# **Technical Details**





1) Internal coolant is recommended.



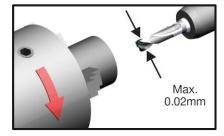
2) In case of external coolant, cutting depth must be 3XD or less.



3) Dry cutting is not recommended. Limited applicability in cast iron materials, minimum quantity lubrication (MQL) strongly recommended.

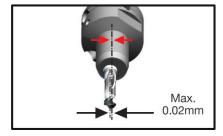
### **Usage Precautions: Core Deviation**

1) For turning machines:



Set deviation amount under 0.02mm between workpiece and drill.

2) For machining centers:



Do not use any arbor with a damaged attachment surface. Center of arbor deviation must be within 0.02mm.

Application Recommendation	Workpiece Shape
Flat Face Recommended	
Stacked Plates Recommended	
Inclined Surface > 3° Not Recommended	
Half Cylindrical Not Recommended	
Hole Expansion Not Recommended	
Concave Surface Not Recommended	
Pipe Material Not Recommended	
Cored Hole Not Recommended	



# **Technical Details**



#### **How to Attach Inserts**



1) Fix drill holder on arbor. For insert exchange, fix arbor on the machine or set on tool presetter.



2) Remove dust using air blast.



3) Put insert into drill holder (Use gloves to protect your



4) Turn lightly in a clockwise direction.



5) Set the wrench properly.



6) Make sure the wrench fits with the insert slot for the wrench (Is the wrench unfixed from the slot?).



7) Slowly turn the wrench in a clockwise direction.



8) Complete.



#### **How to Detach Inserts**



1) Remove dust using air blast.



2) Set the wrench properly.



3) Fit the wrench to insert slot.



4) Turn the wrench in a counterclockwise direction.



5) Once lock is released, insert can be turned with fingers (Use gloves to protect your hands).



6) Remove insert.

