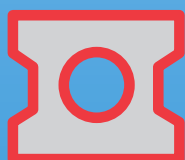


TwinCut

for Internal thread turning



Edition 2012-11



**Scandinavian
Tool Systems**

Scandinavian Tool Systems AB is a Swedish based manufacturer and supplier of tools for thread turning, thread milling, parting off and grooving.

The main product is the QuadCut[®], which on the North American market is sold under the name QuadThread[®].

Our products are sold through distributors in more than 30 countries worldwide.



General information about the TwinCut system	4
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TwinCut inserts

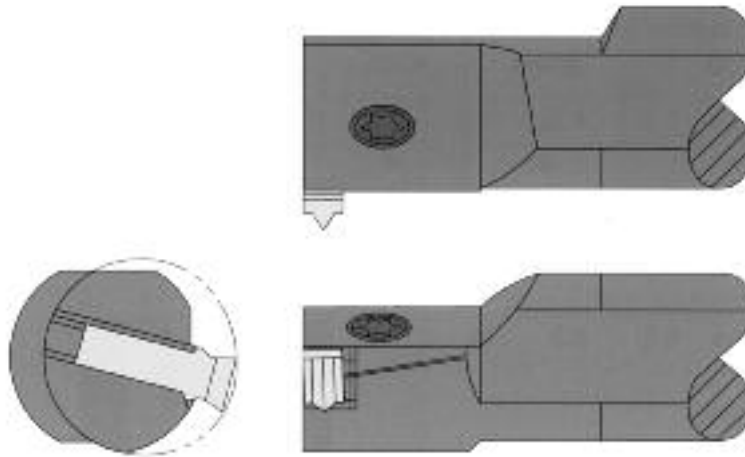
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• = Stock standard
* = Limited stock

TwinCut



The TwinCut system is suited for applications where larger pitches is required but where the hole diameter is limited. The TwinCut system allows internal threading in holes with a diameter from 18 mm and above. The TwinCut insert has two cutting edges, with a chipbreaker sintered into it.

Since the system has very high indexing accuracy, the cutting edge can be changed without time-consuming dimensional resetting.

TwinCut inserts can be used for both right-hand and lefthand threads, which cuts down your stock-keeping needs.

The larger toolholders have replaceable cassettes for different insert sizes, which drastically reduces the toolholder costs.

Technical information

CUTTING DATA

The table gives recommended cutting speeds in m/min. for different materials and carbide grades.

Material	P30C
Low-carbon steel $\leq 650\text{N/mm}^2$	180-220
Carbon steel 650-850N/mm ²	130-190
Alloyed tool steel and heat-resistant steel	120-160
Stainless steel	90-170
Cast iron HB 180-250	
Non-ferrous materials	

NUMBER OF PASSES

The table gives only general recommendations. Many times fewer passes can be used, depending on material and setup.

Pitch mm	3.5	4.0	4.5	5.0	5.5	6.0
Pitch TPI	7	6	5.5	5	4.5	4
Nr. of passes	11-18	11-18	11-19	12-20	12-20	12-20

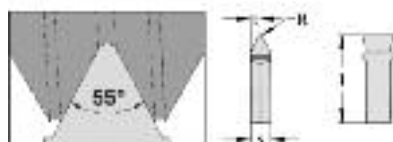
The above recommendations are for full profile UN, ISO and Withworth. For Trapezoidal, ACME, NPT please contact your local STS distributor.



Partial Profile 60°

Internal threading

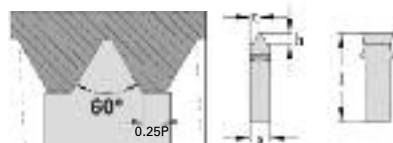
Pitch		Catalogue number	Dimensions				Coated P30C	Price-group
mm	TPI		l	s	t	R		
0.5-3.0	48-8	14N AG60	14	4.6	2.3	0.07	•	848
2.5-4.0	11-6	14N GN60	14	4.6	2.3	0.18	•	848
4.5-6.0	5-4	18N NV60	18	6.8	3.4	0.32	•	849



Partial Profile 55°

Internal threading

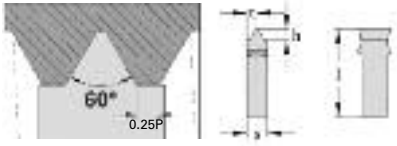
Pitch		Catalogue number	Dimensions				Coated P30C	Price-group
mm	TPI		l	s	t	R		
0.5-3.0	48-8	14N AG55	14	4.6	2.3	0.07	•	848
2.5-4.0	11-6	14N GN55	14	4.6	2.3	0.30	•	848
4.5-6.0	5-4	18N NV55	18	6.8	3.4	0.65	•	849



ISO Metric (M)

