Nibbler for fiber composite materials

Versatile use, unique cutting
Clean, precise, flexible

Accuracy and clean cutting edges pose real challenges when it comes to the manual cutting of fiber composite materials. Fraying and delamination frequently occur. During the separation of the material smoke and harmful dust can form. The world’s first nibbler for cutting fiber composite materials of any kind makes these difficulties a matter of the past.

Developed by experts

The nibbling method comprises continuous punching of the workpiece, in which the punched out material occurs in the form of chips. For metal processing, we have already perfected this cold separation process. As a longstanding specialist for hand-held Power Tools for metal processing, we have now developed the FCN 250 Nibbler to allow processors of composite fiber materials to also benefit from this technology.

“Until now the manual rework of fiber-reinforced composites has been complex and time-consuming. Now the Fiber Composite Nibbler allows me to work with all-round efficiency.”

Roland Hoffmann, Head of Operations, Connova AG, Switzerland

Your benefits

- Precise working
- Perfect cutting edge
- Low dust formation during cutting
- Full freedom of movement
- Cuts all common fiber composite materials, even aramide

Experience the fiber composite nibbler in daily operation: www.youtube.com/TRUMPFtube
Easy handling, full flexibility

With the Fiber Composite Nibbler, you have a clear view of the cutting line. Thanks to the 360 degree tool, you can cut flexibly in any desired direction. This allows you to quickly and accurately process even three-dimensional workpieces as well as hard to reach areas. In the process, the machine has an extreme high curve flexibility. Thus you can make precise cut-outs on scribed lines, as well as cutting straight lines or working in narrow radii.

Flexible in use

- Straight-line cuts on scribed lines
- Curved cuts
- Cutting templates
- Ideal also for aramide
TruTool FCN 250

Fiber Composite Nibbler

High stability
Aluminum cast housing for maximum longevity

Health-friendly working
Cold process without smoke. No harmful formation of dust.

Wide range of applications
Suitable for CFRP, GFRP, AFRP; thermosets and thermoplastics

Outstanding cut quality
No delamination or fraying

Full processing freedom
Change cutting direction by 360°

Further benefits
- Fast and fatigue-free working without forward force
- Ergonomically optimized weight distribution of all components
- Machine ready to use in no time without any adjustment
- Highest curve maneuverability
- Tool-free punch and die change
- Low operating costs due to high tool life

If you have any questions regarding the Fiber Composite Nibbler and its accessories, please feel free to contact us: Find your contact at www.trumpf.com

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Technical Data

<table>
<thead>
<tr>
<th>TruTool FCN 250</th>
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<tbody>
<tr>
<td>Max. material thickness</td>
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<tr>
<td>Smallest radius</td>
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<tr>
<td>Rated input power</td>
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<tr>
<td>Strokes at nominal load</td>
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<td>Weight without cable</td>
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</table>

Subject to changes.

Accessories

The Fiber Composite Nibbler comes with all necessary accessories; thus, it is ready for use in next to no time without any adjustment work. In addition to the supplied accessories, TRUMPF offers optional accessories that allow you to tailor the machine to your needs and requirements. All accessories are easy and quick to replace. This saves time and increases efficiency.

Order numbers machine

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Order numbers accessories

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<td>1 piece 2306495</td>
<td>1 piece 2294435</td>
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<tr>
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<td>Punch guide standard (included)</td>
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<td>Suction unit for chips (hose, die, connecting piece)</td>
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* CFRP = Carbon fiber reinforced plastic  GFRP = Glass fiber reinforced plastic  AFRP = Aramide fiber reinforced plastic
More meters, low cost

Punches and dies have particularly long service life due to the use of ultra hard cutting material. In the process, a costly diamond coating can be avoided, thus making the cost of consumables relatively low. When cutting very thin workpieces, the service life once again increases significantly, making the process a more economically efficient solution.

The dust formation during the nibbling process is significantly lower than during other competitive processes. This increases work safety and comfort immensely so that in most cases even personal protective equipment is rendered unnecessary. The punched out material is in the form of chips, which can be swept together without forming any dust. The chips can also be removed directly using the suction unit.

Average dust concentration (values given in per cent)
Material: GFRP 2,5 mm thickness

- Alveolar dust (fine dust)
- Inhalable dusts (total dust)
Our drive: Passion

Whether production and manufacturing technology, laser technology or material processing: We develop highly innovative products and services that are industrial quality and proven absolutely reliable. We give it our all to achieve competitive advantages for you: Know-how and experience.

Lasers for manufacturing technology
Whether macro, micro or nano: we have the right lasers and the right technology that is innovative and at the same time cost-efficient for every production application. Beyond the technology, we provide you with system solutions, application knowledge and consulting.

Power supplies for high tech processes
From semiconductor manufacturing to solar cell production: with our high and medium frequency generators, power for induction heating and plasma and laser excitation receives a defined form consisting of frequency and power – that is highly reliable and repeatable.

Machine tools for flexible sheet metal- and tube processing
Laser cutting, punching, bending, laser welding: for all processes in flexible sheet metal production, we offer you precisely tailored machines and automation solutions, including consulting, software and services – so you can reliably produce your products in high quality.

Power tools for metal processing
Cutting, fastening, beveling: our Power Tools offer the most innovative technology and the highest quality. Original accessories and a free 5-year warranty provide extra security. Whether on construction sites or in job shops, high-quality and long-lasting machines are our quality promise.

Industry 4.0
The solutions world TruConnect connects man and machine through information. It covers all steps in the manufacturing process – from quote to the shipment of parts.