

TIEGU Company And Product Introduction



安徽铁谷信息科技股份有限公司 ANHULTIEGUINFORMATION TECHNOLOGY CO..LTD

CONTENTS



Tiegu Introduce	03
Pig Iron Business Unit	04
Alloy Auxiliary Materials	07
Casting Business Unit	14
Certification	19
Workshop Show	20
Global Market Distribution	22
Contact Information	23

Tiegu, a comprehensive enterprise with over 15 years in China's foundry industry, is a key hub linking the global foundry market. It offers global buyers full-chain pig iron and casting solutions with profound industrial accumulation and innovative philosophy.

In pig iron operations, Tiegu offers foundry, ductile, steelmaking and high-purity pig iron. Partnering with top domestic ironworks, it has built a full industrial chain spanning mining, ore dressing, smelting, casting and machining, achieving 1.5 million tons of annual output and securing market position with stable quality.





Casting is another core business of Tiegu. Leveraging its in-house pig iron smelting advantage, it cuts raw material costs significantly to offer cost-effective products like ductile iron pipes, auto parts and precision mechanical components. With advanced casting techniques and strict quality control, it ensures both mass-produced standard parts and custom complex components meet leading industry standards.

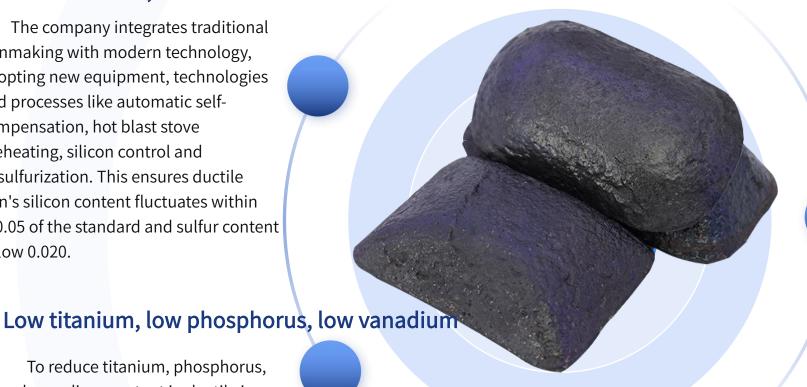
As operator of "Tiegu Network" – a key platform in China 's foundry industry–we partner with over 3,000 top foundry enterprises on the platform. Integrating resources, we offer competitive collaborative quotes, helping buyers select the best in China's market.

Pig Iron Business Unit

Constant silicon, low sulfur

The company integrates traditional ironmaking with modern technology, adopting new equipment, technologies and processes like automatic selfcompensation, hot blast stove preheating, silicon control and desulfurization. This ensures ductile iron's silicon content fluctuates within ±0.05 of the standard and sulfur content below 0.020.

In our ductile iron production, we strictly enforce precise raw material ratios, meticulous processes and accurate operations. Products meet standards of constant silicon, low phosphorus, titanium, vanadium and sulfur. Our foundry pig iron, characterized by stable low phosphorus, chromium and sulfur, is highly recognized by authorities and widely praised by industry users.



High-standard GB cast iron

Domestic foundry pig iron now has stricter requirements for Mn, Ti and Cr. With the aim of reducing costs for customers and improving casting quality, the company controls S within 0.030 through scientific formulas in smelting, refines Mn content (0.20~0.70) into three internal control groups, and keeps Cr within 0.020.

To reduce titanium, phosphorus, and vanadium content in ductile iron,

the key lies in selecting high-quality iron ore concentrate powder for smelting. Our company's premium ductile iron uses high-grade iron concentrate from Benxi, Brazil, and Australia as primary raw materials, employing ultra-low temperature smelting to ensure titanium content <0.030, phosphorus effectively controlled within 0.035, and vanadium within 0.015.

