

THREAD MILLING

INSERTS



Thread milling inserts offer versatility by producing both internal and external threads without the need for tool changes. Featuring various thread profile types, inserts enable the production of diverse thread types and pitches simply by replacing them with another insert. This flexibility streamlines the machining process, enhancing productivity and precision in thread milling operations.

As pastilhas para fresagem de rosca oferecem versatilidade ao produzir rosca interna e externa sem a necessidade de trocar de ferramenta. Com diversos tipos de perfil de rosca, as pastilhas permitem a produção de diferentes passos de rosca, substituindo-as por outra pastilha. Essa flexibilidade otimiza o processo de usinagem, aumentando a produtividade e a precisão nas operações de roscagem.

Las plaquitas de fresado de rosca ofrecen versatilidad al producir rosca interna y externa sin necesidad de cambio de herramienta. Con diferentes tipos de perfil de rosca, las plaquitas permiten realizar diferentes pasos de rosca, sustituyéndolos por otro inserto. Esta flexibilidad optimiza el proceso de mecanizado, aumentando la productividad y la precisión en las operaciones de roscado.

INSERTS > page 940

- > Internal and external threads

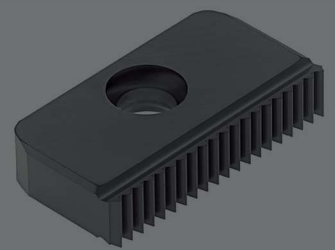
Roscas internas e externas | Hilos internos y externos

- > Full profile: ISO, UN, WHIT, BSPT, NPT, NPTF, ABUT, ACME and others

Perfil completo: ISO, ONU, WHIT, BSPT, NPT, NPTF, ABUT, ACME e outros | Perfil completo: ISO, ONU, WHIT, BSPT, NPT, NPTF, ABUT, ACME e outros

- > Multiple sizes and thread pitches

Multiplos tamanhos e passos de rosca | Múltiples tamaños y pasos de rosca

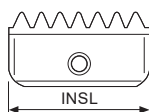


THREAD MILLING INSERTS CODE KEY

Codificação ISO para pastilhas de fresagem de rosca | Codificación ISO para plaquitas de fresado de rosca

30	E	20	UN	PH7920
1	2	3	4	5

1 - Insert Size



12

14

21

30

40

2 - Insert Hand Type

E

External

I

Internal

I/E

Internal + External

3 - Pitch

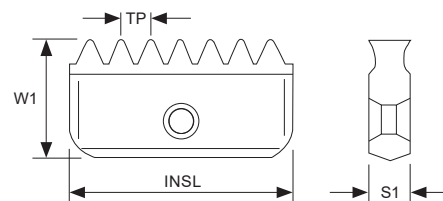
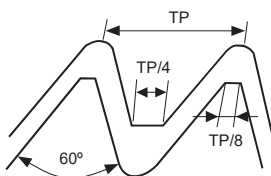
Example: 20 = 20.00

4 - Profile Type

Symbol	Profile Type	Symbol	Profile Type	Symbol	Profile Type
ISO	ISO METRIC	NPT	NPT	ACME	AMERICAN ACME
UN	AMERICAN UN	NPTF	NPTF	PG	PG
W	WITHWORTH	NPS	NPS	UNJ	UNJ
BSPT	BSPT	NPSF	NPSF	ABUT	AMERICAN BUTTRESS

5 - Grades

PH7920



INS L	S1	W1
12	2,9	6,3
14	3,1	7,5
21	4,7	12
30	5,5	16
40	6,3	20

External

P (Pitch)	Dimensions Dimensões Dimensiones (mm)								Stock grade code ⁽²⁾
	14		21		30		40		
	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	(G4) PH7920
0.75 EXT	2123972	14 E 0.75 ISO							⊗
0.80 EXT	2124202	14 E 0.80 ISO							⊗
1.00 EXT	2123973	14 E 1.00 ISO	2123987	21 E 1.00 ISO					⊗
1.25 EXT	2123974	14 E 1.25 ISO							⊗
1.50 EXT	2123975	14 E 1.50 ISO	2123988	21 E 1.50 ISO	2123999	30 E 1.50 ISO	2124012	40 E 1.50 ISO	⊗
1.75 EXT	2123976	14 E 1.75 ISO							⊗
2.00 EXT	2123977	14 E 2.00 ISO	2123989	21 E 2.00 ISO	2124000	30 E 2.00 ISO	2124013	40 E 2.00 ISO	⊗
2.50 EXT	2123978	14 E 2.50 ISO	2123990	21 E 2.50 ISO					⊗
3.00 EXT			2123991	21 E 3.00 ISO	2124001	30 E 3.00 ISO	2124014	40 E 3.00 ISO	⊗
3.50 EXT					2124002	30 E 3.50 ISO			⊗
4.00 EXT					2124003	30 E 4.00 ISO	2124015	40 E 4.00 ISO	⊗
5.00 EXT							2124016	40 E 5.00 ISO	⊗
6.00 EXT							2124017	40 E 6.00 ISO	⊗