Internal threading

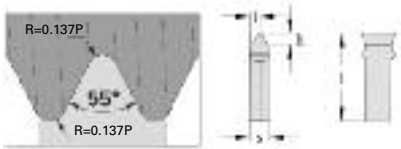
Pitch mm	Catalogue number	Dimensions				Coated P30C	Price-group
		l	s	t	R		
3.5	14N 3.5ISO	14	4.6	2.3	2.05	•	848
4.0	14N 4.0ISO	14	4.6	2.3	2.34	•	848
4.5	18N 4.5ISO	18	6.8	3.4	2.63	•	849
5.0	18N 5.0ISO	18	6.8	3.4	2.92	•	849
5.5	18N 5.5ISO	18	6.8	3.4	3.22	•	849
6.0	18N 6.0ISO	18	6.8	3.4	3.51	•	849



ISO Unified (UN)

Internal threading

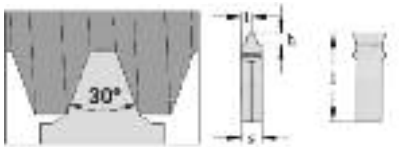
Pitch TPI	Catalogue number	Dimensions				Coated P30C	Price- group
		l	s	t	h		
7	14N 7UN	14	4.6	2.3	2.12	*	848
6	14N 6UN	14	4.6	2.3	2.48	*	848
5	18N 5UN	18	6.8	3.4	2.97	*	849
4.5	18N 4.5UN	18	6.8	3.4	3.30	*	849
4	18N 4UN	18	6.8	3.4	3.71	*	849



Whitworth (BSW, BSP)

Internal threading

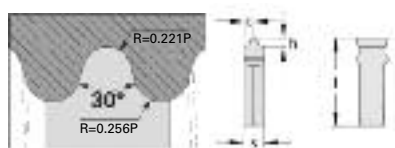
Pitch TPI	Catalogue number	Dimensions				Coated P30C	Price- group
		l	s	t	h		
7	14N 7W	14	4.6	2.3	2.35	*	848
6	14N 6W	14	4.6	2.3	2.75	*	848
5	18N 5W	18	6.8	3.4	3.30	*	849
4.5	18N 4.5W	18	6.8	3.4	3.66	*	849
4	18N 4W	18	6.8	3.4	4.12	*	849



Trapezoidal DIN 103

Internal threading

Pitch mm	Catalogue number	Dimensions				Coated P30C	Price- group
		l	s	t	h		
4.0	14N 4.0TR	14	4.6	2.3	2.25	*	849
5.0	18N 5.0TR	18	6.8	3.4	2.75	*	849
6.0	18N 6.0TR	18	6.8	3.4	3.50	*	850



Round DIN 405

Internal threading

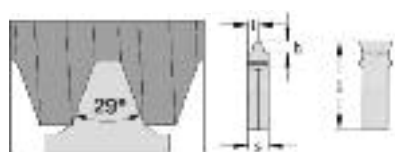
Pitch TPI	Catalogue number		Dimensions				Coated P30C	Price- group
			l	s	t	h		
6	14N	6RD	14	4.6	2.3	2.12	*	849
4	18N	4RD	18	6.8	3.4	3.18	*	850



ACME

Internal threading

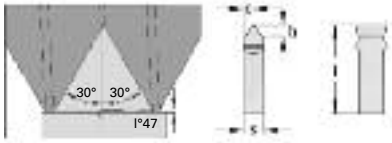
Pitch TPI	Catalogue number		Dimensions				Coated P30C	Price- group
			l	s	t	h		
6	14N	6ACME	14	4.6	2.3	2.54	*	849
5	18N	5ACME	18	6.8	3.4	2.99	*	850
4	18N	4ACME	18	6.8	3.4	3.63	*	850



STUB ACME

Internal threading

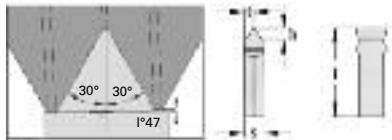
Pitch TPI	Catalogue number		Dimensions				Coated P30C	Price- group
			l	s	t	h		
6	14N	6STACME	14	4.6	2.3	1.69	*	849
5	18N	5STACME	18	6.8	3.4	1.98	*	850
4	18N	4STACME	18	6.8	3.4	2.36	*	850



NPT

Internal threading

Pitch TPI	Catalogue number		Dimensions				Coated P30C	Price- group
			l	s	t	h		
8	14N	8NPT	14	4.6	2.3	2.43	•	849

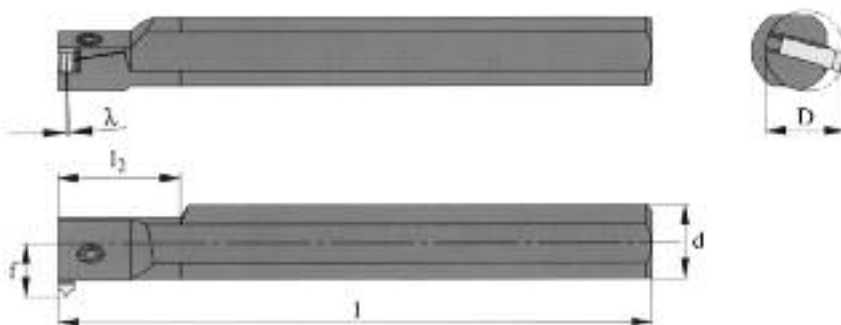
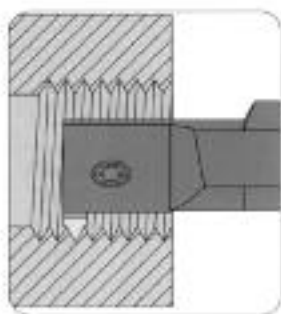


