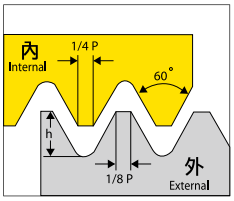
銑牙刀系列

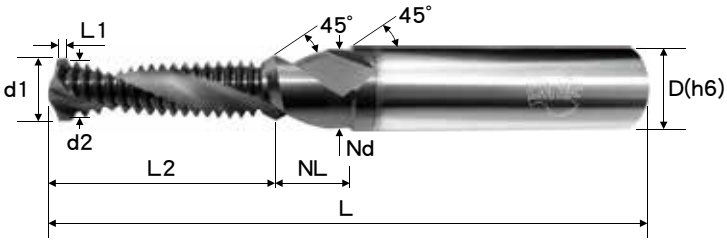
Thread Mills

鎢鋼多功能螺旋鑽銑牙刀(鑽-螺紋-倒角)-內螺紋用(ISO規格)

MICRO GRAIN CARBIDE DRILL- THREAD- CHAMFER- HELIX FLUTE- INTERNAL(ISO Metric)

· CSHI2 00000-000 A





Tolerance class(公差)
6g / 6H

MG TiAlN 26° Milling Table 60

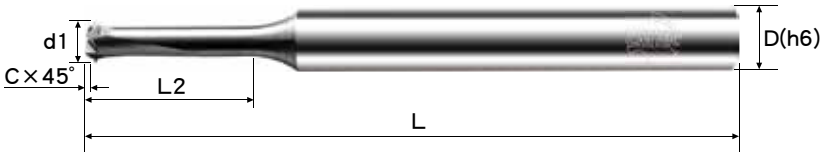
d1	d2	L1	L2	Nd	NL	L	D	h (mm)	螺距 Pitch	螺紋 Thread 粗牙M	牙數 Teeth	刃數 Flute	鍍膜訂購編號 Coated Order No.
5.0	4.85	1.0	13.7	6.6	9.5	60	8	0.58	1.00	M6	11	2	CSHI205008-100A
6.8	6.45	1.3	17.1	9.0	16.8	75	10	0.72	1.25	M8	11	2	CSHI206810-125A
8.5	8.08	1.5	22.1	11.0	11.6	80	12	0.87	1.50	M10	12	2	CSHI208512-150A
10.3	9.74	1.5	25.5	13.5	17.9	90	14	1.01	1.75	M12	12	2	CSHI210314-175A

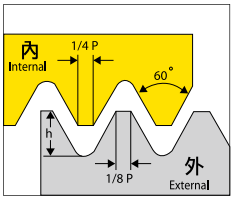
切削條件表 Cutting Condition P.295
參考資料 Technical Data P.243

極細鎢鋼多功能單 / 雙牙螺旋鑽銑牙刀(鑽-螺紋-倒角)- 鋁用- 內螺紋用(ISO規格)

ULTRA CARBIDE MULTIPURPOSE THREAD MILLS- 1 / 2 / 3 TEETH- HELIX FLUTE (DRILL-CHAMFER-THREAD)- For Aluminum- INTERNAL(ISO Metric)

- MSHIA1 00000-000
- MSHIA2 00000-000
- MSHIA3 00000-000





CUT EXAMPLES

UMG 15° Milling Table 77

Tolerance class(公差)
6g / 6H

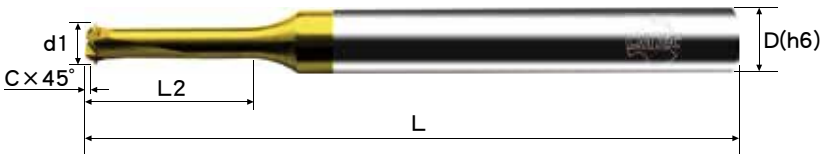
螺紋 Thread	螺距 Pitch	d1	L2	L	D	倒角 Chamfer	牙數 Teeth	刃數 Flute	白刀訂購編號 Uncoated Order No.
M0.8	0.20	0.60	2.4	50	4	0.10	1	1	MSHIA100604-020
M0.9	0.225	0.66	2.7	50	4	0.12	1	1	MSHIA100604-022
M1.0	0.25	0.73	3.0	50	4	0.15	1	1	MSHIA100704-025
M1.2	0.25	0.92	3.6	50	4	0.15	1	1	MSHIA100904-025
M1.4	0.30	1.05	4.2	50	4	0.19	1	1	MSHIA101004-030
M1.6	0.35	1.21	4.8	50	4	0.22	1	1	MSHIA101204-035
M2.0	0.40	1.55	6.0	50	4	0.25	1	2	MSHIA201504-040
M2.5	0.45	2.00	7.5	50	4	0.29	1	2	MSHIA202004-045
M3.0	0.50	2.44	9.0	60	6	0.33	1	2	MSHIA202406-050
M4.0	0.70	3.20	12.0	60	6	0.45	1	2	MSHIA203206-070
M5.0	0.80	4.00	15.0	60	6	0.53	1	2	MSHIA204006-080
M6.0	1.00	4.85	18.0	75	6	0.65	2	3	MSHIA304806-100
M8.0	1.25	6.50	24.0	75	8	0.80	2	3	MSHIA306508-125
M10.0	1.50	7.90	30.0	75	8	1.00	2	3	MSHIA307908-150

