



# CORED WIRE

For the Steel Industry

Cored Wire is fabricated into a tubular wire with a calculated mixture of alloys uniquely blended together; such as CaSi, Carbon, etc. The blended mixture is then metered into the wire during the fabrication process, producing special alloy cored, or flux cored wire in various diameters, depending on customer's requirements and needs.



## ADVANTAGES OF CORED WIRES

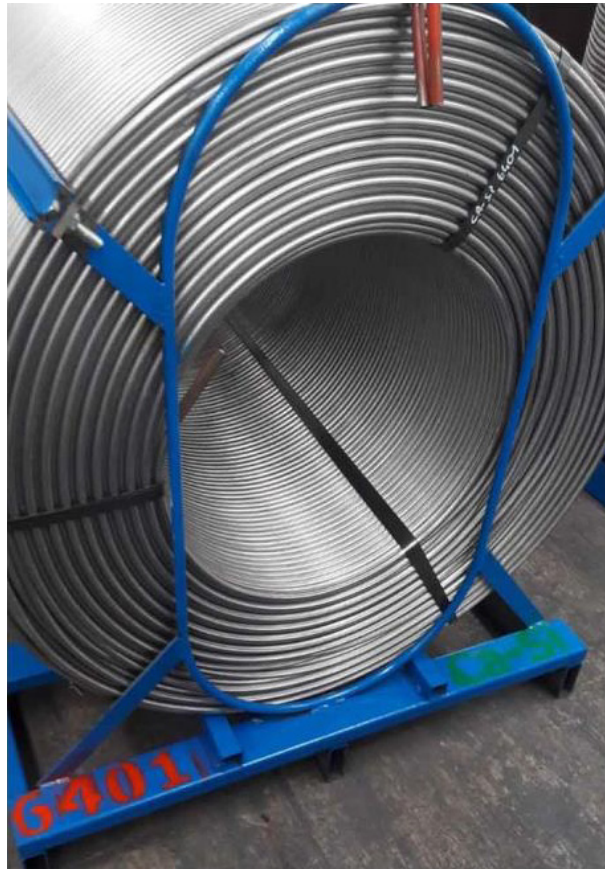
1. Wire feeding technology can make fine adjustments to the chemistry of metals. Wire feeding technology can also increase alloy elements recycling rate.
2. The Steel liquid treated by wire feeding technology is stable and well-mixed.
3. Wire feeding can prevent air being brought into the liquid steel and therefor limit secondary oxidation.
4. Wire feeding technology has good adaptability, needs small investment, and has a good application rage.
5. Wire feeding technology need simple facilities, simple operations, and is environmentally friendly.



**Ca-Fe Cored Wire** functions as the deoxidizer and the desulfurizer in the process of steel-smelting production, mainly applied to cold heading steel, pipe line steel, and other low-silicon steel types. Its core power material is metal calcium and pure iron powder.

**Ca-Si Cored Wire** is the ideal deoxidizer and inclusion refiner of special steel and alloy steel.

**S Cored Wire** Sulfur is normally controlled to as low as possible values in steel due to the negative effect of Sulfur on cast ability of steel and the increased embrittlement of steel. However it has a good effect on machinability of tool steels and is therefore added to these kind of steels.





**Ca Cored Wire** The pure calcium cored wire is mainly used for Al-killed steel. Due to its low density, low boiling point and high oxidability, calcium needs to be released near the ladle bottom in order to have the best recovery. Calcium is used to transform alumina into low melting point calcium-aluminates, avoiding nozzle clogging as well as to control the shape of oxide and sulfide inclusions.

**C Cored Wire** Carbon content is important to manage in steel. Low carbon steels have good ductility. Increasing carbon leads to increased mechanical strength. The use of carbon wire gives excellent control and yield for carbon refining.

#### **Ca Rod Cored Wire**

Calcium rod cored wire contains high-purity calcium in a solid rod form, designed for deep injection and controlled release in the ladle. It provides excellent **calcium recovery**, making it suitable for steels requiring precise inclusion control. The rod form helps minimize oxidation during feeding and ensures consistent modification of oxide and sulfide inclusions.

**Fe-Ti Cored Wire** Titanium at steelmaking temperatures forms very stable compounds with oxygen, carbon, nitrogen and sulphur. Because of this property, it is often used in steelmaking to fix these elements, neutralizing their harmful effects.

#### **Fe-B Cored Wire**

Ferro-boron cored wire is used in steelmaking to introduce **boron** in a controlled and efficient manner. Boron is a powerful alloying element that greatly improves the **hardenability**, **strength**, and **wear resistance** of steel, even in very small amounts. Because boron is highly reactive and easily lost if added directly, the cored-wire feeding method ensures **high recovery**, accurate dosing, and uniform distribution throughout the melt. It is commonly used in alloy steels, structural steels, and steels requiring improved heat-treatment response.



