



EFFECTIVE & EFFICIENT.
CARBON CONCENTRATE
FOR SLAG FOAMING.

A REGIONAL RESOURCE.

Rheinbraun Brennstoff's LSC Lignite Special Coke is a fine-grained carbon concentrate used in metallurgical, chemical and other industrial processes.

LSC can be used to replace other carbon carriers such as dried anthracite, hard coal coke, (calcined) petroleum coke, needle coke, pitch coke or graphite.

LSC is produced by coking Rhenish lignite, extracted from RWE Power AG's opencast mines near Cologne.

LSC – made in Germany:

- From the region for the world: locally available resources are the basis for reliable and cost-optimised production in Germany.
- Consistent quality: production, sales and logistics are carried out strictly in accordance with a quality assurance system based on DIN ISO 9001.
- Long-term supply agreements: costs can be calculated years in advance.
- Environment: LSC is a safe and pollutant-free product.

LSC is available in grain sizes to suit your needs and is transported in bulk and in a wide variety of containers (sacks and big bags).

LSC products

LSC® GRAINS
(1–5 mm)



LSC® FINES
(< 1,6 mm)



CONSISTENTLY HIGH QUALITY.

Analysis reference	
Water	0,5 %
Ash	9,0 %
Volatile components (predominantly CO and CO ₂)	3,0 %
Fixed carbon	87,5 %
Sulphur	0,5 %
Free sulphur	0,05 %
Nitrogen	0,5 %
Hydrogen	0,4 %
Net calorific value (NCV)	29,9 MJ/kg

Properties and advantages:

- High quality
- High reactivity
- Consistently high process quality
- Safe to use
- For a wide range of industrial processes
- Affordable/cost-efficient
- Predictable operating costs over the long term
- Security of supply/long-term availability

LSC® PULVERIZED

(< 0,4 mm)



LSC® SUPER

(< 0,1 mm)



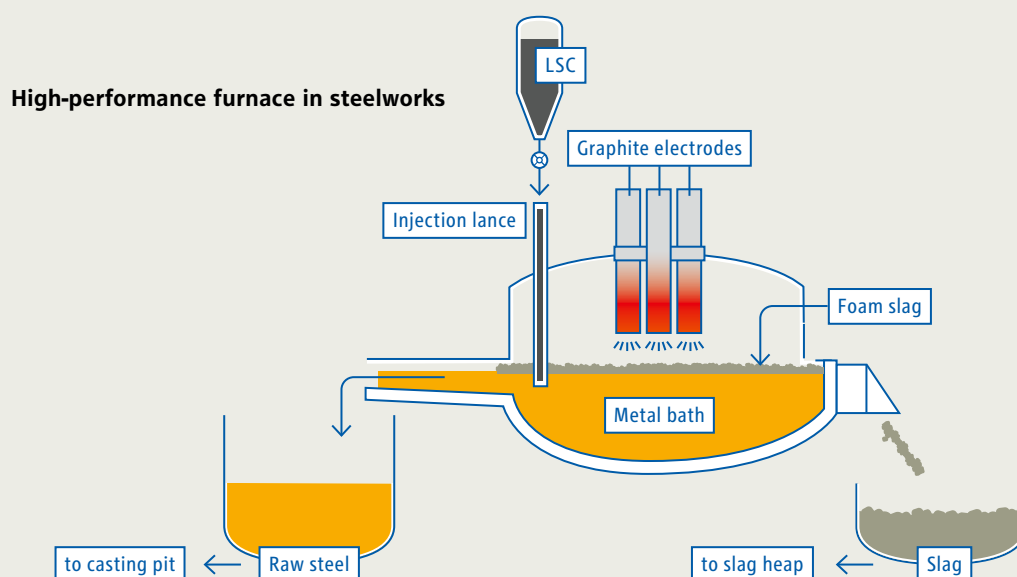
FAST REACTION AND QUICK DISSOLUTION.

When operating high-performance furnaces with long arcs and high electrical power, a voluminous slag (foam slag) minimises the radiation losses of the arc energy. In general, the foam slag is produced by injecting a fine-grained carbon product into the slag.

Various steelworks inject LSC because it has a constant reactivity, a low sulphur content, a low companion-element content and a basic ash composition.

Key benefits of LSC:

- High reactivity and quick dissolution due to its porous structure. The pore volume is approx. 50%, the specific surface area is 300m²/g. The high dissolution rate leads to a higher CO gas formation rate per unit of time with corresponding foaming effects.
- The low sulphur content increases the surface tension and, in this context, leads to a homogeneous formation of gas bubbles and a high bubble density. This effect is particularly evident on the furnace wall and helps to build up a stable foam slag with the associated positive insulating properties.
- The volatile components of the carbon concentrate consist mainly of CO (2% by weight) and CO₂ (1% by weight) and support foaming. The ash has a strongly alkaline character due to the high lime content of over 40%, and the basicity is comparable to the basicity of typical steelworks slags.



BOTH REGIONAL AND INTERNATIONAL.

RHEINBRAUN BRENNSTOFF

Rheinbraun Brennstoff, a business segment of RWE Power AG, produces and markets several million tonnes of refined products from its own production every year and supplies thousands of business customers worldwide. With our own production facilities and seamless intermodal logistics by ship, rail and lorry, we guarantee a high level of supply security.



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RWE
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