

SYNCHRO RTS



The Allrounder Solution

Highest Process Security

Great Performance

RTS

EN-ID-0617



THREADING SOLUTIONS

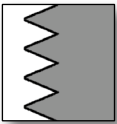
WHAT MEANS “RIGID TAPPING”?

All modern CNC-machines are now equipped with the option so-called “Rigid Tapping” (a tapping spindle with axial float is no longer needed).

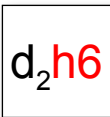
The main objective is to simplify the programming of the tapping operation. The optimal synchronisation between the rotation and the spindle feed permits the correct pitch to be cut, whilst the tap is held rigidly in a toolholder.



The perfect synchronization of the spindle and the programmed feed



The pitch to be cut is determined by the spindle feed



The tool is clamped rigidly

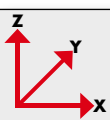
WHICH ARE THE REQUIREMENTS?



CNC machine with “Rigid Tapping” function (Synchro)



Efficient and stable machining centre



Synchronization of the spindle and the Z-axis

WHICH ARE THE ADVANTAGES ?



Wide range of application in over 50 materials



High cutting speeds = Reduced cycle times



Traditional tapping spindle unnecessary



Simplified programming



Process security thanks to NC-controlled feed



Shank tolerance h6, therefore shrinking possible

ONE TAP FOR ALL YOUR APPLICATIONS!

One tap for all materials? Unfortunately we can't keep this promise entirely, yet the application range of the RTS Geometry is impressive: Regardless of whether you work in aluminium, cast iron, stainless steel or highly alloyed materials up to 1'150 N/mm², the RTS gets them all!

11 Free-cutting steels 1.0711 9S20 1.0715 9SMn28 1.0718 9SMnPh28 1.0726 3S520 1.0737 9SMnPh36	12 Structural, cementation steels 1.0037 St37-2 (S235JR) 1.0050 St50-2 (E295) 1.0060 St60-2 (E335) 1.5919 15CrNi6 1.7131 16MnCr5	13 Carbon steels 1.0503 C45 1.0535 C55 1.0601 C60 1.1545 C105W1 1.2067 102Cr6 (100Cr6)	14 Alloy steels < 850 N/mm ² 1.2363 X100CrMoV5-1 1.3551 80MoCrV42-16 1.7218 25CrMo4 1.7220 34CrMo4 1.7225 42CrMo4
15 Alloy steels hard./temp. >850 - <1150 N/mm ² 1.3553 X82WMoCrV6-5-4 1.6580 30CrNiMo8 1.7220 34CrMo4 1.7225 42CrMo4 1.8507 34CrAlMo5	21 Free machining stainless steels 1.4005 X12CrS13 1.4104 X14CrMoS17 1.4305 X10CrNiS18-9	22 Austenitic stainless steels 1.4301 X5CrNi18-10 1.4406 X2CrNiMo17-12-2 1.4435 X2CrNiMo18-14-3 1.4541 X6CrNiTi18-10 1.4571 X6CrNiMoTi17-12-2	31 Cast iron 0.6015 GG15 0.6020 GG20 0.6025 GG25 0.6030 GG30
32 Spheroidal graphite + malleable cast iron 0.7040 GGG40 0.7043 GGG40.3 0.7050 GGG50 0.7060 GGG60 0.7080 GGG80	61 Pure copper (electrolytic copper) 2.0060 E-Cu57 (E-Cu)	63 Long chip brass 2.0240 CuZn15 (Ms85) 2.0265 CuZn30 (Ms70) 2.0321 CuZn37 (Ms63)	72 Al alloyed Si < 1.5% 3.1255 AlCuSiMn 3.1355 AlCuMg2 3.2315 AlMgSi1 3.3206 AlMgSi0.5 3.4345 AlZnMgCu0.5
73 Al alloyed Si > 1.5% - < 10% 3.2161 G-AlSi8Cu3 3.2162 GD-AlSi8Cu3 3.2341 G-AlSi5Mg 3.2371 G-AlSi7Mg	74 Al alloyed Si > 10% Mg-alloys 3.2381 G-AlSi10Mg 3.2382 GD-AlSi10Mg 3.2581 G-AlSi12 3.2583 G-AlSi12 (Cu)		

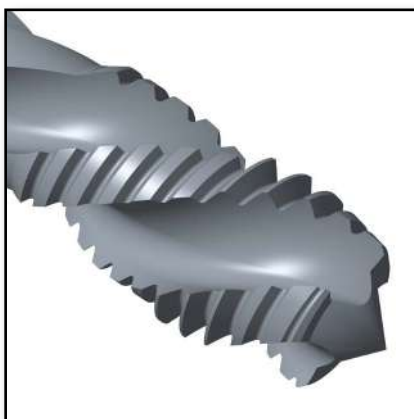
A COMPLETE PROGRAMME

DC has developed "multirange" taps **type RTS**, for through and blind holes, with and without internal coolant. These taps are designed to take advantage of "Rigid Tapping" and are capable of overcoming the negative effects by incorporating the following features:

