

Extra Long SUPER MULTI-DRILLS MDW ... XHT/PHT Type

A Revolution in Deep Hole Drilling



■ Features

- Drills faster than conventional high speed drills and gun drills
- Drilling depths up to 30xD
- Unique flute design efficiently removes chips
- Solid carbide construction provides excellent finished hole geometry
- Low cutting forces - suitable for low powered machine spindles
- Eco-friendly - uses MQL (minimum quantity lubrication) systems

■ Chip Form Examples Using Alternative Coolant Methods

MQL chips well across a wider range of cutting conditions

MQL works well even when drilling soft steels



**MQL - optimised
chip evacuation**

C o o l a n t s u p p l y

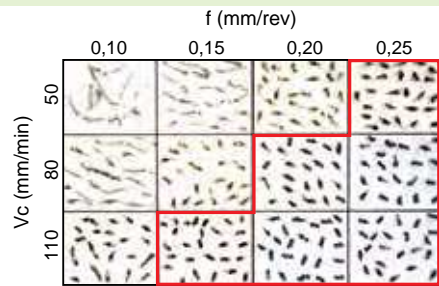
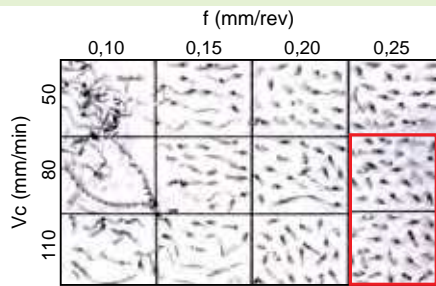
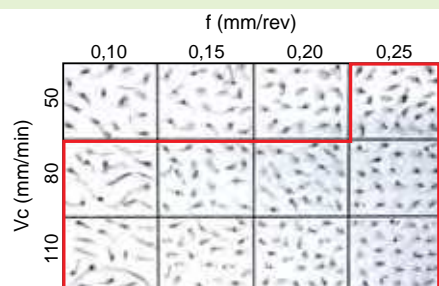
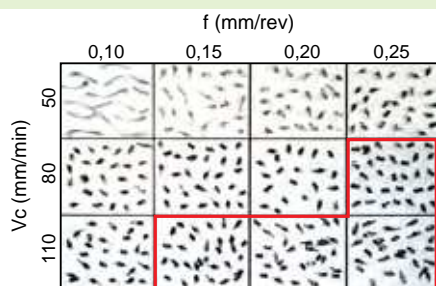
Internal coolant (Emulsion 3MPa)

Internal MQL (Natural oil 0,6MPa)

W o r k m a t e r i a l

C50 (230HB)

15CrMo5 (<230HB)



Applicable range

■ Recommended Cutting Conditions

Vc: Cutting speed (m/min), f: Feed Rate (mm/rev)

Work material		General Steel	Alloy Steel	Stainless Steel	Grey Cast Iron	Ductile Cast Iron	Aluminium Alloy
Drill Ø (mm)		(~ HB300)	(~ HRC45)	(~ HB200)	(GG25)	(GGG45)	—
~ 5	Vc	70 ~ 90	50 ~ 70	30 ~ 50	50 ~ 90	50 ~ 90	80 ~ 160
	f	0,08 ~ 0,12	0,06 ~ 0,15	0,06 ~ 0,12	0,15 ~ 0,25	0,15 ~ 0,2	0,08 ~ 0,3
~ 6	Vc	80 ~ 120	60 ~ 80	30 ~ 60	50 ~ 90	50 ~ 90	80 ~ 160
	f	0,1 ~ 0,17	0,12 ~ 0,25	0,08 ~ 0,15	0,15 ~ 0,3	0,15 ~ 0,25	0,12 ~ 0,35
~ 8	Vc	80 ~ 120	70 ~ 90	40 ~ 80	60 ~ 100	50 ~ 90	80 ~ 180
	f	0,12 ~ 0,25	0,12 ~ 0,25	0,1 ~ 0,2	0,2 ~ 0,35	0,15 ~ 0,25	0,15 ~ 0,4
~ 10	Vc	80 ~ 120	70 ~ 90	40 ~ 80	60 ~ 100	80 ~ 120	80 ~ 180
	f	0,15 ~ 0,3	0,12 ~ 0,25	0,1 ~ 0,2	0,2 ~ 0,35	0,15 ~ 0,3	0,2 ~ 0,5
~ 12	Vc	80 ~ 120	70 ~ 90	40 ~ 80	60 ~ 100	80 ~ 120	80 ~ 180
	f	0,15 ~ 0,3	0,12 ~ 0,25	0,1 ~ 0,2	0,2 ~ 0,35	0,15 ~ 0,3	0,2 ~ 0,45