Categories										
		Grade	С	S	Si	Mn	Р	Ti	Introduction	
		C1	≥3.30	≤0.015	≤0.20	≤0.05	≤0.015	≤0.010	High-purity pig iron is a premium iron-	
	High purity pig iron	C2	≥3.60	≤0.020	≤0.70	≤0.10	≤0.020	≤0.025	based material with ultra-low impurity content, mainly used in high-end fields like wind turbine castings and nuclear energy	
		C3	≥3.80	≤0.020	≤0.70	≤0.12	≤0.030	≤0.030	storage/transport vessels.	
		Q8			>0.50~0.60		Grade 1: ≤0.040	First grade: ≤0.040	Ductile iron, where carbon exists as spheroidal graphite, exhibits superior	
	Pig iron for ductile iron casting	Q10	≥3.80	Class II: <0.020 Class III: >0.020~0.030	>0. 65~ 1. 00	Group I: ≤0. 20 Group II: >0. 20~ 0. 50	Grade 2: >0. 040~ 0. 050 Grade 3: >0. 050~ 0. 080	Second grade:	mechanical properties and is extensively employed in manufacturing high-end castings (e.g., crankshafts, gears, pistons)	
Blast Furnace	casting	Q12			>1. 00~ 1. 40				and diverse mechanical components	
Pig Iron	Foundry pig iron	Z14	≥3.30 :		>1. 25~ 1. 60	Group I: ≤0.50; Group II: >0. 50~ 1.00		/	Gray iron (cast iron with flake graphite) combines superior machinability, wear	
		Z18		≤0.07	>1. 60~ 2. 00		<0.12		resistance, and castability, making it a top choice for manufacturing machine	
		Z22			>2. 00~ 2. 40				bases, pipes, and other cast components.	
		L4			≤0.6以下			/	Steelmaking pig iron carbon mainly in the form of iron carbide exists, its	
	Steelmaking pig iron	L8	3.3-4.5	>0.01-0.07	0.6~0.8	>0.30~1.00	>0.07~0.15		section is white, usually also called white iron. This pig iron performance is hard and brittle, generally used as raw	
		L10			0.8~1.0				materials for steelmaking.	
Reduced Pig Iron	Direct Reduced Pig Iron		Low Carbon	Grade I: ≤0.015 Grade II: >0.015 ~ 0.020 Grade III: 0.020 ~ 0.025 Grade IV: >0.025 ~ 0.030	≤0.5%	/	Grade 1: ≤ 0.020 Grade 2: > 0.020 ~ 0.040 Grade 3: 0.040 ~ 0.060 Grade 4: > 0.060 ~ 0.080	/	DRI/HBI: Ultra-pure iron via gas/H₂ reduction. Carbon-lean EAF feedstock.	
Custom	Customised pig iron Various chemical parameters are customised to meet the special needs of users.									

Display Of Pig Iron Products

















Ferromanganes





- Product Overview:
 Ferromanganese is an iron alloy primarily composed of iron and manganese. It is primarily used as a deoxidizer, desulfurizer, and alloy additive in steelmaking.
- Product granularity and packaging:
 - 1. Particle size: 0-1mm, 3-10mm, 10-70mm, natural lump or customized according to customer requirements.
 - 2. Packaging: Packed in ton bags (1002.5kg/bag) or customized according to customer requirements.

Ferromanganese Parameter Table											
		chemical composition (%))									
category	grade	Mn	С	S	Si	Р					
category	grade	IVIII	C	- 1	II	I	Ш	S			
		scope			\$	\leq					
Low-	FeMn88C0.2	85.0-92.0	0.20	1.0	2.0	0.10	0.30	0.02			
carbon ferroman	FeMn84C0.4	80.0-87.0	0.40	1.0	2.0	0.15	0.30	0.02			
ganese	FeMn84C0.7	80.0-87.0	0.70	1.0	2.0	0.20	0.30	0.02			
Medium	FeMn82C1.0	78.0-85.0	1.00	1.5	2.5	0.20	0.35	0.03			
carbon ferroman	FeMn82C1.5	78.0-85.0	1.50	1.5	2.5	0.20	0.35	0.03			
ganese	FeMn78C2.0	75.0-82.0	2.00	1.5	2.5	0.20	0.40	0.03			
High	FeMn78C8.0	70.0-82.0	8.00	1.5	2.5	0.20	0.33	0.03			
carbon ferroman	FeMn74C7.5	70.0-77.0	7.50	2.0	3.0	0.25	0.38	0.03			
ganese	FeMn68C7.0	65.0-72.0	7.00	2.5	4.5	0.25	0.40	0.03			