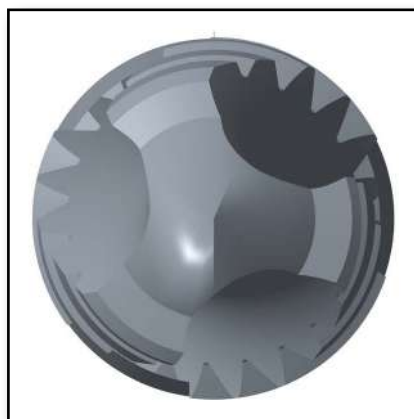
- Cutting geometry suitable for a wide range of current materials up to 1'150 N/mm² tensile strength, contributing to tool rationalisation and consequently to important cost reduction.
- Flute profile and double surface coating, which in spite of variable cutting speed ensure efficient swarf removal.
- Wide standard programme in M, MF, UNC, UNF and G (BSP), from Ø 2 up to 24 mm, as well as in several tolerances.



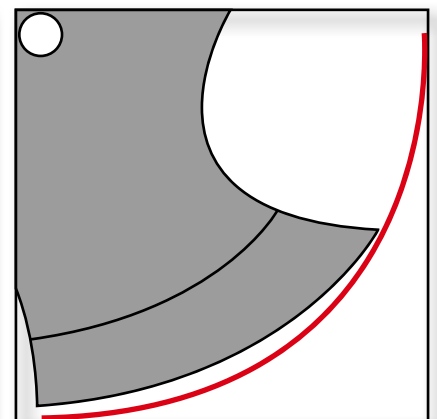
Truncated thread



Efficient swarf forming

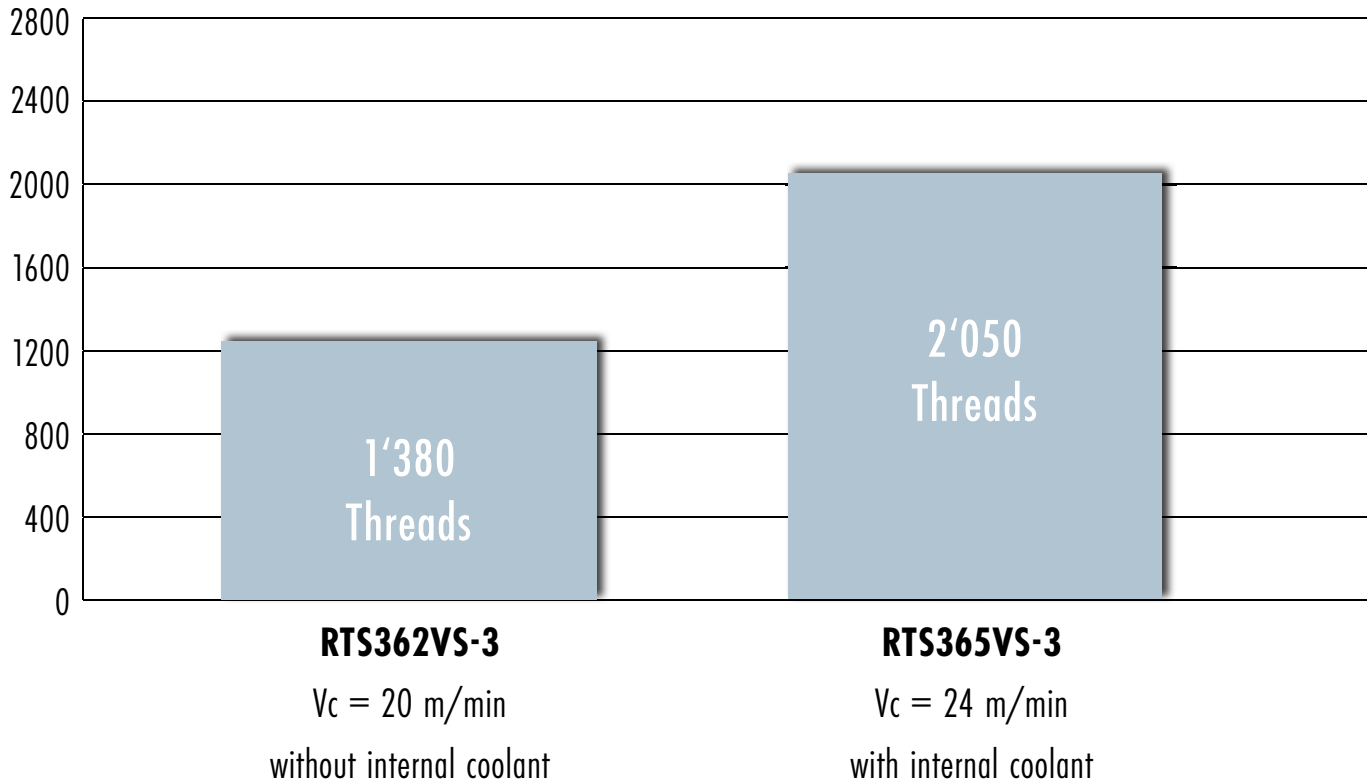


Strong relief



THE CHAMPION IN DETAIL

Material:	Alloy steel, 1.2363/ AISI A2	Core hole depth:	33 mm
Tensile strength:	850 N/mm ²	Threading depth:	25 mm
Thread size:	M10 6H	Working method:	Rigid Tapping
Kind of hole:	Blind hole	Position:	Vertical
		Lubricant:	Emulsion 10%