⊗ Stock item | Produto de stock | Itens de stock

Insert order code = (1) Geometry Code + (2) Grade Code

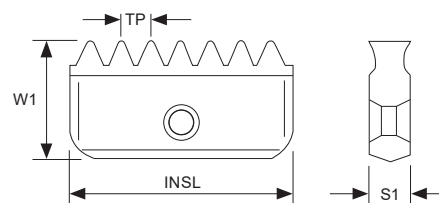
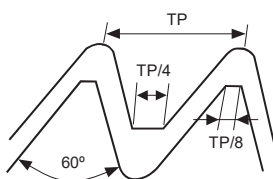
Internal

P (Pitch)	Dimensions Dimensões Dimensiones (mm)										Stock grade code ⁽²⁾
	12		14		21		30		40		
	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	(G4) PH7920
0.50 INT	2123967	12 I 0.50 ISO	2123979	14 I 0.50 ISO							⊗
0.75 INT	2123968	12 I 0.75 ISO	2123980	14 I 0.75 ISO							⊗
1.00 INT	2123969	12 I 1.00 ISO	2123981	14 I 1.00 ISO	2123992	21 I 1.00 ISO					⊗
1.25 INT	2123970	12 I 1.25 ISO	2123982	14 I 1.25 ISO							⊗
1.50 INT	2123971	12 I 1.50 ISO	2123983	14 I 1.50 ISO	2123993	21 I 1.50 ISO	2124004	30 I 1.50 ISO	2124018	40 I 1.50 ISO	⊗
1.75 INT			2123984	14 I 1.75 ISO	2123994	21 I 1.75 ISO					⊗
2.00 INT			2123985	14 I 2.00 ISO	2123995	21 I 2.00 ISO	2124005	30 I 2.00 ISO	2124019	40 I 2.00 ISO	⊗
2.50 INT			2123986	14 I 2.50 ISO	2123996	21 I 2.50 ISO					⊗
3.00 INT					2123997	21 I 3.00 ISO	2124006	30 I 3.00 ISO	2124020	40 I 3.00 ISO	⊗
3.50 INT					2123998	21 I 3.50 ISO	2124007	30 I 3.50 ISO	2124021	40 I 3.50 ISO	⊗
4.00 INT							2124008	30 I 4.00 ISO	2124022	40 I 4.00 ISO	⊗
4.50 INT							2124009	30 I 4.50 ISO	2124023	40 I 4.50 ISO	⊗
5.00 INT							2124010	30 I 5.00 ISO	2124024	40 I 5.00 ISO	⊗
5.50 INT									2124025	40 I 5.50 ISO	⊗
6.00 INT									2124026	40 I 6.00 ISO	⊗

⊗ Stock item | Produto de stock | Itens de stock

Insert order code = (1) Geometry Code + (2) Grade Code

UN UNC, UNF, UNEF, UNS Two cutting edges | Duas arestas de corte | Dos filos de corte



INSL	S1	W1
12	2,9	6,3
14	3,1	7,5
21	4,7	12
30	5,5	16
40	6,3	20

External

P (Pitch)	Dimensions Dimensões Dimensiones (mm)								Stock grade code ⁽²⁾
	14		21		30		40		
	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	(G4) PH7920
32.00 EXT	2124033	14 E 32 UN							⊗
28.00 EXT	2124034	14 E 28 UN							⊗
24.00 EXT	2124035	14 E 24 UN	2124055	21 E 24 UN					⊗
20.00 EXT	2124036	14 E 20 UN	2124056	21 E 20 UN	2124072	30 E 20 UN			⊗
18.00 EXT	2124037	14 E 18 UN	2124057	21 E 18 UN	2124073	30 E 18 UN			⊗
16.00 EXT	2124038	14 E 16 UN	2124058	21 E 16 UN	2124074	30 E 16 UN	2124089	40 E 16 UN	⊗
14.00 EXT	2124039	14 E 14 UN	2124059	21 E 14 UN	2124075	30 E 14 UN	2124090	40 E 14 UN	⊗
13.00 EXT	2124203	14 E 13 UN							⊗
12.00 EXT	2124040	14 E 12 UN	2124060	21 E 12 UN	2124076	30 E 12 UN	2124091	40 E 12 UN	⊗
11.00 EXT	2124041	14 E 11 UN							⊗
10.00 EXT			2124062	21 E 10 UN	2124077	30 E 10 UN	2124092	40 E 10 UN	⊗
8.00 EXT					2124078	30 E 8.0 UN	2124093	40 E 8.0 UN	⊗
6.00 EXT					2124079	30 E 6.0 UN	2124094	40 E 6.0 UN	⊗

⊗ Stock item | Produto de stock | Itens de stock

⊗ Stock available until sold out | Stock disponível até acabar o stock
Stock disponible hasta acabar el stock

Insert order code = (1) Geometry Code + (2) Grade Code

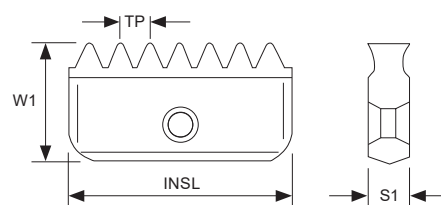
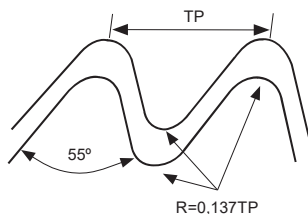
Internal

