

【Question】



I have a surface finish problem on the drill diameter portion of Center Drills. I use them to create a center starting hole for tap drills and the drilled hole portion seems to be the problem. Can you advise how to avoid this?

【Answer】

Please use **Point Drills** for spot drilling a centering hole prior to drilling. A **Point Drill** creates a guide for the drill to follow. Unlike Center Drills, **Point Drills** do not have a drill diameter portion so they should eliminate your problem.



【Solution】

Point Drills do not have a drill diameter portion for starting the centering hole. You can avoid problems like bad surface finishes that you may encounter when using Center Drills as a spot drill. (See following picture.) A **Point Drill** can also be used for hole or edge chamfering and angled channeling on flat workpieces as well as creating a center for starting drilled holes. Note: Center Drills should be used exclusively to create angled holes that are used with stationary or live centers. The drill diameter portion of a center drill creates a clearance hole so the point of a stationary or live center never touches the bottom of the centered hole.

with drill diameter portion



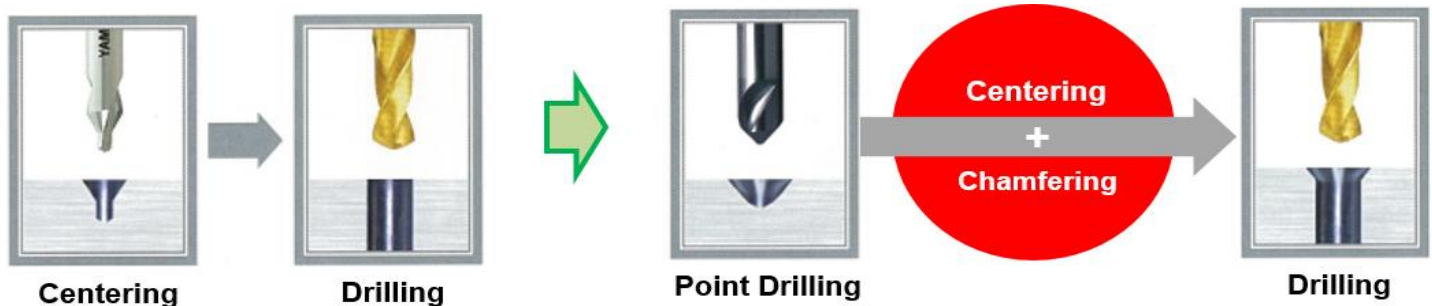
Center Drill



without drill diameter portion



Point Drill



【Guide】



Yamawa **Point Drills** are offered as a 90° included angle PE-Q point drill and a 60° included angle PE-S Point Drill. Additional Point Drills are offered as TiCN coated drills, long shanked drills, and carbide drills. **Point Drills** have a high rigidity and are suitable for high speed center drilling. You can use **Point Drills** as a multi-purpose tool that can be used in various machining processes like hole chamfering, edge beveling and angled channeling. See catalogs and leaflets for more information.

Centering hole
Chamfering



Edge Beveling



Angled
Channeling