THE PERFECT CHOICE

DC Swiss offers a specific total solution adapted to this modern machining method; a tapping chuck with axial shock absorber, **type SRT**, Soft Rigid Tapping. This tapping chuck, suitable for quick change systems is able to overcome the axial pressure applied to the cutting edges when the spindle reverses, and therefore increasing the tap life.



SRT tapping chucks see page 15

SRT



APPLICATION CHART FOR RIGID TAPPING

From page

M

MF

UNC

UNF

G

RTS

6

7

10

10

11

11

12

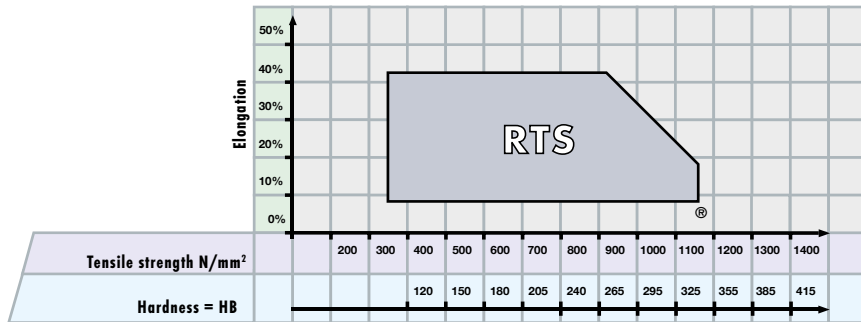
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13

13

14

RTS Rigid Tapping



Use :

E suitable with emulsion

B optimal with emulsion



Material classification

Material groups	Material designation	Hardness (HB)	Tensile strength R _m (N/mm ²)	Elongation A (%)	V _c (m/min) < Ø 20 mm Guide line Coated VS	RTS .20VS RTS .23VS	RTS .62VS RTS .65VS	RTS523VS RTS623VS	RTS565VS RTS665VS	
10 Steels	11 Free-cutting steels	< 200	< 700	< 10	20 – 40	B	B	B	B	11
	12 Structural / cementation steels	< 200	< 700	< 30	20 – 40	B	B	B	B	12
	13 Carbon steels	< 300	< 1000	< 20	16 – 24	B	B	B	B	13
	14 Alloy steels < 850 N/mm ²	< 250	< 850	< 30	16 – 24	E	E	E	E	14
	15 Alloy steels hard. / temp. > 850 - < 1150 N/mm ²	> 250	> 850	< 30	6 – 12	E	E	E	E	15
	16 High tensile alloy steels	> 250	> 850	< 12						16
20 Stainless Steels	21 Free machining stainless steels	< 250	< 850	< 25	20 – 40	B	B	B	B	21
	22 Austenitic stainless steels	< 250	< 850	> 20	6 – 12	E	E	E	E	22
	23 Ferritic and martensitic < 850 N/mm ²	< 250	< 850	> 20						23
	24 Ferritic and martens. > 850 - < 1150 N/mm ²	> 250	> 850	> 15						24
30 Cast iron	31 Cast iron	< 250	< 850	< 10	20 – 40	B	B	B	B	31
	32 Spheroidal graphite + malleable cast iron	< 250	< 850	> 10	20 – 40	B	B	B	B	32
40 Titanium	41 Pure titanium	< 250	< 850	> 20						41
	42 Titanium alloys	> 250	> 850	< 20						42
50 Nickel	51 Nickel alloys 1 < 850 N/mm ²	< 250	< 850	> 25						51
	52 Nickel alloys 2 > 850 - < 1150 N/mm ²	> 250	> 850	< 25						52
	53 Nickel alloys 3 > 1150 - ≤ 1600 N/mm ²	> 340	> 1150	< 20						53
60 Copper	61 Pure copper (electrolytic copper)	< 120	< 400	> 12	10 – 20	E	E	E	E	61
	62 Short chip brass, phosphor bronze, gun metal	< 200	< 700	< 12						62
	63 Long chip brass	< 200	< 700	> 12	20 – 40	B	B	B	B	63
70 Aluminium Magnesium	71 Al unalloyed	< 100	< 350	> 15						71
	72 Al alloyed Si < 1.5 %	< 150	< 500	> 15	30 – 50	B	B	B	B	72
	73 Al alloyed Si > 1.5 % - < 10 %	< 120	< 400	< 15	20 – 40	B	B	B	B	73
	74 Al alloyed Si > 10 %, Mg-Alloys	< 120	< 400	< 10	20 – 40	B	B	B	B	74
80 Plastic compounds	81 Thermoplastics	-	-	-						81
	82 Duroplastics	-	-	-						82
	83 Glass fibre reinforced plastics	-	-	-						83