P (Pitch)	Dimensions Dimensões Dimensiones (mm)										Stock grade code ⁽²⁾
	12		14		21		30		40		
	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	
32.00 INT	2124027	12 I 32 UN	2124043	14 I 32 UN							⊗
28.00 INT	2124028	12 I 28 UN	2124044	14 I 28 UN							⊗
27.00 INT			2124045	14 I 27 UN							⊗
24.00 INT	2124029	12 I 24 UN	2124046	14 I 24 UN	2124063	21 I 24 UN					⊗
20.00 INT	2124030	12 I 20 UN	2124047	14 I 20 UN	2124064	21 I 20 UN	2124080	30 I 20 UN			⊗
18.00 INT	2124031	12 I 18 UN	2124048	14 I 18 UN	2124065	21 I 18 UN	2124081	30 I 18 UN			⊗
16.00 INT	2124032	12 I 16 UN	2124049	14 I 16 UN	2124066	21 I 16 UN	2124082	30 I 16 UN	2124095	40 I 16 UN	⊗
14.00 INT			2124050	14 I 14 UN	2124067	21 I 14 UN	2124083	30 I 14 UN	2124096	40 I 14 UN	⊗
12.00 INT			2124051	14 I 12 UN	2124068	21 I 12 UN	2124084	30 I 12 UN	2124097	40 I 12 UN	⊗
10.00 INT			2124053	14 I 10 UN	2124069	21 I 10 UN	2124085	30 I 10 UN	2124098	40 I 10 UN	⊗
9.00 INT			2124054	14 I 9.0 UN							⊗
8.00 INT					2124070	21 I 8.0 UN	2124086	30 I 8.0 UN	2124099	40 I 8.0 UN	⊗
7.00 INT					2124071	21 I 7.0 UN					⊗
6.00 INT							2124087	30 I 6.0 UN	2124100	40 I 6.0 UN	⊗
5.00 INT							2124088	30 I 5.0 UN			⊗
4.50 INT									2124101	40 I 4.5 UN	⊗
4.00 EXT									2124102	40 I 4.0 UN	⊗

⊗ Stock item | Produto de stock | Itens de stock

⊗ Stock available until sold out | Stock disponível até acabar o stock
Stock disponible hasta acabar el stock

Insert order code = (1) Geometry Code + (2) Grade Code



INSL	S1	W1
12	2,9	6,3
14	3,1	7,5
21	4,7	12
30	5,5	16
40	6,3	20

Same insert for external and internal thread | Mesma pastilha para roscagem externa e interna | Misma plaquita para roscado externo e interno

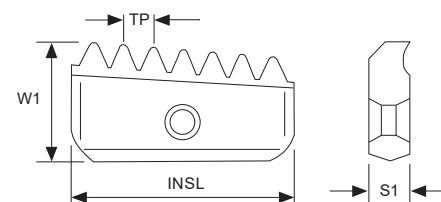
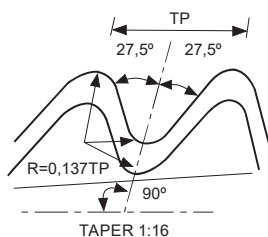
P (Pitch)	Dimensions Dimensões Dimensiones (mm)										Stock grade code ⁽²⁾
	12		14		21		30		40		
	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	(G4) PH7920
24.00			2124104	14 I/E 24 W							⊗
20.00			2124105	14 I/E 20 W	2124110	21 I/E 20 W					⊗
19.00	2124103	12 I/E 19 W*	2124106	14 I/E 19 W	2124111	21 I/E 19 W					⊗
16.00			2124107	14 I/E 16 W	2124112	21 I/E 16 W	2124115	30 I/E 16 W			⊗
14.00			2124108	14 I/E 14 W	2124113	21 I/E 14 W	2124116	30 I/E 14 W			⊗
11.00			2124109	14 I/E 11 W	2124114	21 I/E 11 W	2124117	30 I/E 11 W	2124118	40 I/E 11 W	⊗
8.00									2124119	40 I/E 8 W	⊗

*One cutting edge | Uma aresta de corte | Un filo de corte

⊗ Stock item | Produto de stock | Itens de stock

Insert order code = (1) Geometry Code + (2) Grade Code

BSPT One cutting edge | Uma aresta de corte | Un filo de corte



INSL	S1	W1
12	2,9	6,3
14	3,1	7,5
21	4,7	12
30	5,5	16
40	6,3	20

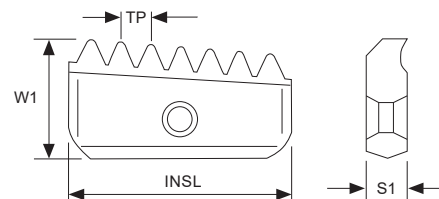
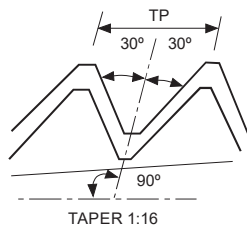
Conical pipe thread milling inserts are one sided and may be used for both external and internal threading | As pastilhas de roscagem para tubos cônicos têm uma face e podem ser usadas para roscagem externa e interna | Las plaquitas de roscado para tubos cônicos tienen una cara y pueden ser usadas para roscado externo e interno.

