



QM-C-7.1/FORGING/0002

Inspection Plan(Check Sheet)

Item: Brake Block Hanger
Specn. : C- 9808 Rev 4
Amd.:
Drg. No. & Alt.: CG-K 9117 Alt 2

Name of Manufacture	
Date of Offer	
RDSO File No.	
Purchase Order No.	
Total Quantity Ordered	
Quantity Earlier Passed	
Quantity Now Offered	
Quantity Passed	
Consignee	
D.P. Date	
Date of Inspection	
Qty. Accepted	
Qty. Rejected	
Balance Order	

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12.0 RECORD CHECK:
Raw Material:

Register No.						
Date of Last Inspection						
Whether any raw material received after last inspection						
Date of Inspection of raw material						
Date of last Inspection						
Inspection results (to be filled as per firm's record)						
Chemical Properties						
	C	Si	Mn	S	P	
Specified	0.3-0.4	0.15-0.35	0.60-0.90	0.04	0.04	
Observed						
Physical Properties						
	Tensile		Yield		% Elongation	
Specified (Min.)	510 MPa		280 MPa		20	
Observed						
Bend Test (As per IS 1875 clause 12.2)						
44mm without fracture						
Macroscopic Examination		OK / Not OK				
Magnetic Particle Test		OK / Not OK				
Inclusion Rating						
Specified		Not worse than 2.5 A B C D for thick 8 thin.				
Observed						
Billets size						
Specified		128mm x 128mm				
Observed						

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iii. FINISH PRODUCT:

Register No.				
These tests to be carried out by manufacturer on a finished product				
Test	Sample Size	Specified		Observed
Dimensional Accuracy	100%	Straightness	By Gauge	
		Holes center to center	234.5-235.5	
		Stem	54-55	
		Thickness	32-33	
		Hole Size	Ø 42	
Microstructure	1 in 200	Grain Flow Lines		
Brinell Hardness	1 in 100	155		
Mangnaflux	100%			
Tensile Strength	1 in 500 or part	540 MPa min.		
Yield Strength	1 in 500 or part	280 MPa min.		
% Elongation	1 in 500 or part	20 min.		
Grain Size	1 in 200	Not coarser than 6		
Shotpeening	100%	Satisfactory		

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13.0 DM No. of Bush (should be as per RDSO STR RDSO/2009/CG-17) –

14.0 Tests to be carried out by Inspector

I.	Test	Sample Size	Specified	Observed				
II	Visual	5%	Surface defects like dent mark, cracks, nicks folds, laps etc. Forging fins and parting lines shall be properly ground. Grinding should be done longitudinally; Transverse grinding shall be cause of rejection.					
III	Markings	5%	As per drawing					
IV.	Dimensional Accuracy	5%	Straightness	By Gauge				
			Holes center to Center	234.5- 235.5				
			Stem	54-55				
			Thickness	32-33				

			Hole Size	Ø 42			
V	Chemical Properties	1 Per 1000					
		C	Si	Mn	S	P	
	Specified	0.3-0.4	0.15-0.35	0.60-0.90	0.04	0.04	
	Observed						
VI	Tensile Strength	1 Per 100		540 MPa min.			
VII	Yield Strength	1 Per 100		280 MPa min.			
VIII	%Elongation	1 Per 100		20 min.			
IX	Brinell Hardness	1 in 100		155			
X	Magnaflux	2%		No surface cracks permitted			
XI	Bend test at 700 kg.	1 Per 1000		As per spec. note ii, iii, iv			
XII	Bend test at 700 Kg.	1 Per 1000		As per spec. note iii, iv, v			
XIII	Grain Flow at all corners	1 Per 1000		Should be clear & continuous from shank to head			
XIV	Gram Size	1 per 1000		Not coarser than 6			
XV	Including rating	1 Per 1000		Not worse than 2.5 ABC D for thick & thin.			

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