP, BSB, Whitworth



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	TPI	mm	mm	mm
11 IR - V - BSW 40			11 IL - V - BSW 40			40		0.6	0.6
11 IR - V - BSW 36			11 IL - V - BSW 36			36		0.6	0.6
11 IR - V - BSW 32			11 IL - V - BSW 32			32		0.6	0.6
11 IR - V - BSW 28	○		11 IL - V - BSW 28			28		0.6	0.7
11 IR - V - BSW 26	○		11 IL - V - BSW 26			26		0.7	0.7
11 IR - V - BSW 24	○		11 IL - V - BSW 24			24	11	0.7	0.8
11 IR - V - BSW 22	○		11 IL - V - BSW 22			22		0.8	0.9
11 IR - V - BSW 20	○		11 IL - V - BSW 20			20		0.8	0.9
11 IR - V - BSW 19	●	○	11 IL - V - BSW 19			19		0.8	1.0
11 IR - V - BSW 18	○	○	11 IL - V - BSW 18			18		0.8	1.0
11 IR - V - BSW 16	○		11 IL - V - BSW 16			16		0.9	1.1
11 IR - V - BSW 14	●	○	11 IL - V - BSW 14			14		0.9	1.1
16 IR - V - BSW 40			16 IL - V - BSW 40			40		0.6	0.6
16 IR - V - BSW 36			16 IL - V - BSW 36			36		0.6	0.6
16 IR - V - BSW 32			16 IL - V - BSW 32			32		0.6	0.6
16 IR - V - BSW 28	○		16 IL - V - BSW 28			28		0.6	0.7
16 IR - V - BSW 26	●		16 IL - V - BSW 26			26		0.7	0.8
16 IR - V - BSW 24	○		16 IL - V - BSW 24			24		0.7	0.8
16 IR - V - BSW 22	○		16 IL - V - BSW 22			22		0.8	0.9
16 IR - V - BSW 20	●		16 IL - V - BSW 20			20	16	0.8	0.9
16 IR - V - BSW 19	●		16 IL - V - BSW 19			19		0.8	1.0
16 IR - V - BSW 18	●		16 IL - V - BSW 18			18		0.8	1.0
16 IR - V - BSW 16	●		16 IL - V - BSW 16			16		0.9	1.1
16 IR - V - BSW 14	●	●	16 IL - V - BSW 14			14		1.0	1.2
16 IR - V - BSW 12	●	○	16 IL - V - BSW 12			12		1.1	1.4
16 IR - V - BSW 11	●	●	16 IL - V - BSW 11			11		1.1	1.5
16 IR - V - BSW 10	●		16 IL - V - BSW 10			10		1.1	1.5
16 IR - V - BSW 9	●		16 IL - V - BSW 9			9		1.2	1.7
16 IR - V - BSW 8	●		16 IL - V - BSW 8			8		1.2	1.5
22 IR - V - BSW 7	○		22 IL - V - BSW 7			7		1.6	2.3
22 IR - V - BSW 6	○		22 IL - V - BSW 6			6	22	1.6	2.3
22 IR - V - BSW 5	○		22 IL - V - BSW 5			5		1.7	2.4
27 IR - V - BSW 4.5	○		27 IL - V - BSW 4.5			4.5	27	1.8	2.6
27 IR - V - BSW 4	○		27 IL - V - BSW 4			4		2.0	2.9

Innengewinde / Internal Thread

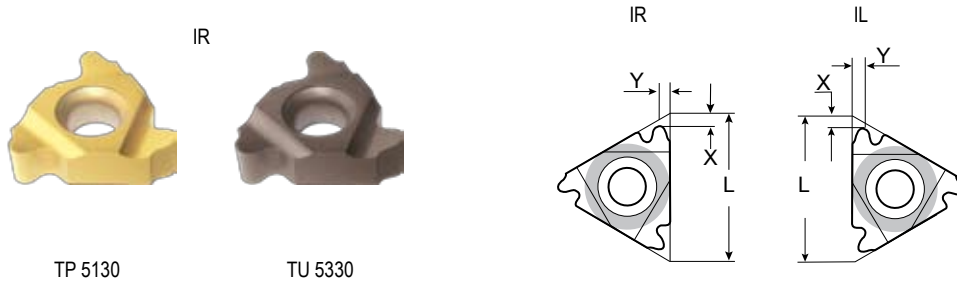
Vollprofil 60° Full Profile 60°
UN, UNC, UNF, UNEF, UNS



