

Protective Coatings for Tire Shredding Equipment



Wear Protection...
Stronger, with
Castolin Eutectic

- Advanced alloys for protection from abrasion, metal-to-metal wear and impact
- Reduce maintenance costs
- Extend life, increase productivity and save money
- OEM protection and repairs

YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



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Castolin Eutectic Solutions for Shredding Equipment Wear

Primary and secondary tire shredding and granulation equipment is subjected to extreme abrasion and metal-to-metal wear, as well as impact. Steel belts and fibers in the tires cause excessive wear which leads to costly maintenance and production downtime. Castolin Eutectic wearfacing alloys have proven to cost effectively extend the life of teeth and knives in this equipment.

Protecting tire shredding equipment saves you time and money

- Castolin Eutectic can offer you multiple coatings that will provide the best solution to combinations of wear
- Recommendations below are based on a deep understanding of applied metallurgy and proven field applications

Technical Data	GOOD		BETTER		BEST			
	EnDOTec DO*351		EnDOTec DO*15		EnDOTec DO*327		EutecTrode 6327XHD	
Typical Hardness	58 HRC		58 HRC		59 HRC		59 HRC	
Type:	Seamless MCW		MCW		MCW		SMAW	
Current & Polarity:	DC (+) electrode positive		DC (+) electrode positive		DC (+) electrode positive		DC (+) electrode or (-)	
Shielding Gas 1st Choice	82% Argon + 18% CO ₂		97,5% Argon + 2,5% CO ₂		97,5% Argon + 2,5% CO ₂		-	
Shielding Gas 2nd Choice	97,5% Argon + 2,5% CO ₂		82% Argon + 18% CO ₂		98% Argon + 2% Oxygen		-	
Shielding Gas Flow Rate:	14-17 l/min.		14-19 l/min.		14-19 l/min.		-	
Positions:	Flat, Horizontal and Vertical Down		Flat, Horizontal and Vertical-Up		Flat, Horizontal		Flat, Horizontal	
Diameter	1,2 mm	1,6 mm	1,2 mm	1,6 mm	1,2 mm	1,6 mm	3,2 mm	4,0 mm
Voltage	12-35	16-38	16-22	17-28	18-26	20-34	-	
Amperage	50-320	80-420	90-230	110-320	160-260	140-320	90-140	125-160

PRODUCT	FEATURES	BENEFITS
EnDOTec DO*351	Martensitic Steel Alloy	Crack-free w/ multiple passes Resistance to impact and abrasion
	Seamless Wire	Excellent wire feeding Superior automated welding performance
	Metal-cored	High deposition efficiency
	Moderate alloy content	Cost-effective
	Slag free	No post-weld cleanup
EnDOTec DO*15	High Alloy Tool Steel	Improved abrasion resistance Crack-free with multiple passes
EnDOTec DO*327	High Alloy with Nb-carbide	Excellent resistance to abrasion Very good edge retention
	Uniquely balanced composition	Crack-free w/ multiple passes Good impact resistance
	Metal-cored	High deposition efficiency
	Slag free	No post-weld cleanup
	High Alloy with Nb-carbide	Excellent resistance to abrasion Compatible with DO*327 so ideal for repairs and touch-ups
EutecTrode 6327XHD	Uniquely balanced composition	Crack-free w/ multiple passes Good impact resistance

NOTE: All alloys are available in spools or drums in either 1,2 or 1,6 mm diameters.

Stronger, with Castolin Eutectic

www.Eutectic.com

Increase Service Life with Superior Wearfacing Technologies

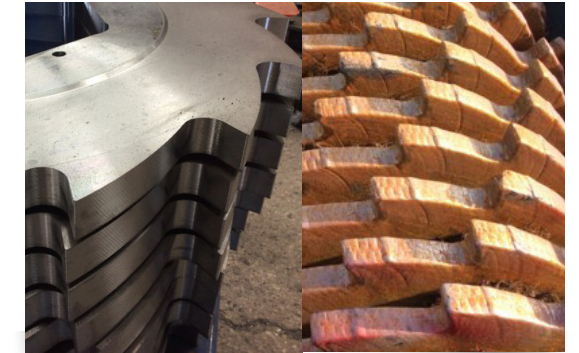
Castolin Eutectic Case Studies

Protect OEM Shredder Rotors

WEAR FACTORS: abrasion, erosion and mild pressure

SITUATION: Tire Shredder OEM hires local service center to hardface their rotors, previous product did not produce the service life they wanted.

SOLUTION: Castolin Eutectic's EnDOTec DO*351 wire offered not only extended wear life but also better feeding characteristics. Longer service life, more efficient welding and sold in larger drum sizes all saved this customer time and money.



Wearface Tire Shredder Knives

WEAR FACTORS: abrasion, erosion and metal-to-metal wear

SITUATION: Customer had to resurface shredder knives after only 5,000 tons.

SOLUTION: Castolin Eutectic's EnDOTec DO*15 wire maintained a sharp edge over multiple passes and didn't cause metal fatigue. DO*15 achieved a record 13,000 tons before knives needed service. Service life was increased 2.6 times, reducing the customer's maintenance costs and providing a greater return on his investment.



Wearface Tire Shredder Knives

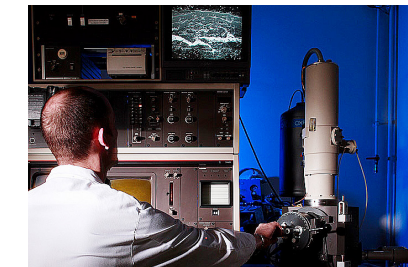
WEAR FACTORS: abrasion, erosion and metal-to-metal wear

SITUATION: Customer wanted to replace his multi-wire solution with one hardfacing wire that was capable of a multiple pass build-up of 12 to 20 mm without cracking. Customer's previous solution included build-up of 7018 and two separate capping wires that cracked when applied in multiple passes. Steel belts in the tires wear into the cracks causing spalling and premature wear.

SOLUTION: Castolin Eutectic's EnDOTec DO*327 multiple pass build-up capability and high hardness met the customer's requirements and provided a single source solution.



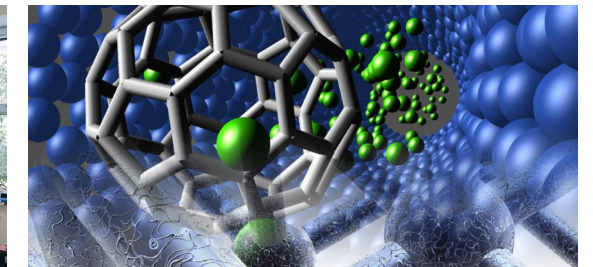
World Leader in Advanced Alloy Development



Strong international R&D facilities



Lab testing to define wear mechanisms



Development of new, cutting edge technologies

Critical equipment that's subjected to extreme conditions requires the best wearfacing solution!
Start saving money in your maintenance and repair operations

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