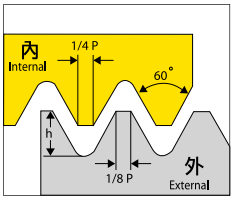
切削條件表 Cutting Condition P.306
參考資料 Technical Data P.243

極細鎢鋼多功能單 / 雙牙螺旋鑽銑牙刀(鑽-倒角-螺紋)-硬材質用- 內螺紋用(ISO規格)

ULTRA CARBIDE MULTIPURPOSE THREAD MILLS- 1 / 2 / 3TEETH- HELIX FLUTE (DRILL-CHAMFER-THREAD)- HARD MATERIALS CUTTING- INTERNAL(ISO Metric)

- MSHIDA1 00000- 000A
- MSHIDA2 00000- 000A
- MSHIDA3 00000- 000A





切削實例 CUT EXAMPLES

UMG | TOP TiSIN | 15° | HRC 45 | Milling Table | 77

Tolerance class(公差)
6g / 6H

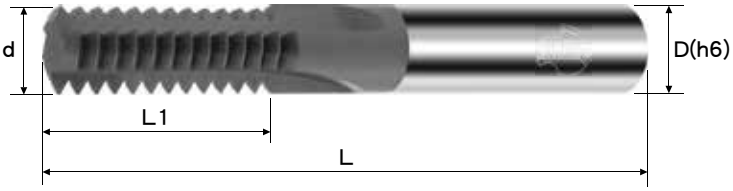
螺紋 Thread	螺距 Pitch	d1	L2	L	D	倒角 Chamfer	牙數 Teeth	刃數 Flute	鍍膜訂購編號 Coated Order No.
M0.8	0.20	0.60	2.4	50	4	0.10	1	1	MSHIDA100604-020A
M0.9	0.225	0.66	2.7	50	4	0.12	1	1	MSHIDA100604-022A
M1.0	0.25	0.73	3.0	50	4	0.15	1	1	MSHIDA100704-025A
M1.2	0.25	0.92	3.6	50	4	0.15	1	1	MSHIDA100904-025A
M1.4	0.30	1.05	4.2	50	4	0.19	1	1	MSHIDA101004-030A
M1.6	0.35	1.21	4.8	50	4	0.22	1	1	MSHIDA101204-035A
M2.0	0.40	1.55	6.0	50	4	0.25	1	2	MSHIDA201504-040A
M2.5	0.45	2.00	7.5	50	4	0.29	1	2	MSHIDA202004-045A
M3.0	0.50	2.44	9.0	60	6	0.33	1	2	MSHIDA202406-050A
M4.0	0.70	3.20	12.0	60	6	0.45	1	2	MSHIDA203206-070A
M5.0	0.80	4.00	15.0	60	6	0.53	1	2	MSHIDA204006-080A
M6.0	1.00	4.85	18.0	75	6	0.65	2	3	MSHIDA304806-100A
M8.0	1.25	6.50	24.0	75	8	0.80	2	3	MSHIDA306508-125A
M10.0	1.50	7.90	30.0	75	8	1.00	2	3	MSHIDA307908-150A

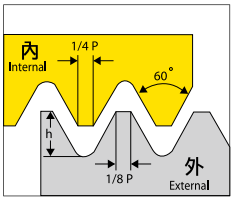
切削條件表 Cutting Condition P.306
參考資料 Technical Data P.243

鎢鋼直刃銑牙刀- 外螺紋用(ISO規格)

MICRO GRAIN CARBIDE THREAD- STRAIGHT FLUTE- EXTERNAL(ISO Metric)

