

# HSS



Being the best through innovation



# STI TAPS

# GEWINDEBOHRER FÜR GEWINDEDRAHTEINSÄTZE






- Tapping STI Threads of Soft Materials
- Zum Gewindeschneiden für Drahteinsätze in weichen Werkstoffen

# SELECTION GUIDE

## SCREW THREAD INSERT TAPS

Tapping STI Threads of Soft Materials

### SCREW THREAD INSERT TAPS

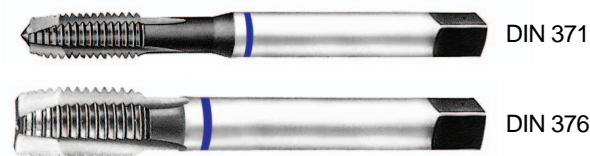
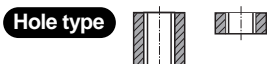
EDP No.	MODEL	Tool Material	Standard	Work Material	Dimensions	Tolerance	Chamfer	Surface Treatment	PAGE
<b>TC973</b>		HSS-E	EG-M	<b>AI</b>	DIN 371/376	6H Mod.	B	Bright	<b>467</b>
<b>TC909</b>		HSS-E	EG-M	<b>AI</b>	DIN 371/376	6H Mod.	C	Bright	<b>468</b>
<b>TC934</b>		HSS-E	EG-UNC	<b>AI</b>	DIN 371/376	2B	B	Bright	<b>469</b>
<b>TC944</b>		HSS-E	EG-UNC	<b>AI</b>	DIN 371/376	2B	C	Bright	<b>470</b>
<b>TC954</b>		HSS-E	EG-UNF	<b>AI</b>	DIN 371/374	2B	B	Bright	<b>471</b>

# EG-M ISO metric coarse threads for Screw Thread insert

## Metrisches ISO Regelgew.f.Gew. Drahteins

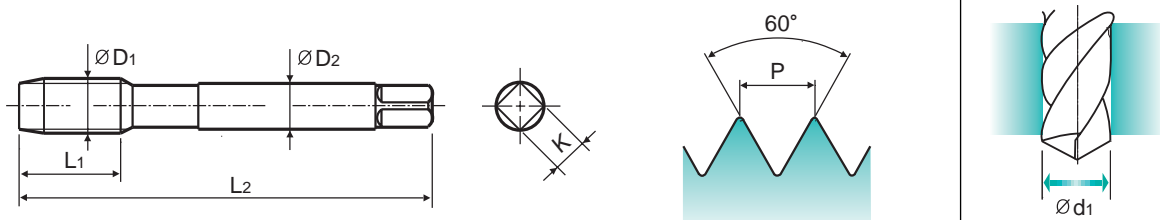
► Wire insert threads are used for increasing fastening strength in soft materials.

► Gewinde mit Drahteinsätzen werden verwendet um größere Drehmomente in weichen Werkstoffen zu erreichen.



Material groups **AI** **HSS-E** **DIN 371/376** **6H Mod.** **60°** **B** **Bright**

Machine taps  
Maschinengewindebohrer



SIZE	Pitch	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
ØD1	P		L1	L2	ØD2	K	Ød1
M2.5 × 0.45		<b>TC973176</b>	11	56	3.5	2.7	2.65
M3 × 0.5		<b>TC973206</b>	10	63	4.5	3.4	3.15
M3.5 × 0.6		<b>TC973226</b>	14	70	6	4.9	3.7
M4 × 0.7		<b>TC973246</b>	13	70	6	4.9	4.2
M5 × 0.8		<b>TC973286</b>	13	80	6	4.9	5.25
M6 × 1		<b>TC973316</b>	17	90	8	6.2	6.3
M8 × 1.25		<b>TC973366</b>	18	100	10	8	8.4
M10 × 1.5		<b>TC973426</b>	22	110	9	7	10.4
M12 × 1.75		<b>TC973506</b>	26	110	11	9	12.5
M14 × 2		<b>TC973546</b>	27	110	12	9	14.5
M16 × 2		<b>TC973606</b>	27	125	14	11	16.5
M18 × 2.5		<b>TC973656</b>	32	140	18	14.5	18.75
M20 × 2.5		<b>TC973706</b>	34	160	18	14.5	20.75

