

## Easy Line knives

Easy Line knives combine performance, affordability and availability.

Manufactured at our integrated production units in Europe, the Easy Line product range utilises our new submicron grade CTOPP10 which has been extensively tested in a variety of different wood machining applications. This entry performance tungsten carbide grade offers the same high reliability as CERATIZIT's existing grades with wear characteristics close to MG18, a recognised all round grade for solid wood.

CTOPP10	
Cobalt content:	10%
Hardness:	1570 HV10
Transverse rupture strength:	> 3000 MPa
Grain size:	0,7 µm

### Advantages

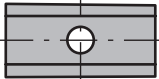


- Versatile application
- Very good price-performance ratio
- Conserves resources

### Optimal price-performance ratio

The manufacturing process for Easy Line knives has been optimised for high-volume and cost-sensitive markets. In exchange for minimum order quantities, customers benefit from special price levels to address today's market expectations. Lead time is also reduced, with most popular articles available from stock.

These benefits make Easy Line knives a great alternative for today's most common wood machining applications.

## Easy Line product range

			without corner radius	with corner radius
Indexable knives		EL CTK ST 9.6X12.0X1.5 CTOPP10	11791000	
		EL CTK ST 15.0X12.0X1.5 CTOPP10	11791001	
		EL CTK ST 20.0X12.0X1.5 CTOPP10	11791002	
		EL CTK ST 30.0X12.0X1.5 CTOPP10	11742547	
		EL CTK ST 40.0X12.0X1.5 CTOPP10	11791003	
		EL CTK ST 50.0X12.0X1.5 CTOPP10	11742544	
		EL CTK ST 60.0X12.0X1.5 CTOPP10	11791004	
Scorers		EL CTK SC 14.0X14.0X2.0 CTOPP10	11742545	
		EL CTK SC 15.0X15.0X2.5 82° R 95 CTOPP10	11799038	
		EL CTK SC 15.0X15.0X2.5 82° R115 CTOPP10	11799035	
		EL CTK SC 15.0X15.0X2.5 82° R150 CTOPP10	11799039	
		EL CTK SC 15.0X15.0X2.5 R 95 CTOPP10	11778838	11827619
		EL CTK SC 15.0X15.0X2.5 R115 CTOPP10	11789902	11827617
Planer blades		EL CTK PK 75.5X5.5X1.1 CTOPP10	11871695	
		EL CTK PK 80.5X5.5X1.1 CTOPP10	11871691	
		EL CTK PK 82.0X5.5X1.1 CTOPP10	11801133	

## Composition and properties

CERATIZIT grade code	ISO code	U.S. code	Binder [m %]	Density [g/cm <sup>3</sup> ]	Hardness			Transverse rupture strength		Fracture toughness (SEVNB) [MPa*m <sup>1/2</sup> ]
					HV10	HV30	HRA	[MPa]	[P.S.I.]	

### Nano-grades

UMG04	K01	C4	2,2	15,30	2500	2400	96,0	3200	464000	5,4
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### Ultrafine grades

SMG02	K01	C4	2,4	15,25	2300	2200	95,2	3500	508000	5,7
HE40	K40	N/A	20,0	13,15	1250	1240	88,8	3500	508000	12,1

### Submicron grain

KCR08	N/A	N/A	4,2	15,20	1920	1885	93,4	2300	331000	8,7
MG18	K20	C2	10,0	14,45	1680	1660	92,3	3700	537000	9,4
CTOPP10	N/A	N/A	10,0	14,45	1570	1550	91,6	3000	435000	N/A

### Fine grain grades

HC05	K10	C3	4,0	15,15	1730	1700	92,5	2200	319000	8,7
HC20	K20	C2-C3	6,0	15,00	1640	1620	92,1	2200	319,000	9,9

### Medium grain grades

HC35	K30	C1	9,0	14,60	1400	1380	90,3	2800	335000	10,9
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#### Comment:

1. The data in this table are typical material parameters. We reserve the right to modify the data due to technical progress or due to further development within our company.

2.  $K_{IC}^*$ : The measured critical tension intensity factors ( $K_{IC}$ ) depend to a high degree on the sample geometry and sample preparation. A direct comparison with parameters which have been determined by means of a different method is therefore not admissible.

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