Note: Other chemical elements and their contents can be customized according to customer requirements

Ferrosilicon

	chemical composition (%)										
grade	Si	Al	Ca	Mn	Cr	Р	S	С			
	scope				€						
FeSi75A10.5-A	74.0-80.0	0.5	1.0	0.4	0.3	0.035	0.02	0.1			
FeSi75A10.5-B	72.0-80.0	0.5	1.0	0.5	0.5	0.04	0.02	0.2			
FeSi75A11.0-A	74.0-80.0	1.0	1.0	0.4	0.3	0.035	0.02	0.1			
FeSi75A11.0-B	72.0-80.0	1.0	1.0	0.5	0.5	0.04	0.02	0.2			
FeSi75A11.5-A	74.0-80.0	1.5	1.0	0.4	0.3	0.035	0.02	0.1			
FeSi75A11.5-B	72.0-80.0	1.5	1.0	0.5	0.5	0.04	0.02	0.2			
FeSi75A12.0-A	74.0-80.0	2.0	1.0	0.4	0.3	0.035	0.02	0.1			
FeSi75A12.0-B	74.0-80.0	2.0	1.0	0.4	0.3	0.04	0.02	0.1			
FeSi75A12.0-C	72.0-80.0	2.0		0.5	0.5	0.04	0.02	0.2			
FeSi75-A	74.0-80.0			0.4	0.3	0.035	0.02	0.1			
FeSi75-B	74.0-80.0			0.4	0.3	0.04	0.02	0.1			
FeSi75-C	72.0-80.0			0.5	0.5	0.04	0.02	0.2			
FeSi65	65.0-<72.0			0.6	0.5	0.04	0.02				
FeSi45	40.0-47.0			0.7	0.5	0.04	0.02				

Note: Other chemical elements and their contents can be customized according to customer requirements



- Product Overview:
 Ferrosilicon, used as a deoxidizer or an additive of alloy elements, is widely applied in steelmaking processes, casting processes, and other industries.
- Product granularity and packaging:
- 1. Particle size: finer than 200 mesh, finer than 60 mesh, 0-1mm, 1-3mm, 3-8mm, 10-70mm, natural lump. The above are commonly used particle sizes, and custom processing can be provided according to customer needs.
- 2. Packaging: Packed in ton bags (1002.5kg/bag) or customized according to customer requirements.

Ferrochrom



- Product Overview:
 Ferrochromium is an iron alloy composed of chromium and iron, characterized by its corrosion resistance and wear resistance. It is an important alloy additive in steelmaking.
- Product granularity and packaging:
 - 1. Particle size: 10-60mm, 10-100mm, natural blocks, etc., or customized according to customer requirements.
 - 2. Packaging: Packed in ton bags (1002.5kg/bag) or customized according to customer requirements.

		Chemical composition (%)										
level	grade		Cr		С	9	Si	Р		Ç	S	
	J	scope	I	Ш	C	I	П	I	П	I	П	
		scope	}	>				€				
Micro- carbon ferrochro	FeCr65C0.03	60-70			0.03	1.0		0.03		0.02 5		
mium	FeCr55C0.1		60	52	0.10	1.5	2.0	0.04	0.06	0.03		
low carbon ferrochro	FeCr65C0.25	60-70			0.25	1.5		0.03		0.02 5		
me	FeCr55C0.5		60	52	0.50	2.0	3.0	0.04	0.06	0.03	0.05	
medium carbon	FeCr65C1.0	60-70			1.00	1.5		0.03		0.02 5		
ferrochro mium	FeCr55C4.0		60	52	4.00	2.5	3.0	0.04	0.06	0.03	0.05	
high-	FeCr67C6.0	60-72			6.00	3.0		0.03		0.04	0.06	
carbon ferrochro me	FeCr55C10.0		60	52	10.0	3.0	5.0	0.04	0.06	0.04	0.06	
Note: Other chemical elements and their contents can be customized according to customer												

Note: Other chemical elements and their contents can be customized according to customer requirements.

