McMASTER-CARR®

Certificates

330-995-5500
330-995-9600 (fax)
cle.sales@mcmaster.com

Purchase Order	Order Date	Placed By	McMaster-Carr Number	Number of Certificates
P1498569	12/15/2023	Jane Beattey	5391593-01	2

Line		Product	Ordered	Status	Certificates
1	5788N23	Tight-Tolerance High-Strength 863 Bearing Bronze Bar, 1" Thick, 2-1/2" Wide, 1 Foot Long	25 each	25 each shipped January 9	230–9726, 230–9727 *Number provided on products and certificates.*

Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.

TO: McMaster Carr - OH / PO# VA-53429660 / SO# 746799 / PL# 76828

WISCO

MATERIAL TEST REPORT

3.1 EN 10204

DELIVERY NOTE

46602301

CLIENT:	MARANATHA NOW, Inc (ATLAS BRONZE)	Order Nº:	53638

Line	Qty.	Description of product supplied	Cast No.
5	1	C86300 Plate 12.25" x 4" x L=39.3"	2302509

MATERIAL

Wisco designation	EN1982 designation	According other specification: ☐ n/a ☐ Client specification ☒ International standard	Casting process
n/a	n/a	ASTM B505/B505M & B22/B22M _ C86300	Continuous (GC)

Requested results: ☒ C.A. ☒ Hardness ☒ Tensile Test ☐ Others:

CHEMICAL ANALYSIS (%)

Cast No.	Zn	Sn	Si	Sb	S	Pb	P	Ni	Mn	Mg
2302509	25,38	0,106	0,0372	0,003	0,007	0,00	0,011	0,31	2,91	0,0003

Cast No.	Fe	Cr	Co	Bi	B	As	Al	Cu		
2302509	3,06	0,0120	0,0016	0,0087	0,0024	0,0063	5,54	62,60		

MECHANICAL PROPERTIES

Cast No.	Hardness	Tensile Test					Compression Deformation		
	HBW 10-3000	$YS_{0.5}$		TS		E 4D (%)	ksi*	MPa	
		ksi*	MPa	ksi*	MPa				
2302509	217	71	490	115	792	16,5	68	467	

Remarks:

*Values in ksi calculated by mathematical conversion. Real values obtained from test are in MPa

Quality system ISO 9001

LRQA certificate Nº: SGI 1957361

Contact information

Wisco Española, S.A.
C/ Mayor s/n
31890 Betelu
Navarra (Spain)
Tel: +34 948513050
Fax: +34 948513186

For more information about our products and services please visit us
www.wisco.es
wisco@grupowisco.com

WISCO ESPAÑOLA, S. A.
Wisco Stamp
(Not valid without stamp)
Tel: 948 51 30 50
Fax: 948 51 31 86

Issue date	Rev.	Page
03/10/2023	0	1 of 1

[1] *This revision supersedes any prior revision of this certificate for the delivery note lines written above*

TO: McMaster Carr -OH / PO# VA-53429660 / SO# 746799 / PL# 76828

WISCO

MATERIAL TEST REPORT

3.1 EN 10204

DELIVERY NOTE

44935701

CLIENT:	MARANATHA NOW, Inc (ATLAS BRONZE)	Order Nº:	50371

Line	Qty.	Description of product supplied	Cast No.
17	2	Bronze C86300 Plate 12.25"x4"xL=144"	2303959

MATERIAL

Wisco designation	EN1982 designation	According other specification: ☐ n/a ☐ Client specification ☒ International standard	Casting process
n/a	n/a	ASTM B505/B505M & B22/B22M_ C86300	Continuous (GC)

Requested results: ☒ C.A. ☒ Hardness ☒ Tensile Test ☐ Others:

CHEMICAL ANALYSIS (%)

Cast No.	Zn	Sn	Si	Sb	S	Pb	P	Ni	Mn	Mg
2303959	25,57	0,092	0,0567	0,003	0,006	0,03	0,008	0,33	3,26	0,0004

Cast No.	Fe	Cr	Co	Bi	B	As	Al	Cu		
2303959	2,85	0,0120	0,0019	0,0075	0,0024	0,0031	5,42	62,36		

MECHANICAL PROPERTIES

Cast No.	Hardness	Tensile Test					Compression Deformation		
	HBW 10-3000	YS 0,5		TS		E 5D (%)	ksi*	MPa	
		ksi*	MPa	ksi*	MPa				
2303959	217	73	505	121	836	18	62	428	

Remarks:

*Values in ksi calculated by mathematical conversion. Real values obtained from test are in MPa

Quality system ISO 9001

LRQA certificate Nº: SCI 1957361

Contact information

Wisco Española, S.A.
C/ Mayor s/n
31890 Betelu
Navarra (Spain)
Tel: +34 948513050
Fax: +34 948513186

For more information about our products and services please visit us
www.wisco.es
wisco@grupowisco.com

WISCO ESPAÑOLA, S. A.
Wisco Stamp
(Not valid without stamp)
Tel: 948 51 30 50
Fax: 948 51 31 86

Issue date	Rev.	Page
27/03/2023	0	1 of 1

[1] *This revision supersedes any prior revision of this certificate for the delivery note lines written above*