Unit : mm

► DIN 371(M2.5~M8) and DIN 376(M10~M20)

Unit : N/mm<sup>2</sup>

◎ : Excellent ○ : Good

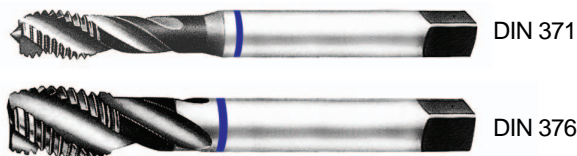
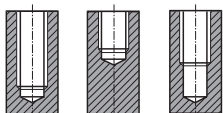
Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
○	○	○											○	
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si ≤ 10%	Al Si > 10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
				◎				◎	◎	◎				

**EG-M** ISO metric coarse threads for Screw Thread insert  
**Metrisches ISO Regelgew.f.Gew. Drahteins**

► Wire insert threads are used for increasing fastening strength in soft materials.

► Gewinde mit Drahteinsätzen werden verwendet um größere Drehmomente in weichen Werkstoffen zu erreichen.

Hole type



Material groups

**AI**

HSS-E

DIN 371/376

6H Mod.

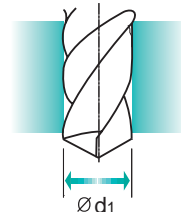
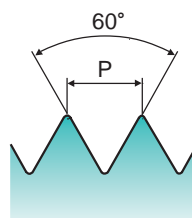
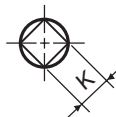
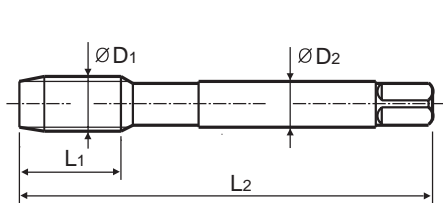
60°

C

Bright

R40

Machine taps  
 Maschinengewindebohrer



Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
ØD1	P		L1	L2	ØD2	K	Ød1
M2.5 × 0.45		TC909176	6	56	3.5	2.7	2.65
M3 × 0.5		TC909206	5	63	4.5	3.4	3.15
M3.5 × 0.6		TC909226	8	70	6	4.9	3.7
M4 × 0.7		TC909246	8	70	6	4.9	4.2
M5 × 0.8		TC909286	8	80	6	4.9	5.25
M6 × 1		TC909316	10	90	8	6.2	6.3
M8 × 1.25		TC909366	16	100	10	8	8.4
M10 × 1.5		TC909426	15	110	9	7	10.4
M12 × 1.75		TC909506	20	110	11	9	12.5
M14 × 2		TC909546	22	110	12	9	14.5
M16 × 2		TC909606	20	125	14	11	16.5
M18 × 2.5		TC909656	27	140	18	14.5	18.75
M20 × 2.5		TC909706	30	160	18	14.5	20.75

► DIN 371(M2.5~M8) and DIN 376(M10~M20)

Unit : N/mm<sup>2</sup>

◎ : Excellent ○ : Good

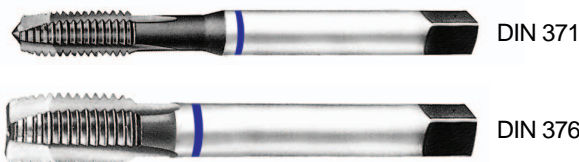
Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
○	○	○											○	○
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si ≤ 10%	Al Si > 10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
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# EG-UNC Unified coarse threads for Screw Thread insert

## Unified Regelgew.f.Gew.Drahteins

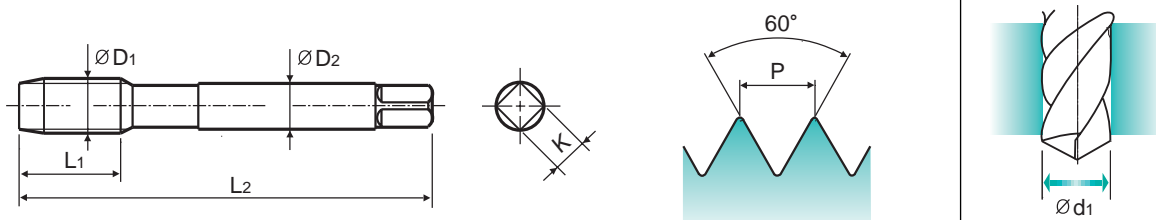
► Wire insert threads are used for increasing fastening strength in soft materials.

