



Super Invar

1. Brief introduction:

4J32 alloy is also called Super-Invar alloy. In -60°C to 80°C temperature range the expansion coefficient is lower than that of 4J36, but the low temperature structure stability is not good as that of 4J36.

It is primarily used for manufacture high precision instrument parts that require high-accuracy dimensions within the range of ambient temperature variations.

2. Main specifications:

Chinese grade	USA	Russia	France
4J32	Super-Invar	32HKД,32HK-ВИ	Invar,Superieur

3. Chemical composition under YB/T5241-2005 standard:

Grade	chemical composition,%								
	C	P	S	Si	Cu	Mn	Ni	Co	Fe
4J32	0.05	0.02	0.02	0.2	0.4~0.8	0.2~0.6	31.5~33	3.2~4.2	Remainder

Remarks: If require adjustments for some chemical compositions, pls consult with us.

4. Typical average linear expansion coefficient value $\alpha_{10-6}/^{\circ}\text{C}$:

Grade	20 $^{\circ}\text{C}$ ~50 $^{\circ}\text{C}$	20 $^{\circ}\text{C}$ ~100 $^{\circ}\text{C}$	20 $^{\circ}\text{C}$ ~200 $^{\circ}\text{C}$	20 $^{\circ}\text{C}$ ~300 $^{\circ}\text{C}$	20 $^{\circ}\text{C}$ ~400 $^{\circ}\text{C}$	20 $^{\circ}\text{C}$ ~500 $^{\circ}\text{C}$
4J32	0.7	0.8	1.4	4.3	7.2	9.3



Shanghai Hite Special Alloy Co., Ltd.
<https://www.hitealloy.com>

5. Main product types:

wire,rod, bar,strip, plate/sheet,tube,rectangular tube,square tube, ring,forging

6. Super Invar source URL:

<https://www.hitealloy.com/product/4j32-super-invar.html>

Shanghai Hite Special Alloy Co., Ltd.
Shanghai Hite Special Alloy Co., Ltd.