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	TPI	mm	mm	mm
11 IR - V - UN 40			11 IL - V - UN 40			40		0.6	0.6
11 IR - V - UN 36			11 IL - V - UN 36			36		0.6	0.6
11 IR - V - UN 32			11 IL - V - UN 32			32		0.6	0.6
11 IR - V - UN 28			11 IL - V - UN 28			28		0.6	0.7
11 IR - V - UN 27			11 IL - V - UN 27			27		0.7	0.8
11 IR - V - UN 24			11 IL - V - UN 24			24	11	0.7	0.8
11 IR - V - UN 20			11 IL - V - UN 20			20		0.8	0.9
11 IR - V - UN 18			11 IL - V - UN 18			18		0.8	1.0
11 IR - V - UN 16			11 IL - V - UN 16			16		0.9	1.1
11 IR - V - UN 14			11 IL - V - UN 14			14		0.9	1.1
16 IR - V - UN 40			16 IL - V - UN 40			40		0.6	0.6
16 IR - V - UN 36			16 IL - V - UN 36			36		0.6	0.6
16 IR - V - UN 32	○		16 IL - V - UN 32			32		0.6	0.6
16 IR - V - UN 28	●		16 IL - V - UN 28			28		0.6	0.7
16 IR - V - UN 27	○		16 IL - V - UN 27			27		0.7	0.8
16 IR - V - UN 24	●		16 IL - V - UN 24			24		0.7	0.8
16 IR - V - UN 20	●		16 IL - V - UN 20			20		0.8	0.9
16 IR - V - UN 18	●		16 IL - V - UN 18			18	16	0.8	1.0
16 IR - V - UN 16	●		16 IL - V - UN 16			16		0.9	1.1
16 IR - V - UN 14	●		16 IL - V - UN 14			14		0.9	1.2
16 IR - V - UN 13	●		16 IL - V - UN 13			13		1.0	1.3
16 IR - V - UN 12	●		16 IL - V - UN 12			12		1.1	1.4
16 IR - V - UN 11	●		16 IL - V - UN 11			11		1.1	1.5
16 IR - V - UN 10	○		16 IL - V - UN 10			10		1.1	1.5
16 IR - V - UN 9	●		16 IL - V - UN 9			9		1.2	1.7
16 IR - V - UN 8	●		16 IL - V - UN 8			8		1.1	1.5
22 IR - V - UN 7	○		22 IL - V - UN 7			7		1.6	2.3
22 IR - V - UN 6	○		22 IL - V - UN 6			6	22	1.6	2.3
22 IR - V - UN 5	○		22 IL - V - UN 5			5		1.6	2.3
27 IR - V - UN 4.5			27 IL - V - UN 4.5			4.5	27	1.7	2.4
27 IR - V - UN 4			27 IL - V - UN 4			4		1.8	2.7

Innengewinde / Internal Thread

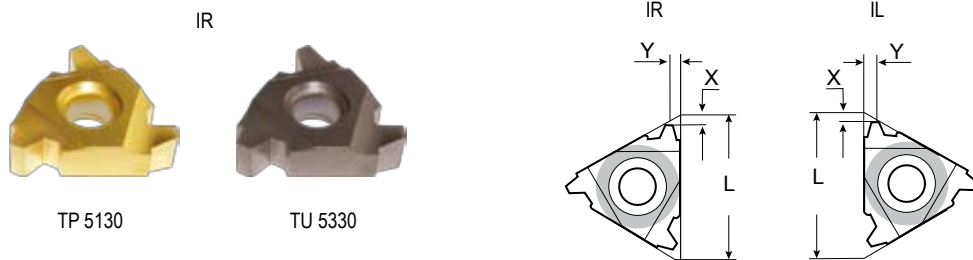
Vollprofil RD DIN 405 Full Profile RD DIN 405



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	TPI	mm	mm	mm
16 IR - V - RD 405 / 10	○		16 IL - V - RD 405 / 10			10		1.1	1.2
16 IR - V - RD 405 / 8	●		16 IL - V - RD 405 / 8			8	16	1.4	1.4
16 IR - V - RD 405 / 6	○		16 IL - V - RD 405 / 6			6		1.4	1.5
22 IR - V - RD 405 / 6	○		22 IL - V - RD 405 / 6			6	22	1.5	1.7
22 IR - V - RD 405 / 4	○		22 IL - V - RD 405 / 4			4		2.2	2.3
27 IR - V - RD 405 / 4			27 IL - V - RD 405 / 4			4	27	2.2	2.3

