

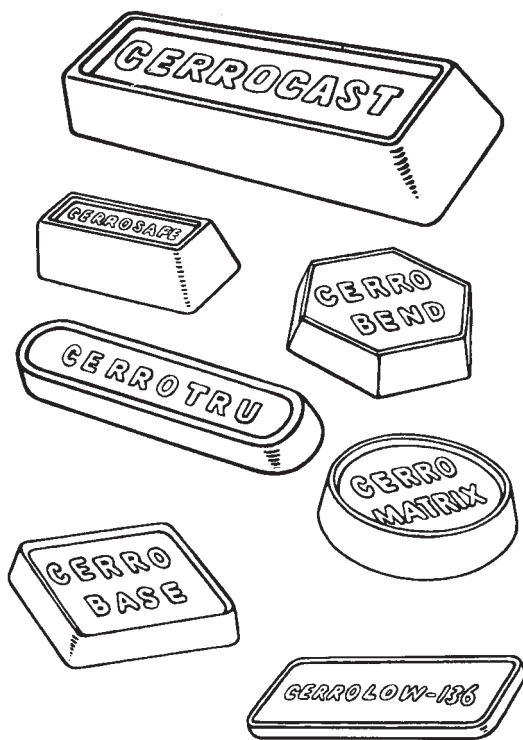


CERRO Non-Shrinking Alloy

Low-Melting Point Metals for Pattern Shops and Foundries

Cerro's low-melting point and non-shrinking characteristics provide a short-cut method for producing master patterns for match plates as well as duplicate patterns. With Cerro you can produce master patterns direct from routed wood molds, and they are an easy way to anchor plastic, metal or wood patterns in match plates. They are noted for producing patterns that compensate for shrinkage.

With Cerro you can make shell patterns with uniform wall thickness. Cerro is also an easy way to salvage worn wood patterns and core boxes and to alter or repair match plates of solid patterns. They can also be used to make metal faced molds for epoxy patterns.



Also available in rod, pellet, pig and wire forms.

To Order Specify: (1) Number of Ingots
(2) Catalog Number

Cerro Metal

(cast in approximately two-pound ingots)

Description	Catalog Number
Cerrolow 117	994-L117
Cerrolow 136	994-L136
Cerrolow 147	994-L147
Cerrobend	994-D
Cerrosafe	994-S
Cerromatrix	994-M
Cerrobase	994-B
Cerrotru	994-T
Cerrocass	994-C

Properties of Cerro Alloys

		Cerrolow			Cerro-bend	Cerro-safe	Cerro-matrix	Cerro-base	Cerro-tru	Cerro-cast
Melting	Temp. (°F)	117	136	147	158	—	—	255	281	—
	Range (°F)	—	—	142-149	—	158-190	217-440	—	—	281-338
Initial	Shrinkage	.0000" in 30 min.	.0000" in 1 hr.	None	None	Initially	None	Initially	None	Yes
	Growth	—	—	Rapid immed.	Rapid immed.	.0000" in 1 hr.	Rapid for 15 hrs.	Slow grth later	.0005" per inch	None
After Casting		.0002" per inch stable in 2 hrs.	.0002" per inch stable in 5 hrs.	Max. +.0052" per inch	Max. +.0057" per inch	Max. +.0025" per inch	Max. +.0061" per inch	Max. +.0022" per inch	Max. +.0005" per inch	Only -.0001" per inch
Weight-Lbs./in. ³		.32	.31	.342	.339	.341	.343	.380	.315	.296
% Comp.	Bismuth	44.7	49.0	48.0	50.0	42.5	48.0	55.5	58.0	40.0
	Lead	22.6	18.0	25.6	26.7	37.7	28.5	44.5	42.0	—
	Tin	8.3	12.0	12.8	13.3	11.3	14.5	—	—	60.0
	Cadmium	5.3	—	9.6	10.0	8.5	—	—	—	—
	Indium	19.1	21.0	4.0	—	—	—	—	—	—
	Antimony	—	—	—	—	—	9.0	—	—	—



Mahogany Pattern Lumber (No Longer Available)

Mahogany has exceptional ability to resist heat and cold and extremes in dryness and moisture and still maintain dimensional stability. It will withstand abrasion and wear exceptionally well. The straight grain is compact, and although Mahogany is a hardwood, it carves easily.

FAS Grade Pattern Mahogany

FAS (First and Seconds) is the top grade of Mahogany available. This grade calls for approximately 83% clear lumber on the face. In practice it will usually be better...often up to 100% clear.

FAS grade Mahogany is usually free of knots. However, splits are permitted. Split lengths can be up to twice (in inches) the surface footage of the board, providing the split does not deviate by more than 1" to the foot.

Boards come in random widths of 6" and wider, and random lengths from 8' to 16'.

Thickness	Catalog Number
4/4 (1")	N/A
5/4 (1-1/4")	N/A
6/4 (1-1/2")	N/A
8/4 (2")	N/A
10/4 (2-1/2")	N/A
12/4 (3")	N/A
16/4 (4")	N/A

Jelutong Pattern Lumber (No Longer Available)

Jelutong is considered to be one of the better pattern woods because of its stability and ease of working and because it has no knots. It has straight and tight grain which makes it most suitable for carving intricate patterns and/or turning.

Some Jelutong boards may have latex pockets that are approximately 1/16" wide and 1/4" long. These are not considered a defect because they are small enough to be filled with Pat-Bild or Quick-Bild. Jelutong is available in

one grade and board widths are usually 12" wide. Lengths range from 8' to 16'.

Thickness	Catalog Number
4/4 (1")	N/A
5/4 (1-1/4")	N/A
6/4 (1-1/2")	N/A
8/4 (2")	N/A

NOTE: Kindt-Collins can supply other lumber species and grades. Contact us toll free at 1-800-321-3170 to order.

To order any pattern lumber, specify catalog number, lengths and quantity desired.