



## Gray Iron in ASTM A126

ASTM A126 Gray Iron casting is intended for use as valve pressure retaining parts, pipe fittings and flanges only, include three casting metal grades: Class A, Class B and Class C. [www.castingquality.com](http://www.castingquality.com)

*Reference Casting Standards:*

**ASTM A126: Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings.**

**Gray Iron castings can be produced in Casting Quality Industrial Co., Ltd by:**

- n Sand Casting
- n Shell Casting
- n Lost Form Casting
- n Centrifugal casting

**Gray iron standard grades in ASTM A126 standard:**

Casting Grade	Tensile Strength, min	
	ksi	Mpa
ASTM A126 Class A	21	145
ASTM A126 Class B	31	214
ASTM A126 Class C	41	283

**Transvers Testing requirement can be specified by the purchaser.** This test shall be performed with the bar resting on support separated by 12in (305mm) and the load applied midway between the supports. The load shall be applied at the rate that will produce 0.10 in (2.5mm) central deflection in 20 to 40s. In case the transverse test specimen varies from the specified diameter of 1.20in (30.5mm), a correction factor conforming to the requirement for below table.

Casting Grade	Force at center, min		Deflection at center, min	
	Lb	kN	In	mm
ASTM A126 Class A	2200	9.75	0.10	2.5
ASTM A126 Class B	3300	14.65	0.12	3.0
ASTM A126 Class C	4000	17.75	0.12	3.0

**Chemical Requirements listed in ASTM A126:**

Casting Grade	Chemical Analysis	
	P, %, max	S, %, max
ASTM A126 Class A	0.75	0.15
ASTM A126 Class B	0.75	0.15
ASTM A126 Class C	0.75	0.15



### ASTM A126 Gray Iron Heat Treatment Requirement:

no requirement in standard, but strength relief can be processed if necessary.

### ASTM A126 Gray Iron Typical Casting Application

Cast Iron Valve industry, Iron Flange, Cast Iron Pipe fittings, Cast Iron Pipe.

**No detailed requirement of chemistry in ASTM A126 Standards, but we will suggest the chemistry based on our experience in China Casting industry:**

ASTM A126	Chinese Grade	C,%	Si,%	Mn,%	P ≤,%	S ≤,%	Gray Iron Hardness (HBS)
<b>Class A</b>	HT150	3.3-3.5	2.0-2.4	0.5-0.8	0.2	0.12	150-200
<b>Class B</b>	HT250	3.2-3.5	1.6-2.0	0.7-0.9	0.15	0.12	190-240
<b>Class C</b>	HT300	2.9-3.2	1.4-1.7	0.8-1.0	0.15	0.12	210-260

**Similar Gray Iron Casting Grades in whole world:** [www.castingquality.com](http://www.castingquality.com)

Index	Country	Grey Iron Grade						
1	China	—	HT350	HT300	HT250	HT200	HT150	HT100
2	Japanese	—	FC350	FC300	FC250	FC200	FC150	FC100
3	USA	NO.60	NO.50	NO.45	NO.35/ NO.40	NO.30	NO.25	NO.20
4	Russia	C440	C435	C430	C424/C425	C418/C420/C421	C415	C410
5	Germany	GG40	GG35	GG30	GG25	GG20	GG15	GG10
6	Italy	—	G35	G30	G25	G20	G15	G10
7	France	FGL400	FGL350	FGL300	FGL250	FGL200	FGL150	—
8	England	400	350	300	260	180/220	150	100
9	Poland	Z140	Z135	Z130	Z125	Z120	Z115	—
10	India	FG400	FG350	FG300	FG260	FG200	FG150	—
11	Romania	FC400	FC350	FC300	FC250	FC200	FC150	—
12	Spanish	—	FG35	FG30	FG25	FG20	FG15	—
13	Belgium	FGG40	FGG35	FGG30	FGG25	FGG20	FGG15	FGG10
14	Australia	T400	T350	T300	T260	T220	T150	—
15	Sweden	O140	O135	O130	O125	O120	O115	O110
16	Hungary	OV40	OV35	OV30	OV25	OV20	OV15	—
17	Bulgaria	—	Vch35	Vch30	Vch25	Vch20	Vch15	—
18	ISO	—	350	300	250	200	150	100
19	COPANT	FG400	FG350	FG300	FG250	FG200	FG150	FG100
20	Taiwan(CN)	—	—	FC300	FC250	FC200	FC150	FC100
21	Holand	—	GG35	GG30	GG25	GG20	GG15	—
22	Luxemburg	FGG40	FGG35	FGG30	FGG25	FGG20	FGG15	—
23	Austria	—	GG35	GG30	GG25	GG20	GG15	—
24	Europa-Norm		EN-GJL-350	EN-GJL-300	EN-GJL-250	EN-GJL-200	EN-GJL-150	





As a professional casting manufacture, Qingdao Casting Quality Industrial pay much attention to the quality and technology, our products are much more casting and forging parts. We are mainly do Sand Casting, Investment Casting (Lost Wax Casting or Precision Casting) and Die Casting .Today, its products are marketed globally through many countries.

## Our Services

Casting Quality focus on Metal Parts industry, we provide professional service in Metal Casting field.

Sand Casting  
Investment Casting  
Shell Casting  
CNC Machining  
CAD Design  
Tools/Mold Design

Many buyers from all over the world purchase products from China. But do you know the quality of products in China? Maybe you only pay the surface and price, but the inner quality is lost .

Housing Casting Design in Solidworks

## What makes Casting Quality the best?

### Innovation

Our engineers are more than just designers....they're pioneers. Our team use CAD/CAM to do the simulation of casting parts .Through the advanced technology, we can know the weight and structure . We also visited so many factories to know their difference and improve our products every year.

### Quality

We're obsessed with quality. Casting Quality constantly strives to exceed our customers' expectations in durability and performance. In fact, we will control the whole process from the original material to the finished parts , include the technology .Uniquely-designed Quality Control System focuses on ensuring four product goals: 1) Eligible Chemistry , 2) Hardness 3) Property and 4) Affordable Pricing. The result is the best casting products value in the industry.

### Service

We're in Qingdao,China, It has convenient transportation of road and sea. Courteous service is part of who we are, and we do it better than anyone in the industry. With Casting Quality you can expect friendly, knowledgeable, and prompt customer service.

### Fulfillment

Shipping orders complete and on-time is of paramount importance to our customers. We will count the delivery date and result before accept your order. Casting Quality consistently ranks as one of the best in speed of delivery and fill rates.

### ***SERVICE IN QINGDAO CASTING QUALITY INDUSTRIAL***

- I SAND CASTING**
- I INVESTMENT CASTING**
- I SHELL CASTING**
- I PERMANENT MOLD CASTING**
- I CNC MACHINING**
- I CAD/CAM DESIGN**