



UNI 0124 HF Drill

Middle range deep hole drilling for horizontal machining centers and turning machines

Economical for middle range deep hole drilling

- Diameter range 30.00 - 69.00 mm *
- Drilling depth 6xD - 14xD
- Shortened drilling time when using conventional machine

* Standard drill diameters are available in 1mm increments.
Other diameters are available upon request.

Effective machining on conventional machines

- Recommended for use on Horizontal M/C
- Can also be used on turning machine

Easy to use, rigid drill body

- Direct mount inserts, no diameter adjustment necessary
- Heat treated tool steel body

High quality surface finish

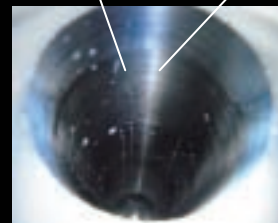
- Burnishing effect improves surface finish
- Possible to eliminate finish process

Actual result

Cutting conditions

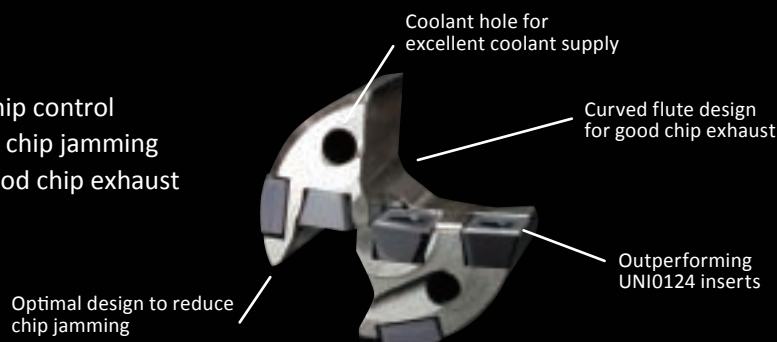
Tool diameter	φ 30mm
Drilling depth	200mm
Workpiece material	Carbon steel
Cutting speed	100m/min
Spindle speed	0.1mm/rev
Machine	ISO50 M/C

No spiral marks caused by chips
Guide pads burnishing effect improves surface finish

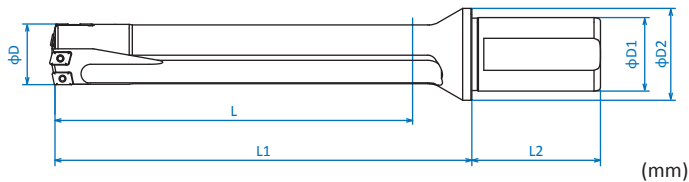


Good chip exhaust

- UNI0124 inserts enable best chip control
- Unique head design eliminates chip jamming
- Curved flute design ensures good chip exhaust



UNI 0124 HF Drill



D	Ordering code	L	L1	L2	D1	D2	D2
30	HF0124-3000ST32-14	420	449	60	32	40	14
31	HF0124-3100ST32-13	420	449	60	32	40	13
32	HF0124-3200ST40-13	420	449	70	40	50	13
33	HF0124-3300ST40-12	420	449	70	40	50	12
34	HF0124-3400ST40-12	420	450	70	40	50	12
35	HF0124-3500ST40-12	420	450	70	40	50	12
36	HF0124-3600ST40-11	420	450	70	40	50	11
37	HF0124-3700ST40-11	420	453	70	40	50	11
38	HF0124-3800ST40-11	420	453	70	40	50	11
39	HF0124-3900ST40-10	420	453	70	40	50	10
40	HF0124-4000ST40-10	420	454	70	40	50	10
41	HF0124-4100ST40-10	420	454	70	40	50	10
42	HF0124-4200ST40-10	420	454	70	40	50	10
43	HF0124-4300ST40-9	420	456	70	40	50	9
44	HF0124-4400ST40-9	420	456	70	40	50	9
45	HF0124-4500ST40-9	420	456	70	40	50	9
46	HF0124-4600ST40-9	420	459	70	40	50	9
47	HF0124-4700ST40-8	420	459	70	40	50	8
48	HF0124-4800ST40-8	420	459	70	40	50	8
49	HF0124-4900ST40-8	420	461	70	40	50	8
50	HF0124-5000ST40-8	420	461	70	40	50	8
51	HF0124-5100ST40-8	420	461	70	40	50	8
52	HF0124-5200ST40-8	420	464	70	40	-	8
53	HF0124-5300ST40-7	420	464	70	40	-	7
54	HF0124-5400ST40-7	420	464	70	40	-	7
55	HF0124-5500ST40-7	420	464	70	40	-	7
56	HF0124-5600ST40-7	420	464	70	40	-	7
57	HF0124-5700ST40-7	420	464	70	40	-	7
58	HF0124-5800ST40-7	420	470	70	40	-	7
59	HF0124-5900ST40-7	420	470	70	40	-	7
60	HF0124-6000ST40-7	420	470	70	40	-	7
61	HF0124-6100ST40-6	420	470	70	40	-	6
62	HF0124-6200ST40-6	420	470	70	40	-	6
63	HF0124-6300ST40-6	420	470	70	40	-	6
64	HF0124-6400ST40-6	420	473	70	40	-	6
65	HF0124-6500ST40-6	420	473	70	40	-	6
66	HF0124-6600ST40-6	420	473	70	40	-	6
67	HF0124-6700ST40-6	420	473	70	40	-	6
68	HF0124-6800ST40-6	420	473	70	40	-	6
69	HF0124-6900ST40-6	420	473	70	40	-	6