P (Pitch)	Dimensions Dimensões Dimensiones (mm)										Stock grade code ⁽²⁾
	12		14		21		30		40		
	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	
19.00	2124120	12 I/E 19 BSPT	2124121	14 I/E 19 BSPT							⊗
14.00			2124122	14 I/E 14 BSPT	2124123	21 I/E 14 BSPT					⊗
11.00					2124124	21 I/E 11 BSPT	2124125	30 I/E 11 BSPT	2124126	40 I/E 11 BSPT	⊗

⊗ Stock item | Produto de stock | Itens de stock

Insert order code = (1) Geometry Code + (2) Grade Code

NPT One cutting edge | Uma aresta de corte | Un filo de corte



INS L	S1	W1
12	2,9	6,3
14	3,1	7,5
21	4,7	12
30	5,5	16
40	6,3	20

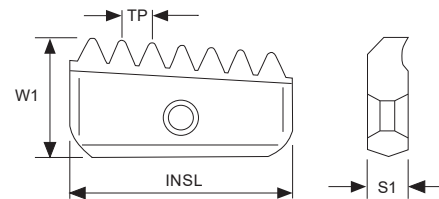
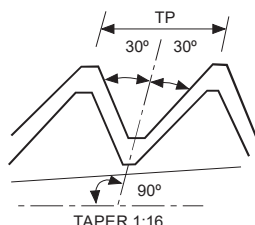
Conical pipe thread milling inserts are one sided and may be used for both external and internal threading | As pastilhas de roscagem para tubos cónicos têm uma face e podem ser usadas para roscagem externa e interna | Las plaquitas de roscado para tubos cónicos tienen una cara y pueden ser usadas para roscado externo e interno.

P (Pitch)	Dimensions Dimensões Dimensiones (mm)										Stock grade code ⁽²⁾
	12		14		21		30		40		
	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	(G4) PH7920
18.00	2124127	12 I/E 18 NPT	2124128	14 I/E 18 NPT							Ⓐ
14.00			2124129	14 I/E 14 NPT	2124130	21 I/E 14 NPT					Ⓐ
11.50					2124131	21 I/E 11.5 NPT	2124132	30 I/E 11.5 NPT	2124134	40 I/E 11.5 NPT	Ⓐ
8.00							2124133	30 I/E 8 NPT	2124135	40 I/E 8 NPT	Ⓐ

Ⓐ Stock item | Produto de stock | Itens de stock

Insert order code = (1) Geometry Code + (2) Grade Code

NPTF One cutting edge | Uma aresta de corte | Un filo de corte



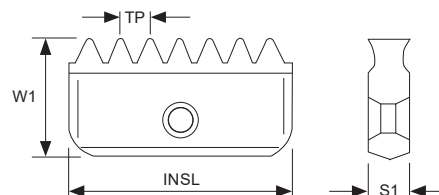
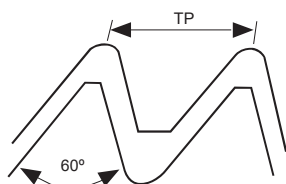
INS L	S1	W1
12	2,9	6,3
14	3,1	7,5
21	4,7	12
30	5,5	16
40	6,3	20

Conical pipe thread turning inserts are one sided and may be used for both external and internal threading | As pastilhas de roscagem para tubos cónicos têm uma face e podem ser usadas para roscagem externa e interna | Las plaquitas de roscado para tubos cónicos tienen una cara y pueden ser usadas para roscado externo e interno.

P (Pitch)	Dimensions Dimensões Dimensiones (mm)										Stock grade code ⁽²⁾
	12		14		21		30		40		
	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	
18.00	2124136	12 I/E 18 NPTF	2124137	14 I/E 18 NPTF							Ⓐ
14.00			2124138	14 I/E 14 NPTF	2124139	21 I/E 14 NPTF					Ⓐ
11.50					2124140	21 I/E 11.5 NPTF	2124141	30 I/E 11.5 NPTF	2124143	40 I/E 11.5 NPTF	Ⓐ
8.00							2124142	30 I/E 8 NPTF	2124144	40 I/E 8 NPTF	Ⓐ

Ⓐ Stock item | Produto de stock | Itens de stock

Insert order code = (1) Geometry Code + (2) Grade Code



INSL	S1	W1
12	2,9	6,3
14	3,1	7,5
21	4,7	12
30	5,5	16
40	6,3	20

Same insert for external and internal thread | Mesma pastilha para roscagem externa e interna | Misma plaquita para roscado externo e interno

