upGRADE

New recycled carbide grade

We take a big step towards a more sustainable future: recycled carbide meets high performance.

Our new KLC20+ grade is made with recycled carbide and is itself recyclable. The grade is available for saw tips, indexable knives and rods. All of them offer you best performance due to our recycling processes.

Proven recycling methods

Over 99% of the raw material that is used for the KLC20+ grade is coming from our optimised recycling processes. That means the used material does not come from ore, but from secondary raw material. The properties of the grade are under CERATIZIT specification as the used carbide grains are similar to conventional mined carbide.

Reduce your carbon footprint

The "**LC**" in our new K**LC**20+ grade stands for low carbon – because with our recycled tungsten carbide powder we emit less CO_2e compared to the production with virgin raw materials. As a result, by using upGRADE, you can reduce your own carbon footprint and help to conserve the earth's valuable and limited primary resources.



upGRADE BENEFITS

- ▲ The whole supply chain in one hand
- ▲ Reduced product carbon footprint
- Recycling as integrated part of the supply chain
- ▲ The usual high performance

| CERATIZIT grade code | Binder [m %] | Grain size | Hardness HV10 HRA | | Fracture toughness (KiC) [MPa*m ¹/₂] | Transverse rupture strength [MPa] | Applications |
|----------------------------|-----------------|------------|----------------------|----|--|---|--------------|
| KLC20+ | 10% | Submicron | n 1630 | 92 | 10 | 3200 | |
| | | | | | | | GROUP |

Upgrade your wood working portfolio

You can count on best performance with lower carbon emission at the same time. As an example, a comparison of the average Product Carbon Footprint (PCF) of upGRADE (KLC20+) and another high-performer grade (KCR):

Better PCF, same high performance



What is the Product Carbon Footprint (PCF)?

It's the specific carbon footprint in kg CO_2e/kg product or kg $CO_2e/piece$. It is calculated by multiplying the input information (composition, weights) with the process carbon footprint (production). Cradle-to-Gate methodology used for the calculation, including scope 1, 2 and 3.

Order your products now:



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| | Mat | Designation | | Mat | Designation |
|--------|----------|--------------------------------------|----------|----------|---------------------------------|
| | 14855683 | CTK FC 12.0x12.0x1.5 KLC20+ | | 14869140 | 17037- 8.0X 2.9X2.3 TS90 KLC20+ |
| | 14855685 | CTK SC 14.0x14.0x1.2 KLC20+ | | 14869142 | 17037- 8.0X 3.2X2.3 TS90 KLC20+ |
| | 14855687 | CTK SC 15.0x15.0x2.5 R05 KLC20+ | | 14869143 | 17037- 8.0X 3.5X2.3 TS90 KLC20+ |
| | 14855688 | | | 14869144 | 17037- 8.0X 3.6X2.3 TS90 KLC20+ |
| | 14855691 | | | 14869145 | 17037- 8.0X 3.8X2.3 TS90 KLC20+ |
| /es | 14855692 | | Saw Tips | 14869147 | 17037- 8.0X 4.3X2.3 TS90 KLC20+ |
| Knives | 14855693 | CTK SC 15.0x15.0x2.5 R150 R05 KLC20+ | | 14869148 | 10975- 8.5X 4.1X2.5 TS90 KLC20+ |
| | 14855694 | CTK ST 20.0x12.0x1.5 KLC20+ | | 14869149 | 10975- 8.5X 4.8X2.5 TS90 KLC20+ |
| | 14855695 | CTK ST 30.0x12.0x1.5 KLC20+ | 0) | 14869150 | 11748-10.5X 3.4X2.5 TS90 KLC20+ |
| | 14855696 | CTK ST 40.0x12.0x1.5 KLC20+ | 1.17 | 14869151 | 11748-10.5X 3.5X2.5 TS90 KLC20+ |
| | 14855697 | CTK ST 50.0x12.0x1.5 KLC20+ | | 14869152 | 12356-10.5X 4.1X3.0 TS90 KLC20+ |
| | 14855699 | CTK ST 60.0x12.0x1.5 KLC20+ | | 14869153 | 12356-10.5X 4.5X3.0 TS90 KLC20+ |
| | 14855700 | CTRG W00- 6,00X330,0 KLC20+ | | 14869154 | 26457-10.5X 4.5X3.5 TS90 KLC20+ |
| ds | 14855701 | CTRG W00- 8,00X330,0 KLC20+ | | 14869155 | 26457-10.5X 5.0X3.5 TS90 KLC20+ |
| Rods | 14855702 | CTRG W00- 10,00X330,0 KLC20+ | | | |
| | 14855703 | CTRG W00- 12,00X330,0 KLC20+ | | | |

If you have further questions, our experts are available at any time. hardmaterialsolutions@ceratizit.com

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