Innengewinde / Internal Thread

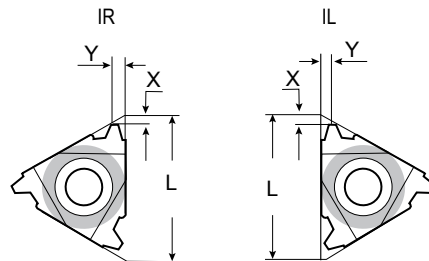
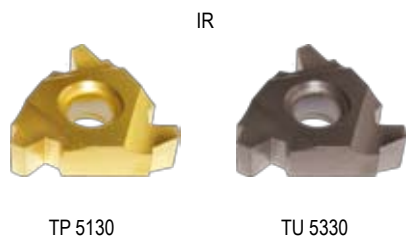
Vollprofil TR DIN 103 Full Profile TR DIN 103



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	TPI	mm	mm	mm
11 IR - V - TR 103 / 1.5			11 IL - V - TR 103 / 1.5			1.5	11	0.8	0.9
16 IR - V - TR 103 / 1.5	○		16 IL - V - TR 103 / 1.5			1.5		1.0	1.1
16 IR - V - TR 103 / 2	●		16 IL - V - TR 103 / 2			2	16	1.0	1.3
16 IR - V - TR 103 / 3	●		16 IL - V - TR 103 / 3			3		1.3	1.5
22 IR - V - TR 103 / 4	●		22 IL - V - TR 103 / 4			4		1.7	1.9
22 IR - V - TR 103 / 5	●		22 IL - V - TR 103 / 5			5	22	2.1	2.5
22 IR - V - TR 103 / 6	●		22 IL - V - TR 103 / 6			6		2.3	2.7
27 IR - V - TR 103 / 6			27 IL - V - TR 103 / 6			6	27	2.3	2.7

Innengewinde / Internal Thread

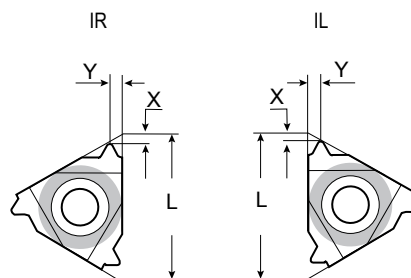
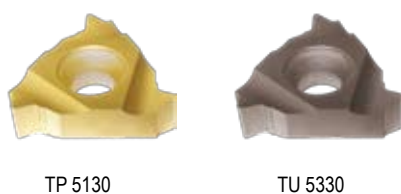
Vollprofil ACME Full Profile ACME



Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	TPI	mm	mm	mm
11 IR - V - ACME16	○		11 IL - V - ACME16			16	11	0.9	1.0
16 IR - V - ACME16	○		16 IL - V - ACME16			16		0.9	1.0
16 IR - V - ACME14	○		16 IL - V - ACME14			14		1.0	1.2
16 IR - V - ACME12	○		16 IL - V - ACME12			12	16	1.1	1.2
16 IR - V - ACME10	○		16 IL - V - ACME10			10		1.3	1.3
16 IR - V - ACME8	○		16 IL - V - ACME8			8		1.5	1.5
22 IR - V - ACME6	○		22 IL - V - ACME6			6		1.8	2.1
22 IR - V - ACME5	●		22 IL - V - ACME5			5	22	2.0	2.3
27 IR - V - ACME 4			27 IL - V - ACME 4			4	27	2.3	2.6