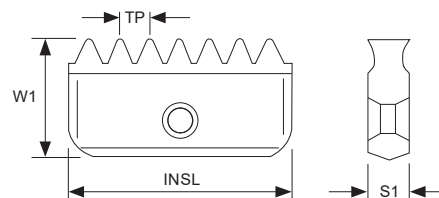
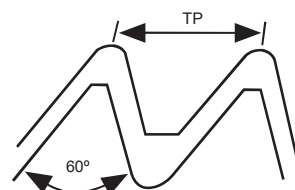
P (Pitch)	Dimensions Dimensões Dimensiones (mm)										Stock grade code ⁽²⁾
	12		14		21		30		40		
	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	(G4) PH7920
18.00	2124145	12 I/E 18 NPS*	2124147	14 I/E 18 NPS							☺
14.00			2124148	14 I/E 14 NPS	2124149	21 I/E 14 NPS					☺
11.50					2124150	21 I/E 11.5 NPS	2124151	30 I/E 11.5 NPS	2124153	40 I/E 11.5 NPS	☺
8.00							2124152	30 I/E 8 NPS	2124154	40 I/E 8 NPS	☺

☺ Stock available until sold out. This item will be discontinued. | Stock disponível até acabar o stock. Este artigo será descontinuado.
Stock disponible hasta acabar el stock. Este ítem será descontinuado.

Insert order code = (1) Geometry Code + (2) Grade Code

*One cutting edge | Uma aresta de corte | Un filo de corte

NPSF Two cutting edges | Duas arestas de corte | Dos filos de corte



INSL	S1	W1
12	2,9	6,3
14	3,1	7,5
21	4,7	12
30	5,5	16
40	6,3	20

Same insert for external and internal thread | Mesma pastilha para roscagem externa e interna | Misma plaquita para roscado externo e interno

P (Pitch)	Dimensions Dimensões Dimensiones (mm)										Stock grade code ⁽²⁾
	12		14		21		30		40		
	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	(G4) PH7920
18.00	2124155	12 I/E 18 NPSF*	2124156	14 I/E 18 NPSF							Ⓢ
14.00			2124157	14 I/E 14 NPSF	2124158	21 I/E 14 NPSF					Ⓢ
11.50					2124159	21 I/E 11.5 NPSF	2124160	30 I/E 11.5 NPSF	2124162	40 I/E 11.5 NPSF	Ⓢ
8.00							2124161	30 I/E 8 NPSF	2124163	40 I/E 8 NPSF	Ⓢ

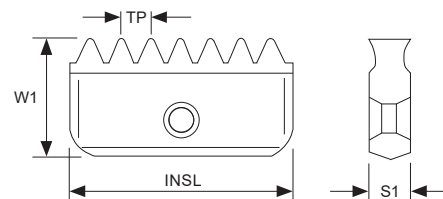
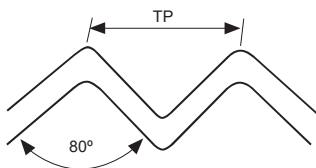
☺ Stock available until sold out. This item will be discontinued. | Stock disponível até acabar o stock. Este artigo será descontinuado.
Stock disponible hasta acabar el stock. Este ítem será descontinuado.

Insert order code = (1) Geometry Code + (2) Grade Code

*One cutting edge | Uma aresta de corte | Un filo de corte

PG DIN 40430

Two cutting edges | Duas arestas de corte | Dos filos de corte



INSL	S1	W1
14	3,1	7,5
21	4,7	12
30	5,5	16

Same insert for external and internal thread | Mesma pastilha para roscagem externa e interna | Misma plaqueta para roscado externo e interno

P (Pitch)	Dimensions Dimensões Dimensiones (mm)						Stock grade code ⁽²⁾
	14		21		30		
	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	(G4) PH7920
18.00	2124164	14 I/E 18 PG	2124165	21 I/E 18 PG			⊗
16.00			2124166	21 I/E 16 PG	2124167	30 I/E 16 PG	⊗

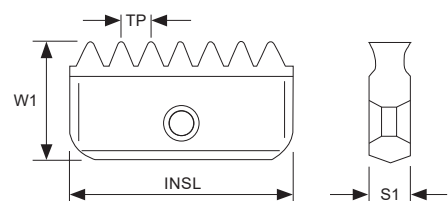
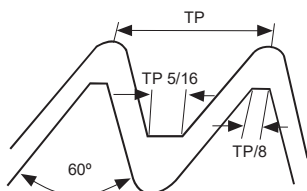
*One cutting edge | Uma aresta de corte | Un filo de corte

⊗ Stock item | Produto de stock | Itens de stock

Insert order code = (1) Geometry Code + (2) Grade Code

UNJ

Two cutting edges | Duas arestas de corte | Dos filos de corte



INSL	S1	W1
14	3,1	7,5
21	4,7	12

Same insert for external and internal thread | Mesma pastilha para roscagem externa e interna | Misma plaqueta para roscado externo e interno

