



Fact sheet

EURODUR®

Stress-relief cracks



hard coating

base material

EURODUR® composite armor plates are manufactured using high-alloy filler wires via the OpenArc welding process in accordance with DIN EN ISO 15614. High proportions of carbide-forming alloying elements in the filler wire, combined with the proprietary cooling technology of the hardfacing welding stations, ensure optimal formation and distribution of the hard phases within the coating. During the EURODUR® hardfacing process, high compressive stresses occur which, upon cooling, lead to so-called hardening cracks

due to the high carbon content (approx. 3–5%) and other components of the hardfacing material.

Thanks to the precise process control of EURODUR® technology, the hardening cracks are strictly confined to the mixing zone (approx. 20%) of the base material. The remaining base material layer remains crack-free and intact.

The characteristic, controlled, and desired crack formation in EURODUR® wear-resistant coatings relieves internal stresses and supports safe and reliable plant operation.