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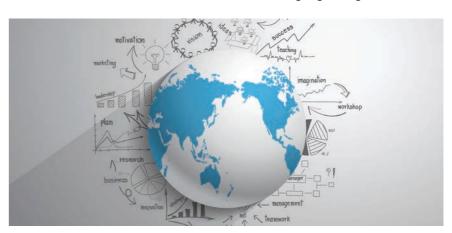
Company Profile



Since 1995 AVEKS AS has been a supplier of raw materials for industrial production and steel.

With this experience in conjunction with our broad spectrum of suppliers AVEKS AS offers a wide range of products including; pig irons, ferroalloys, noble alloys, coke and recarburizers, metals and minerals, a variety of core wires, abrasives, refractory products, and chemicals for iron, steel, nonferrous industries. Thanks to our well-established position in the market and our advantageous relationship with producers around the world, we are continually developing new products and expanding our customer base.

We try to create close relationships with customers to ensure their happiness and satisfaction by offering our products at competitive prices. Both are cost-effective and creative solutions within this market have enabled us to accommodate ourselves to the needs of the even larger growing world market.



We take pride not only in the reliability and quality of our products but also in the speed in which transactions are made. Our commitment to excellence has helped expand our customer base to cover: Turkey, Europe, CIS, and the Middle East.

We have successfully undertaken numerous obstacles to minimize or diminish customer hassles by utilizing our organized professional services. Our offices (Istanbul, Beijing, Kolkata, Dammam, Dubai, Cairo, Geneva, and Nikolaev) around the world, our warehouses in different locations and skilled personnel try to optimize the quality of goods by protecting imported goods against damage, loss and inefficient utilization.

Over the years we have elevated ourselves to become one of the most trusted suppliers of all kind of metallurgical raw materials.

Above all, our primary goal is to help better serve you with your needs.

PIGIRONS







 NODULAR HP
 3.50-4.50 %
 1.00 % max
 0.04 % max
 0.04 % max
 0.010 % max

 Size
 10-12 kg ingots without notches

 Packing
 Bulk

NODULAR PIG IRON is used in the manufacture of ductile [also known as nodular or spheroidal graphite - SG] iron castings.



FOUNDRY PIG IRON G ROA

	С	Si	Mn	Р	S	
L1	3.50-4.50 %	3.20-3.60 %	0.40-0.80 %	0.08 % max	0.04 % max	
L2	3.50-4.50 %	2.80-3.20 %	0.40-0.80 %	0.08 % max	0.04 % max	
L3	3.50-4.50 %	2.40-2.80 %	0.40-0.80 %	0.08 % max	0.04 % max	
L4	3.50-4.50 %	2.00-2.40 %	0.40-0.80 %	0.08 % max	0.04 % max	
L5	3.50-4.50 %	1.60-2.00 %	0.40-0.80 %	0.08 % max	0.04 % max	
L6	3.50-4.50 %	1.20-1.60 %	0.40-0.80 %	0.08 % max	0.04 % max	
L5-L6 Low Mn	3.50-4.50 %	1.00-2.00 %	0.099 % max	0.08 % max	0.04 % max	
Size	10-12 kg ingots without notches					
Packing			Bulk			

 $HEMATITE\ PIG\ IRON\ [also\ known\ as\ FOUNDRY\ PIG\ IRON]\ is\ used\ mainly\ in\ the\ manufacture\ of\ grey\ iron\ castings\ in\ cupola\ or\ induction\ furnaces.$

BASIC PIGIRON RON

	С	Si	Mn	Р	S		
Low Mn	3.50-4.50 %	1.20 % max	0.099 % max	0.08 % max	0.05 % max		
PL1 / PL2	3.50-4.50 %	0.60-1.20 %	0.40-0.80 %	0.08 % max	0.05 % max		
Size		10-18 kg ingots without notches					
Packing		Bulk					

BASIC PIG IRON is used mainly in electric arc steelmaking.