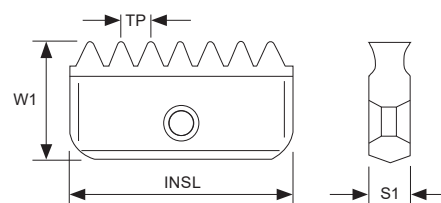
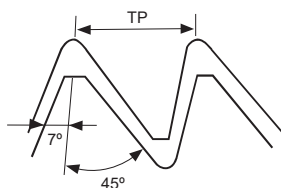
P (Pitch)	Dimensions Dimensões Dimensiones (mm)				Stock grade code ⁽²⁾
	14		21		
	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	(G4) PH7920
24.00	2124168	14 E 24 UNJ	2124174	21 E 24 UNJ	⊗
20.00	2124169	14 E 20 UNJ	2124175	21 E 20 UNJ	⊗
18.00	2124170	14 E 18 UNJ			⊗
16.00	2124171	14 E 16 UNJ			⊗
14.00	2124172	14 E 14 UNJ			⊗
12.00	2124173	14 E 12 UNJ	2124179	21 E 12 UNJ	⊗

⊗ Stock item | Produto de stock | Itens de stock

Insert order code = (1) Geometry Code + (2) Grade Code

Note: For internal UNJ threads it is common to use UN inserts as partial profile tool | Para roscagem interna UNJ é comum utilizar pastilhas UN como ferramenta de perfil parcial | Para roscado interno UNJ é usual utilizar plaquetas UN como herramienta de perfilado parcial

AMERICAN BUTTRESS Two cutting edges | Duas arestas de corte | Dos filos de corte



INSL	S1	W1
21	4,7	12
30	5,5	16

Same insert for external and internal thread | Mesma pastilha para roscagem externa e interna | Misma plaquita para roscado externo e interno

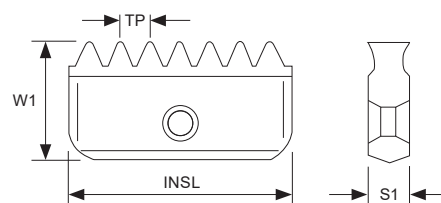
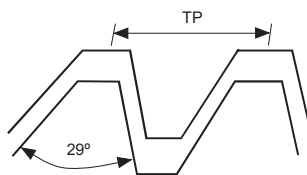
P (Pitch)	Dimensions Dimensões Dimensiones (mm)				Stock grade code ⁽²⁾
	21		30		
	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	(G4) PH7920
16.00	2124180	21 I/E 16 ABUT	2124184	30 I/E 16 ABUT	⊗
12.00	2124181	21 I/E 12 ABUT	2124185	30 I/E 12 ABUT	⊗
10.00	2124182	21 I/E 10 ABUT	2124186	30 I/E 10 ABUT	⊗
8.00	2124183	21 I/E 8 ABUT	2124187	30 I/E 8 ABUT	⊗
6.00			2124188	30 I/E 6 ABUT	⊗
4.00			2124189	30 I/E 4 ABUT	⊗

⊗ Stock item | Produto de stock | Itens de stock

Insert order code = (1) Geometry Code + (2) Grade Code

Note: ABUT thread milling inserts are one-sided and it can be used only on Multi-insert toolholders | As pastilhas de roscagem ABUT são de uma face e só podem ser utilizadas nos suportes de múltiplas pastilhas | Las plaquitas de roscado ABUT son de una cara y sólo se pueden utilizar en las herramientas de múltiples plaquitas

ACME Two cutting edges | Duas arestas de corte | Dos filos de corte



INSL	S1	W1
21	4,7	12
30	5,5	16
40	6,3	20

Same insert for external and internal thread | Mesma pastilha para roscagem externa e interna | Misma plaquita para roscado externo e interno

P (Pitch)	Dimensions Dimensões Dimensiones (mm)						Stock grade code ⁽²⁾
	21		30		40		
	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	Geometry code ⁽¹⁾	Ref.	(G4) PH7920
12.00	2124191	21 I 12 ACME					⊗
10.00							⊗
8.00							⊗
6.00			2124197	30 I 6.0 ACME			⊗
4.00							⊗
3.50							⊗
3.00							⊗

⊗ Stock item | Produto de stock | Itens de stock

Insert order code = (1) Geometry Code + (2) Grade Code

THREAD MILLING

TOOLHOLDERS



Thread milling offers a variable range of toolholders suitable for internal, external, medium, and large threads. It is particularly effective for threading large diameter or blind holes. With reduced cutting force requirements and the ability to use a single tool across various hole sizes, thread milling ensures versatility, process security, efficiency, and precise threading.

A fresagem de roscas oferece uma ampla gama de suportes adequados para roscas internas, externas, de tamanho médio e grande. É particularmente eficaz para furos de grande diâmetro ou cegos. Com requisitos reduzidos de força de corte e a capacidade de usar uma única ferramenta em diferentes tamanhos de furo, garante versatilidade, segurança do processo, eficiência e precisão na roscagem.

El fresado de roscas ofrece una amplia gama de soportes adecuados para roscas internas, externas, medianas y grandes. Es particularmente eficaz para agujeros ciegos o de gran diámetro. Con requisitos de fuerza de corte reducidos y la capacidad de utilizar una sola herramienta en diferentes tamaños de orificios, garantiza versatilidad, seguridad del proceso, eficiencia y precisión en el roscado.

