Synchro Ultra Fast

Maximum productivity - Vc=50~200m/min

La nuova serie YAMAWA - ULTRA FAST è ideata per filettature ultra rapide su macchine con maschiatura rigida e sincronizzata. **Rivestimento**: TiCN, TiAlN. **Geometria**: la geometria dei maschi ULTRA FAST è specificamente disegnata per ridurre al massimo gli attriti di taglio e garantire una lunga durata dell'utensile anche a velocità ultra rapide. **Lubrificazione interna**: i maschi per fori ciechi sono disegnati con un unico foro centrale. I maschi per fori passanti sono disegnati con fori laterali all' interno delle scanalature. **Gambo**: il gambo rinforzato, costruito con tolleranze molto accurate, garantisce tenacità e massima precisione anche ad altissima velocità. **Mandrino**: per l'uso dei maschi ULTRA FAST è indispensabile utilizzare mandrini ad alta precisione.

The new YAMAWA - ULTRA FAST series has been developed for high speed tapping on rigid clamping and full synchro machines. **Coating**: TiCN, TiAlN. **Geometry**: ULTRA FAST taps geometry is specifically designed to minimize the cutting torque and get long tool life even at ultra fast cutting speed. **Internal coolant**: the ULTRA FAST taps for blind holes are designed with a single central hole. The ULTRA FAST taps for through holes are designed with side holes inside the tap grooves. **Shank**: the reinforced shank, designed with the most accurate tolerance, allows high toughness and high precision even at ultra fast cutting speed. **Holder**: high precision holders or high gripping power holders must be used.

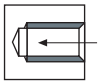
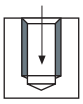
Die neue YAMAWA - ULTRA FAST Serie ist für ultraschnelle Gewinden auf synchronisierten Maschinen und mit starrer Befestigung ausgedacht worden. **Beschichtung**: TiCN, TiAlN. **Geometrie**: die Geometrie der Gewindebohrer ULTRA FAST ist besonders für die maximale Schneiddrucksenkung und für eine längere Standzeit auch bei ultraschnellen Geschwindigkeit konzipiert worden. **Innere Kühlmittelzuführung**: Die Gewindeboher für Grundlöcher haben einen einzigen zentralen Loch. Die Gewindebohrer für Durchgangslöcher haben seitliche Löcher in den Nuten. **Schaft**: Der mit genauer Toleranz hergestellte verstärkte Schaft besorgt Härte und Präzision auch bei ultraschneller Geschwindigkeit. **Spindel**: für die Benutzung der ULTRAFAST Gewindebohrer braucht man Hochleistungsspindel.

La nouvelle série YAMAWA - ULTRA FAST a été etudiée pour le filetage ultra-rapide dans des machines à taraudage rigide et synchronisé. **Revêtement**: TiCN, TiAlN. **Géométrie**: la géométrie des tarauds ULTRA FAST est spécialement dessinée pour réduire le plus possible les frottements de coupe et garantir une longue durée de vie de l'outil, même à très grande vitesse. **Lubrification intérieure**: les tarauds pour trous borgnes sont dessinés avec un seul trou central. Les tarauds pour trous débouchants sont dessinés avec des trous lateraux à l'intérieur des rainures. **Queue**: la queue renforcée, construite avec des tolérances très soignées, garantit la plus grande précision et tenacité, même à très grande vitesse. **Mandrin**: pour l'emploi des tarauds ULTRA FAST il est indispensable d'employer des mandrins de haute précision.