 $\frac{4}{2}$

NODULARISERS







FERRO SILICO MAGNESIUM A GNESIUM								
	Mg	Si	Ca	TRE	La	Ва	Al	
FeSiMg 522	4.5-5.5 %	43-47 %	1.8-2.6%	2.0-2.4%			< 0.80 %	
FeSiMg 522- low Al	4.5-5.5 %	43-47 %	1.8-2.6%	2.0-2.4%			< 0.50 %	
FeSiMg 610	5.5-6.5 %	43-47 %	1.0-1.5%	0.25%			< 0.80 %	
FeSiMg 611	5.5-6.5 %	43-47 %	1.0-1.5%	0.5-0.7%			< 0.80 %	
FeSiMg 611A	5.5-6.5 %	43-47 %	1.0-1.5%	0.9-1.2%			< 0.80 %	
FeSiMg 731	6.2-7.2 %	43-47 %	2.7-3.2%	0.5-0.7%			< 0.80 %	
FeSiMg 731A	6.2-7.2 %	43-47 %	2.7-3.2%	0.9-1.2%			< 0.80 %	
FeSiMg 931	8.4-9.6 %	45-50%	2.7-3.2%	0.9-1.9%			< 0.80 %	
FeSiMg+La	5.6-6.2 %	43-47 %	0.8-1.2%		0,35-0,55		< 0.80 %	
Innotal 100	8.0-10.0%	42-50 %	0.8-1.2%	< 0,25		0,25	<1 %	
Size	0,6-6 mn	n/ 2-10 mm / 5-	-25 mm / and as	per customers	requiremen	ts		
Packing		appr. 1,2 r	mt big-bag / pap	per bag of 25 kg				

Ferro Silicon Magnesium is one of the best nodularizers due to its low levels of magnesium oxide and high nodularization. This material is used to modify the graphite flakes in the iron making process.

Mg CORED WIRE	E
3	

3	Mg	Si	Ca	TRE	Al			
Composition 1	29-31	41-47	2.0-3.0	1.0-2.0	0,3-0,5			
Composition 2	29-31	44-52	3.0-4.0	1.0-2.0	0.5-1.0			
Composition 3	27-29	46-52	4.0-6.0	0	0.5-1.0			
Diameter		9mm-13mm / and as per customers requirements						
Packing	appr. 1,3 - 1,8 mt /per coil							
Length		appr. 4900 m						

Our wires gua-rantee you a very high reliability treatment. The quality of our wires is ensured by continually monitored data recording. We adapt the composition of our wire to your needs.



INOCULANTS

Product	Active element	Features			
INOBAR® GRAFIDIN®	Ва	Provides a high number of germs, is fade resistant. To be used as a pre-conditioner.			
INOSTRONG® INOSTRONG® 50	Sr	High chill reduction. They do not increase the number of germs.			
LMC® INOCAST® 175	Ва	Universal inoculants with a well-balanced composition.			
ZL 80° INOCAST°125 ZIRCOGRAF° ZIRCOBAR°	Zr	Universal inoculants, fade resistant, appreciated for medium and heavy sections.			
INOCAST® 100	Al	Increases the number of germs and avoids chilling.			
SPHERIX®	Bi + TR	Extremely powerful inoculant reserved for ductile iron. It multiplies the number of nodules, avoids chill in thin sections and reduces the risk of chunky graphite.			
SPHERIX® Plus	Sb + TR	This inoculant fights the chunky graphite in ductile iron castings.			
AMERINOC®	Bi + TR	Same use as SPHERIX, recommended for green sand casting.			
CERINOC®	Ce	This inoculant controls the undesirable elements, provides germs and minimizes the risk of shrinkage.			
FeSiLa®	La	Fights against micro shrinkage, available in 2% and 10% Lantha¬num.			
WIN4®	Bi + La	This inoculant combines a chilling reduction effect and reduces micro shrinkage.			
Size	All our inoculants are available in the standard sizes 2-6 mm; 0.5-2 mm; 0.2-0.7 mm. Custom sizes are available upon request.				
Packing	Super Sack, drum, paper bag.				

Today's castings must meet increasingly higher requirements. To achieve this, the research teams of FerroPem work closely with foundries of various countries to create more effective inoculants.

RECARBURIZERS SILICON CARBIDE







RECARBURIZERS

	Fix Carbon	Sulpfur	Nitrogen	Hydrogen	Size(mm)	
ELSICARB S	99.85 % min	0.01 % max	0.001 % max	0.007 % max	0.5-4 max	
ELSICARB G	99.50 % min	0.50 % max	0.05 % max	0.20 % max	0.5-4 max	
Packing	Big-bags / Paper Bags wrapped on Pallets					

The electric furnace production of cast iron often requires a recarburizing step because the process relies on inexpensive, relatively low carbon scrap as a starting material. High carbon scrap, high carbon ferroalloys or even pig iron are used as sources of carbon but when practice, specifications or economics dictate, specific recarburizers are needed.

So recarburizer can be used in the casting, which can significantly increase the amount of scrap steel and reduce the consumption of pig iron or enable even not using of pig iron.

