CALZOT®

Cost efficient and easy nitrogen alloying

Calzot® is an effective additive for nitridation of liquid steel and powder nitriding of surface components.

Nitrogen is an important alloying element, which is dissolved interstitially in the steel's crystal lattice. Nitridated steels therefore enable a reduction of cost driving elements in the steel industry. A popular method for nitridation are cored wires and powders, especially Calzot®.

Calzot® is based on the chemical compound Calcium Cyanamide ($CaCN_2$). Besides cyanamide, lime and carbon are the main components.

Calzot® is applied in lumpy form for nitride hardening of finished components or as a cored wire for nitridation of liquid steel.

Application

- Addition of Calzot® in bags during tapping into the ladle
- Addition via lance injection or chute
- Powder nitriding of surfaces
- Cored wire injection

Your Benefits

- High and constant nitrogen content for secure alloying
- Significant cost savings compared to nitrogenous alloys
- Less temperature and time loss compared to alloying via gas phase
- Lowest level of impurities

alzchem group
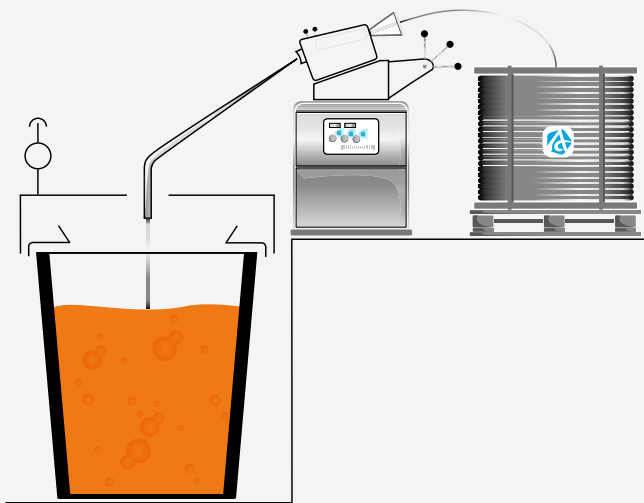
CHEMICAL ANALYSIS

Total nitrogen	> 23%
Total calcium	> 44%
Total carbon	22.5%

PACKAGING

Grain size	1–5 mm, 0–2 mm, 5–30 mm
Big bags	500 kg / 1000 kg
PE bags	25 kg
Paper bags	10 kg / 20 kg
Steel drums	9 drums á 80 kg on a pallet

COIL SPECIFICATIONS

Powder weight	880 kg/coil (approx.)
Wire length	4200 m/coil (approx.)
Inner diameter	600 mm
Outer diameter	1200 mm
Height	800 mm
Pull-out	vertical or horizontal

CORED WIRE SPECIFICATIONS

Diameter	13 mm
Filling rate	210 g/m (approx.)
Steel strip thickness	0.4 mm