Innengewinde / Internal Thread

Vollprofil NPT 60° Full Profile NPT 60°

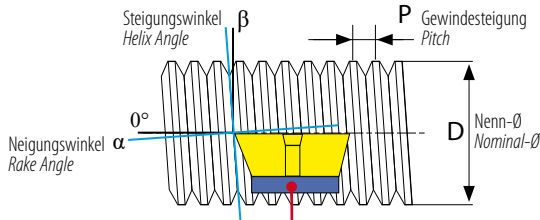


Bezeichnung Part Number	Lager Stock		Bezeichnung Part Number	Lager Stock		Steigung Pitch	L	X	Y
Rechte WSP RH Inserts	TP 5130	TU 5330	Linke WSP LH Inserts	TP 5130	TU 5330	TPI	mm	mm	mm
11 IR - V - NPT 27	○		11 IL - V - NPT 27			27		0.7	0.8
11 IR - V - NPT 18	○		11 IL - V - NPT 18			18	11	0.8	1.0
11 IR - V - NPT 14	○		11 IL - V - NPT 14			14		0.8	1.0
16 IR - V - NPT 27	○		16 IL - V - NPT 27			27		0.7	0.8
16 IR - V - NPT 18	○		16 IL - V - NPT 18			18		0.8	1.0
16 IR - V - NPT 14	○		16 IL - V - NPT 14			14	16	0.9	1.2
16 IR - V - NPT 11.5	○		16 IL - V - NPT 11.5			11.5		1.1	1.5
16 IR - V - NPT 8	●		16 IL - V - NPT 8			8		1.3	1.8

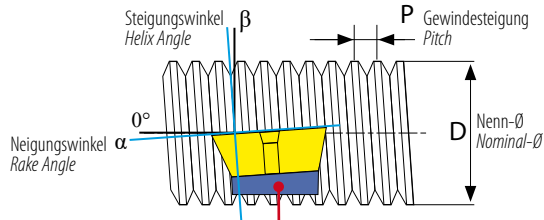
Gewindedrehen - Technische Information Threading - Technical Information

Zugunsten einer größtmöglichen Profilgenauigkeit, bester Oberflächengüte sowie einem gleichmäßigen Verschleiß und der damit verbundenen längeren Standzeit der Wendschneidplatte, muss der **Wendeplatten-Neigungswinkel "α"** mit dem **Gewinde-Steigungswinkel "β"** möglichst exakt übereinstimmen.

*In favor of high level on accuracy of the profile, best surface finish as well as simultaneously wear and longer tool life of the insert, the **rake angle "α"** of the insert and the **helix angle "β"** of the thread have to agree.*



Unterlegplatte mit falschem Neigungswinkel
Shim with incorrect rake angle

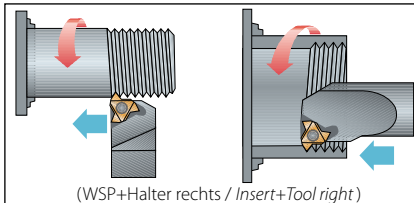


Unterlegplatte mit richtigem Neigungswinkel
Shim with correct rake angle

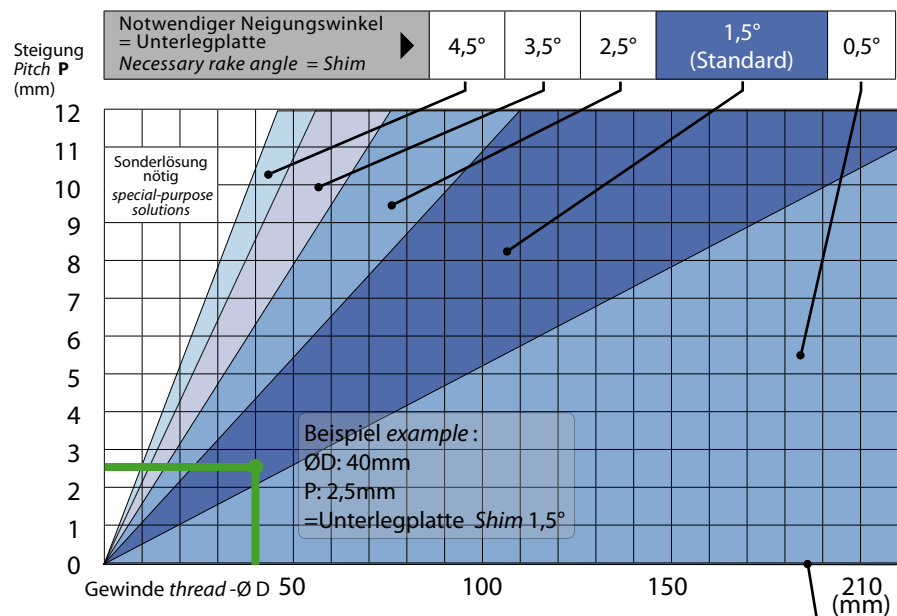
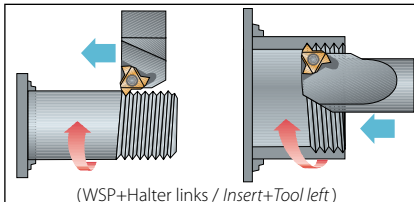
Steigungswinkeldiagramm zum Austausch der Unterlegplatten für metrisches Gewinde

