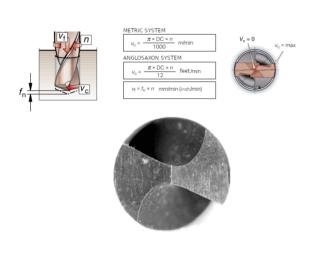


# **Temis Vent Drill Bits**

We recommend our drills with a PARABOLIC helix geometry when drilling in aluminium. The special geometry of the helix improves chip evacuation. In case of deep drilling, this preserves the tool's life and allows tighter tolerances



## How to drill with extra long bits

Rotation speed between 18.000 and 25.000 rpm

Never drill a deep hole in one single movement.

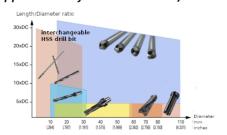
For deep drilling, start with a standard drill and progressively change the drill length

When cleaning a hole, come down in 3 or 4 times.

Keep the drill helix clean of rubber leftovers by rotating the machine.

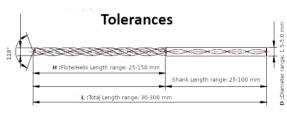
If the helix (cutting flute) is not clean, drill bits can break easily

#### Applications of solid HSS or HSS/Co drill bit



HSS and HSS/Co solid drill bits are a must for small diameter holes and when the hole has to respect tighter tolerances.

- Small diameters
- Tight hole or precision tolerances
- Relatively deep holes



GENERAL TOLERANCE (mm.)	
LENGTH	TOLERANCE
> 36	±0.2
> 6 - 30	±0.3
> 30 - 120	±0.5
>120 - 315	±0.5
>315 - 1000	±0.8

#### Drilling non-linear surfaces

When drilling non-linear surfaces, the drill bit might flex. To reduce this side effect to the minimum, it is recommended to reduce drilling speed at the first contact with the material.









Drill only if the radium is > 15 times larger than the drill bit diameter and if the hole is perpendicular to the radius.

Reduce speed 25% at the first contact with the material.

When possible, grind a small surface to obtain a flat perpendicular surface, and then proceed to standard drilling.

### Appearance of the removed chips



FIRST CHIP: The first chip formed when drilling is always longer. This is OK, it poses no problem.

Following chips