## TECHNICAL DATA SHEETS



## PRODUCT SPECIFICATION

Used while processing steel for high yield adjustment and sensitive treatment of molten steel

**Product Name**  
Seam - CAL / A  
CORED WIRE

Coil Properties		Tolerance
Ca (%)	> 98	
Wire diameter (mm)	10	± 0.2
Calcium (gr/m)	70	± 2
Steel (gr/m)	207	± 10
Wire (gr/m)	277	± 10
Ca <sub>Total</sub> (kg/coil)	490	± 50*
Steel <sub>Total</sub> (kg/coil)	1450	± 100
Wire <sub>Total</sub> (kg/coil)	1925	± 150*
Coil inner diameter (mm)	750	± 50*
Coil External diameter (mm)	1150	± 50*
Coil height (mm)	1150	± 50*
Steel quality	Cold rolled DIN EN 10130 Grade DC 01	
Steel Thickness	1.3	

**Shelf Life** : In original packing and dry storage conditions maximum 3 months from production

(\*) Those are standard products. However product can be produced in different size according to the customer request / transport conditions

## PRODUCT SPECIFICATION

Used while processing steel for high yield adjustment and sensitive treatment of molten steel

**Product Name**  
Seam - CAL / B  
CORED WIRE

Coil Properties		Tolerance
Ca (%)	> 98	
Wire diameter (mm)	9.4	± 0.2
Calcium (gr/m)	70	± 2
Steel (gr/m)	155	± 10
Wire (gr/m)	225	± 10
Ca <sub>Total</sub> (kg/coil)	550	± 60*
Steel <sub>Total</sub> (kg/coil)	1200	± 125
Wire <sub>Total</sub> (kg/coil)	1750	± 150*
Coil inner diameter (mm)	750	± 50*
Coil External diameter (mm)	1150	± 50*
Coil height (mm)	1150	± 50*
Steel quality	Cold rolled DIN EN 10130 Grade DC 01	
Steel Thickness	1	

**Shelf Life** : In original packing and dry storage conditions maximum 3 months from production

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## PRODUCT SPECIFICATION

Used while processing steel for high yield adjustment and sensitive treatment of molten steel

**Product Name**  
Seam - CAL / C  
CORED WIRE

Coil Properties		Tolerance
Ca (%)	> 98	
Wire diameter (mm)	9	± 0.2
Calcium (gr/m)	58.5	± 2
Steel (gr/m)	144	± 10
Wire (gr/m)	205	± 10
Ca <sub>Total</sub> (kg/coil)	525	± 60*
Steel <sub>Total</sub> (kg/coil)	1280	± 75
Wire <sub>Total</sub> (kg/coil)	1800	± 100*
Coil inner diameter (mm)	750	± 50*
Coil External diameter (mm)	1150	± 100*
Coil height (mm)	1150	± 150*
Steel quality	Cold rolled DIN EN 10130 Grade DC 01	
Steel Thickness	1	

**Shelf Life** : In original packing and dry storage conditions maximum 3 months from production

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## PRODUCT SPECIFICATION

Used while processing steel for adjustment and treatment of molten steel at ladle furnace

**Product Name**  
**C**  
**CORED WIRE**

Coil Properties		Tolerance
C (%)	> 99.5	
Powder (gr/m)	190	± 10
Wire diameter (mm)	13	± 1
Powder (kg/coil)	1025	± 75*
Total (kg/coil)	1650	± 100*
Coil inner diameter (mm)	600	± 50
Coil external diameter (mm)	1150	± 50*
Coil Height (mm)	1150	± 50*
Steel quality	Cold rolled DIN EN 10130 Grade DC 01	
Steel Thickness (mm)	0.4	

**Shelf Life** : In original packing and dry storage conditions maximum 3 months from production

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## PRODUCT SPECIFICATION

Used while processing steel for adjustment and treatment of molten steel at ladle furnace

**Product Name**  
**Ca Fe**  
**CORED WIRE**

Coil Properties		Tolerance
Ca (%)	30	$\pm 2$
Fe (%)	70	$\pm 2$
Powder (gr/m)	280	$\pm 10$
Wire diameter (mm)	13	$\pm 1$
Powder (kg/coil)	1325	$\pm 75^*$
Total (kg/coil)	2050	$\pm 100^*$
Coil inner diameter (mm)	600	$\pm 50$
Coil external diameter (mm)	1150	$\pm 50^*$
Coil Height (mm)	1150	$\pm 50^*$
Steel quality	Cold rolled DIN EN 10130 Grade DC 01	
Steel Thickness (mm)	0.4	