· CTSE000000-000A





Tolerance class(公差)
6g / 6H

MG TiAℓN Milling Table 61

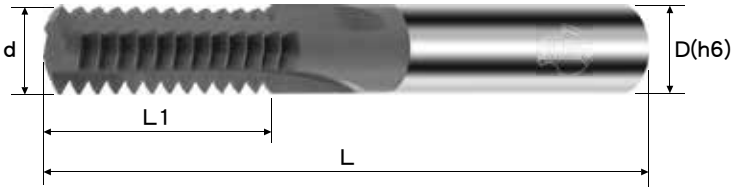
d	L1	L	D	h(mm)	螺距 Pitch	螺紋 Thread	牙數 Teeth	刃數 Flute	鍍膜訂購編號 Coated Order No.
5.9	15.0	60	6.0	0.31	0.50	M3	30	3	CTSE305906-050A
7.9	19.5	60	8.0	0.46	0.75	M4.5	26	3	CTSE307908-075A
9.9	24.0	75	10.0	0.61	1.00	M6	24	5	CTSE509910-100A
11.9	30.0	100	12.0	0.92	1.50	M10	20	5	CTSE511912-150A
11.9	30.0	100	12.0	1.23	2.00	M14	15	5	CTSE511912-200A
15.9	36.0	100	16.0	1.84	3.00	M24	12	5	CTSE515916-300A
15.9	40.0	100	16.0	2.45	4.00	M36	10	5	CTSE515916-400A
19.9	36.0	100	20.0	3.68	6.00	M64	6	5	CTSE519920-600A

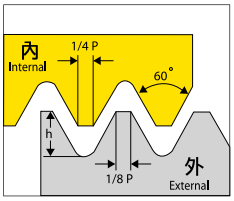
切削條件表 Cutting Condition P.296
參考資料 Technical Data P.243

鎢鋼直刃銑牙刀- 內螺紋用(ISO規格)

MICRO GRAINCARBIDE THREAD- STRAIGHT FLUTE- INTERNAL(ISO Metric)

· CTSI000000-000A





Tolerance class(公差)
6g / 6H

MG TiAℓN Milling Table 61

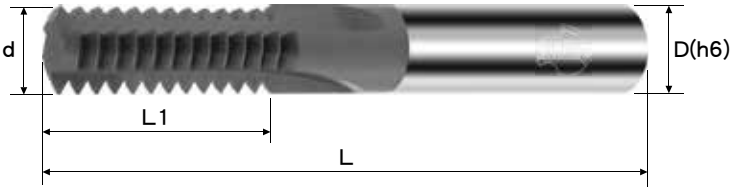
d	L1	L	D	h(mm)	螺距 Pitch	螺紋 Thread	牙數 Teeth	刃數 Flute	鍍膜訂購編號 Coated Order No.
3.0	6.7	50	4.0	0.43	0.75	M4.5	9	3	CTSI303004-075A
5.9	15.0	60	6.0	0.43	0.75	M8	20	3	CTSI305906-075A
3.6	8.0	50	4.0	0.46	0.80	M5	10	3	CTSI303604-080A
4.0	9.0	60	6.0	0.58	1.00	M6	9	3	CTSI304006-100A
7.9	20.0	60	8.0	0.58	1.00	M12	20	3	CTSI307908-100A
5.0	12.5	60	6.0	0.72	1.25	M8	10	3	CTSI305006-125A
5.9	15.0	60	6.0	0.87	1.50	M10	10	3	CTSI305906-150A
9.9	24.0	75	10.0	0.87	1.50	M14	16	5	CTSI509910-150A
11.9	30.0	100	12.0	0.87	1.50	M18	20	5	CTSI511912-150A
7.9	19.2	60	8.0	1.01	1.75	M12	11	3	CTSI307908-175A
9.9	24.0	75	10.0	1.15	2.00	M16	12	5	CTSI509910-200A
11.9	30.0	100	12.0	1.15	2.00	M18	15	5	CTSI511912-200A
11.9	30.0	100	12.0	1.44	2.50	M20	12	5	CTSI511912-250A
15.9	36.0	100	16.0	1.73	3.00	M24	12	5	CTSI515916-300A
15.9	38.5	100	16.0	2.02	3.50	M30	11	5	CTSI515916-350A
15.9	40.0	100	16.0	2.31	4.00	M36	10	5	CTSI515916-400A
19.9	40.0	100	20.0	2.89	5.00	M48	8	5	CTSI519920-500A
19.9	36.0	100	20.0	3.46	6.00	M64	6	5	CTSI519920-600A

