# Bag full of wisdom when you are in trouble



No. 016

## How to distinguish between CE-S and CD-S

Centering Type
Cutting Tools

#### [Question]

What is the difference between a CE-S and a CD-S centering tools? How I can distinguish one from the other?

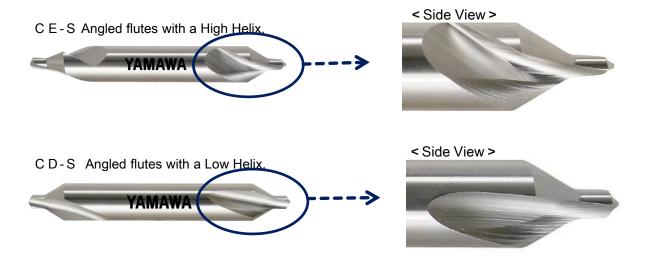
### [Answer]

The CE-S centering tool has angled flutes with a high helix that are suitable for cutting soft stringy materials.

The CD-S centering tool has angled flutes with a low helix that is recommended for hard materials as it has a cutting edge that can accept more force.

#### [Guide]

The difference between a CE-S and a CD-S is the shape of the flute and the characteristics of each design.



Flute Helix Angle Characteristics	High	Low
Twisted chips ejection	Large	Small
Workability	Excellent	Poor
Cutting Edge Intensity	Slow	Quick
Wear resistance	Poor	Excellent

The CE-S centering tool is suitable for cutting stringy materials that eject twisted chips.

The CD-S centering tool is suitable for cutting hard materials that create difficult-to-twist chips.

Understanding the difference between a CE-S and a CD-S will help you select the center drilling tool best suited for your application.

CE-S is recommended for Low Carbon Steels, Stainless Steels, Titanium, Aluminum, Copper, etc.

CD-S is recommended for High Carbon Steels, Alloy Steels, Tool Steels, Cast Iron, Nickel Based Alloys, Brass etc.