**Shelf Life** : In original packing and dry storage conditions maximum 3 months from production

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## PRODUCT SPECIFICATION

Used while processing steel for adjustment and treatment of molten steel at ladle furnace

**Product Name**  
**Ca Rod**  
**CORED WIRE**

Coil Properties		Tolerance
Ca (%)	> 98	
Filling (gr/m)	70	± 1
Wire diameter (mm)	10	± 1
Powder (kg/coil)	625	± 50*
Total (kg/coil)	2475	± 75*
Coil inner diameter (mm)	600	± 50
Coil external diameter (mm)	1150	± 50*
Coil Height (mm)	1150	± 50*
Steel quality	Cold rolled DIN EN 10130 Grade DC 01	
Steel Thickness (mm)	0.6	

**Shelf Life** : In original packing and dry storage conditions maximum 3 months from production

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## PRODUCT SPECIFICATION

Used while processing steel for adjustment and treatment of molten steel at ladle furnace

**Product Name**  
**Ca Si**  
**CORED WIRE**

Coil Properties		Tolerance
Ca (%)	> 30	
Si (%)	60	± 2
Powder (gr/m)	225	± 10
Wire diameter (mm)	13	± 1
Powder (kg/coil)	1150	± 75*
Total (kg/coil)	1750	± 100*
Coil inner diameter (mm)	600	± 50
Coil external diameter (mm)	1150	± 50*
Coil Height (mm)	1150	± 50*
Steel quality	Cold rolled DIN EN 10130 Grade DC 01	
Steel Thickness (mm)	0.4	

**Shelf Life** : In original packing and dry storage conditions maximum 3 months from production

(\*) Those are standard products. However product can be produced in different size according to the customer request / transport conditions

## PRODUCT SPECIFICATION

Used while processing steel for adjustment and treatment of molten steel at ladle furnace

**Product Name**  
**Fe Ti**  
**CORED WIRE**

Coil Properties		Tolerance
Ti (%)	70	$\pm 2$
Powder (gr/m)	380	$\pm 15$
Wire diameter (mm)	13	$\pm 1$
Powder (kg/coil)	1875	$\pm 75^*$
Total (kg/coil)	2500	$\pm 100^*$
Coil inner diameter (mm)	600	$\pm 50$
Coil external diameter (mm)	1150	$\pm 50^*$
Coil Height (mm)	1150	$\pm 50^*$
Steel quality	Cold rolled DIN EN 10130 Grade DC 01	
Steel Thickness (mm)	0.4	

**Shelf Life** : In original packing and dry storage conditions maximum 3 months from production

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## PRODUCT SPECIFICATION

Used while processing steel for adjustment and treatment of molten steel at ladle furnace

**Product Name**  
**S**  
**CORED WIRE**

Coil Properties		Tolerance
S (%)	>99	
Powder (gr/m)	210	± 10
Wire diameter (mm)	13	± 1
Powder (kg/coil)	1100	± 75*
Total (kg/coil)	1650	± 100*
Coil inner diameter (mm)	600	± 50
Coil external diameter (mm)	1150	± 50*
Coil Height (mm)	1150	± 50*
Steel quality	Cold rolled DIN EN 10130 Grade DC 01	
Steel Thickness (mm)	0.4	

**Shelf Life** : In original packing and dry storage conditions maximum 3 months from production

(\*) Those are standard products. However product can be produced in different size according to the customer request / transport conditions

## PRODUCT SPECIFICATION

**Product Name**  
**Fe B**  
**CORED WIRE**

Used in steelmaking to **add boron** to molten steel in a controlled and efficient way.

Coil Properties	Specifications	Tolerance
B (% Min)	17.5	-
B (% Max)	19	-
C (% Max)	1.5	-
Si (% Max)	4.0	-
Al (% Max)	0.25	-
Sheath Thickness (mm)	0.4	+/- 0.05mm
Dia (mm)	13	+/- 0.8mm
Powder Filling rate (g/m)	550	+/- 10
Wire Length (m)	3100	+/- 10%
Weight (kg)	2200	+/- 10%
Coil ID (mm)	550	-
Coil OD (mm)	1100	-
Coil width (mm)	1100	+/- 50mm

Packaging

Horizontal (eye to Wall) plastic shrink (anti-proof), cage (steel structured) + pallet

Shelf life

In original packing and dry storage conditions. Optimal use is maximum 6 months from production





ALTech GROUP have a global footprint



- Sales Office and Registered Entity
- Sales Representation



- Manufacturing Plant
- Warehouse (upcoming)
- Warehouse

[altech@altechgroup.net](mailto:altech@altechgroup.net)  
[www.altechgroup.net](http://www.altechgroup.net)