SILICON CARBIDE CARBIDE

	SiC	SiO ₂ + Si	С	Fe ₂ 0 ₃	Al_2O_3	
SiC	88.0 - 92.0 % min	0.5 - 4.0 %	0.5 - 5.0 %	0.8 % max	0.5 % max	
Size	0 - 10 mm					
Packing	Big-bags / Paper Bags wrapped on Pallets					

Silicon carbide is used for the de-oxidation and re-carburation of cast iron and steel in foundries. Metallurgical grade Silicon Carbide grain is a unique material for use in the production of iron and steel. It is used in the foundry industry for electric furnace production of gray, ductile, and malleable iron. It is an excellent source of carbon and silicon, promoting nucleation and rendering the iron more responsive to inoculation, deoxidizing the iron, which enhances furnace lining life.

FERRO ALLOYS





FERRO SILICON

	Si	Al	С	Р	S		
FeSi 45 %	45 % min	2.00 % max	0.20 % max	0.03 % max	0.02 % max		
FeSi 65 %	65 % min	1.50 % max	0.15 % max	0.03 % max	0.02 % max		
FeSi 75 %	75 % min	1.50 % max	0.15 % max	0.03 % max	0.02 % max		
FeSi 75 % Low Al	75 % min	1.00 % max	0.05 % max	0.03 % max	0.02 % max		
FeSi 75 % High Purity	75 % min	0.10 % max	0.03 % max	0.03 % max	0.02 % max		
Size	1-3 mm / 3-10 mm / 10-50 mm / 10-100 mm						
Packing		Bulk or 1 mt big-bag					

Ferro Silicon is a universal "heat-blocker" used in the production of carbon and stainless steels. This additive is used with other ferro alloys in the deoxidising process of steel, as well as in the production of silicon itself. It is also used in the production of cast iron, as it can accelerate graphitisation. Ferro Silicon replaces the need for ferro manganese, spiegeleisen and calcium silicides in the manufacturing process.



	Mn	Si	С	Р	S		
FeSiMn 6014	60 % min	14 % min	2 % max	0.30 % max	0.05 % max		
FeSiMn 6517	65 % min	17 % min	2 % max	0.30 % max	0.03 % max		
FeSiMn 7018	70 % min	17 % min	2 % max	0.30/0.50 % max	0.03 % max		
Size	10-50 mm / 10-80 mm						
Packing	Bulk or 1 mt big-bag						

Ferro Silico Manganese is used as a deoxidizer and an alloying element in steel.

It can be used as a substitute for Ferro Silicon and Ferro Manganese when added to make different types of steel.

FERRO SULPHUR

	S	Si	Al	Moisture			
FeS	50-52 %	2 % max	0.8 % max	0.5 % max			
Size	3-10 mm / 10-50 mm						
Packing	25 kg bags in 1 MT Big Bag on pallet						

Ferro Sulphur is used in metallurgy give the steel or alloy the desired sulphur content. It is used for this purpose instead of elemental sulphur because the low melting point of the sulphur could accumulate on the molten metal surface, causing SO2 emissions and also a deterioration of its mechanical properties by the formation of a low eutectic melting point in the grain boundaries.



FERRO CHROME

	Cr	С	Si	Р	S
FeCr HC-Charge CR	55-60 %	6-8 %	3.0 % max	0.03 % max	0.04 % max
FeCr HC	60-65 %	6-8 %	1.5 % max	0.02 % max	0.02 % max
FeCr MC	60-65 %	0.5/1.0 % max	1.0 % max	0.03 % max	0.03 % max
FeCr LC	65-70 %	0.10/0.25 % max	1.0 % max	0.03 % max	0.03 % max
FeCr LC high purity	65-70 %	0.03/0.06 % max	1.0 % max	0.03 % max	0.03 % max
Size	4-10 mm / 10-50 mm / 10-80 mm / 10-100 mm				
Packing	Bulk or 1 mt big-bag				

Ferro-chrome is added to steel to impart properties of hardness, strength and to make it stainless. High Carbon Ferro Chrome is most commonly used in specialist applications such as engineering steels. Low-carbon Ferro-Chrome is used during steel production to correct chrome percentages. It is also a low cost alternative to metallic chrome for uses in super alloys and other special melting applications.



	Mn	С	Si	Р	S
FeMn HC	75 % min	6-8 %	1.50 % max	0.25 % max	0.03 % max
FeMn HC Low P	76/78 % min	6-8 %	1.50 % max	0.10 % max	0.03 % max
FeMn MC	80 % min	1.50 % max	1.50 % max	0.20 % max	0.03 % max
FeMn LC	80 % min	0.50 % max	0.50 % max	0.025 % max	0.03 % max
Size	1-3 mm / 3-10 mm / 10-50 mm / 10-100 mm				

Ferro-manganese is used mainly in the steel industry for hardening and desulphurisation of steel and as a deoxidizer, making the slag more fluid.