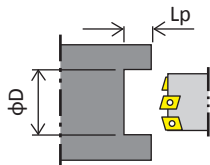
Ordering example : HF0124-4000ST40-10 1 pc

- Tool will be supplied complete with 1 set of spare parts but less inserts.
- Other diameters and lengths are available upon request.
- For screws and wrenches, please refer to the UNITAC General catalog.

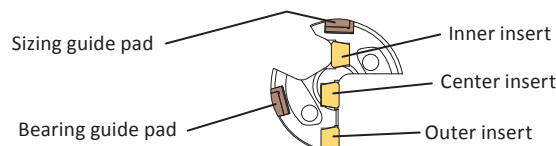
Note:

To start the tool, a pilot hole is required. (tolerance: + 0.10 to 0.15 mm)
The pilot hole should ideally have a flat bottom, but generally a throw-away drill is acceptable to create a pilot hole if the inner insert touches the bottom last.

Tool dia. D(mm)	Pilot hole length Lp(mm)
φ30.00 ~ 39.00	10.0 or more
φ39.01 ~ 45.00	12.5 or more
φ45.01 ~ 57.00	15.0 or more
φ57.01 ~ 69.00	17.5 or more



UNI 0124 HF inserts and guide pads



Tool Dia. D (mm)	Insert			Guide pad
	Outer	Inner	Center	
30.00 - 33	0124-06R	0124-06R	0124-06L	USG07CDTA
33.01 - 36	0124-06R	0124-06R	0124-08L	USG07CDTA
36.01 - 39	0124-08R	0124-06R	0124-08L	USG07CDTA
39.01 - 42	0124-08R	0124-08R	0124-08L	USG08CDTA
42.01 - 45	0124-08R	0124-08R	0124-10L	USG08CDTA
45.01 - 48	0124-10R	0124-08R	0124-10L	USG10CDTA
48.01 - 51	0124-10R	0124-10R	0124-10L	USG10CDTA
51.01 - 57	0124-10R	0124-10R	0124-12L	USG10CDTA
57.01 - 63	0124-12R	0124-10R	0124-12L	USG12CDTA
63.01 - 69	0124-12R	0124-12R	0124-12L	USG12CDTA

Insert ordering example : 0124-10R UC1125 10pcs

Guide pad ordering example : USG10CDTA 4pcs

Insert grade

New grade name Previous grade name	ISO	Application area	Coating type	Materials
UC1125 DLXT	P25	P20-30	CVD 3-layered	Steel, Alloyed steel, Steel casting
UC3120 KLXT	M30	K15-25 M35-40 P30-40 S15-25	PVD-TiCN	Stainless, HRSA, Cast iron
UC2220 NLX	P30	M10-30 P15-35	PVD-TiAlN	Multipurpose grade

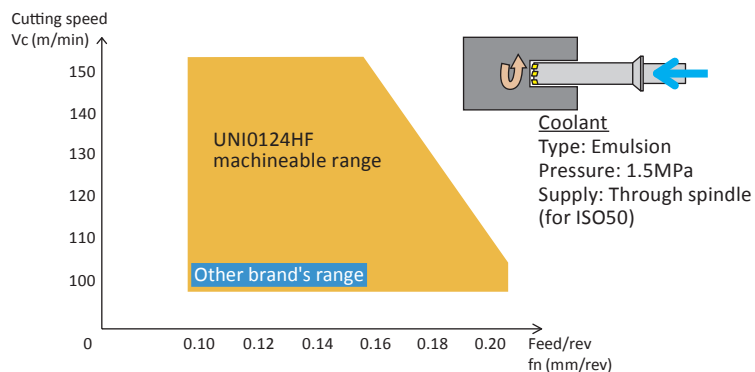
For insert grades, a new designation system is introduced.

e.g.) UC1125 equals DLXT. Please indicate either designation when ordering.

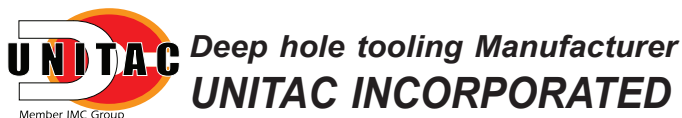
ISO50 M/C Machining data

Actual example:

Excellent chip control ensures stable M/C machining



Tool dia: φ30mm Cutting speed: 100 - 50m/min
Drilling depth: 200mm Feed/rev: 0.1 - 0.2mm/rev
Material: Carbon steel Machine: ISO50 Horizontal M/C
(max 11kW)



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■ Tool specifications are subject to change without notice for the purpose of improvement of the products.