

# Extending Tool Life in Extreme Rock Drilling Conditions with Endura-Line

In early 2026, Aarsleff supplied a set of Endura-Line fitted augers to a piling project in Frankfurt, Germany, where the contractor was experiencing severe wear on their traditional drilling tools. The ground conditions consisted of extremely abrasive rock, and each 11-metre pile required around six hours of continuous drilling. As a result, the site was seeing exceptionally high levels of tool degradation. The existing stingers were wearing out at a rate of one per day, and the augers themselves needed to be hard-faced daily to keep them operational. This cycle of wear and repair was not only costly but caused unwelcome delays to the programme.

The Endura-Line equipped augers were delivered to Frankfurt on 30 January 2026. Soon after arrival, early use produced a revealing comparison. A photograph taken after only two drilling cycles showed clear wear on the stinger at the base of the auger, while the Endura-Line protection blocks displayed no visible deterioration at all. This contrast highlighted the resilience of the Endura-Line system in conditions where conventional hard-facing was failing almost immediately.

As drilling continued, the benefits became even more apparent. Since their arrival on site, the Endura-Line tools have remained in continuous use without requiring any replacement of the Endura blocks and without the need for additional hard-facing. Routine replacement of stingers and teeth has continued as expected, but the protected sections of the auger have remained intact. This performance has offered a significant improvement over the previous setup, reducing both downtime and maintenance effort and allowing the team to progress more efficiently through the challenging geology.



*Existing Stinger wearing out at a rate of one per day.*

Encouraged by these results, Aarsleff is now supplying additional tooling fitted with Endura-Line blocks on the stingers themselves, aiming to reduce wear in the areas that continue to experience the heaviest abrasion. This development marks the next step in enhancing tool longevity across the full drilling assembly.

The Frankfurt project demonstrates the practical value of Endura-Line in high-wear applications. In a setting where traditional tools were lasting only a day before needing re-hard facing, the Endura-Line system has delivered sustained durability, reduced maintenance requirements and improved overall productivity. With further enhancements now being introduced, the site continues to benefit from a more reliable and cost-effective tooling solution suited to the demands of rock drilling.