FERRO PHOSPHORUS

	Р	Si	С	S	Cu	V
FeP	23-28 %	1-2 %	0.1 % max	0.01 % max	0.5 % max	0.5 % max
Size	10-50 mm / 10-100 mm					
Packing		1 mt big-bag				

Ferro phosphorus is used mainly as the additives in the foundry industry to improve the floatability of foundry iron, thus improving the quality of the castings. Phosphorus content can increase the wearing resistance and improve the cutability in the castings. Ferro phosphorus is also used as additive in the steel production, which can improve the corrosion resistivity in certain steel products.

NOBLEALLOYS



FERROTITANIUM A

Ti	40 / 70	% min	
Al	0.5 / 4.5	% max	
V	3	% max	
N	0.2 / 0.5	% max	
S	0.03	% max	
P	0.04	% max	
С	0.20	% max	
Mn	1.5	% max	
Size	10-50 mm / 10-100 mm		
Packing	1 mt big-bag / steel drums		

Ferro Titanium is used by stainless steel makers as a stabiliser to prevent chromium carbide forming at grain boundaries and in the production of low carbon steels for sheet production. Main applications for Ferro Titanium include:

- Cleansing Agent: used for deoxidizing, desulfurization and denitrification.
- Grain Refiner: improve malleability in carbon steels, thereby increasing its versatility.



Nb	63 / 65	% min	
Al	2/3	% max	
Si	2.5 / 3	% max	
С	0.3	% max	
P	0.2	% max	
Size	5-30 mm / 10-50 mm		
Packing	1 mt big-bag / steel drums		

FERRO NIOBIUM OBIUM

Ferro Niobium has anti-corrosive properties (better than carbon steel). The adding of Ferro Niobium to an alloy can make it more weldable and much stronger. The largest practical application of Ferro Niobium is in the alloying process of HSLA steel.



Мо	60 / 65	% min	
Cu	0.5	% max	
Si	1.5	% max	
S	0.1	% max	
С	0.1	% max	
P	0.05	% max	
Size	10-50 mm / 10-100 mm		
Packing	1 mt big-bag / steel drums		

FERRO MOLYBDENUM BOENUM

Ferro Molybdenum has hardening properties that makes steel extremely strong and at the same time weldable. Additionally, the adding of Ferro Molybdenum to an alloy can increase corrosion resistance. Ferro Molybdenum is used in stainless, heat-resisting and tool steels.



В	18	% min	
Si	1.5	% max	
Al	0.5	% max	
С	0.5	% max	
P	0.1	% max	
S	0.01	% max	
Size	10-50 mm		
Packing	1 mt big-bag		
		3 3	

FERRO BORON

Ferro Boron is used in the production of alloy steel and foundry iron as additives, which can improve the quenching degree and mechanical properties in carbon steel and alloys structural steel, the strength of heat-resistivity in heat-resistant steel and heat-resistant alloy steel.







W	75	% min	
Si	0.5	% max	
С	0.2	% max	
Mn	0.25	% max	
Cu	0.15	% max	
S	0.08	% max	
Р	0.05	% max	
As	0.05	% max	
Sb	0.05	% max	
Sn	0.08	% max	
Pb	0.05	% max	
Bi	0.06	% max	
Size	10-50 mm / 10-100 mm		
Packing	1 mt big-bag / steel drums		

FERRO TUNGSTEN GS

Ferro Tungsten improves the hot hardenability, abrasion resistance and impact strength of steel, used in production of high-speed tool steel, alloy tool steel, heat-resistant steel, spring steel and magnetic steel.



٧	78-82	%	
Al	0.5 / 1.5	% max	
Si	1.5	% max	
С	0.1 / 0.25	% max	
S	0.05	% max	
Р	0.05	% max	
Cu	0.1	% max	
As	0.05	% max	
Size	5-50 mm / 10-50 mm / 10-80 mm		
Packing	1 mt big-bag / steel drums		

FERRO VANADIUM ADIUM

When added to crude steel, ferrovanadium creates a product that is lightweight and extremely high in tensile strength and wear resistance. The largest practical application of Ferro Vanadium is in the alloying process of any hardened steel.



