

# How Endura-Line® Transformed Rigid Inclusion Barrel Wear and Productivity

In March 2025, Aarsleff began rolling out Endura-Line®, our long-wear protection system designed to extend the life of high-impact drilling and piling tools. The aim was simple: reduce wear, cut downtime, and prove that a smarter approach to tooling could create real value on live projects.

What followed across Bracknell, Doncaster, Avonmouth, Sawley, and Corby showed exactly what Endura-Line® was capable of.

## The First Live Trial – Bracknell

Bracknell became the proving ground. Two barrels were put to work, one with traditional hard-facing and one with Endura-Line® applied.

The traditionally faced barrel started the project and completed 330 rigid inclusions before needing to be re-hard faced. The wear was severe enough to confirm that this type of repair would have been a regular requirement throughout the programme.

As a result, the barrel was returned to our workshop in Newark and we fitted with Endura-Line®.

The project itself was finished using the Endura-Line® barrel, which went on to deliver a further 380 rigid inclusions without any intervention before moving straight to the next job at Avonmouth Plot 4. This was our first clear indication that Endura-Line® could dramatically reduce wear and extend service life.

Following the early success at Bracknell, we manufactured additional Endura-Line® barrels for:

- Doncaster
- Avonmouth Plot 3
- Additional packages at Avonmouth Plot 4

In total, six barrels were produced and deployed across the UK.

Across these sites, the combined output reached 10,128 rigid inclusions completed without a single hard-facing intervention, an average of 1,688 inclusions per barrel. All six barrels continued working beyond these numbers, proving that the wear protection was not just lasting, but consistently reliable.

Across all monitored barrels, Endura-Line® itself remained in excellent condition.

The only significant wear observed was on the tooth holder. While the holder experienced substantial abrasion, the Endura-Line® coating remained intact and fully protective, demonstrating that the underlying steel would have been at far greater risk without Endura-Line®.

This also helped us identify future development opportunities around secondary wear components.

## Project Delivery Summary

- Bracknell — 710 piles  
First barrels produced March 2025.
- Doncaster — 3,787 piles  
Endura-Lined barrel manufactured March 2025.
- Avonmouth Plot 4 — 3,854 piles  
Barrels manufactured March/April 2025.
- Avonmouth Plot 3 — 2,107 piles  
Barrels manufactured March/April 2025.
- Sawley — ongoing  
Two new barrels plus one original, manufactured November 2025.
- Avonmouth RI — ongoing  
Two new barrels plus one original, manufactured November 2025.
- Corby — three new barrels  
Currently in use.

The performance of Endura-Line® has exceeded expectations across every project to date. By eliminating the need for repeated hard-facing, the system has:

- Reduced downtime
- Lowered repair and transport costs
- Extended tool life
- Provided consistent performance across multiple soil conditions and regions

With more than 10,000 rigid inclusions completed on early deployments and barrels still in active service Endura-Line® has proven to be a reliable, long-term solution for heavy-duty piling and drilling environments.