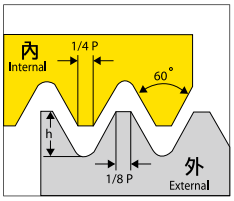
切削條件表 Cutting Condition P.296
參考資料 Technical Data P.243

鎢鋼直刃銑牙刀- 外螺紋用(UN美製規格)

MICRO GRAIN CARBIDE THREAD- STRAIGHT FLUTE- EXTERNAL(American UN)

· CTSEU000000-000A





Tolerance class(公差)
2A / 2B

MG TiAℓN Milling Table 61

d	L1	L	D	h(mm)	牙/吋 Tpi	螺紋 Thread	牙數 Teeth	刃數 Flute	鍍膜訂購編號 Coated Order No.
5.9	14.3	60	6.0	0.49	32	No.6	18	3	CTSEU305906-320A
7.9	19.9	60	8.0	0.56	28	No.12	22	3	CTSEU307908-280A
9.9	22.9	75	10.0	0.78	20	1/4"	18	5	CTSEU509910-200A
9.9	24.0	75	10.0	0.87	18	5/16"	17	5	CTSEU509910-180A
11.9	28.6	100	12.0	0.97	16	3/8"	18	5	CTSEU511912-160A
11.9	29.6	100	12.0	1.30	12	9/16"	14	5	CTSEU511912-120A
15.9	38.1	100	16.0	1.95	8	1"	12	5	CTSEU515916-080A
19.9	38.1	100	20.0	2.60	6	1 3/8"	9	5	CTSEU519920-060A

※ 25.4 ÷ Tpi = Pitch

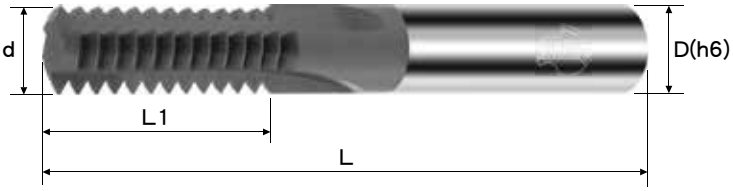
➡ 切削條件表 Cutting Condition P.296

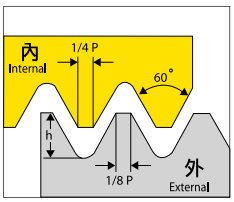
➡ 參考資料 Technical Data P.243

鎢鋼直刃銑牙刀- 內螺紋用(UN美製規格)

MICRO GRAIN CARBIDE THREAD- STRAIGHT FLUTE- INTERNAL(American UN)

· CTSIU000000-000A





Tolerance class(公差)
2A / 2B

MG TiAlN Milling Table 61

d	L1	L	D	h(mm)	牙/吋 Tpi	螺紋 Thread	牙數 Teeth	刃數 Flute	鍍膜訂購編號 Coated Order No.
3.0	6.3	50	4.0	0.41	36	No.8	9	3	CTSIU303004-360A
3.0	6.3	50	4.0	0.46	32	No.8	8	3	CTSIU303004-320A
5.9	14.3	60	6.0	0.46	32	5/16"	18	3	CTSIU305906-320A
3.6	8.2	50	4.0	0.52	28	No.12	9	3	CTSIU303604-280A
7.9	19.9	60	8.0	0.52	28	7/16"	22	3	CTSIU307908-280A
4.0	8.5	60	6.0	0.61	24	No.12	8	3	CTSIU304006-240A
4.0	10.2	60	6.0	0.73	20	1/4"	8	3	CTSIU304006-200A
9.9	22.9	75	10.0	0.73	20	9/16"	18	5	CTSIU509910-200A
5.0	12.7	60	6.0	0.81	18	5/16"	9	3	CTSIU305006-180A
9.9	24.0	75	10.0	0.81	18	9/16"	17	5	CTSIU509910-180A
5.9	14.3	60	6.0	0.92	16	3/8"	9	3	CTSIU305906-160A
11.9	28.6	100	12.0	0.92	16	3/4"	18	5	CTSIU511912-160A
7.9	18.1	60	8.0	1.05	14	7/16"	10	3	CTSIU307908-140A
7.9	19.5	60	8.0	1.13	13	1/2"	10	3	CTSIU307908-130A
9.9	23.3	75	10.0	1.22	12	9/16"	11	5	CTSIU509910-120A
11.9	29.6	100	12.0	1.22	12	1"	14	5	CTSIU511912-120A
9.9	23.1	75	10.0	1.33	11	5/8"	10	5	CTSIU509910-110A
11.9	27.9	100	12.0	1.47	10	3/4"	11	5	CTSIU511912-100A
15.9	33.3	100	16.0	1.63	9	7/8"	12	5	CTSIU515916-090A
15.9	38.1	100	16.0	1.83	8	1"	12	5	CTSIU515916-080A
15.9	36.3	100	16.0	2.09	7	1 1/8"	10	5	CTSIU515916-070A
19.9	38.1	100	20.0	2.44	6	1 3/8"	9	5	CTSIU519920-060A
19.9	40.6	100	20.0	2.93	5	1 3/4"	8	5	CTSIU519920-050A
19.9	39.5	100	20.0	3.26	4.5	2"	7	5	CTSIU519920-045A