EXAMPLES FOR APPLICATION GROUPS

11 Free-cutting steels

1.0711 9S20
1.0715 9SMn28
1.0718 9SMnPb28
1.0726 3S520
1.0737 9SMnPb36

12 Structural, cementation steels

1.0037 S137-2 (S235JR)
1.0050 S150-2 (E295)
1.0060 S160-2 (E335)
1.5919 15CrNi6
1.7131 16MnCr5

13 Carbon steels

1.0503 C45
1.0535 C55
1.0601 C60
1.1545 C105W1
1.2067 102Cr6 (100Cr6)

14 Alloy steels < 850 N/mm²

1.2363 X100CrMoV5-1
1.3551 80MoCrV42-16
1.7218 25CrMo4
1.7220 34CrMo4
1.7225 42CrMo4

15 Alloy steels hard./temp. >850 - <1150 N/mm²

1.3553 X82WMoCrV6-5-4
1.6580 30CrNiMo8
1.7220 34CrMo4
1.7225 42CrMo4
1.8507 34CrAlMo5

21 Free machining stainless steels

1.4005 X12CrS13
1.4104 X14CrMoS17
1.4305 X10CrNiS18-9

22 Austenitic stainless steels

1.4301 X5CrNi18-10
1.4406 X2CrNiMoN17-12-2
1.4435 X2CrNiMo18-14-3
1.4541 X6CrNiTi18-10
1.4571 X6CrNiMoTi17-12-2

31 Cast iron

0.6015 GG15
0.6020 GG20
0.6025 GG25
0.6030 GG30

32 Spheroidal graphite + malleable cast iron

0.7040 GGG40
0.7043 GGG40.3
0.7050 GGG50
0.7060 GGG60
0.7080 GGG80

61 Pure copper (electrolytic copper)

2.0060 E-Cu57 (E-Cu)

63 Long chip brass

2.0240 CuZn15 (Ms85)
2.0265 CuZn30 (Ms70)
2.0321 CuZn37 (Ms63)

72 Al alloyed Si < 1.5 %

3.1255 AlCuSiMn
3.1355 AlCuMg2
3.2315 AlMgSi1
3.3206 AlMgSi0.5
3.4345 AlZnMgCu0.5

73 Al alloyed Si > 1.5 % - < 10 %

3.2161 G-ALSi8Cu3
3.2162 GD-ALSi8Cu3
3.2341 G-ALSi5Mg
3.2371 G-ALSi7Mg

74 Al alloyed Si > 10 % Mg-Alloys

3.2381 G-ALSi10Mg
3.2382 GD-ALSi10Mg
3.2581 G-ALSi12
3.2583 G-ALSi12 (Cu)

Reference: DIN

11 Free-cutting steels

1.0711 1212
1.0715 1213
1.0718 12L13
1.0726 1140
1.0737 12L14

12 Structural, cementation steels

1.0037 1015
1.0050 A570 Gr.50
1.0060 A572 Gr.65
1.5919 3115
1.7131 5115

13 Carbon steels

1.0503 1045
1.0535 1055
1.0601 1060
1.1545 W110
1.2067 L3

14 Alloy steels < 850 N/mm²

1.2363 A2
1.3551 M50
1.7218 4130
1.7220 4135
1.7225 4140

15 Alloy steels hard./temp. >850 - <1150 N/mm²

1.3553 -
1.6580 4340
1.7220 4135
1.7225 4140
1.8507 A355CLD (K23510)

21 Free machining stainless steels

1.4005 416
1.4104 430F
1.4305 303

22 Austenitic stainless steels

1.4301 304
1.4406 316LN
1.4435 316L
1.4541 321
1.4571 316Ti

31 Cast iron

0.6015 A48-25B
0.6020 A48-30B
0.6025 A48-40B
0.6030 A48-45B

32 Spheroidal graphite + malleable cast iron

0.7040 60-40-18
0.7043 -
0.7050 65-45-12
0.7060 80-55-06
0.7080 120-90-02

61 Pure copper (electrolytic copper)

2.0060 C11000

63 Long chip brass

2.0240 C23000
2.0265 C26000
2.0321 C27200

72 Al alloyed Si < 1.5 %

3.1255 2014
3.1355 2024
3.2315 6082
3.3206 6060
3.4345 7020

73 Al alloyed Si > 1.5 % - < 10 %

3.2161 380.1
3.2162 -
3.2341 -
3.2371 A 356.2

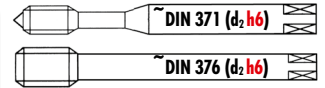
74 Al alloyed Si > 10 % Mg-Alloys

3.2381 A360
3.2382 -
3.2581 A413
3.2583 413.1

Reference: AISI



Uniquement pour taraudage synchrone
Nur für Synchrobearbeitung
Only for rigid tapping
Solo per maschiatura sincrona
Solo para roscado sincronizado