Vorschub in Richtung Futter Movement to Chuck

Rechtsgewinde Right Thread:

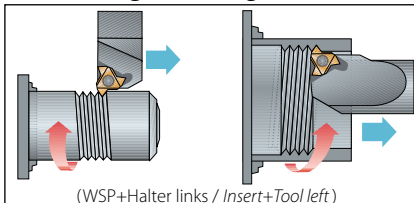


Linksgewinde Left Thread:

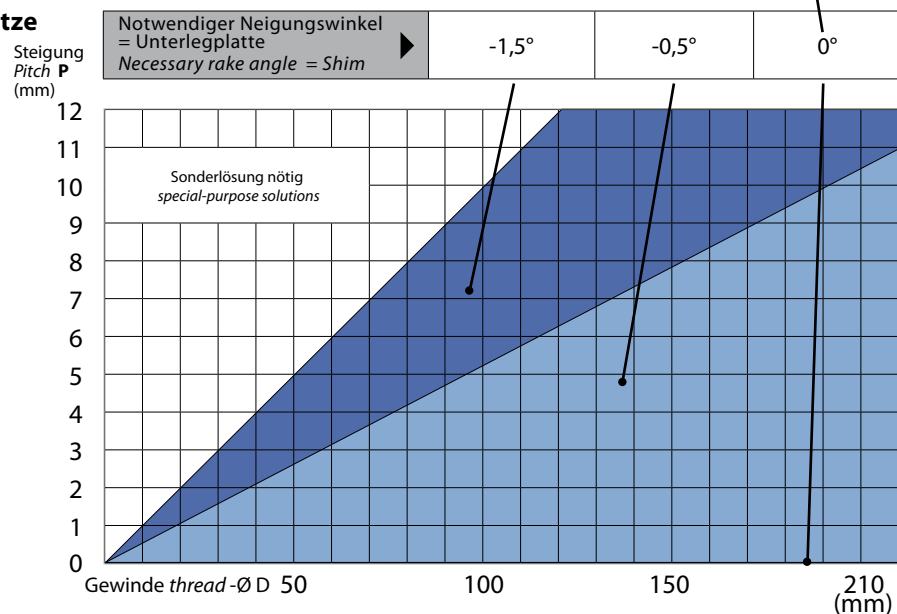
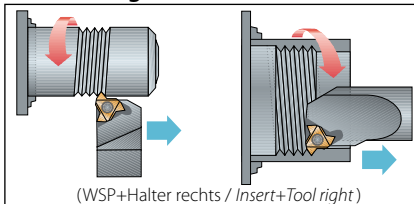


Vorschub in Richtung Drehbankspitze Movement to Center

Rechtsgewinde Right Thread:



Linksgewinde Left Thread:



$$\lambda^\circ = \frac{20 \cdot P}{D} \quad \text{tg } \lambda = \frac{P}{3,14 \cdot D}$$