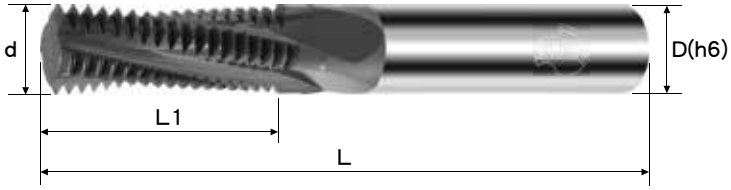
※ 25.4 ÷ Tpi = Pitch

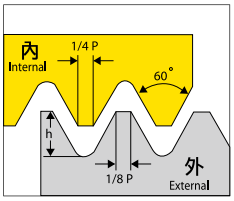
切削條件表 Cutting Condition P.296
參考資料 Technical Data P.243

鎢鋼螺旋銑牙刀- 內螺紋用(ISO規格)

MICRO GRAIN CARBIDE THREAD- HELIX FLUTE- INTERNAL(ISO Metric)

· CTHI000000-000A





Tolerance class(公差)
6g / 6H

MG TiAℓN 15° Milling Table 61

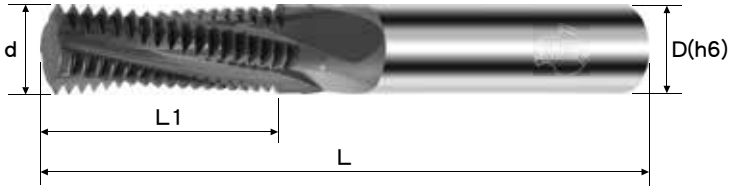
d	L1	L	D	h (mm)	螺距 Pitch	螺紋 Thread		牙數 Teeth	刃數 Flute	鍍膜訂購編號 Coated Order No.
						M粗牙	Mx1細牙			
2.2	6.00	50	4	0.29	0.50	M3	M3.5~M16	12	3	CTHI302204-050A
3.0	8.00	50	4	0.29	0.50		M4	16	3	CTHI303004-050A
3.9	10.00	50	4	0.29	0.50		M5	20	3	CTHI303904-050A
2.8	8.40	50	4	0.40	0.70	M4		12	3	CTHI302804-070A
3.9	12.00	50	4	0.43	0.75		M6	16	3	CTHI303904-075A
3.5	10.40	50	4	0.46	0.80	M5		13	3	CTHI303504-080A
3.9	12.00	50	4	0.58	1.00	M6	M8~M40	12	3	CTHI303904-100A
5.9	16.00	60	6	0.58	1.00		M8	16	3	CTHI305906-100A
7.9	20.00	60	8	0.58	1.00		M10	20	3	CTHI307908-100A
9.9	24.00	75	10	0.58	1.00		M12	24	4	CTHI409910-100A
5.8	16.25	60	6	0.72	1.25	M8		13	3	CTHI305806-125A
7.7	20.00	60	8	0.72	1.25		M10	16	3	CTHI307708-125A
7.7	21.00	60	8	0.87	1.50	M10	M12~M48	14	3	CTHI307708-150A
9.4	24.00	75	10	0.87	1.50		M12	16	4	CTHI409410-150A
11.2	28.50	100	12	0.87	1.50		M14	19	4	CTHI411212-150A
11.9	33.00	100	12	0.87	1.50		M16	22	4	CTHI411912-150A
8.7	24.50	75	10	1.01	1.75	M12		14	4	CTHI408710-175A
9.9	28.00	75	10	1.15	2.00	M14	M17~M80	14	4	CTHI409910-200A
11.9	32.00	100	12	1.15	2.00	M16	M17~M80	16	4	CTHI411912-200A
13.9	40.00	100	16	1.44	2.50	M18~M22		16	5	CTHI513916-250A
15.9	42.00	100	16	1.73	3.00	M24		14	4	CTHI415916-300A

