



## QM-C-7.1/Steel Liners-Wear Plate/0001

### Inspection Plan(Check Sheet)

**Item** : Silico-Manganese Steel Liners and Wear Plates for Bogie & Couplers

**Spec.** : (A) WD-21-CASNUB-22NLB-93, Rev. 02 July 2002,  
Amd. 04 of Feb'2010 for Bogie

(B) 48-BD-2008, 56-BD-07 for Coupler

**Drg No. & Alt. No.:** WD-87056-S-01 Alt.4 for SCWP

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1. Name of Manufacturer :
  2. Date of offer :
  3. Date of Inspection :
  4. RDSO File No. :
  5. Drawing & Alt. No. :
  8. P. O. No. :
  9. Total Quantity ordered :
  10. Quantity earlier passed :
  11. Quantity now offered :
  12. Consignee :
  13. D.P. :

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SIGNATURE OF RDSO INSPECTOR



<b>A. Lot Size:</b> 1000 Nos. or part thereof	
<b>B. Visual Check:</b> Specified sample size - 3% or (Minimum 10 Nos. or Maximum 50 Nos.) Actual sample size –	
<b>Specified</b>	<b>Observation</b>
Material should be free from all visual of harmful surface defects.	OK/Not OK
<b>C. Chemical &amp; Hardness check : (Through NABL Lab or others)</b>  Specified sample size - 2 Nos. of each item up to 1000 Nos., 4 Nos. of each item from 1000 Nos. to 10000 Nos., 8 Nos. of each item above 10000 Nos. Actual sample size-	
<b>Specified</b>	<b>Observation</b>
1. Check the original test certificate produced by manufacturer duly signed by quality control manager to ensure that the material confirming to IS: 3885 Pt-1, Gr – IV.	OK/Not OK
2. To be cross checked by RDSO Inspecting official as per sample size through NABL Lab or others. Both Chemical & Hardness (Report to be attached).	OK/Not OK
<b>D.</b> 1. Whether the quenching, I was tested as per IS: 2664/1980 medium grade point Kinematic viscosity and saponification value.  2. Date of last quenching oil test.	
<b>Specified</b>	<b>Observation</b>
<b>E. Whether quenching oil tested within 6 months or 40000 Nos. whichever is earlier from the date of manufacturing of this lot.</b>	Last Date of Testing....
<b>F. Whether indelible metal stamp ink used for stamping on the offered liners.</b>	Yes/No

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<b>G.</b> 1. When the Brinell hardness testing machine was last calibrated and when due?		Last Calibrated.... When due....	
2. Whether quenching oil tank is connected with pyrometer & is working.		Working/Not Working	
<b>H.</b> 1. Confirm whether temperatures were recorded for hardening and tempering operation. 2. Record the following from Heat Treatment Cycle.			
Sl. No.	Parameter	Specified Value	Values as recorded in the firm's record
1.	Temperature of furnace at the time of placing component	Less than 500 <sup>0</sup> C.	
2.	Time to Heat 860 <sup>0</sup> C 900		
3.	Soaking time	As per requirement	
4.	Quenching	Circulating oil (Rise in Temp. of oil not more than 60 <sup>0</sup> C.)	
5.	Tempering Temperature	450 <sup>0</sup> C to 550 <sup>0</sup> C	
6.	Tempering time at specified Temp.	1 Hr. to 2 Hrs.	
7.	Number of pieces loaded at a time.		

Specified	Observation
<b>I. Confirm packing of liners in double gunny bag containing tested samples distributed &amp; sealed with identification tag containing description of stores &amp; inspection stamp.</b>	Yes/No
<b>J. Confirm whether packing process has been mentioned in D.M.</b>	Yes/No
<b>K. Impact test for Door Check Spring (5%).</b>	Ok/Not Ok
<b>L. Marking:</b> Firm's initial, Month & Year of Manufacturing.	Ok/Not Ok
<b>M. Apply suitable rust preventive oil.</b>	Ok/Not Ok

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