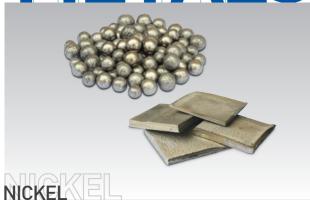
Мо	99.80	% min
W	0.20	% max
02	0.50	% max
Size	Bar/	plate
Packing	1 mt bigbags / steel drums	

MOLYBDENUM METAL-BRIQUETTES		
Мо	99	% min
Size	Briquette (1'X1'X3')	
Packing	in 300 kgs boxes	

MOLYBDENUM METAL-BARETAL-BAR

Molybdenum is primarily used as an alloying agent in steel. When added to steel in concentrations between 0.25% and 8%, molybdenum forms very high strength steels. Molybdenum also improves the strength of steel at high temperatures. When alloyed with nickel molybdenum forms heat and corrosion resistant materials used in the chemical industry.

METALS



Ni	99.970	% min	
Co	0.00010	% max	
С	0.00010	% max	
S	0.00070	% max	
Fe	0.00600	% max	
Cu	0.00020	% max	
Zn	0.00005	% max	
Pb	0.00002	% max	
Size	5-13 mm granules / 4x4 cm Cut Cathodes		
Packing	in 250 kg steel drums		

Two-thirds of all nickel produced goes into stainless steel, to promote a stable, ductile, austenitic structure as well as contribute to corrosion resistance.



Mg	99.9	% min		
Fe	0.04	% max		
Si	0.02	% max		
Ni	0.002	% max		
Cu	0.01	% max		
Al	0.02	% max		
Cl	0.05	% max		
Мо	0.03	% max		
Na	not stated	% max		
Size	7.5 ± 0.5 Kgs. ingot/granules			
Packing	on pallets			

The main applications of magnesium are, in order: component of aluminium alloys, in die-casting (alloyed with zinc), to remove sulfur in the production of iron and steel, the production of titanium in the Kroll process.



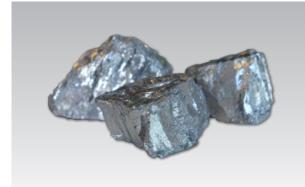
MAGNESIUM METAL

Mn	99.7	% min			
С	0.04	% max			
S	0.05	% max			
P	0.005	% max			
Fe+Si+Se	0.205	% max			
Size	Flake/lump/briqutte				
Packing	in big-bags / steel drums				

MANGANESE META

Packing in big-bags / steel drums

In fact, the single largest use of manganese today is in the creation of iron and steel alloys for building purposes. Manganese is essential to iron and steel production by virtue of its sulfur-fixing, deoxidizing, and alloying properties.



CHROME METAL

Cr	99.5	% min		
Fe	0.10	% max		
Si	0.05	% max		
Al	0.02	% max		
Cu	0.001	% max		
С	0.005	% max		
N	0.01	% max		
P	0.003	% max		
S	0,005	% max		
Size	2-50 mm			
Packing	in 500 kg steel drums			

Chrome metal is mainly used in the production of specialty alloys, nickel and cobalt -based alloys (super alloys) where low iron is required. Due to their unique high temperature and corrosion resistance properties, these high performance alloys are used in the most critical environments, such as aeronautic, oil & gas production, land based turbines, petrochemical and chemical processing.





		Si (% min)	Fe (% max)	Al (% max)	CA (% max)	P (PPM)		
	SiMet 1101	99.50	0.1	0.1	0.01	15-40		
	SiMet 1501	99.20	0.15	0.15	0.01	20-40		
	SiMet 2202	99.50	0.2	0.2	0.02	30-100		
	SiMet 3303	99.00	0.3	0.3	0.03	40-100		
	SiMet 3305	99.00	0.3	0.3	0.05	40-100		
	SiMet 331	99.00	0.3	0.3	0.01	40-100		
	SiMet 4405	99.00	0.4	0.4	0.05	40-100		
	SiMet 441	99.00	0.4	0.4	0.1	40-100		
	SiMet 553	98.50	0.5	0.5	0.3	40-100		
	SiMet 775	97.00	0.7	0.7	0.5	40-100		
	Size	2-25 mm / 10-100 mm						
	Packing	1 mt big-bag						
1 /								

SILICON META

Silicon is alloyed with aluminum for use in engines as the presence of silicon improves the metal's castability. Silicon can enhance iron's magnetic properties. It is also an important component of steel, which it toughens.



	Co (% min)
Co Ingots	99.30
Co Cathodes	99.90
Co Briquettes	99.80

COBALT

Cobalt has a variety of applications which include superalloys, corrosion resistant alloys, high speed tool steels, magnets, cemented carbides, pigments, rechargeable batteries and chemical catalysts.



