

KEMROC chain cutter in Lower Austria

PRECISE TRENCHING IN DOLOMITE

Eight kilometers of trenching completed

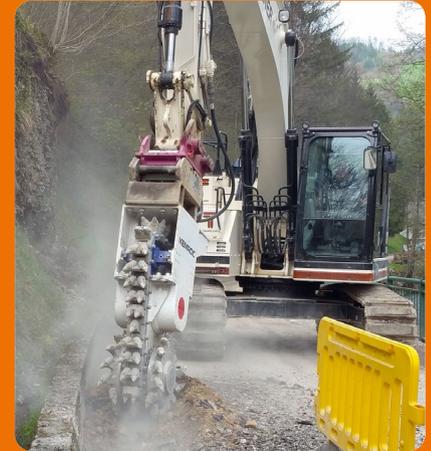
When it came to excavating trenches in Schwarzenbach an der Pielach (Lower Austria), the contractor, Traunfellner, put their faith in a KEMROC chain cutter from the EK ange. Working in dolomite with a strength up to 120 MPa, thanks to its patented design, the chain cutter achieved a higher production rate compared to more conventional cutter attachments – with significantly lower wear and tear on the operator and the equipment.

Anton Traunfellner is a well-known company in Lower Austria providing a wide range of services in the construction industry including general construction, civil engineering, road and bridge construction, demolition and transport. In 2016 Traunfellner was awarded the contract to excavate trenches for the ABA Project (waste-water disposal plant) in Schwarzenbach an der Pielach. The project involved excavating 8 km of trench with width varying between 60 to 120 cm and with depth down to 350 cm. The upper layer of the trench consisted of 40 to 60 cm of asphalt and gravel below which there is solid dolomite rock with uniaxial compressive strength up to 120 MPa

For this technically complex project, they rented a KEMROC EK 100 chain cutter with a 600 mm wide cutter head.

Chain cuts out the middle step

Conventional drum cutters, due to their design, must be slewed from side to side to remove material located between the two cutter drums. This is not the case with Kemroc's range of EK chain cutters, because they have a chain fitted with picks running through the space between the two cutter drums. The chain and drums cut the material along the full width of the cutter head, allowing it to descend without a need for sideways movement. As a result, the operator can excavate a narrow trench with vertical sides. Excavating a trench to the exact dimensions required avoids wasting time excavating more rock than necessary and reduces transport costs associated with removal of excavated material and the amount of material and time required to fill the trench. Not having to slew from side to side also reduces wear and tear on equipment as well as making life easier for the operator, which is also the case when compared to trenching with the commonly used lengthways drum cutter.



While excavating a total of 8 km of trench in Lower Austria, Anton Traunfellner GmbH had to cut through dolomite rock between 120 – 250 cm thick.



A KEMROC EK 100 chain cutter with 60 cm cutting width was rented for this project.

These positive benefits were experienced when using a 60 cm wide KEMROC EK 100 mounted on a CAT 325F L crawler excavator. Franz Schnirzer from the contractor Traunfellner reported, "The powerful KEMROC chain cutter excavated 25 m of trench per day, even in 140 to 250 cm deep dolomite rock. That was a lot more than we were achieving previously with a lengthways drum cutter." According to Franz Schirzner, even the operator, Herbert Redl, who had been sceptical beforehand, was praising the productivity and especially the smooth operation of the attachment. "In the past, while using the lengthways cutter he was being shaken around in the cabin and the wear and tear on the equipment was high. With the chain cutter, not needing to do the energy consuming and stressful sideways slewing, the excavator worked more effectively and with less wear and tear."

Currently, there are two sizes available in the KEMROK range of EK chain cutters. The EK 100 with a rated power of 100 kW is designed for use on 18 to 30-ton excavators. The EK 140 is the larger model with 140 kW rated power and designed for use on 30 to 45-ton excavators. The plan is to add an EK 60 size chain cutter, designed for use on 10 to 18-ton excavators, to the range in 2017. ■



Thanks to its patented design, with a chain running between the cutter drums, the chain cutter attachment can excavate narrow trenches to a precisely defined width.

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