RTS

Rigid Tapping Synchro

RTS320VS-4



11	12	13	14
15	21	22	31
32	61	63	72
73	74		

RTS420VS-4



RTS323VS-4



11	12	13	14
15	21	22	31
32	61	63	72
73	74		

RTS423VS-4

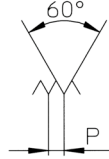
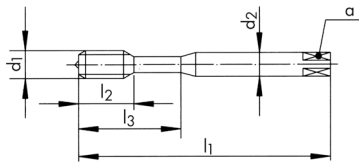


RTS320VS-4

RTS420VS-4

RTS323VS-4

RTS423VS-4



6HX

6HX

6HX

6HX

$\varnothing d_1$ M	P mm	l_1 mm	l_2 mm	l_3 mm	d_2 h6 mm	α mm		
*2	0.40	45	8.0		2.8(h9)	2.1	2	1.60
2.5	0.45	50	10.0		2.8(h9)	2.1	3	2.05
3	0.50	56	5.5	18	3.5(h9)	2.7	3	2.50
4	0.70	63	7.5	21	4.5(h9)	3.4	3	3.30
5	0.80	70	9.0	25	6.0	4.9	3	4.20
6	1.00	80	11.0	30	6.0	4.9	3	5.00
8	1.25	90	12.5	35	8.0	6.2	3	6.80
10	1.50	100	14.0	39	10.0	8.0	3	8.50
12	1.75	110	14.0		*10.0	*8.0	3	10.20
14	2.00	110	14.0		*12.0	*9.0	3	12.00
16	2.00	110	18.0		12.0	9.0	3	14.00
20	2.50	140	24.0		16.0	12.0	4	17.50
24	3.00	160	27.0		16.0	12.0	4	21.00

ID

ID

ID

ID

143532

143534

150601

150603

150605

150606

150610

150611

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151863

151864

162535

150670

150671

150679

162787

* DC Norm

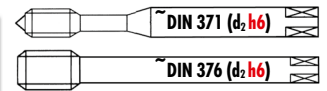
* RTS320VS-3



sur demande
auf Anfrage
on request
su richiesta
sobre pedido



Uniquement pour taraudage synchro
Nur für Synchrobearbeitung
Only for rigid tapping
Solo per maschiatura sincrona
Solo para roscado sincronizado



RTS

Rigid Tapping Synchro

RTS362VS-3 RTS462VS-3 RTS365VS-3 RTS465VS-3



RTS362VS-3



11	12	13	14
15	21	22	31
32	61	63	72
73	74		

RTS462VS-3

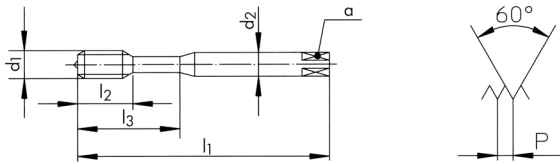


RTS365VS-3



11	12	13	14
15	21	22	31
32	61	63	72
73	74		

RTS465VS-3



∅ d ₁ M	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ h6 mm	a mm		
*2	0.40	45	7.0		2.8 (h9)	2.1	3	1.60
*2.5	0.45	50	9.0		2.8 (h9)	2.1	3	2.05
3	0.50	56	5.5	18	3.5 (h9)	2.7	3	2.50
4	0.70	63	7.5	21	4.5 (h9)	3.4	3	3.30
5	0.80	70	9.0	25	6.0	4.9	3	4.20
6	1.00	80	11.0	30	6.0	4.9	3	5.00
8	1.25	90	12.5	35	8.0	6.2	3	6.80
10	1.50	100	14.0	39	10.0	8.0	3	8.50
12	1.75	110	14.0		*10.0	*8.0	3	10.20
14	2.00	110	14.0		*12.0	*9.0	3	12.00
16	2.00	110	18.0		12.0	9.0	3	14.00
20	2.50	140	24.0		16.0	12.0	4	17.50
24	3.00	160	27.0		16.0	12.0	4	21.00

ID	ID	ID	ID
143536			
143538			
150602		160477	
150604		160478	
150607		150608	
150612		150613	
150622		150623	
150637		150638	
	151865		151866
	151870		150663
	150672		150673
	150681		150682
	151873		150690

* DC Norm

* RTS360VS-3

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sobre pedido

≥ ∅ 6 mm

RTS

Rigid Tapping Synchro

RTS362VS-5



VS



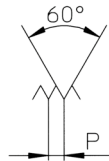
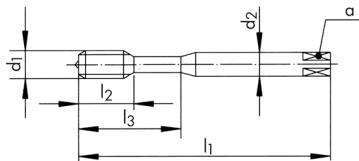
RTS365VS-5