Tapping the Future with YAMAWA

Tapping the Future with YAMAWA

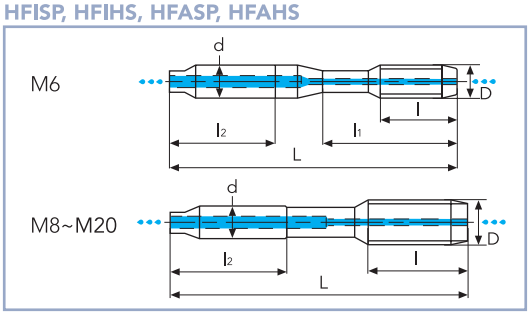
HSSE + TiCN synchro ultra fast

HDISL			HDISL (LH 15°)	Z=3 M 6~M16 Z=4 M18~M20
HFISP/HFASP			HFISP (RH 8°)	Z=3 M 6~M16 Z=4 M18~M20
			HFASP (RH 8°)	Z=3 M 6~M20
HFIHS/HFAHS			HFIHS (RH 45°)	Z=3 M 6~M16 Z=4 M18~M20
			HFAHS (RH 48°)	Z=3 M 6~M20

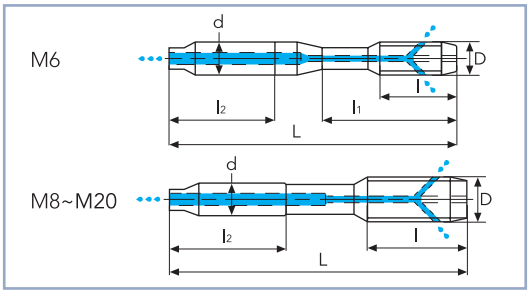
Dxp		L	l*	l**	l1	l2	d	Tol.µ
M 6x1	5.0	62	19	11	27	-	6	P4(80~60)
M 8x1.25	6.8	70	22	12	-	36	8	P4(80~60)
M10x1.5	8.5	75	24	13	-	37	10	P4(80~60)
M12x1.75	10.3	82	29	15	-	40	12	P4(80~60)
M14x2	12.0	88	30	14	-	40	12	P4(80~60)
M16x2	14.0	95	32	14	-	43	16	P4(80~60)
M20x2.5	17.5	105	37	14	-	45	16	P5(100~80)
MF10x1.25	8.8	75	24	12	-	37	10	P4(80~60)
MF12x1.5	10.5	82	29	14	-	40	12	P4(80~60)
MF12x1.25	10.8	82	29	14	-	40	12	P4(80~60)
MF14x1.5	12.5	88	30	14	-	40	12	P4(80~60)
MF16x1.5	14.5	95	32	14	-	43	16	P4(80~60)
MF18x1.5	16.5	100	37	14	-	45	16	P4(80~60)
MF20x1.5	18.5	105	37	14	-	45	16	P5(100~80)

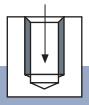
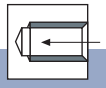
* HDISL, HFISP, HFASP
** HFIHS, HFAHS

HFISP, HFIHS, HFASP, HFAHS

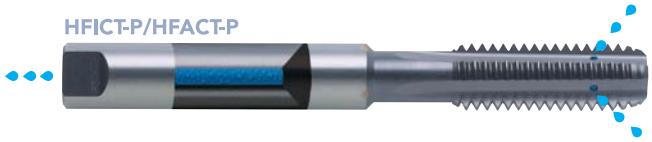


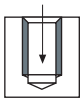
HDISL



materiale/material Werkstoff/matiére	2xD	 2xD	 2xD	Vc (m/min)
acciai al carbonio · carbon steel · Kohlenstoffstähle · aciers au carbone	HDISL	HFIHS	HFISP	50 or faster
acciai legati · alloy steel · legierte Stähle · aciers alliés	HDISL	HFIHS	HFISP	50 or faster
acciai inossidabili (V2A) · stainless steel (V2A) rostfreie Stähle (V2A) · aciers inoxydables (V2A)	HDISL	HFIHS	HFISP	20~30
ghisa nodulare · nodular cast iron · Kugelgraphitguss · fonte nodulaire	HDISL	HFIHS	HFISP	40 or faster
alluminio · aluminium · Aluminium · aluminium	HDISL	HFAHS	HFASP	100 or faster
magnesio · magnesium · Magnesium · magnésium	HDISL	HFAHS	HFASP	50 or faster

