भारत सरकार-रेलमंत्रालय अनुसंघान अभिकल्प

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Government of India Ministry of Railways Research, Designs & Standards Organization, LUCKNOW - 226011



No. EL/ 2.2.1 / High reach

Dated - 25.04.2019.

M/s. Schunk Metal & Carbon (India) Pvt. Ltd. 54/2 white field Road Mahadevpura, P.O Bangalore – 560048.

Attn: Sri Naresh Goenka (Director / Marketing)

Sub: Minutes of Meeting held at RDSO related to high reach pantograph.

Dear Sir,

The minutes of meeting held at RDSO on 11.04.2018 related to High Reach Pantograph of M/s. Schunk Metal & Carbon (India) Pvt. Ltd. is attached for ready references.

The minutes of meeting has also been uploaded in RDSO website.

This is for your kind information and necessary action.

Thanking you,

Yours Faithfully,

(Aseem Kumar)
For Director General/ Elect

Encl - NIL

Copy to:

1. Secretary (Electrical) Railway Board.(Kind attn.: Sri A. K. Goswami DEE/RS/RB

2. Principal Chief Electrical Engineer, All Zonal Railways, & CLW --- for kind information.

(Aseem Kumar)

For Director General/ Elect.

Encl - NIL

Meeting held at RDSO on 11.04.2019 on issues related to high reach pantograph WBL-85 HR of M/s. Schunk

Members Present:

SN	Name (S/Shri)	Designation
RD:	SO	
1	O.P. Kesari	PEDSE
2	Aseem Kumar	DSE/Pn.
3	V K Yadav	SSE/D/Elect.
Rail	ways	
1	Geeta Singh	SSE/ELS/BL
2	Ankur Namdev	SSE/ELS/NKJ

SN	Name (S/Shri)	Designation			
M/s. Schunk					
1	Austin Jayakiran	VP, Operation			
2	S. Chedella	Engineering manager			
3	Rajesh L	Production Engineer			

A Review was carried out at RDSO on 11.04.2019 on issues related to maintenance and operation of High Reach Pantograph WBL85HR. Discussion held is as follows:

		D. danielakia
SN	Issues	Review status
1.	Zonal Railways reported failures of diagonal rods from the fixing points. The firm explained that the failure was due to acid cleaning and pinch line formation. They have improved the process by adopting sand blasting and removing the pinch line. The stainless steel diagonal rods will be provided in new supplies from May 2019 and also replace old one by stainless steel diagonal rod. The firm requested the sheds to continue RDPT/visual checking to avoid any line failures till the time replacement is not made.	The firm's representatives apprised that stainless steel diagonal rod supply commenced from April 2019. Out of 156 nos., 107 sets have been supplied. The firm is advised to provide shed wise list of the supply.
2.	Control box inside locomotive: The firm mentioned that there scheme has been made and ORD resetting facility, ADD bypassing facility & ORD/ADD indications on control unit that can be provided in machine room. An instruction sticker for information should be provided in both the cabs.	The firm assured that Pantograph with control box will be provided in machine room within 3weeks.
3.	Wear rate of metallized carbon strips: M/s. Schunk will collect the data from sheds and review the wear rate loco wise. Design, Composition and property of metallized carbon strips may be reviewed so as to provide higher life of carbon strips for locomotives.	Railways are advised to keep close watch on wear rate and submit wear rate report loco wise. Firm is again advised that Design, Composition and property of metallized carbon strips may be reviewed so as to provide higher life of carbon strips for locomotives within a month time.
4.	Modification in Rev. '1' pantographs: A modification was issued by RDSO to change the cam to increase working height of rev. '1' high reach pantographs. The firm stated that only few sheds namely LDH, KYN and VSKP have purchased the cam from them so far.	The firm apprises that ELS/LDH, ELS/TKD and ELS/BZA have completed the modification. Other sheds may please complete modification .
5	Western railway (ELS/Valsad and Baroda) pointed out that a) Partial operation of ORD switch in high rise OHE leading to air leakage from the valve.	a) Firm will carry out trial with new type of ORD switch in Valsad shed within a week.

6	 a) ORD is getting actuated at 3550 mm instead of 3.7m after maximum extension of 3.6m as mentioned in the specification. b) Sheds requested that working height of Panto may be increased from present 3400 mm to 3600mm so that contact pressure is sufficient over the contact wire. The firm stated that this will require change in specification. However, Railways are requested that as stipulated for high rise OHE, contact wire height should be maintained at 7.57 m at support and not more than that. 	maximum extension is not possible without increasing the length.
7	PRV leakages in pneumatic control box. It was found that gasket got damaged.	The firm apprised that repair kit has been made and will advise to sheds/Railways. Same will be included in maintenance manual also.
8	All sheds complained that some parts of Panto like Insulated hose pipe, SS fittings, air hose pipe, dampers etc are found missing or damage in the new locos/ panto coming from CLW	Feedback to be taken from CLW/ZRs. CLW is requested to issue necessary modification advice in the PO for the balance quantities to be supplied.
9	ELS/TKD mentioned that the brass fittings in control box get damaged during tightness. They suggested that SS fittings may be used to avoid such damages.	Firm apprised that brass fittings are suitable as per their CoC. Training for shed maintenance staff will be given.
10	Poor response of firm to attend warranty failures.	The firm assured that they will strengthen their after sale services branch.
11	Cases of Air filter body crack, and filter choke.	Firm apprised that Sinter bronze can be used in place of paper filter. Hence Railways are advised to use sinter bronze filter on trial basis and report the performance before regular use.
12	Breakage of bolt of upper frame bearing in ELS/LDH	The firm apprised that their engineer will visit the shed for detailed investigation & submit the report
13	Tracking between control box and servomotor mounting plate at roof of locomotive during foggy weather.	Firm apprised that they have made a new arrangement and will put for trial. Firm was advised to strengthen the paint insulation level
14	ELS/TKD pointed out that whenever Pantograph gets lowered after operation of ADD, there is a huge jerk.	The firm is again advised to review the matter and submit the action plan.
15	Difficulty faced by staff in opening the control box as the fixing nut is inside the box	Firm apprised that they have made a new arrangement and will put for trial.
16	All sheds demanded one round of training of their staff regarding maintenance of the pantograph.	Firm agreed to impart training and apprised that already in some sheds they have conducted two days program of training. They also offered that they can provide training up to 20 persons in their premises. Zonal railways may approach the firm for the same.

