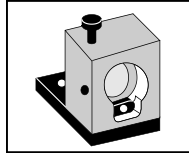


Key

Tool no.	D	Category
N631004	For ER32 nut	CNC
N631003		CNC



Tightening Device

Tool no.	D	Category
N642001	For ISO30 Tool Holder	CNC

Collets Category CNC

Collets are purposely manufactured from softer metal than tool holders. They feature special slots allowing them to "collapse" and "spring" to tightly grip the cutting tool. As a result, they will wear out faster than the holders will. Worn collets will cause cutting tools to fail prematurely, costing manufacturers thousands of dollars in preventable costs.

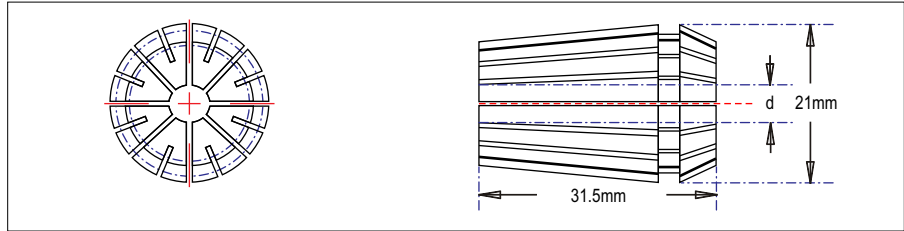
Collets should be replaced whenever wear is evident so the accuracy and performance of the cutting tool and tool holder assembly is maintained. While there is no standard rule of thumb for replacing a collet, some common causes to replace them would include: If a tool is broken off while in the collet and it has scored or marked the inside or outside of the collet in any way, it should be replaced.

If noticeable marking is evident on the cutting tool shank, a condition called "fretting" may be occurring. Fretting happens when two steel parts are rubbing against one another. It is visible as small copper or dark black colored pits or marks and this is evidence that the tool holder is becoming worn. Fretting is easily mistaken for rust. Once noticeable fretting develops the tool holder should be replaced immediately.



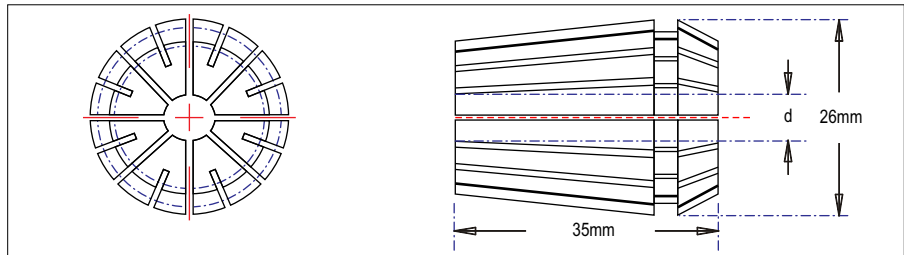
ER20

Tool no.	d
N6152018	1/8"
N61520316	3/16"
N6152014	1/4"
N61520516	5/16"
N6152038	3/8"
N6152012	1/2"



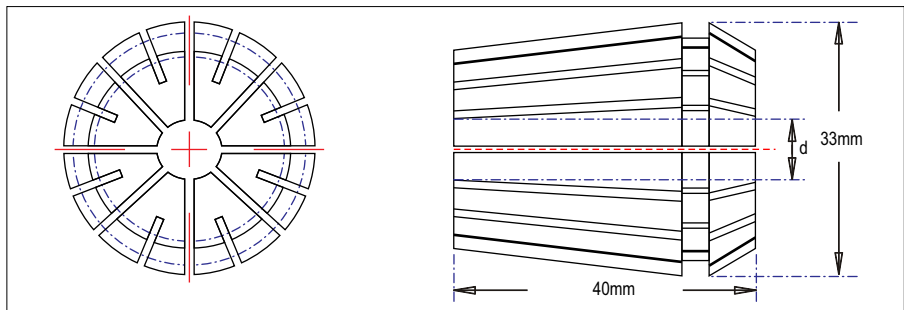
ER25

Tool no.	d
N6152518	1/8"
N61525316	3/16"
N6152514	1/4"
N61525516	5/16"
N6152538	3/8"
N6152512	1/2"



ER32

Tool no.	d
N615041	3-4mm
N61532316	1/8"
N615044	3/16"
N615012	6-7mm
N61532516	1/4"
N615013	7-8mm
N615010	5/16"
N6153238	8mm
N615009	10mm
N615053	3/8"
N615056	1/2"
N6153234	3/4"
N6153220	20mm



ER40

Tool no.	d
N615060	3-4mm
N615065	8mm
N61540316	3/16"
N6154014	1/4"
N615007	10mm
N61540516	5/16"
N6154038	3/8"
N615006	1/2"
N615003	19-20mm
N6154034	3/4"
N615077	20-21mm
N615001	25-26mm