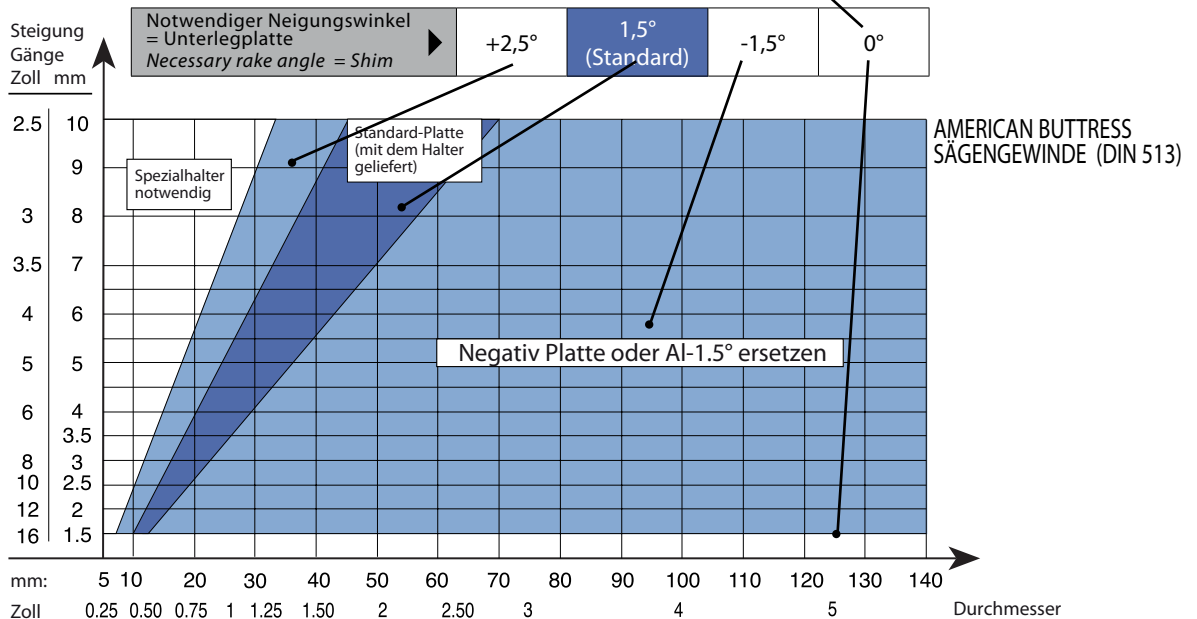
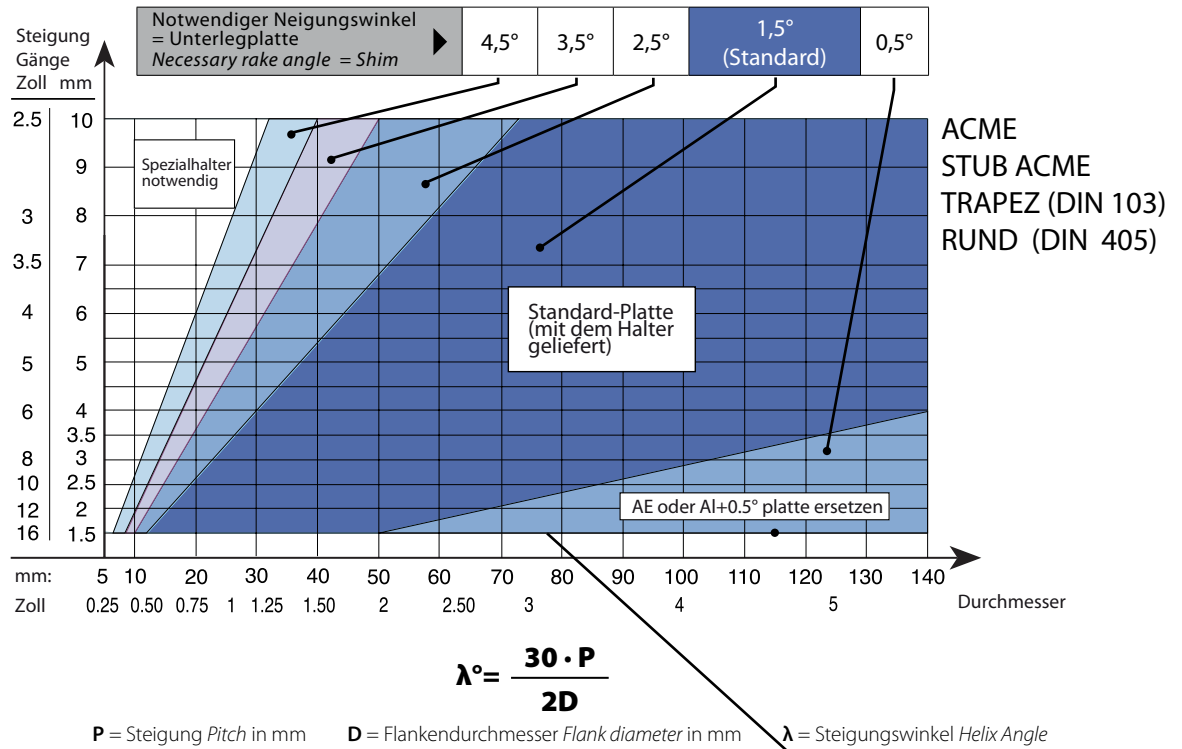
P = Steigung Pitch in mm

D = Flankendurchmesser Flank diameter in mm

λ = Steigungswinkel Helix Angle

Gewindedrehen - Technische Information Threading - Technical Information

Steigungswinkeldiagramm zum Austausch der Unterlegplatten



Richtwerte für die Anzahl der Gewindedurchgänge * Guide Lines for the Number of Threading Passes *

