

New Product Information

Turning of Steel (Ceratzit 3x3)

Chip breaker -XU

2017-07

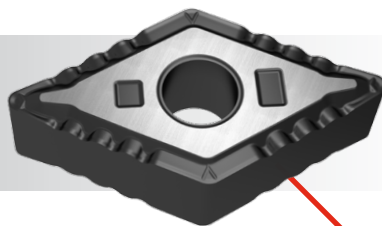
After the successful commercial launch of the user-friendly CERATIZIT 3x3 concept - the complete package for the turning of steel -, Ceratizit extend the steel matrix with an new chip breaker.

The new chip breaker -XU is an extension geometry between the chip breakers -F50 & -M50 for applications with chipping problems.

The -XU chip breaker is for close contour machining and general turning with varying depth of cut ideally up to light roughing and covers a very large machining range. In Europe-wide market testing the -XU showed itself as a problem solver for materials and applications where perfect chip breaking is required. The -XU focus is on long chipping materials and guarantees highest process reliability on turning centers and standard applications. In addition to the main chip breaker -M50, the -XU opens up further possibilities.

Application

- Finishing to light roughing
- Steel
- Universal chip breaker
- Low cutting forces
- Ideally suited to general turning
- Draw turning
- For chip breaking problems



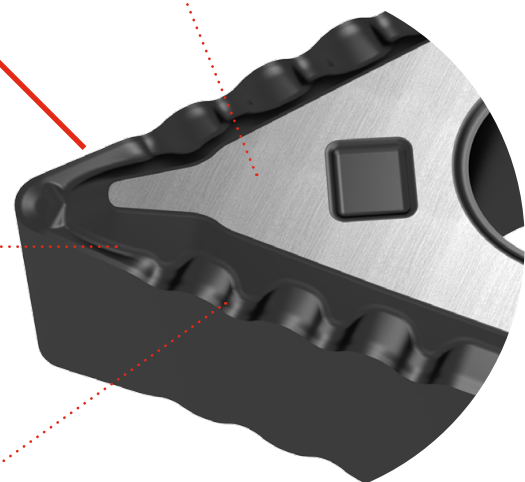
Advantages/Benefits

- Highest process reliability for turning centers and unmanned production
- Secure transport of chips and small space requirement for swarf
- Reduced downtime and tooling costs
- Minimized risk of injury from stringing swarf

Surface polishing for maximum process reliability

Post-treated surface for perfect chip flow

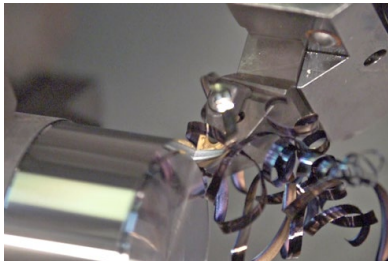
Developed from perfect chip breaking geometry



Field test report

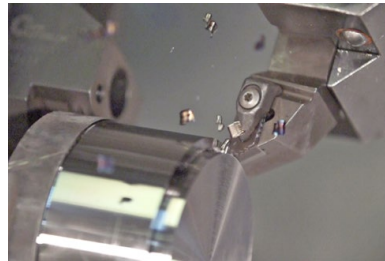
Steel CK60 1.1221 AISI 1060

Competitor



$v_c = 160$ m/min
 $a_p = 5.0$ mm
 $f = 0.35$ mm/U

Chip breaker -XU



$v_c = 160$ m/min
 $a_p = 5.0$ mm
 $f = 0.35$ mm/U

The chip breaker -XU guarantees a perfect chip breaking for highest process reliability.

Cutting data:

- Grades: CTCP115, CTCP125
- Cutting speeds v_c can be taken from the Cutting data table in the main catalog.
- Depth of cut a_p and feed f are determined in the laboratory for each Geomtrie (insert size / radius).
- So there are the optimal cutting data for each geometry.
- This data is printed on the respective labels.

Program and cutting data -XU

Material no.		Designation	Cutting depth (mm)		Feed rate (mm/U)	
CTP115	CTCP125		a_p min	a_p max	f min	f max
11891297	11891298	CNMG 120404EN-XU	0,3	2,5	0,08	0,25
11891300	11891301	CNMG 120408EN-XU	0,6	3	0,13	0,35
11891302	11891303	CNMG 120412EN-XU	0,9	3,5	0,15	0,45
11890690	11890693	DNMG 150604EN-XU	0,3	2,5	0,08	0,25
11890696	11890713	DNMG 150608EN-XU	0,6	3	0,13	0,35
11809639	11809642	DNMG 150612EN-XU	0,9	3,5	0,15	0,4
11891304	11891305	VNMG 160404EN-XU	0,3	1,8	0,08	0,2
11891308	11891309	VNMG 160408EN-XU	0,6	2,5	0,13	0,3
11890716	11890718	WNMG 080404EN-XU	0,3	2,5	0,08	0,25
11890720	11890722	WNMG 080408EN-XU	0,6	3	0,13	0,35
11809646	11588487	WNMG 080412EN-XU	0,9	3,5	0,15	0,45

Sales support

Prices and availability can also be found in the e-techstore.

Link [Ceratizit 3x3](#)