VS

RTS362VS-5

RTS365VS-5



6HX

6HX

∅ d ₁ M	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ h6 mm	a mm		
3	0.50	56	5.5	18	3.5 (h9)	2.7	3	2.50
4	0.70	63	7.5	21	4.5 (h9)	3.4	3	3.30
5	0.80	70	9.0	25	6.0	4.9	3	4.20
6	1.00	80	11.0	30	6.0	4.9	3	5.00
8	1.25	90	12.5	35	8.0	6.2	3	6.80
10	1.50	100	14.0	39	10.0	8.0	3	8.50

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ID

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157650

157652

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158076

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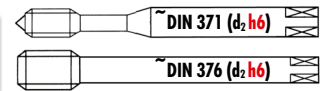
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on request
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sobre pedido



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Solo para roscado sincronizado



RTS

Rigid Tapping Synchro

RTS362VS-3



RTS462VS-3

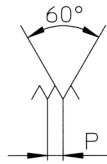
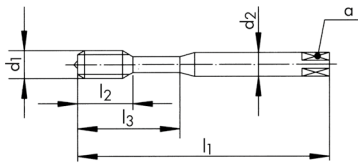


RTS362VS-3

RTS462VS-3

RTS362VS-3

RTS462VS-3



∅ d ₁ M	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ h6 mm	α mm		6H mm
3	0.50	56	5.5	18	3.5 (h9)	2.7	3	2.50
4	0.70	63	7.5	21	4.5 (h9)	3.4	3	3.30
5	0.80	70	9.0	25	6.0	4.9	3	4.20
6	1.00	80	11.0	30	6.0	4.9	3	5.00
8	1.25	90	12.5	35	8.0	6.2	3	6.80
10	1.50	100	14.0	39	10.0	8.0	3	8.50
12	1.75	110	14.0		*10.0	*8.0	3	10.20
16	2.00	110	18.0		12.0	9.0	3	14.00

* DC Norm

ID	6H + mm	ID	6H + mm	ID	6H + mm	ID	6H + mm
162797	0.020			184689	0.036		
162798	0.022			184691	0.041		
162799	0.024			184693	0.044		
162800	0.026			184695	0.050		
162801	0.028			184697	0.052		
162802	0.032			184699	0.060		
		163253	0.034			184701	0.066
		172037	0.038			184703	0.072

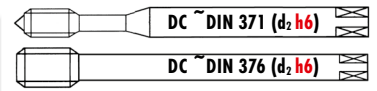


sur demande
auf Anfrage
on request
su richiesta
sobre pedido

≥ ∅ 6 mm



Uniquement pour taraudage synchrone
Nur für Synchrobearbeitung
Only for rigid tapping
Solo per maschiatura sincrona
Solo para roscado sincronizado



RTS

Rigid Tapping Synchro

RTS523VS-4



11	12	13	14
15	21	22	31
32	61	63	72
73	74		

RTS623VS-4



11	12	13	14
15	21	22	31
32	61	63	72
73	74		

RTS565VS-3

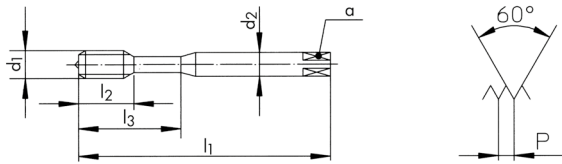


11	12	13	14
15	21	22	31
32	61	63	72
73	74		

RTS665VS-3



11	12	13	14
15	21	22	31
32	61	63	72
73	74		



RTS523VS-4

RTS623VS-4

RTS565VS-3

RTS665VS-3



∅ d ₁ M	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ h6 mm	a mm		
5	0.80	125	9.0	25	6.0	4.9	3	4.20
6	1.00	125	11.0	30	6.0	4.9	3	5.00
8	1.25	140	12.5	35	8.0	6.2	3	6.80
10	1.50	160	14.0	39	10.0	8.0	3	8.50
12	1.75	180	14.0		*10.0	*8.0	3	10.20
16	2.00	200	18.0		12.0	9.0	3	14.00

* DC Norm

ID	ID
161038	
161041	
161044	
161047	
	161050
	161053

∅ d ₁ M	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ h6 mm	a mm		
6	1.00	125	11.0	30	6.0	4.9	3	5.00
8	1.25	140	12.5	35	8.0	6.2	3	6.80
10	1.50	160	14.0	39	10.0	8.0	3	8.50
12	1.75	180	14.0		*10.0	*8.0	3	10.20
16	2.00	200	18.0		12.0	9.0	3	14.00

* DC Norm

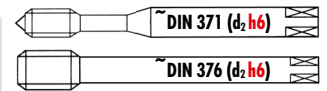
ID	ID	
	150614	
	150624	
	150639	
		151867
		150674



sur demande
auf Anfrage
on request
su richiesta
sobre pedido



Uniquement pour taraudage synchrone
Nur für Synchrobearbeitung
Only for rigid tapping
Solo per maschiatura sincrona
Solo para roscado sincronizado