Steigung Pitch	mm	0.5	0.75	1.0	1.25	1.5	1.75	2.0	2.5	3.0	4.0	5.0	6.0
	G/1" TPI	48	32	24	20	16	14	12	10	8	6	5	4
Zahl der Durchgänge No. of passes		4-6	4-7	4-8	5-9	6-10	7-12	7-12	8-14	10-16	11-18	12-20	12-20

*abhängig von Werkstoff und Schnittbedingungen depends on material and cutting conditions

Unterschiede zwischen Voll- und Teilprofil-Gewindeschneidplatten Differences between Full and Partial Profile Threading Inserts

Vollprofil - Gewindeschneidplatte



Full Profile - Threading Insert

Vorteile / Advantages

Das gesamte Gewindeprofil einschließlich Gewindespitze wird normhaltig bearbeitet - für Serienfertigung geeignet.
The complete thread profile including tip of thread is machined complying with the norm - suitable for series production.
Die Gewindespitzen sind gratfrei.
The tips of thread are burr-free.

Nachteile / Disadvantages

Für jede Steigung wird eine andere Wendeschneidplatte benötigt.
For every pitch a different insert is required.

Teilprofil - Gewindeschneidplatte



Partial Profile - Threading Insert

Vorteile / Advantages

Mit wenigen Wendeschneidplatten können die meisten Steigungen gefertigt werden.
With only a few inserts it is possible to machine most of the different pitches.

Nachteile / Disadvantages

Das Gewindeprofil weicht geringfügig von der Norm ab.
The profile of thread differs slightly from the norm.
Die Gewindespitzen müssen häufig nachträglich entgratet werden.
The tips of thread often have to be de-burred.

Schnittdaten-Empfehlungen zum Gewindedrehen Cutting Data Recommendations for Threading

Werkstückwerkstoff Material		Festigkeit Tensile strength	Schnittgeschwindigkeiten / Cutting speeds v_c [m/min]	
			TP 5130 (P/M30/K20C)	TU 5330 (P30C)
A (P)	unlegierter Stahl mild steel	< 650 N/mm ² 650 - 850 N/mm ²	70 - 200 70 - 160	70 - 220 70 - 160
	legierter Stahl alloyed steel	700 - 1000 N/mm ² 1000 - 1300 N/mm ²	90 - 160 70 - 120	90 - 180 70 - 120
	rostfreier Stahl stainless steel	500 - 700 N/mm ² (austenitisch / austenitic) 500 - 900 N/mm ² (ferritisch / ferritic)	80 - 160 100 - 160	50 - 240 50 - 200
F (K)	Grauguss grey cast iron	110 - 150 HB > 150 HB	150 - 220 100 - 160	60 - 230 60 - 160
N	Aluminium und Kupferlegierungen aluminium and copper alloys	50 - 160 HB	80 - 360	100 - 500

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepaltenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Symbolerklärung Explanation of Symbols



Metrisches ISO-Regelgewinde DIN 13
ISO Metric Coarse Thread DIN 13



Sackloch
Blind Hole



Durchgangsloch
Through Hole



Für universellen Einsatz
For universal use



Niro, Stahl, Sonderlegierungen
Stainless Steel, Steel, Special Alloys



Vaporisiert
Steam treatment

Schnittdaten-Richtwerte (bei Verwendung von Emulsion / Schneidöl) Cutting Data Recommendations (when using emulsion / cutting oil)

Werkstückwerkstoff Material		Festigkeit Tensile strength	Schnittgeschwindigkeiten / Cutting feeds v _c [m/min] JD 4126 JD 4226	
A	Unlegierter Stahl Mild steel	< 650 N/mm ²	08 - 12	
			10 - 15	
		650 - 850 N/mm ²	08 - 10	
			10 - 12	
	Legierter Stahl Alloyed steel	700 - 1000 N/mm ²	06 - 08	
			08 - 10	
		1000 - 1300 N/mm ²		
R	Rostfreier Stahl Stainless steel	500 - 700 N/mm ² (austenitisch / austenitic)	05 - 06	
			06 - 08	
		500 - 900 N/mm ² (ferritisch / ferritic)	05 - 06	
			06 - 08	
F	Grauguss Grey cast iron	110 - 150 HB	10 - 12	
			12 - 15	
		> 150 HB	08 - 10	
			10 - 12	
N	Aluminium Aluminium		12 - 15	
			15 - 18	
	Kupferlegierungen Copper alloys		08 - 12	
			08 - 15	