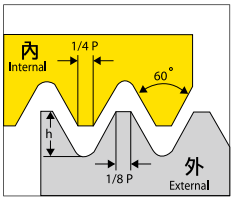
切削條件表 Cutting Condition P.296
參考資料 Technical Data P.243

鎢鋼螺旋銑牙刀-內螺紋用(UN美製規格)

MICRO GRAIN CARBIDE THREAD- HELIX FLUTE- INTERNAL(UN Metric)

· CTHIU000000-000A





Tolerance class(公差)
2A / 2B

MG TiAlN 15° Milling Table 61

d	L1	L	D	h (mm)	牙/吋 Tpi	螺紋 Thread			牙數 Teeth	刃數 Flute	鍍膜訂購編號 Coated Order No.
						UNC 粗牙	UNF 細牙	UNEF 超細牙			
3.0	8.5	50	4	0.41	36		No.8		12	3	CTHIU303004-360A
3.3	11.1	50	4	0.46	32		No.10	No.12-3/8"	14	3	CTHIU303304-320A
3.8	11.8	50	4	0.52	28		No.12，1/4"	7/16"，1/2"	13	3	CTHIU303804-280A
4.6	12.7	60	6	0.52	28		1/4"	7/16"，1/2"	14	3	CTHIU304606-280A
9.2	22.7	75	10	0.52	28			7/16"，1/2"	25	4	CTHIU409210-280A
2.9	10.6	50	4	0.61	24	No.10	5/16"，3/8"	9/16"-11/16"	10	3	CTHIU302904-240A
3.5	11.6	50	4	0.61	24	No.12	5/16"，3/8"	9/16"-11/16"	11	3	CTHIU303504-240A
5.7	15.9	60	6	0.61	24		5/16"，3/8"	9/16"-11/16"	15	3	CTHIU305706-240A
7.4	19.1	60	8	0.61	24		3/8"	9/16"-11/16"	18	3	CTHIU307408-240A
11.9	28.6	100	12	0.61	24			9/16"-11/16"	27	4	CTHIU411912-240A
3.9	12.7	50	4	0.73	20	1/4"	7/16"，1/2"	3/4"-1"	10	3	CTHIU303904-200A
8.5	22.9	75	10	0.73	20		7/16"，1/2"	3/4"-1"	18	4	CTHIU408510-200A
9.9	25.4	75	10	0.73	20		1/2"	3/4"-1"	20	4	CTHIU409910-200A
15.9	38.1	100	16	0.73	20			3/4"-1"	30	5	CTHIU515916-200A
5.2	16.9	60	6	0.81	18	5/16"	9/16"，5/8"	11/16"-1 11/16"	12	3	CTHIU305206-180A
11.3	29.6	100	12	0.81	18		9/16"，5/8"	11/16"-1 11/16"	21	4	CTHIU411312-180A
11.9	32.5	100	12	0.81	18		5/8"	11/16"-1 11/16"	23	4	CTHIU411912-180A
6.7	19.1	60	8	0.92	16	3/8"	3/4"		12	3	CTHIU306708-160A
15.9	38.1	100	16	0.92	16		3/4"		24	4	CTHIU415916-160A
7.6	23.6	60	8	1.05	14	7/16"	7/8"		13	4	CTHIU407608-140A
18.7	44.4	100	20	1.05	14		7/8"		24	4	CTHIU418720-140A
8.9	25.4	75	10	1.13	13	1/2"			13	4	CTHIU408910-130A
10.3	29.6	100	12	1.22	12	9/16"	1"-1 1/2"		14	4	CTHIU410312-120A
19.9	50.8	100	20	1.22	12		1"-1 1/2"		24	5	CTHIU519920-120A
11.0	32.3	100	12	1.33	11	5/8"			14	4	CTHIU411012-110A
13.5	38.1	100	16	1.47	10	3/4"			15	5	CTHIU513516-100A
15.2	45.2	100	16	1.63	9	7/8"			16	4	CTHIU415216-090A
17.0	50.8	100	20	1.83	8	1"			16	4	CTHIU417020-080A

※ 25.4 ÷ Tpi = Pitch

切削條件表 Cutting Condition P.296
參考資料 Technical Data P.243