RTS

Rigid Tapping Synchro

RTS320VS-4 RTS420VS-4 RTS362VS-3 RTS462VS-3



RTS320VS-4



11	12	13	14
15	21	22	31
32	61	63	72
73	74		

RTS420VS-4

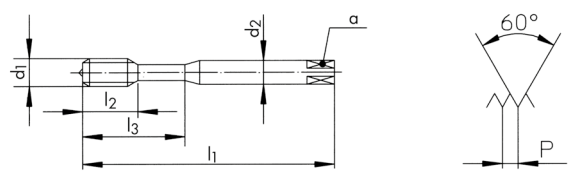


RTS362VS-3



11	12	13	14
15	21	22	31
32	61	63	72
73	74		

RTS462VS-3



∅ d ₁ MF	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ h6 mm	a mm		
8	1.00	90	12.5	35	8.0	6.2	3	7.00
10	1.00	100	14.0	39	10.0	8.0	3	9.00
12	1.50	110	14.0		*10.0	*8.0	3	10.50
14	1.50	110	14.0		*12.0	*9.0	3	12.50
16	1.50	110	18.0		12.0	9.0	3	14.50

ID	ID
150615	
150630	
	150640
	150655
	150665

* DC Norm

∅ d ₁ MF	P mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ h6 mm	a mm		
8	1.00	90	12.5	35	8.0	6.2	3	7.00
10	1.00	100	14.0	39	10.0	8.0	3	9.00
12	1.50	110	14.0		*10.0	*8.0	3	10.50
14	1.50	110	14.0		*12.0	*9.0	3	12.50
16	1.50	110	18.0		12.0	9.0	3	14.50

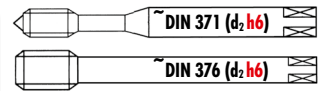
ID	ID	
	150617	
	150632	
		151862
		151869
		151871

* DC Norm

sur demande
auf Anfrage
on request
su richiesta
sobre pedido
≥ ∅ 6 mm



Uniquement pour taraudage synchrone
Nur für Synchronbearbeitung
Only for rigid tapping
Solo per maschiatura sincrona
Solo para roscado sincronizado



RTS

Rigid Tapping Synchro

RTS320VS-4



VS



RTS420VS-4



VS

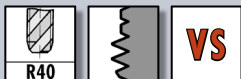
RTS362VS-3



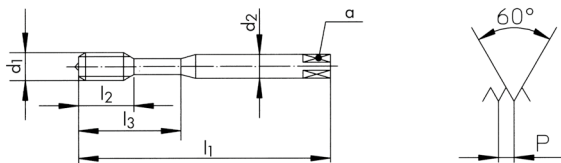
VS



RTS462VS-3



VS



RTS320VS-4

RTS420VS-4

RTS362VS-3

RTS462VS-3



Ø" d ₁ UNC	P TPI	d ₁ mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ h6 mm	a mm		
6	32	3.50	56	6.5	20	4.0(h9)	3.0	3	2.75
8	32	4.16	63	7.5	21	4.5(h9)	3.4	3	3.40
10	24	4.82	70	9.0	25	6.0	4.9	3	3.80
1/4	20	6.35	80	11.0	30	*6.0	*4.9	3	5.10
5/16	18	7.93	90	12.5	35	8.0	6.2	3	6.50
3/8	16	9.52	100	14.0	39	10.0	8.0	3	8.00
1/2	13	12.70	110	14.0		*10.0	*8.0	3	10.80

* DC Norm

ID

ID

ID

ID

157395

157402

157396

157403

157397

157404

157398

157405

157399

157406

157400

157407

157401

157408

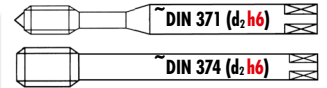


sur demande
auf Anfrage
on request
su richiesta
sobre pedido

≥ Ø 6 mm



Uniquement pour taraudage synchrone
Nur für Synchronbearbeitung
Only for rigid tapping
Solo per maschiatura sincrona
Solo para roscado sincronizado