Sackloch / *Blind Hole*

Typ
Type
VA

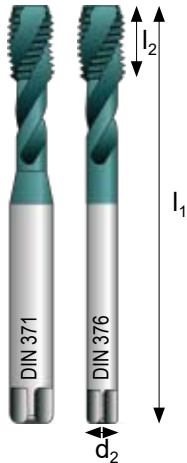
DIN
371
376

M


Tol.
6 H
ISO 2

HSS-E

TiAlN



Bezeichnung Part Number	DIN	Nennmaß Size	Lager Stock	Maße [mm] Dimensions					Z
				Steigung Pitch	l_1	l_2	d_2	a	
JD 4123 M3		M3	●	0.50	56	6	3.50	2.7	
JD 4123 M4		M4	●	0.70	63	7.5	4.50	3.4	
JD 4123 M5	371	M5	●	0.80	70	8.5	6.00	4.9	
JD 4123 M6		M6	●	1.00	80	11	6.00	4.9	3
JD 4123 M8		M8	●	1.25	90	14	8.00	6.2	
JD 4123 M10		M10	●	1.50	100	16	10.00	8.0	
JD 4123 M12	376	M12	●	1.75	110	18.5	9.00	7.0	
JD 4123 M16		M16	○	2.00	110	20	12.00	9.0	4

Durchgangsloch / *Through Hole*

Typ
Type
VA

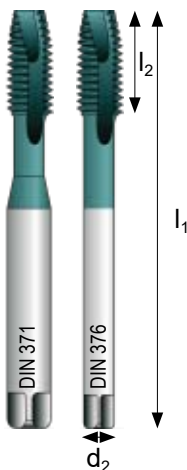
DIN
371
376

M


Tol.
6 H
ISO 2

HSS-E

TiAlN



Bezeichnung Part Number	DIN	Nennmaß Size	Lager Stock	Maße [mm] Dimensions					Z
				Steigung Pitch	l_1	l_2	d_2	a	
JD 4223 M3		M3	●	0.50	56	10	3.50	2.7	
JD 4223 M4		M4	●	0.70	63	12	4.50	3.4	
JD 4223 M5	371	M5	●	0.80	70	14	6.00	4.9	
JD 4223 M6		M6	●	1.00	80	16	6.00	4.9	3
JD 4223 M8		M8	●	1.25	90	18	8.00	6.2	
JD 4223 M10		M10	●	1.50	100	20	10.00	8.0	
JD 4223 M12	376	M12	●	1.75	110	24	9.00	7.0	
JD 4223 M16		M16	●	2.00	110	26	12.00	9.0	4

Maschinengewindebohrer *Machine Taps*

Sackloch / *Blind Hole*



	Bezeichnung Part Number	DIN	Nennmaß Size	Lager Stock	Maße [mm] Dimensions					Z
					Steigung Pitch	l ₁	l ₂	d ₂	a	
	JD 4126 M3		M3	●	0.50	56	5	3.50	2.7	3
	JD 4126 M4		M4	●	0.70	63	7	4.50	3.4	
	JD 4126 M5	371	M5	●	0.80	70	8	6.00	4.9	
	JD 4126 M6		M6	●	1.00	80	10	6.00	4.9	
	JD 4126 M8		M8	●	1.25	90	13	8.00	6.2	
	JD 4126 M10		M10	●	1.50	100	15	10.00	8.0	
	JD 4126 M12		M12	●	1.75	110	18	9.00	7.0	4
	JD 4126 M14	376	M14	○	2.00	110	20	11.00	9.0	
	JD 4126 M16		M16	○	2.00	110	20	12.00	9.0	

Durchgangsloch / *Through Hole*



	Bezeichnung Part Number	DIN	Nennmaß Size	Lager Stock	Maße [mm] Dimensions					Z
					Steigung Pitch	l ₁	l ₂	d ₂	a	
	JD 4226 M3		M3	●	0.50	56	9	3.50	2.7	3
	JD 4226 M4		M4	●	0.70	63	12	4.50	3.4	
	JD 4226 M5	371	M5	●	0.80	70	13	6.00	4.9	
	JD 4226 M6		M6	●	1.00	80	15	6.00	4.9	
	JD 4226 M8		M8	●	1.25	90	18	8.00	6.2	
	JD 4226 M10		M10	●	1.50	100	20	10.00	8.0	
	JD 4226 M12		M12	●	1.75	110	23	9.00	7.0	4
	JD 4226 M14	376	M14	○	2.00	110	25	11.00	9.0	
	JD 4226 M16		M16	●	2.00	110	25	12.00	9.0	