

➤ **Introduction**

Grate and grate bars are easily damaged parts which been widely used for wast incinerator, biomass and coal-fired boiler, sintering machine and other machines. It is produced by heat resistant steel with different type of structures. We are able to produce and offer a large range of grate bars by different materials or grate types. With the support of our production team, we can cooperate with our customers to improve their materials and designs in order to increase the life span of their products.

We strictly comply with the high standards of production, pay attention to the return charge percentage, process control and product inspection to ensure our customers get right quality products.

➤ **Grate type we are supplying**

Flat grate;
Travelling grate;
Roller grate;
Moving/return grate bar;
Grate bar;

➤ **Typical products**



Sintering machine grate bar



Coal-fired boiler grate bar



Wast incinerator grate bar



Biomass boiler grate bar



Grate plate for melting industry



Chain link



Water-cooling grate

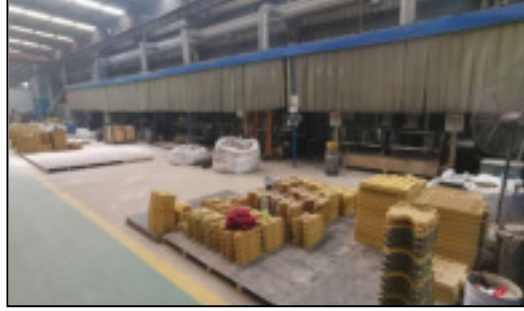


Grate for boiler

➤ **Production process**

Shell molding is the most common process for our products for grate or grate bars. By this process, we can get high quality castings with good dimensional accuracy and high internal quality, but the cost is not as high as lost wax castings. For higher requirement castings, we use lost wax process as priority, and by this process we can get best surface and dimensional quality.

For simple castings such as grate bars, we use both lost foam process or shell molding process. By lost foam casting process, we can get much higher production efficiency to reduce production cost.



Shell molding process



Lost foam process



Lost wax process

➤ **Materials we are supplying**

Material	Standard	C%	Si%	Mn%	P% Max	S% Max	Cr%	Mo%	Ni%	N%	Max working temperature/°C
ZG40Cr25Ni20Si2	GB/T 8492-2002	0.3-0.5	1.0-2.5	2	0.04	0.03	24-27	0.5	19-22		1100
ZG40Cr25Ni20	GB/T 6403-1992	0.35-0.45	1.75max	1.50max	0.04	0.04	23-27	0.5max	19-22		1150
ZG40Cr9Si2	GB/T 6403-1992	0.35-0.50	2-3	0.7max	0.035	0.03	8-10				800
ZG35Cr24Ni7SiN	GB/T 6403-1992	0.3-0.4	1.3-2.0	0.8-1.5	0.04	0.03	23-25.5		7-8.5	0.2-0.28	1100
ZG35Cr26Ni12	GB/T 6403-1992	0.2-0.5	2.0max	2.0max	0.04	0.04	24-28		11-14		1100
ZGCr29Si2	GB/T 8492-2002	1.2-1.4	1.0-2.5	0.5-1.0	0.04	0.03	27-30	0.5	1		1100
1.4777(GX130CrSi29)	DIN 17465-1993	1.2-1.4	1.0-2.5	0.5-1.0	0.035	0.03	27-30				1100
1.4729(GX40CrSi13)	DIN 17465-1993	0.3-0.45	1.0-2.5	0.5-1.0	0.035	0.03	12-14				850
1.4776(GX40CrSi28)	DIN 17465-1993	0.3-0.45	1.0-2.5	0.5-1.0	0.035	0.03	27-30				1150
1.4823(GX40CrNiSi27-4)	DIN 17465-1993	0.35-0.50	1.0-2.5	1.50max	0.035	0.03	25-28		3.5-5.5		1100

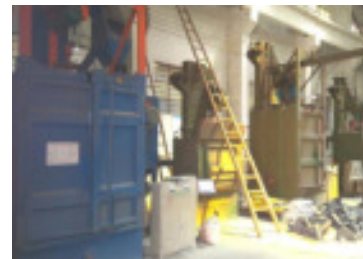
➤ **Production & Inspection**



Molding



Melting & pouring



shot blasting



Cleaning & Grinding



Machining



Dimensional inspection



MT Inspection



UT Inspection



Hardness Inspection



Chemical composition



Tensile test



Metallographic test

➤ **Galary**