NPTF Dryseal

Internal threading

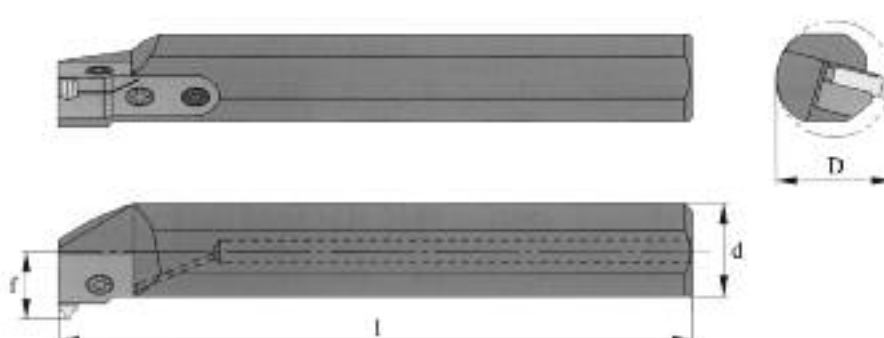
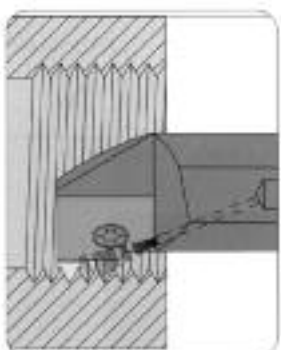
Pitch TPI	Catalogue number		Dimensions				Coated P30C	Price- group
			l	s	t	h		
8	14N	8NPTF	14	4.6	2.3	2.41	•	849

WARNING! Always determine if NPT or NPTF profile should be used. Be sure you use the right one.



Small toolholders

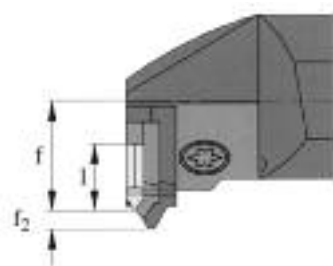
Catalogue number	Dimensions					Insert	Stock standard (λ)						Price-group
	d	l	l ₂	f	D min		4.5	3	1.5	0	98.5	97	
QNR 0016K-14	16	125	32	11	18	14N	•	•	•	•	•	•	862
QNR 0020M-14	20	150	-	13	24	14N		•	•	•	•	•	862
QNR 0016K-18	16	125	52	14	19.5	18N			*				862
QNL 0016K-14	16	125	32	11	18	14N	•	•	•	•	•	•	862
QNL 0020M-14	20	150	-	13	24	14N		•	•	•	•	•	862



Cassette-type toolholders

Catalogue number	Dimensions				Cassettes		Stock standard	Price-group
	d	l	f	D min	Insert 14N	Insert 18N		
QNR 0025P-C25	25	170	16.5	30	QNR 25-14	QNR 25-18	•	862
QNR 0032R-C25	32	200	20.5	37	QNR 25-14	QNR 25-18	•	863
QNR 0040S-C25	40	250	24.0	45	QNR 25-14	QNR 25-18	•	864
QNL 0025P-C25	25	170	16.5	30	QNL 25-14	QNL 25-18	•	862
QNL 0032R-C25	32	200	20.0	37	QNL 25-14	QNL 25-18	•	863
QNL 0040S-C25	40	250	24.0	45	QNL 25-14	QNL 25-18	•	864

Toolholders delivered without cassette, to be ordered separately.



For cassette-type toolholders, the f-dimension is displaced dependent upon the insert size according to the f₂-dimension in the table.

f-Dimension

Dimensions	
l	f ₂
14	0
18	1.5



Internal cassettes

Catalogue number	Insert	Stock standard (λ)						Price-group
		4.5	3	1.5	0	98.5	97	
QNR 25-14	14N		•	•	•	•	•	861
QNR 25-18	18N	•	•	•	•	•	•	861
QNL 25-14	14N		•	•	•	•	•	861
QNL 25-18	18N	•	•	•	•	•	•	861

Screws



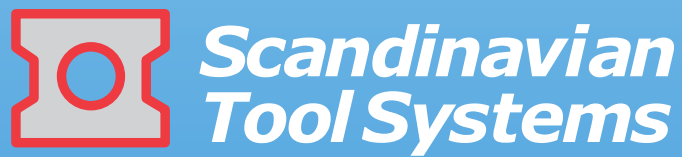
Catalogue number	Used for	Price-group
STST15xM5	Insert 14N	221
STST15xM5	Insert 18N	221
STST15xM5	Cassettes	221

Keys



Catalogue number	Used for	Price-group
Torx T15	STST15xM5	222





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