

Solid Carbide Drills

STARTER DRILL

**Precision Starting / Guide hole
to improve drill tool life.**

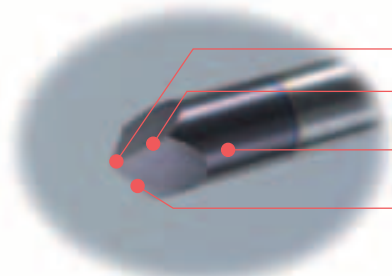
STARTER DRILL

Three faceted, opposing 120° faces form a 90° cutting angle to provide a perfectly round, high accuracy starter hole.



STARTER DRILL

Features

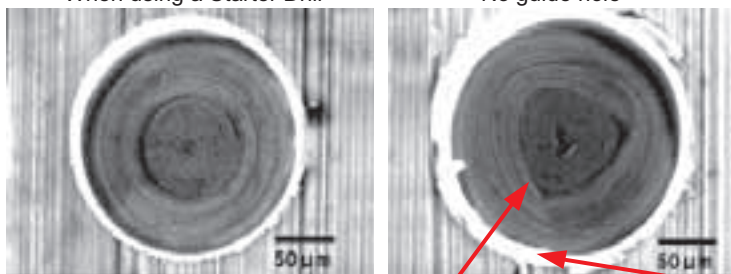


- Triangular pyramid shape helps high precision drilling.
- Optimize cost effectiveness by creating center holes of 0.0039 inch to 0.118 inch.
- Long tool life ensured by MIRACLE VP15TF coating.
- The same Starting / Guide drill can be used for dual purposes. Center hole drilling and a 90° chamfer angle.

Cutting performance

When using a Starter Drill

No guide hole



Cuts a high-precision hole.

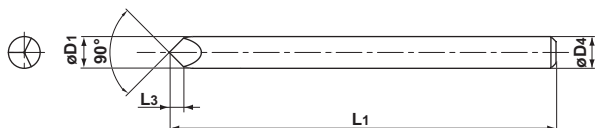
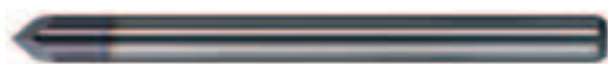
The bottom of the hole is drilled polygonally because the drill wanders.

Large burr

<Cutting conditions> Workpiece : 304 stainless steel

(Cutting a guide hole)		(Drilling)	
Tool : MSP0300SB	Tool : MSE0020SB	Tool : MSE0020SB	Tool : MSE0020SB
Guide hole dia. : .006 inch	Cutting speed : 20 SFM	Cutting speed : 20 SFM	Cutting speed : 20 SFM
Revolution : 10,000min ⁻¹	Revolution : 10,000min ⁻¹	Revolution : 10,000min ⁻¹	Revolution : 10,000min ⁻¹
Cutting speed : 310 SFM	Feed : .00007 IPR	Feed : .00007 IPR	Feed : .00007 IPR
Feed : .00002 IPR	Hole depth : .011 inch Blind hole	Hole depth : .011 inch Blind hole	Hole depth : .011 inch Blind hole
Coolant : Water soluble emulsion	Steps : .0008 inch	Steps : .0008 inch	Steps : .0008 inch
	Coolant : Water soluble emulsion	Coolant : Water soluble emulsion	Coolant : Water soluble emulsion

STARTER DRILL



RECOMMENDED CUTTING CONDITIONS

Order Number	Revolution (min ⁻¹)	Table Feed (IPR)
MSP0300SB	10,000	.00002

Order Number	Grade	Stock	Dimensions (inch)				Range of Diameter (inch)
			D1	D4	L1	L3	
MSP0300SB	VP15TF	●	.118	.118	1.496	.059	.0039~.118

Note : Please contact Mitsubishi Materials for special grades and geometries other than our standard products.

For your safety

●Do not touch cutting or chips without wearing gloves. ●Use tools under recommended cutting conditions, and exchange tools before excessive wear occurs. ●Chips become extremely hot, scattered over and may be stretched. Ensure safety guards and goggles are used. ●In case of using non-water soluble oil, make sure to have a fire prevention countermeasure. ●Use the provided wrench spanner, and ensure the inserts and spare parts are damped securely.

MITSUBISHI MATERIALS CORPORATION



Tokubetsu Plant
ISO 9001-2000
Registration No. JSA02 080
GMA Plant
ISO 9001-2000
Registration No. JSA04 084



Tokubetsu Plant
ISO 14001-1996
Registration No. JSAE 036



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Mitsubishi Carbides Home page : <http://www.mitsubishicarbide.com>

(Tools specifications subject to change without notice.)