McMASTER-CARR®

Certificate

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

Purchase Order	Order Date	Placed By	McMaster-Carr Number	Number of Certificates
P1469836	12/22/2022	Jane Beattey	3828146-01	1

Line		Product	Ordered	Status	Certificate
1	8954K671	Ultra-Machinable 360 Brass Bar, 2" Thick, 4" Wide, 3 Feet Long	1 each	1 each delivers December 27	185–6503

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

TERMOMECANICA SÃO PAULO S.A.

Client: 300290 THYSSENKRUPP MATERIALS NA

Material: BC360H02000461
UNS-C36000 H02 flat bar 4" x 2"
CUREC00402

Control Nº: 040001224763
Lot Nº: 0000860863 **Qty:** 1,602.000 KG

Quality Certificate

Invoice Nº / Date:
000247288 / 01.20.2022

Order / Date:
PO-5400585479 / 10.21.2021

Exp. Nº / Supply Nº / Item
EXP-12170/22 / 81414782 / 000060

Analysis Results - Chemical Composition

Characteristics	Unit	Found	Minimum	Maximum
Cu	%	61.30	60.00	63.00
Pb	%	2.77	2.50	3.00
Fe	%	0.17	0.00	0.35
Zn	%	remainder		

Physical, Mechanical and Metallographic Tests

Characteristics	Unit	Found	Minimum	Maximum
Format	-	RECTANGULAR BAR		
Alloy	-	UNS C-36000		
Temper	-	1/2 HARD (H02)		
Mercurous Nitrate	-	ASTM B154(16)		
Width	inches	3.998	3.988	4.012
Thickness	inches	2.001	1.994	2.006
HRB Hardness	HRB	63.000	35.000	70.000
Length furnishing	mm	3665	3658	3668
Tensile Strength	ksi	51.8	39.9	
Yield Strength	ksi	27.3	15.2	
Elongation	%	28.0	20.0	
Visual Inspection	-	Approved	-	-

WE ARE IN CONFORMITY WITH ROHS 2011/65/UE DIRECTIVE AS PER THE FIRST PARAGRAPH OF ARTICLE 4 AND ITEM 6 OF THE ATTACHED DOCUMENT. IN ACCORDANCE WITH STANDARD ASTM B-16 (19) / B-249 (20) / B-154 (16) / AMS 4610N(03) . COUNTRY OF MELT AND MANUFACTURING: BRAZIL.

Resp. Chemist: Cleber Segantini
CRQ: 04453254

Resp. Laboratory: Márcio Rodrigues da Silva
CREA: 5063293547

Av. Caminho do Mar, 2652 Compl.: 2700, R.12 de Outubro, 148 - SP - CEP 09612-000 - Brazil Tel. +55 11 4366-9722
www.termomecanica.com.br - exportacao@termomecanica.com.br

From: ThyssenKrupp Materials NA
Cust. MCMASTER-CARR SUPPLY CO Del.: 2408884218
CstAr 5272 CstOr UZ-25184570
Wgt.: 264.563 LB Date 05/23/2022