About this organisation

Machine translation

This organisation has been machine-translated based on data provided in German.

Deutsche Edelstahlwerke is one of the world's leading manufacturers of stainless steel long products with over 160 years of experience. The globally unique product range includes tool steels, stainless, acid and heat-resistant steels (RSH steels), engineering steels and special materials. The range of dimensions extends from drawn wire with a diameter of 4.5 mm to forged products with a diameter of 1,100 mm and metal powder.

Bainidur steels allow a large process window in terms of temperature control during forging and cooling. The bainitic microstructure and the properties of the component can thus be reliably adjusted without additional CO2-emitting heat treatment. Bainidur is the ideal solution for highly stressed parts and at the same time significantly reduces the amount of material used compared to conventional steels, with comparable load values. Bainidur is also suitable for additive manufacturing, covering the entire product life cycle - from additive manufacturing to series production. Density-reduced steels are also part of the DEW portfolio. Aludur steels are high-aluminium alloyed engineering steels. Compared to conventional steels such as 42CrMo4, the high aluminium content in Aludur enables a reduction in specific weight. When used in cars, CO2 emissions can be reduced thanks to the weight saving.

Auestraße 4 58452 Witten North Rhine-Westphalia Germany

☑ www.dew-stahl.com



Turnover

Funding

n/a

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About this organisation				
Main areas covered	High-strength steels, density-reduced steels, Metal powder			
Infrastructure	Steel production and processing, Prototyping, Additive manufacturing			
Certifications	ISO 9001, IATF 16949, AS 9100, KTA 1401, ISO 50001 and ISO 14001			
Keywords	Steel, Metal powder, Bainidur, Aludur, Printdur			
Memberships	Lightweight construction initiative, FOSTA			

Overview of lightweighting expertise				
Machine translation				
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		_	Manufacturing	
	Research	Development	& Supply	
Offer	Research		_	
Products	Research		_	
	Research		·	

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Overview of lightweighting expertise					
Machine translation					
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	Research	Development	Manufacturing & Supply		
Field of technology					
Design & layout Lightweight material construction	✓	✓	✓		
Functional integration					
Measuring and testing technology Visual analysis (e.g. microscopy, metallography), Materials analysis, Destructive analysis, Non- destructive analysis	✓	~	✓		
Modelling and simulation Processes, Materials	~	✓	✓		
Plant construction & automation					
Recycling technologies Material separation, Recycling			✓		

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Overview of lightweighting expertise Machine translation This organisation has been machine-translated based on data provided in German.									
							Research	Development	Manufacturing & Supply
						Manufacturing process			
Additive manufacturing 3D printing, Deposition welding, Selective laser melting (SLM, LPBF,)	✓	~	✓						
Coating (surface engineering)									
Fibre composite technology									
Forming Forging, Thermal converting, Rolling			✓						
Joining									
Material property alteration Thermomechanical treatment, Heat treatment			✓						
Primary forming Casting			✓						
Processing and separating Turning, Milling, Sawing			✓						
Textile technology									

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Overview of lightweighting expertise **Machine translation** This organisation has been machine-translated based on data provided in German. Manufacturing **Development** & Supply Research Material Biogenic materials Cellular materials (foam materials) Composites Metal matrix composite Fibres Functional materials Metals Steel **Plastics** Structural ceramics (Technical) textiles

Contacts

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