Sn	99.968	% min	Cu	0.0004	% max
Ag	0.0001	% max	Fe	0.0023	% max
Al	0.0001	% max	Pb	0.0057	% max
As	0.0044	% max			
Bi	0.0002	% max	Cd	0.0001	% max
Cd	0.0001	% max	Sb	0.0057	% max
Со	0.0002	% max	Zn	0.0002	% max
Size	ingots / bars				
Packing	on pallets				

Tin is used as a coating on the surface of other metals to prevent corrosion and provide low toxicity. Tin is also used in many alloys, most notably tin/lead soft solders, typically containing 60% or more of tin.



Pb	99.89	% min	Ag	0.0023	% max
Sb	0.01	% max	Ni	0.001	% max
Sn	0.001	% max	Cd	0.0001	% max
As	0.065	% max	Zn	0.0005	% max
Cu	0.0018	% max	S	0.0005	% max
Bi	0.021	% max	Other Impurities	0.021	% max
Size	0.3-10 mm				
Packing	1 mt big-bag				

Lead is used to line tanks that store corrosive liquids and as a covering on some wires and cables to protect them from corrosion. Lead's high density makes it useful as a shield against X-ray and gamma-ray radiation. Most of the lead is used in the production on lead-acid storage batteries.



ANTHRACITE





	Grade "ASH"	Grade "AS"	Grade "AM"	Grade "AKO
Total Moisture	10 % max	9 % max	7 %max	5 % max
Ash	17 % max	8 % max	6 % max	5 % max
Volatile Matter	3 % max	3 % max	3 % max	3 % max
Total Sulphur	1 % max	1 % max	1 % max	1 % max
Fixed Carbon	80 % min	89 % min	91 % min	92 % min
Calorific Value (Kcal/Kg min)	6000	6400	6800	7000
Size	0-6 mm / +6-13 mm / +13-25 mm / +25-70/100 mm			

PCL

	PCI		
Size	0-50 mm Guaranteed.		
Total Moisture	8 % max.		
Ash (dry).	13 % max.		
Volatile (d.b.)	12 % max.		
Fixed Carbon (dry)	76 % min.		
Sulphur (dry)	0.7 % max.		
K20 in Ash (dry)	2.2 % max.		
Na20 in Ash (dry)	0.6 % max.		
Phosphorus In Ash (dry).	0.4 % max.		
HGI	55 min. / 75 max.		
Calorific Value	6.500 kcal / min.		
Screen Analysis	0-6 mm 80 % max.		
6-50 mm	20 % min		

STEAM COALCOAL

	Steam Coal
Total Moisture	10% max
Ash	14-16%
Volatile Matter	16-32%
Total Sulphur	0.7 % max
Calorific Value (Kcal/Kg min)	6000
Size	0-50 mm



CARBON PRODUCTS

Injection Carbon					
Size	0-1 mm	0,3-3 mm	1-4 mm,	2-6 mm	
M, % max	1,5	2	2	2	
A, % max	4	6	10	13	
V, % max	2,5	3	3	3	
S, % max	1	1	1	1	
FC, % min	93,5	91	87	84	

Charge Carbon					
Size	5-20 mm	10-30 mm	20-70 mm		
M, % max	8	7	6		
A, % max	10	8	5		
V, % max	3,5	3,5	3		
S, % max	1	1	0,8		
FC, % min	86,5	88,5	92		

Recarburizer										
Size	5-20 mm	10-30 mm	20-70 mm							
M, % max	8	7	6							
A, % max	10	8	5							
V, % max	3,5	3,5	3							
S, % max	1	1	0,8							
FC, % min	86,5	88,5	92							

COKING COAL COAL

Total Moisture (as-received)	% max 7,00
Ash (dry basis)	% max 8,00
Volatile Matter (dry basis)	% 24 – 28
Sulphur (dry basis)	% max 0,60
Phosphorus (dry basis)	% max 0,050
Total Alkali K20+Na20(in ash)	% max 2,80
Free Swelling Index (FSI)	min 7,00
Max. Fludity (ddpm)	min 150
Relative Degree of Oxidation	95%
Random Vitrinite Reflectance	0,9 - 1,5

	0 - 50
Size	+ 50 mm % max 0
	- 0,50 mm % max 25
Dilatation (A.A., + d)	% min 25
Ash Fusion Temperature °C	min. 1350
Net Calorific Value (dry basis)	min. 6.500
Stability	min. 55
Coke Reactivity Index (CRI)	max. 32
Coke Strength after Reaction (CSR)	min. 50
Coking Wall Pressure (kpa)	max. 7





