

# ABRASERVICE

## Abraservice introduce Duroxite® overlay products

If you are looking for quality and durable wear parts, on-time delivery and a long-term partner who understands your industry's needs, look no further.

Abraservice supports you on every step of the way – from analyzing your requirements through to supplying finished parts ready for fitting. We offer tailored technical support and engineering services, and we stock Duroxite® plate and wire so that you can protect your equipment for years to come.

Duroxite® overlay products can add weeks, months, or even years of trouble-free operations to your most extreme wear applications and environments. Abraservice is the leading provider of wear resistant steel processing services. We can help you choose the right material for your needs.



### ABRASERVICE UK

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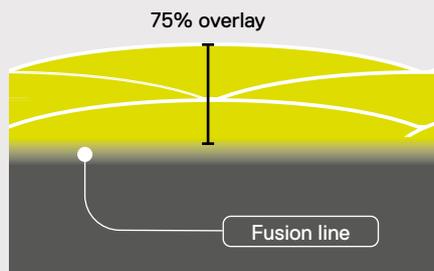
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# Overlay overview

The ultimate Duroxite® product for your application depends on the material – whether rock, sand, gravel or other substance – sliding along the surface of the wear part. It also depends on the angle and speed of impact, and the operating temperature. Duroxite® is delivered as plate, pipe, pin and wire, ready for installation on your equipment or further fabrication in your workshop.

	SLIDING WEAR		SEVERE SLIDING WEAR	
	DUROXITE® 100	DUROXITE® 100 WIRE	DUROXITE® 200	DUROXITE® 200 WIRE
DESCRIPTION	A chromium-rich overlay deposited on a mild steel backing plate for sliding wear and moderate to low impact applications up to 350 °C (660 °F)	A flux cored open-arc wire for hardfacing components subject to sliding wear applications.	A complex carbide overlay deposited on a mild steel backing plate for severe sliding wear and moderate impact applications up to 600 °C (1100 °F).	A flux cored open-arc wire for hardfacing components subject to severe sliding wear applications.
PROPERTIES	<p><b>Bulk hardness:</b> Single pass 55-57 HRC, double pass 59-62 HRC, triple plus passes 60-64 HRC</p> <p><b>Carbide hardness:</b> 1700 HK</p> <p><b>Volume fraction of primary carbides:</b> 30-50%</p> <p><b>ASTM G65-Procedure A weight loss:</b> 0.18 g max.</p>	<p><b>Chemical composition (wt. %):</b> 4.7 C, 0.2 Mn, 0.6 Si, 27.0 Cr, Balance, Fe</p> <p><b>Surface hardness:</b> Three-layer deposit on mild steel 60-62 HRC</p> <p><b>ASTM G65-Procedure A weight loss:</b> 0.18 g max.</p>	<p><b>Bulk hardness:</b> 60-65 HRC</p> <p><b>Carbide hardness:</b> 2500-3000 HK</p> <p><b>Volume fraction of primary carbides:</b> 30-50%</p> <p><b>ASTM G65-Procedure A weight loss:</b> 0.12 g max.</p>	<p><b>Chemical composition (wt. %):</b> 5.3 C, 0.5 Mn, 0.2 Si, 22.0 Cr, 6.5 Nb, Balance, Fe</p> <p><b>Surface hardness:</b> Three-layer deposit on mild steel: 62-67 HRC</p> <p><b>ASTM G65-Procedure A weight loss:</b> 0.12 g max.</p>
TYPICAL APPLICATIONS	Chutes/hoppers, liners for truck beds, dozer blades, shovel buckets, dragline buckets, excavators, separator guide vanes, discharge cones for clinker storage bins, chutes for sintering ore conveying, outlet ducts for clinker grinding mills, receiving hoppers, dredging pipes and pumps, suction pipelines, pump discharges, fan blade/housings, coke vibrating screen plates, coal handling chutes, coal feeder liners, crusher screen plates, classifier cones, journal liners, silo bunkers	Loader bucket liners, bucket lip and side shrouds, jaw shrouds, heel pads and dewatering conveyors, coal discharger chutes	Chutes, liner plates, conveyors sides, underground mine skips, cement furnace components, sinter plant parts, fan blades, mixer blades, crews, gyratory mantles, coal and cement pulverizer rolls, raw material crushing components, molding panels, ore sintering, crushing, riddling, blast furnace hoppers, throats, and ovens	Screen plates, loader bucket liners, feeding systems for ball mills, loader bucket liners, bucket lip shrouds, bucket side shrouds, chutes, liner plates and skip liners, cement furnace components, sinter plant parts, fan blades, mixer blades, crews, gyratory mantles, coal and cement pulverizer rolls, raw material crushing components, molding panels, coal discharger chutes

## GUARANTEED OVERLAY THICKNESS, GUARANTEED OVERLAY PROPERTIES



Duroxite® overlay plates and pipes are delivered with an overlay thickness guaranteed within  $\pm 10\%$ . This is consistent throughout the material and between individual plates and pipes.

The wear properties of Duroxite® are also guaranteed throughout the overlay down to 75% of the overlay thickness.

The remaining 25% of overlay is the transition layer necessary to maintain good bonding to the base material.