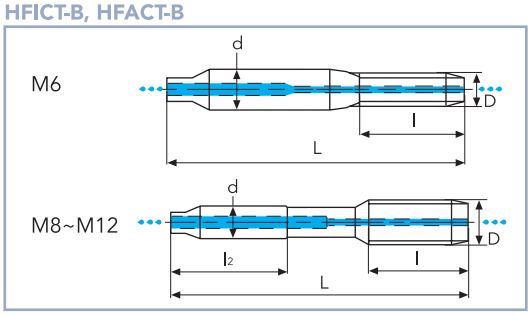
CARBIDE + TiAlN synchro ultra fast

HFICT-P/HFACT-P 			HFICT-P	Z=3
			HFACT-P	Z=3

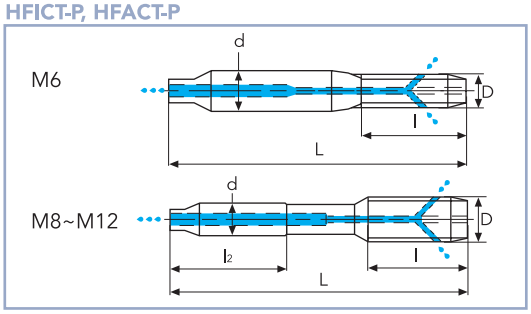
HFICT-B/HFACT-B			HFICT-B	Z=3
			HFACT-B	Z=3

Dxp		L	l	l1	l2	d	Tol.µ
M 6x1	5.0	62	19	27	-	6	P3(60~40)
M 8x1.25	6.8	70	22	-	36	8	P3(60~40)
M10x1.5	8.5	75	24	-	37	10	P3(60~40)
M12x1.75	10.3	82	29	-	40	12	P3(60~40)
MF10x1.25	8.8	75	24	-	37	10	P3(60~40)
MF12x1.5	10.5	82	29	-	40	12	P3(60~40)
MF12x1.25	10.8	82	29	-	40	12	P3(60~40)

HFICT-B, HFACT-B



HFICT-P, HFACT-P



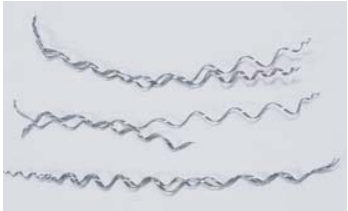
materiale/material Werkstoff/matiére	2xD	2xD	Vc (m/min)
ghisa grigia · grey cast iron · Grauguss · fonte grise	HFICT-P	HFICT-B	50 or faster
ghisa nodulare · nodular cast iron · Kugelgraphitguss · fonte nodulaire	HFICT-P	HFICT-B	50 or faster
alluminio · aluminium · Aluminium · aluminium	HFACT-P	HFACT-B	100 or faster
magnesio · magnesium · Magnesium · magnésium	HFACT-P	HFACT-B	50 or faster

ESEMPIO DI LAVORAZIONE · APPLICATION EXAMPLES
BEARBEITUNGSBEISPIELE · EXEMPLES DE TRAVAIL

HFIHS M8x1,25

macchina · machine	centro di lavoro · machining centre
materiale · material	acciaio al carbonio · carbon steel (15~17HRC)
Ø foro · Hole Ø	6,8mm
lunghezza foro · hole length	18mm cieco · blind
lunghezza filetto · thread length	12mm
Vc	50m/min
Vf	controllo sincro · synchro controlled
lubrificante · lubricant	emulsione · emulsion (5%)

Finitura filetto · thread finishing
Gewindefertigbearbeitung · finissage du filet