Nodulizer

Spheroidizing agent parameter table											
	chemical composition (%)										
grade	Mg	RE	Si	Ca	Ва	AI	Fe				
		sco	pe		Ба	€					
FeSiMg5RE1	5.5-6.5	0.5-1.5	38-45	2.0-3.5	moderate amount	0.8	margin				
FeSiMg5RE2	5.5-6.5	1.5-2.5	38-45	2.0-3.5	moderate amount	0.8	margin				
FeSiMg6RE2	6.0-7.0	1.5-2.5	38-45	2.0-3.5	moderate amount	0.8	margin				
FeSiMg7RE2	6.5-7.5	1.5-2.5	38-45	2.0-3.5	moderate amount	0.8	margin				
FeSiMg7RE3	6.5-7.5	2.5-3.5	38-45	2.0-3.5	moderate amount	0.8	margin				
FeSiMg8RE3	7.5-9.0	2.5-3.5	38-45	2.0-3.5	moderate amount	0.8	margin				
FeSiMg8RE5	7.5-8.5	4.5-5.5	38-45	2.0-3.5	moderate amount	0.8	margin				
FeSiMg8RE7	7.0-9.0	6.5-7.5	38-45	2.0-4.0	moderate amount	0.8	margin				

Note: Other chemical elements and their contents can be customized according to customer requirements.





- Product Overview:
 - Spheroidizing agent, also known as rare earth magnesium-silicon-iron alloy, is an additive that promotes the graphite crystallization into spherical shapes in ductile iron. It is generally used in the field of cast iron casting. During the casting process, it is added to the molten iron to cause graphite to precipitate in spherical shapes.
- Product granularity and packaging:
 - 1. Particle size: 5-25mm, 5-30mm, or customized according to customer requirements.
 - 2. Packaging: Packed in 25kg small bags (1002.5kg/bag), or customized according to customer requirements.

Inoculant

Silicon-Barium Inoculant Parameter Table										
chemical composition (%)										
Si	Ва	Ca	Al	Р	S	С	Fe			
	scope			\$	€					
70.0-72.0	4.0-6.0	0.5-1.3	1.5	0.04	0.02	0.2	margin			
70.0-72.0	3.0-5.0	0.5-1.3	1.5	0.04	0.02	0.2	margin			
70.0-72.0	2.0-4.0	0.5-1.5	1.3	0.04	0.02	0.2	margin			
69.0-70.0	5.0-7.0	0.5-1.5	1.5	0.04	0.02	0.2	margin			
68.0-70.0	4.0-6.0	0.5-1.5	1.5	0.04	0.02	0.2	margin			
65.0-70.0	3.0-5.0	0.5-2.0	1.5	0.08	0.05	0.3	margin			
60.0-65.0	2.0-5.0	0.5-2.0	1.5	0.08	0.05	0.3	margin			

Note: Other chemical elements and their contents can be customized according to customer requirements.





- Product Overview:
 - The casting materials studied for ductile iron and gray iron castings promote graphitization, refine the body structure, significantly reduce the tendency towards chilling, and enhance the machinability of the castings. They are widely used in foundries for the production of ductile iron and gray iron castings.
- Product granularity and packaging:
 - 1. Particle size: 0-0.25mm, 0.2-0.8mm, 1-3mm, 3-5mm, 3-8mm, 5-10mm, 8-15mm, 10-20mm, and can also be customized according to customer requirements.
 - 2. Packaging: 25kg jumbo bag with inner and outer bags (1002.5kg/bag), or customized according to customer requirements.