								STEEL	SHOT							
Product Size (mm)	% : min & max cumulative percentages allowed on corresponding sieves															
S780 2.0-2.8	0%		85 % min	97 % min												
S660 1.7-2.4		0%		85 % min	97 % min											
S550 1.4-2.0			0%		85 % min	97 % min										
S460 1.2-1.7			0%	5 % max		85 % min	96 % min									
S390 1.0-1.4				0%	5 % max		85 % min	96 % min								
S330 0.85-1.2					0%	5 % max		85 % min	96 % min							
S280 0.71-1.0						0%	5 % max		85 % min	96 % min						
S230 0.6-0.85							0%	10 % max		85 % min	97 % min					
S170 0.42-0.71								0%	10 % max			85 % min	97 % min			
S110 0.3-0.5										0%	10 % max			80 % min	90 % min	
S70 0.18-0.35												0%	10 % max		80 % min	90 mi
SAE Sieve No.	7	8	10	12	14	16	18	20	25	30	35	40	45	50	80	12
Aperture	2.80	2.36	2.00	1.70	1.40	1.18	1.00	0.85	0.71	09:0	0.50	1.425	1.355	0:30	0.18	1 1 2 5

Steel abrasives are steel particles that are used as abrasive or pe

Steel abrasives are steel particles that are used as abrasive or peening media. They are usually available in two different shapes (shot and grit) that address different industrial applications.

Steel shot refers to spherical grains made of molten steel through an atomization ("granulation") process, available in different sizes and hardnesses.



		STEEL GRIT															
	Product Size (mm)	% : min & max cumulative percentages allowed on corresponding sieves															
	G12 1.7-2.4		0%		80 % min	90 % min											
	G14 1.4-2.0			0%		80 % min	90 % min										
	G16 1.2-1.7				0%		75 % min	85 % min									
	G18 1.0-1.4					0%		75 % min		85 % min							
	G25 0.71-1.2						0%			70 % min			80 % min				
	G40 0.42-1.0							0%					70 % min		80 % min		
	G50 0.3-0.71									0%					65 % min	75 % min	
	G80 0.18-0.42												0%			65 % min	75 % min
ľ	SAE Sieve No.	7	8	10	12	14	16	18	20	25	30	35	40	45	50	80	120
	Aperture	2.80	2.36	2.00	1.70	1.40	1.18	1.00	0.85	0.71	09.0	0.50	1.425	1.355	0.30	0.18	1.125

STEEL GRIT. GR

Steel grit characterizes grains with a predominantly angular shape. These grains are obtained by crushing steel shot, therefore they exhibit sharp edges and broken sections. Harder than steel shot, it is also available in different sizes and hardnesses.



	STAINLESS STEEL SHOT									
mm	EN 20	EN 30	EN 40	EN 50	EN 60	EN 100				
1.400						5 % max				
1.180					5 % max					
1.000				5 % max		90 % max				
0.850			5 % max							
0.710					5 % max					
0.600				90 % max						
0.500		5 % max								
0.425			90 % max							
0.355										
0.300	5 % max									
0.212										
0.106		90 % max								
0.075	90 % max									

STAINLESS STEEDSHOTTEEL SHOT



CALCIUM CARBIDE CARBIDE

	CALCIUM CARBIDE									
Size	Low Size (mm) % Max.	Over Size (mm) % Max.	Yield (Lt/Kg) Min.	C ₂ Ca % Min.						
50 - 80 mm	5	5	291	77						
25 - 50 mm	5	5	291	77						
7 - 15 mm	5	5	252	67						
Specifications	CaC ₂ : 77% min.									
pH3	110 ppm max. (DIN 53922)									
Origin	South Africa / Argentina									
Packing	In net 55/100/120 kgs, airtight and pneumatically sealed steel drums on pallets or 100 kg steel drums on pallets.									

The main application of calcium carbide is when reacting with water to generate acetylene gas. Carbide is used as a desulphurising agent in the metallurgical industry to remove sulphur from the iron before it is converted in the BOF (Basic Oxygen Furnace). Carbide is also used for FeO and MnO deoxidation in the steel industry.



The high specific gravity and high thermal conductivity of chromite provide a pronounced chilling effect. Chromite sand has a glossy black appearance. Chromite is generally used for steel casting to provide chilling. It is difficult to reclaim chromite sand since, if it becomes contaminated with silica, its refractoriness is seriously reduced.