► Gewinde mit Drahteinsätzen werden verwendet um größere Drehmomente in weichen Werkstoffen zu erreichen.



Material groups **AI** **HSS-E** **DIN 371/376** **2B** **60°** **B** **Bright**

Machine taps  
Maschinengewindebohrer



SIZE	TPI	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
ØD1			L1	L2	ØD2	K	Ød1
#4	- 40UNC	TC934162	13	63	4.5	3.4	3.1
#5	- 40UNC	TC934202	13	63	4.5	3.4	3.4
#6	- 32UNC	TC934242	14	70	6	4.9	3.8
#8	- 32UNC	TC934282	13	80	6	4.9	4.4
#10	- 24UNC	TC934322	17	80	7	5.5	5.2
#12	- 24UNC	TC934362	17	80	7	5.5	5.8
1/4"	- 20UNC	TC934402	20	90	8	6.2	6.7
5/16"	- 18UNC	TC934442	22	100	10	8	8.4
3/8"	- 16UNC	TC934482	21	110	12	9	10.0
7/16"	- 14UNC	TC934522	26	110	11	9	11.6
1/2"	- 13UNC	TC934562	27	110	12	9	13.3
9/16"	- 12UNC	TC934602	26	125	14	11	15
5/8"	- 11UNC	TC934642	30	125	14	11	16.5
3/4"	- 10UNC	TC934702	32	140	18	14.5	19.75

► DIN 371(#4~3/8") and DIN 376(7/16"~3/4")

Unit : N/mm<sup>2</sup> © : Excellent ○ : Good

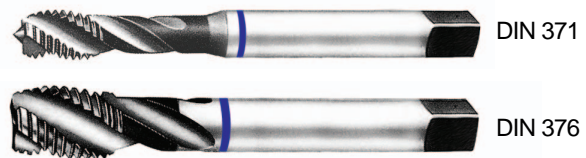
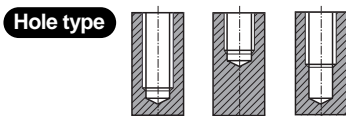
Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
○	○	○											○	
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si ≤ 10%	Al Si > 10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
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# EG-UNC Unified coarse threads for Screw Thread insert

## Unified Regelgew.f.Gew.Drahteins

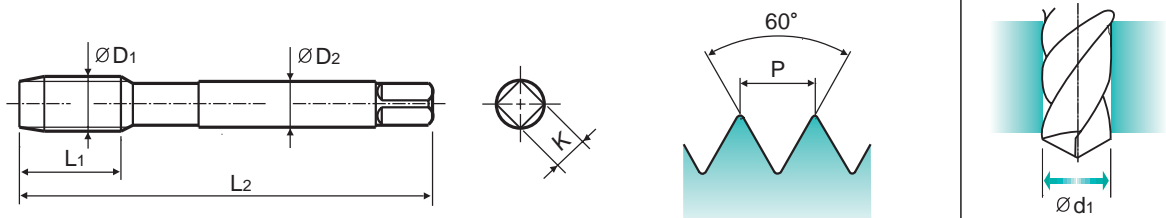
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Material groups **AI** **HSS-E** **DIN 371/376** **2B** **60°** **C** **Bright** **R40**

Machine taps  
Maschinengewindebohrer



SIZE	TPI	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
ØD1			L1	L2	ØD2	K	Ød1
#4	40 UNC	TC944162	7	63	4.5	3.4	3.1
#5	40 UNC	TC944202	7	63	4.5	3.4	3.4
#6	32 UNC	TC944242	8	70	6	4.9	3.8
#8	32 UNC	TC944282	8	80	6	4.9	4.4
#10	24 UNC	TC944322	10	80	7	5.5	5.2
#12	24 UNC	TC944362	10	80	7	5.5	5.8
1/4"	20 UNC	TC944402	14	90	8	6.2	6.7
5/16"	18 UNC	TC944442	16	100	10	8	8.4
3/8"	16 UNC	TC944482	16	110	12	9	10.0
7/16"	14 UNC	TC944522	20	110	11	9	11.6
1/2"	13 UNC	TC944562	22	110	12	9	13.3
9/16"	12 UNC	TC944602	22	125	14	11	15
5/8"	11 UNC	TC944642	25	125	14	11	16.5
3/4"	10 UNC	TC944702	27	140	18	14.5	19.75