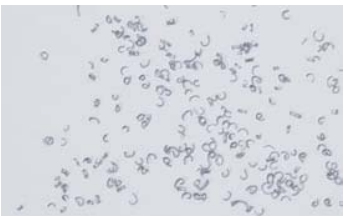


Truciolo · chips
Span · copeau

HFASP M8x1,25

macchina · machine	centro di lavoro · machining centre
materiale · material	alluminio · aluminium (50~63HRB)
Ø foro · Hole Ø	6,8mm
lunghezza foro · hole length	18mm cieco · blind
lunghezza filetto · thread length	12mm
Vc	100m/min
Vf	controllo sincro · synchro controlled
lubrificante · lubricant	emulsione · emulsion (5%)

Finitura filetto · thread finishing
Gewindefertigbearbeitung · finissage du filet

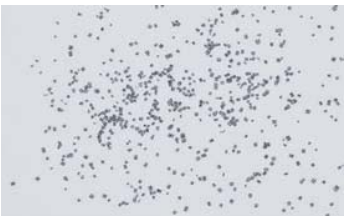


Truciolo · chips
Span · copeau

HFICT-P M8x1,25

macchina · machine	centro di lavoro · machining centre
materiale · material	ghisa grigia · grey cast iron (85HRB)
Ø foro · Hole Ø	6,8mm
lunghezza foro · hole length	12mm passante · through
lunghezza filetto · thread length	12mm
Vc	50m/min
Vf	controllo sincro · synchro controlled
lubrificante · lubricant	emulsione · emulsion (5%)

Finitura filetto · thread finishing
Gewindefertigbearbeitung · finissage du filet



Truciolo · chips
Span · copeau

HDISL M8x1,25

macchina · machine	centro di lavoro · machining centre
materiale · material	acciaio al carbonio · carbon steel (15~17HRC)
Ø foro · Hole Ø	6,8mm
lunghezza foro · hole length	12mm passante · through
lunghezza filetto · thread length	12mm
Vc	20m/min
Vf	controllo sincro · synchro controlled
lubrificante · lubricant	secco · dry

Finitura filetto · thread finishing
Gewindefertigbearbeitung · finissage du filet

Truciolo · chips
Span · copeau

HDISL M12x1,5

macchina · machine	centro di lavoro · machining centre
materiale · material	acciaio al carbonio · carbon steel (C40)
Ø foro · Hole Ø	10,5mm
lunghezza foro · hole length	32mm passante · through
lunghezza filetto · thread length	32mm
Vc	90m/min
Vf	controllo sincro · synchro controlled
lubrificante · lubricant	emulsione · emulsion (6%)
durata utensile · tool life	3000 filetti · threads

HFISP M20x1,5

macchina · machine	centro di lavoro · machining centre
materiale · material	ghisa nodulare · nodular cast iron (GGG-40)
Ø foro · Hole Ø	18,5mm
lunghezza foro · hole length	48mm cieco · blind
lunghezza filetto · thread length	40mm
Vc	56 m/min
Vf	controllo sincro · synchro controlled
lubrificante · lubricant	emulsione · emulsion (7%)
durata utensile · tool life	4900 filetti · threads

HDISL M16x2

macchina · machine	centro di lavoro · machining centre
materiale · material	acciao legato · alloy steel (40CrMnMoS 8 6)
Ø foro · Hole Ø	14mm
lunghezza foro · hole length	32mm passante · through
lunghezza filetto · thread length	32mm
Vc	50m/min
Vf	controllo sincro · synchro controlled
lubrificante · lubricant	emulsione · emulsion (6%)
durata utensile · tool life	6000 filetti · threads

HFISP M12x1,75

macchina · machine	centro di lavoro · machining centre
materiale · material	ghisa nodulare · nodular cast iron (GGG-40)
Ø foro · Hole Ø	10,3mm
lunghezza foro · hole length	30mm cieco · blind
lunghezza filetto · thread length	38mm
Vc	56 m/min
Vf	controllo sincro · synchro controlled
lubrificante · lubricant	emulsione · emulsion (7%)
durata utensile · tool life	7800 filetti · threads

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