Carbon additive







 Cylindrical graphitized carburizer

Content: C: 91%-95%, S: 0.08-0.05%; absorption rate is around 90% Particle size: 1-5mm.

 Graphitized petroleum coke carburizer Particle size: 0-2mm, 1-5mm, or customized according to customer requirements.

forged petroleum coke Content: C: ≥98%, S: ≤0.5%, absorption rate generally ranges from 80% to 90%

Carbonized agent of

 Coal-based carburizer Content: C: 90%-93%, S: 0.3%-0.5%.

Silicon manganese alloy

Product Overview:

Silicon-manganese alloy is an alloy composed of manganese, silicon, iron, a small amount of carbon, and other elements. It is primarily used as a compound deoxidizer and alloy additive in steel production.



Silicon-manganese alloy parameter table										
	chemical composition (%)									
grade	Si	Mn	Р	S	С					
		>	\leq							
Si17Mn65	17.0	65.0	0.25	0.04	2.5					
Si14Mn60	14.0	60.0	0.3	0.05	2.5					

Note: Other chemical elements and their contents can be customized according to customer requirements.

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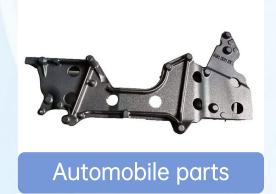
Due to limited brochure space, not all products are shown. If you can't find the needed casting materials, please contact us anytime! Iron Valley offers one-stop quotation and procurement services.

We leverage China's strong alloy auxiliary supply network to provide diverse casting material options.

Casting Business Unit

Casting materials: gray iron castings, ductile iron castings, malleable iron castings, steel castings, non-ferrous metals and alloys.

















































Make casting easier | | | |



Machine tool parts



Machine tool parts



Machine tool parts





























Tiegu has won honors such as "Local Outstanding Private Enterprise" and "Excellent Strategic Partner" for its outstanding market performance and industry contributions, gaining high recognition from the government and partners.

In terms of quality control, we strictly adhere to the ISO9001 quality management system, ISO14001 environmental management system, and ISO45001 occupational health and safety management system, exercising meticulous control over the entire product process from raw material procurement to delivery. Our supplied products not only meet stringent JIS standards but also have passed certifications in target countries and regions, and been tested and verified by international authoritative institutions, ensuring superior quality and stable performance.

















Workshop, Products, Case Presentation





































Cooperative Partner

As a smart service provider covering the entire industrial chain of the foundry sector, Tiegu leverages its professional resource integration capabilities and innovative development concepts to forge in-depth strategic partnerships with multiple high-quality upstream pig iron suppliers and casting manufacturers. Through a long-term and stable win-win cooperation mechanism, it has achieved efficient collaboration and deep synergy, jointly propelling China's highquality casting products to set sail and reach overseas markets.





Tiegu from Anhui, Tiegu for the World

In the future, Tiegu plans to establish overseas branches and forward warehouses in key resource countries and trade hubs, facilitating localized warehousing, logistics, and distribution services. This strategic move will shorten the supply chain radius, reduce customers' procurement costs, and create a one-stop supply chain platform encompassing procurement, transportation, and warehousing.

60 individual

Country and region

Million tons

Experience in the production and sales of pig iron and castings

One-Stop

A globally influential one-stop product service provider for the foundry industry



Contact Information

- Headquarters: Anhui Tiegu Information Technology Co., Ltd Address: 19th Floor, Building 1, Jinnuode, No. 1686 Xiyou Road, Xingyuan Community Service Center, High-tech Zone, Hefei City, Anhui Province
- International trade company: Tiegu (Hainan) International Trade Co., Ltd Address: Room 1906, R&F Center, No. 21 Guoxing Avenue, Meilan District, Haikou City, Hainan Province

Wechat&WhatsApp: +86-15256135588

≥ E-mail: zbw@tiegu.net

If you have inquiries about pig iron or castings, you can also forward them to Tiegu Company via the hyperlink provided below.

Go to the inquiry form

*The above hyperlink will take you to Tiegu's official website.