SINGLE INSERT > page 950

TOOLHOLDERS

- > From ØDc 9,5mm to 48,0mm
De ØDc 9,5mm a 48,0mm | Desde ØDc 9,5mm hasta 48,0mm
- > Short and long version on weldon shank
Versão curta e longa com haste weldon | Versión corta y larga con mango weldon
- > Long carbide on cylindrical shank
Haste cilíndrica longa em metal duro | Mango cilíndrico largo en metal duro



DOUBLE INSERT > page 952

TOOLHOLDERS

- > From ØDc 20mm to 50mm
De ØDc 20mm a 50mm | Desde ØDc 20mm hasta 50mm
- > Short version on weldon shank
Versão curta com haste weldon | Versión corta con mango weldon



THREAD MILLING TOOLHOLDERS CODE KEY

Codificação ISO para suportes de fresagem de rosca | Codificación ISO para herramientas de fresado de rosca

W	S	S	N	029	110	A30	-	1
1	2	3	4	5	6	7		8

1 - Mounting type

A	Arbor
E	Cylindrical
W	Weldon

2 - Toolholder material

S	Steel
C	Carbide

3 - Clamping

S	Screw
----------	-------

4 - Operation type

N	Internal + External
E	External

5 - Cutting diameter (ØDC - mm)

Example: 029 = 29 mm

6 - Toolholder length (LF - mm)

Example: 110 = 110 mm

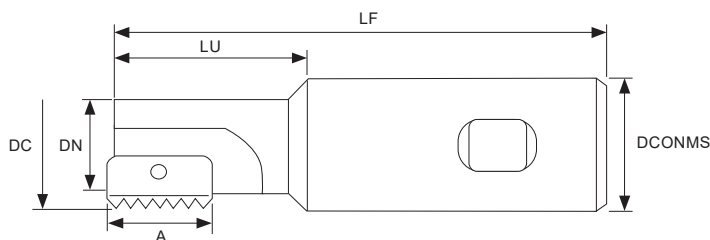
7 - Insert Pocket Size

A12	12 mm
A14	14 mm
A21	21 mm
A30	30 mm
A40	40 mm

8 - Number of inserts

1	2	3	4	5
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WSSN-1



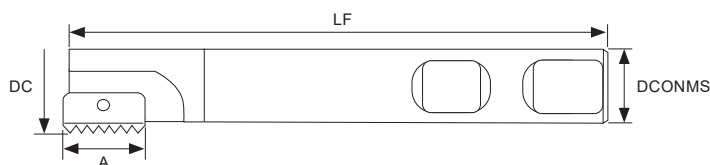
Order Code Código	Reference Referência Referencia	Dimensions Dimensões Dimensiones (mm)						Number of inserts	Stock
		A	DC	DCONMS	DN	LF	LU		
182004400	WSSN 009 085 A12-1	12	9,5	20	7,5	85	14	1	⊗
182008000	WSSN 010 085 A12-1	12	9,9	20	7,6	85	16	1	⊗
182004500	WSSN 012 075 A14-1	14	12,0	20	8,9	75	20	1	⊗
182008100	WSSN 014 085 A14-1	14	14,5	20	11,2	85	25	1	⊗
182008200	WSSN 017 085 A14-1	14	17,0	20	13,4	85	30	1	⊗
182003500	WSSN 018 085 A21-1*	21	18,0	20	14,4	85	30	1	⊗
182003600	WSSN 021 094 A21-1	21	21,0	20	16,5	94	40	1	⊗
182008300	WSSN 029 110 A30-1	30	29,0	25	22,4	110	50	1	⊗
182019600	WSSN 048 153 A40-1	40	48,0	40	35,0	153	78	1	○

⊗ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

*Can not be used with the following inserts: | Não pode ser usado com as seguintes pastilhas: | No se puede utilizar con las siguientes plaquitas:

21 I 3.5 ISO; 21 I 8.0 UN; 21 I 7.0 UN; 21 I/E 11 BSPT; 21 I/E 11.5 NPT; 21 I/E 11.5 NPTF

WSSN-1 Long shank



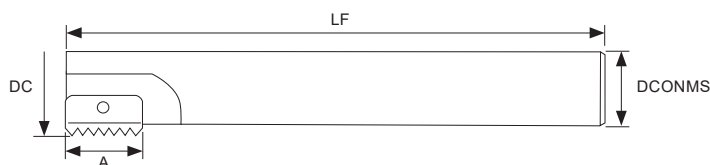
Order Code Código	Reference Referência Referencia	Dimensions Dimensões Dimensiones (mm)				Number of inserts	Stock
		A	DC	DCONMS	LF		
182008600	WSSN 025 125 A21-1	21	25	20	125	1	⊗
182008700	WSSN 031 150 A30-1	30	31	25	150	1	⊗
182019500	WSSN 038 150 A30-1	30	38	32	150	1	⊗
182019700	WSSN 048 210 A40-1	40	48	40	210	1	○

⊗ Stock item | Produto de stock | Itens de stock ○ Available under request | Disponível sobre consulta | Disponible bajo consulta

Note: For holders with long overhang reduce the cutting speed by 20-40%, depending on workpiece, material, pitch and overhang | Para suportes com comprimento elevado reduza a velocidade de corte em 20-40%, dependendo da peça a maquinar, do material, do pitch e comprimento | Para herramientas con longitud elevada reduzca la velocidad de corte en 20-40%, dependiendo de la pieza a mecanizar, del material, del pitch y la longitud.

