

INSPECTION CERTIFICATE

MESSRS	UNIMECH ENGINEERING (M) SDN. BHD.
DELIVER To	
JOB NAME	
JOB No.	
P.O.No.	APO-2201-0074
PRODUCT CODE	(TR)C<ZOP02>2

Certificate No.
1020831160-013-01-01

Issue Date : 2022/03/22



SPECIFICATION

Manuf No.	1020831160-013
Description	CLASS 150 CAST BRONZE GLOBE VALVE SCREWED ENDS
Figure	C<ZOP02>2
Size	2 inch(B)
Quantity	72
Valve No.	
Item No.	13
Kiki No.	

MAIN PARTS

No.	Name of parts	Material
001	BODY	CAC
002	BONNET	C 3771 BE

TEST

Pressure test	Judge.	Inspection fluid and pressure		
Shell	Good	Hydro	2.40	MPa
	Good	Air	0.6	MPa
Seat		Hydro	-	
	Good	Air	0.6	MPa
Back seat		Hydro	-	
		Air	-	

Item	Judge.	Attached sheet
Material	Good	Material Test Result
Dimension	Good	
Visual	Good	
Operation	Good	

NONDESTRUCTIVE EXAMINATION

Type of examination and judgement	Attached sheet

REMARKS

REPRESENTATIVE TEST BY HYDRAULIC SHELL TEST HAS BEEN PERFORMED

Witnessed by

KITZ CORPORATION
QC Manager

MATERIAL TEST RESULT

MESSRS	UNIMECH ENGINEERING (M) SDN. BHD.
JOB NAME	
JOB No.	
P.O.No.	APO-2201-0074
PRODUCT CODE	(TR)C<ZOP02>2

Certificate No.
1020831160-013-01-01-Z1

Issue Date : 2022/03/22



Figure	C<ZOP02>2	Valve No.	
Material	Other standard	CAC	Item No. 13
Charge No.	Display No.	Name of Parts	
1 21070803-1		BODY	
2			
3			
4			

CHEMICAL COMPOSITION %

Element	Cu	Sn	Pb	Zn											
Spec.	79.0	2.0	3.0	4.0											
	87.0	6.0	7.0	12.0											
1	81.5	3.1	5.5	9.6											
2															
3															
4															
Element															
Spec.															
1															
2															
3															
4															

TENSION TEST

IMPACT TEST

Item			Tensile str.	Elongation					
Unit			N/mm2	%					
Spec.			Min	Min					
1			165	15					
2			239	33					
3									
4									

Item									
Unit									
Spec.									
1									
2									
3									
4									

HEAT TREATMENT °C

Spec.		
1		
2		
3		
4		

N:Normalizing A:Annealing T:Tempering Q:Quenching AC:Air Cooling
 WQ:Water Quenching OQ:Oil Quenching WC:Water Cooling FC:Furnace Cooling ST:Solution Treatment

REMARKS

JIS G 0415 2.2

 Reviewed by

KITZ CORPORATION
 QC Manager

MATERIAL TEST RESULT

MESSRS	UNIMECH ENGINEERING (M) SDN. BHD.
JOB NAME	
JOB No.	
P.O.No.	APO-2201-0074
PRODUCT CODE	(TR)C<ZOP02>2

Certificate No.
1020831160-013-01-01-Z2

Issue Date : 2022/03/22



Figure	C<ZOP02>2	Valve No.	
Material	JIS H 3250 C 3771 BE	Item No.	13
Charge No.	Display No.	Name of Parts	
1 H215089		BONNET	
2			
3			
4			

CHEMICAL COMPOSITION %

Element	Cu	Pb													
Spec.	57.0	1.0													
	61.0	2.5													
1	58.8	2.1													
2															
3															
4															

Element	Fe+Sn	Zn												
Spec.	Max	Remainder												
	1.0													
1	0.3	REM.												
2														
3														
4														

TENSION TEST

IMPACT TEST

Item			Tensile str.	Elongation					
Unit			N/mm2	%					
Spec.			Min	Min					
1			315	15					
2			447	32					
3									
4									

Item									
Unit									
Spec.									
1									
2									
3									
4									

HEAT TREATMENT °C

Spec.				
1				
2				
3				
4				

N:Normalizing A:Annealing T:Tempering Q:Quenching AC:Air Cooling
 WQ:Water Quenching OQ:Oil Quenching WC:Water Cooling FC:Furnace Cooling ST:Solution Treatment

REMARKS

JIS G 0415 2.2

 Reviewed by

KITZ CORPORATION
 QC Manager

We hereby certify that the articles listed above are satisfactory in accordance with the requirements of the standard and purchase order.