

# 鑽削計算

## Drilling Calculation Formulas

### 1) 切削速度和回轉速度

#### Cutting Speed and running speed

$$V = \frac{\pi D N}{1000}$$

V: 切削速度 ( m / min)

Cutting speed

以鑽頭圓周速度表示

expressed by circumference speed of drill.

D: 鑽頭直徑 (mm)

Diameter of drill

N: 回轉速 ( R.P.M)

Running speed

$$N = \frac{1000V}{\pi D}$$

### 2) 進刀速度和進刀力量

#### Feed speed and feed amount

$$F = N * f$$

F: 進刀速度 (mm / min)

Feed Speed

f: 進刀量 ( mm / rev)

Feed amount

$$f = \frac{F}{N}$$

### 3) 鑽孔時間

#### Drilling time

$$T = \frac{L}{N f} = \frac{\pi D L}{1000 V f}$$

T: 鑽孔時間 (min)

Drilling time

L: 鑽孔深度 (mm)

Drilling depth