► DIN 371(#4~3/8") and DIN 376(7/16"~3/4")

Unit : N/mm<sup>2</sup> © : Excellent ○ : Good

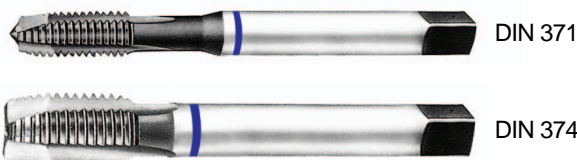
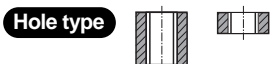
Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
○	○	○											○	
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si ≤ 10%	Al Si > 10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
				○				○	○	○				

# EG-UNF Unified fine threads for Screw Thread insert

## Unified Feingew.f.Gew.Drahteins

► Wire insert threads are used for increasing fastening strength in soft materials.

► Gewinde mit Drahteinsätzen werden verwendet um größere Drehmomente in weichen Werkstoffen zu erreichen.



Material groups

**AI**

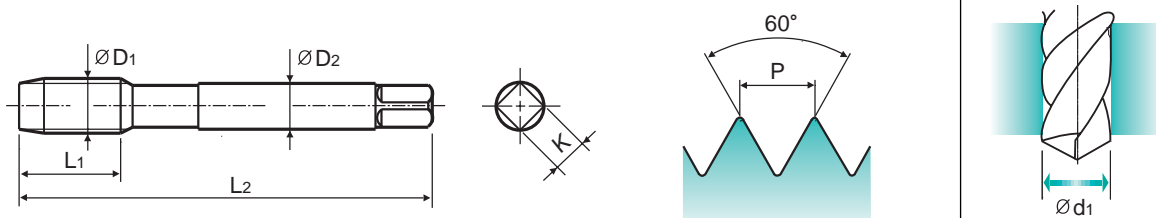
HSS-E

DIN 371/374

2B



Bright

 Machine taps  
Maschinengewindebohrer


SIZE	TPI	EDP No.	Thread Length	Overall Length	Shank Diameter	Square Size	Tapping drill diameter
ØD1			L1	L2	ØD2	K	Ød1
#4	48 UNF	TC954182	12	56	4	3	3.1
#6	40 UNF	TC954262	14	70	6	4.9	3.7
#8	36 UNF	TC954302	13	70	6	4.9	4.4
#10	32 UNF	TC954342	13	80	6	4.9	5.1
1/4"	28 UNF	TC954422	17	90	8	6.2	6.6
5/16"	24 UNF	TC954462	18	100	10	8	8.25
3/8"	24 UNF	TC954502	18	110	12	9	9.8
7/16"	20 UNF	TC954542	22	100	9	7	11.5
1/2"	20 UNF	TC954582	22	100	11	9	13.1
9/16"	18 UNF	TC954622	22	100	12	9	14.75
5/8"	18 UNF	TC954662	25	110	14	11	16.25
3/4"	16 UNF	TC954722	25	125	16	12	19.5

► DIN 371(#4~3/8") and DIN 374(7/16"~3/4")

 Unit : N/mm<sup>2</sup>

◎ : Excellent ○ : Good

Steel < 400	Steel < 700	Steel < 850	St. Alloy < 850	St. Alloy ≤ 1200	St. Alloy > 1200	INOX Free < 850	INOX Aust. < 850	INOX < 1000	GG Cast < 500	GG Cast < 1000	GGG Cast < 700	GGG Cast < 1000	Ti < 700	Ti Alloy < 900
○	○	○											○	
Ti Alloy ≤ 1300	Ni < 500	Ni Alloy < 900	Ni Alloy ≤ 1400	Cu < 350	Cu Alloy Short	Cu Alloy Long	Cu-Al-Fe < 1500	Al / Mg < 350	Al Wrought	Al Si ≤ 10%	Al Si > 10%	Plastic Thermosoft	Plastic Thermoset	Plastic FRP
				◎				◎	◎	◎				