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REFRACTORIES/MINERALS

REFRACTORIES/MINERALS

BASIC

- Magnesia Bricks
- Magnesia Chrome Bricks
- Direct Bonded Magnesia Chrome Bricks
- Magnesia Carbon Bricks
- Basic Mortars
- Basic Ramming Masses
- Basic Gunning Masses
- Basic Spraying Masses
- Basic Fetling Masses

DOLOMITE

- Dolomite Bricks
- Dolomite Monolithics

FIRECLAY & HIGH ALUMINA

- Fireclay & High Alumina Bricks
- Fireclay & High Alumina Ceramic Setting Mortars
- Fireclay & High Alumina Plastic Masses
- Fireclay & High Alumina Castables
- Insulating Castables
- Low Cement High Alumina Castables
- Coke Oven Gunning Mixes
- Coke Oven Spraying Mixes
- Ultra Low Cement Castables
- Conventional Dense Castables
- Insulating Castables

SILICA

- Silica Bricks
- Silica Mortars
- Silica Ramming Masses

FLOW CONTROL

- Slide Gate Refractories
- Gus Purging Refractories
- Tundish Refractories
- Flow Control Monolithics

SPECIAL REFRACTORIES

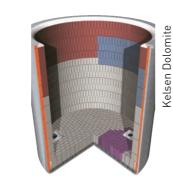
- Silicon Carbide Bricks
- Zircon Bricks



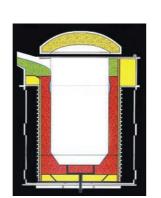
Magna Ramming Masses



Magna Gunning Masses







nduction Linings

INDUCTION FURNACE MAIN LININGS

- Neutral Linings
- Basic Linings
- Silica Linings



FLUXES

- Calcium Aluminate
- Flourspar

REFRACTORY RAW MATERIALS

- MAGNESITE:
- Dead Burned Magnesite
- Fused Magnesite
- GRAPHITE:
- Natural Flake Graphite
- Amorphous Graphite
- SPINELS
- Sintered Alumina-Magnesia Spinel
- Fused Alumina- Magnesia Spinel
- ALUMINA:
- Rotary Kiln Bauxite
- Shaft Kiln Bauxite
- White Fused Alumina
- Brown Fused Alumina
- Sintered Mullite
- ALUMINIUM SILICATE SAND
- CHROMITE SAND (Refractory Grade)
- KAOLIN
- SILICON CARBIDE (Refractory Grade)
- EBT Sand







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STEELPRODUCTS DU S





STEEL PRODUCTS

We offer as per form/shape/size

Semi Finished Steel Products (Semis)

Intermediate solid steel products obtained by Hot Rolling/ Forging of ingots (in conventional process) or by Continuous Casting of liquid steel are known as Semis. These are called so since they are intended for further rolling/forging to produce finished steel products.

Various types of semis are Blooms, Billets, Slabs, Thin Slabs

• Blooms

A Semi Finished product usually in square (at times in rectengular) section of cross sectional size exceeding 125mm x 125mm. Recently upon modern Technologies, the term bloom is covering sizes exceeding 160mm x 160mm.



Billets are used as input material for production of Steel Long product viz vars & rods, light sections etc.

Slabs

A semi-finished Rectengular, wide, semi-finished steel product intended for production of finished hot rolled flat products viz Plates, Sheets, Strips etc.

• Thin Slahe

In modern thin slab casting machine liquid steel is continously cast into much tinner slabs of 35-50mm, directly which are used for production of Finished Hot Rolled Flat products upon heating on-line

Flat Products (Flat Rolled Products)

Finished steel thin flat products produced from slabs/thin slabs in roling mills using flat rolls.

Different types of flat products are:

- Plate
- Sheet
- Strips
- Hot Rolled (HR) Flat Products
- Cold Rolled Coils/Sheets
- Coated Products: Galvanized and Prepainted Coils/Sheets

Long Products

Finished steel products produced normally by hot Rolling/forging of Blooms/billets/pencil ingots into useable shape/sizes. These are normally supplied in straigth length /cut length except wire rods which are normally supplied in ir-regularly wound coils.

Different types of long products are

- Reinforcing Steel Bars
- Merchant Bars and Profiles
- Wire Rod in Coils
- Tubes and Pipes

Other Products

Wires, (Hot Dip Galvanized Wire, Cold drawn Wire) Steel Mesh & Bar

Other Commercial Products (Nail, Bale Wire, Binding Wire etc) or any other product you require.

We ensure we will source it as per your need from reliable sources.

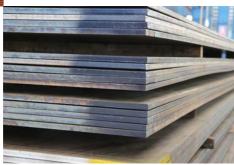
















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