SINGLE INSERT TOOLHOLDERS

ECSN-1 Long carbide shank



Order Code Código	Reference Referência Referencia	Dimensions Dimensões Dimensiones (mm)				Number of inserts	Stock
		A	DC	DCONMS	LF		
182007400	ECSN 010 125 A12-1*	12	9,9	8	125	1	🔒
182007600	ECSN 013 155 A14-1	14	13,2	10	155	1	🔒
182007700	ECSN 015 175 A14-1	14	15,2	12	175	1	🔒
182007800	ECSN 021 130 A21-1	21	21,0	16	130	1	🔒
182007900	ECSN 021 200 A21-1	21	21,0	16	200	1	🔒

 Stock item | Produto de stock | Itens de stock

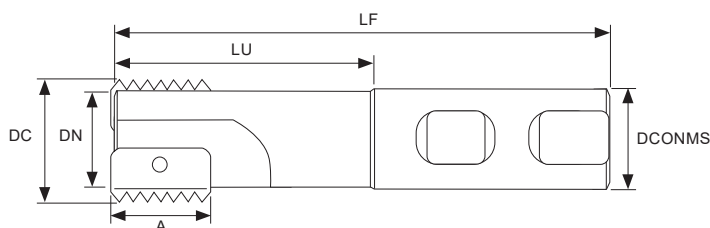
○ Available under request | Disponível sobre consulta | Disponible bajo consulta

* Without coolant bore | Sem furo de refrigeração | Sin agujero de refrigeración

Note: For holders with long overhang reduce the cutting speed by 20-40%, depending on workpiece, material, pitch and overhang | Para soportes con comprimento elevado reduza a velocidade de corte em 20-40%, dependendo da peça a maquinar, do material, do pitch e comprimento | Para herramientas con longitud elevada reduzca la velocidad de corte en 20-40%, dependiendo de la pieza a mecanizar, del material, del pitch y la longitud.

DOUBLE INSERT TOOLHOLDERS

WSSN-2



Order Code Código	Reference Referência Referencia	Dimensions Dimensões Dimensiones (mm)						Number of inserts	Stock
		A	DC	DCONMS	DN	LF	LU		
182004300	WSSN 020 093 A14-2	14	20	20	16	93	41	2	Ⓢ
182008400	WSSN 030 108 A21-2	21	30	25	24	108	52	2	Ⓢ
182008500	WSSN 040 130 A30-2	30	40	32	30	130	70	2	Ⓢ
182019800	WSSN 050 153 A40-2	40	50	40	38	153	78	2	○

 Stock item | Produto de stock | Itens de stock

○ Available under request | Disponível sobre consulta | Disponible bajo consulta

THREAD MILLING TOOLHOLDERS TECHNICAL DATA

Dados técnicos de suportes de fresagem de rosca | Datos técnicos de herramientas de fresado de rosca

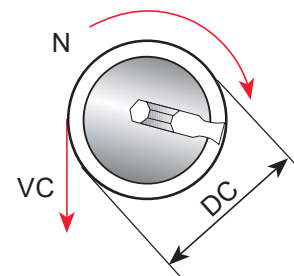
Conversion of selected cutting speed to rotational speed is calculated using the following formulas:

Spindle Speed (rev/min)

$$n = \frac{vc \cdot 1000}{\pi \cdot DC} \quad (\text{RPM})$$

Cutting Speed (m/min)

$$vc = \frac{n \cdot \pi \cdot DC}{1000} \quad (\text{m/min})$$



Nomenclature

DC	- Cutter diameter	(mm)
n	- Spindle Speed	(rev/min)
VC	- Cutting Speed	(m/min)

Example for the following values:

VC = 120 m/min

DC = 30 mm

$$n = \frac{VC \times 1000}{\pi \times D} = \frac{120 \times 1000}{3.14 \times 30} = 1274 \text{ RPM}$$

SPEED AND FEED SELECTION Seleção da velocidade e do avanço | Selección de la velocidad e de avance

TiAlN – Sub-Micron Grade with Titanium Aluminium Nitride multi-layer coating (ISO K10-K20). This is a general purpose grade, which can be used with all materials, it should be run at medium to high cutting speeds.

Recommended feed per tooth: 0.05 - 0.15 mm/t

ISO	Material	Cutting Speed VC (m/min) TiAlN
P	Low and Medium Carbon Steels	115 - 280
	High Carbon Steels	130 - 200
	Treated Steels	105 - 180
M	Stainless Steels, Cast Stainless Steels	130 - 190
	Cast Steels	150 - 190
K	Cast Iron	80 - 170
N	Non-Ferrous and Aluminium	180 - 340
	Synthetics, Duroplastics, Thermoplastics	115 - 460
S	Nickel Alloys, Titanium Alloys	25 - 90