Tool type characteristics

The documentation includes the available features for the tool types that are managed by the Element Manager.

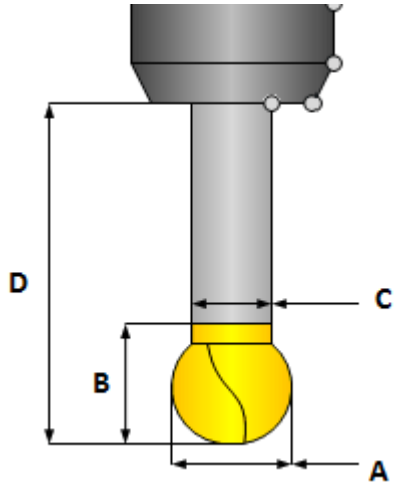
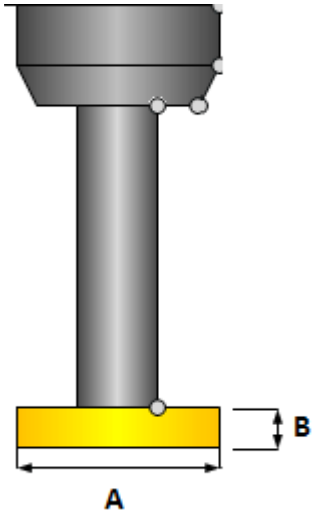
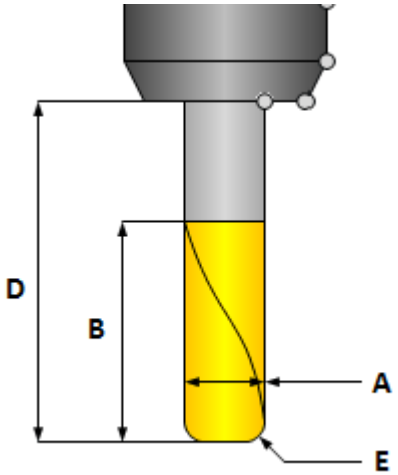
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However, due to the continuous development of described software, it is not possible to guarantee up to date and accurate information, integrity or quality of the content at all times.
As far as we are able to detect errors or omissions or those, which have been reported to us, our attempt is to correct these with the following versions. imos is not responsible for any direct or indirect damages caused by the use or non-use of the presented information or through the use of faulty and incomplete information. The descriptions in this document can be changed at any time without prior notice.

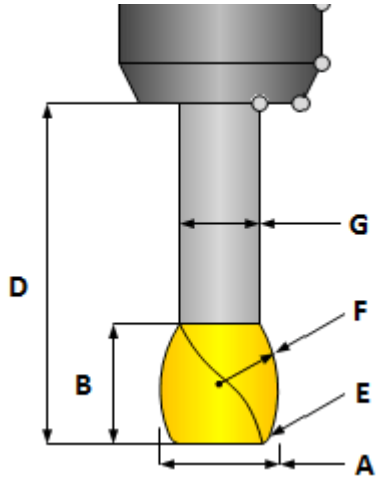
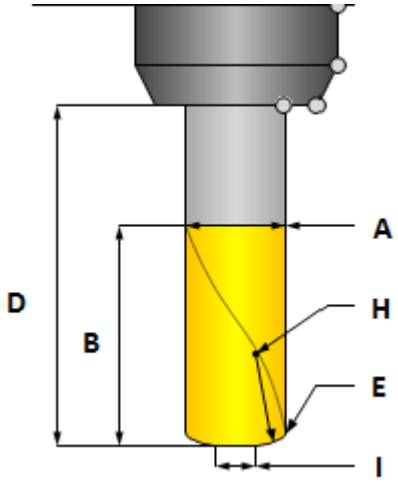
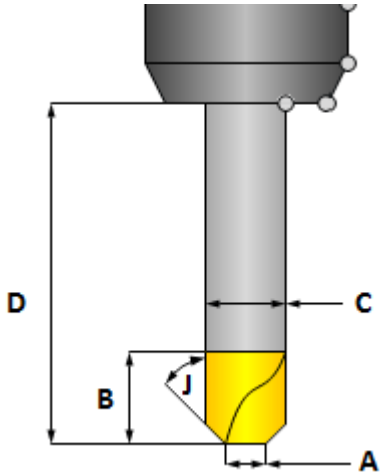
used version: 10.0 SR2

1. Tool characteristics

1.1 Types of mill

Characteristics, described with reference to various mill types:

Mill		
Lollipop Mill	**Slot Mill**	**Bullnose Mill**
		
Characteristics		
A= diameter B= Flute length C= Outside diameter	D= Shaft length E = Corner radius	

Mill		
Barrel Mill	**Convex Tip Mill**	**Taper Mill**
		

Characteristics

A= diameter
B= Flute length
C= Outside diameter
D= Shaft length
E = Corner radius
F= Profile radius
G= Upper diameter
H= Convex tip radius
I= Flatness radius
J= Taper angle

1.2 Possible characteristics

Characteristic	Description	Enabled by default for
Outside diameter [mm]	Diameter of the shaft (see 1.1)	Lollipop Mill
Tool Rotation	You can choose between: • Climb • Conventional	
Diameter [mm]	Diameter of the cutter (see 1.1)	all
Corner Radius [mm]	Corner radius of the cutter (see 1.1)	Taper Mill Convex Tip Mill Bullnose Mill Dove Mill Slot Mill Barrel Mill
Corner radius type	You from choose from the following options in the dropdown box: • None • Corner • Full	Taper Mill Convex Tip Mill Dove Mill Slot Mill Barrel Mill
Convex tip radius [°]	Radius at the convex tip mill	Convex Tip Mill
Correction value	Correction value for the radius of the mill	
Max. speed [U/min]	Defines the maximum speed for the tool.	all
Max. feed [mm/min]	Defines the maximum feed for the tool.	all
Flute length	Length of the mill that can be used for the milling. ((see 1.1)	all
Upper diameter [mm]	Diameter of the shaft for the barrel mill (see 1.1)	Barrel Mill
Flatness radius [mm]	Additionally radius for the convex tip mill (see 1.1)	Convex Tip Mill
Place	Machine site of the tool.	

Profile radius [mm]	Radius for the ball (see 1.1)	Barrel Mill
Retract rate [mm/min]	Feed rate for retract.	all
Shaft length [mm]	Length of the shaft (see 1.1)	all
Tip angle [°]	Angle at the tip of the drill	Drill
Taper angle [°]	Taper angle at the tip of the mill (see 1.1).	Taper Mill Dove Mill
Arbor	Defines the geometry of the arbor of the tool. For the definition of the geometry multiple values have to be defined. Use the button ... to get to the arbor definition. The values entered in the dialog are entered separated by comma in the “value”.	all
Feed in Z [mm/min]	Feed of the tool in z-direction	all
Holder	Defines the geometry of the holder. For the definition of the geometry multiple values have to be defined. Use the button ... to get to the holder definition. The values entered in the dialog are entered separated by comma in the “value”.	all