RTS

Rigid Tapping Synchro

RTS320VS-4 RTS420VS-4 RTS362VS-3 RTS462VS-3



RTS320VS-4



11	12	13	14
15	21	22	31
32	61	63	72
73	74		

RTS420VS-4

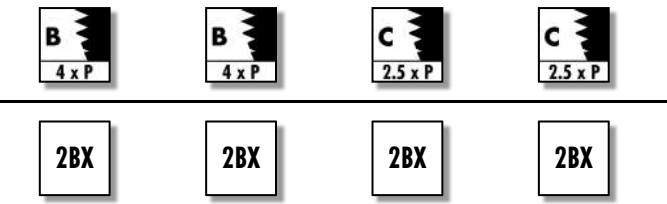
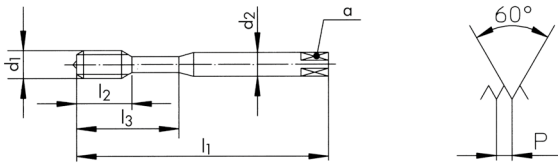
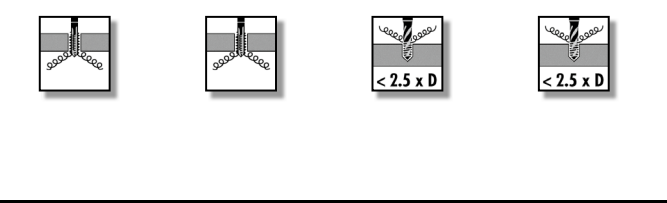


RTS362VS-3



11	12	13	14
15	21	22	31
32	61	63	72
73	74		

RTS462VS-3



Ø" d ₁ UNF	P TPI	d ₁ mm	l ₁ mm	l ₂ mm	l ₃ mm	d ₂ h6 mm	a mm		
10	32	4.82	70	9.0	25	6.0	4.9	3	4.05
1/4	28	6.35	80	11.0	30	*6.0	*4.9	3	5.50
5/16	24	7.93	90	12.5	35	8.0	6.2	3	6.90
3/8	24	9.52	100	14.0	39	10.0	8.0	3	8.50
1/2	20	12.70	110	14.0		*10.0	*8.0	3	11.40

ID	ID	ID	ID
157409		157413	
157410		157414	
157411		157415	
157412		157416	
	157417		157418

* DC Norm



sur demande
auf Anfrage
on request
su richiesta
sobre pedido

G

DIN ISO 228 (BSP)



Uniquement pour taraudage synchrone
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 Solo per maschiatura sincrona
 Solo para roscado sincronizado

PM

RTS

Rigid Tapping Synchro

RTS462VS-3

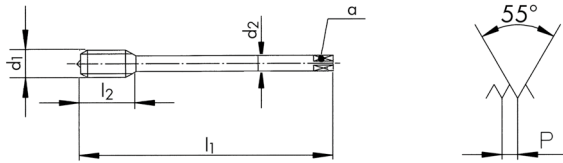


RTS462VS-5



RTS462VS-3

RTS462VS-5



\varnothing " d ₁ G	P TPI	d ₁ mm	l ₁ mm	l ₂ mm	d ₂ h6 mm	α mm		
1/8	28	9.72	100	14.0	* 8.0	* 6.2	3	8.75
1/4	19	13.15	110	14.0	* 12.0	* 9.0	3	11.60
3/8	19	16.66	110	18.0	12.0	9.0	4	15.20
1/2	14	20.95	125	20.0	16.0	12.0	4	18.90

* DC Norm

ID

ID

151861

170629

151868

170631

151872

170633

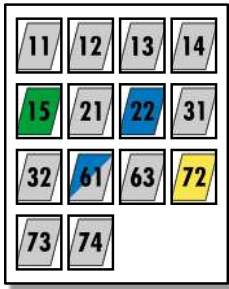
150685

170635





sur demande
 auf Anfrage
 on request
 su richiesta
 sobre pedido

PICTOGRAPHS



For material groups as per DC application chart

 Reinforced shank, ~DIN 371 (d_2 h6)

 Reduced shank, ~DIN 376 (d_2 h6)



Straight flutes with spiral point



1.5 - 2 chamfered threads, form E



40° right hand spiral flutes



Tolerance class 6HX



HSSE-PM



Internal coolant with radial outflow



Through holes
for long chipping materials



Internal coolant with frontal outflow



Blind holes
for long chipping materials $< 2.5 \times D$



Truncated thread



3.5 - 5 chamfered threads, form B



DC wear-protective coating



2 - 3 chamfered threads, form C



Only for rigid tapping

THIS IS DC SWISS

 **SWISS MADE**



▶ **Thread cutting**



▶ **Thread forming**



▶ **Crown tap**



▶ **Thread milling**



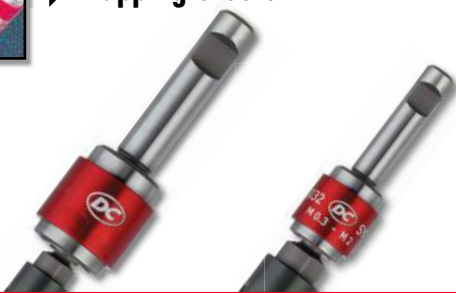
▶ **Thread gauges**



▶ **Thread dies**



▶ **Tapping chucks**





« AS A MECHANICAL SUBCONTRACTOR WE ARE CONFRONTED TO A HUGE VARIETY OF DIFFERENT MATERIALS. THIS IS WHY WE NEED A RELIABLE AND ON THE SAME TIME UNIVERSAL TAPPING SOLUTION. WITH THE RTS WE FINALLY FOUND THE RIGHT ANSWER. »



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