## Reasoned Document for Spec.RDSO/CG/S/24005 for Fasteners for bogies of passenger Coaches

Para No.	Description of para	Comments received from M/s Pioneer Nuts & Bolts Pvt. Ltd., Ludhiana	Comments received from M/s RS Technologies, Kolkata	Gala PrecisionEngineering Limited, Thane	RDSO Remark
Page -3 Subject of STR	SCHEDULE OF TECHNICAL REQUIREMENTS FOR PLAIN NUT, PREVAILING TORQUE ALL METAL NUT WITH METALLIC INSERTS, BOLTS, PINS AND SCREWS ETC. FOR BOGIES OF PASSENGER COACHES		On page 3, it has been mentioned -: "Prevailing Torque All Metal Nut with metallic inserts" whereas on the same page at SI. No.15 DIN 980V has been mentioned which is "Prevailing Torque All Metal Nut without		Firm's comment is in line with this clause. However, minor correction made in this clause as below: i. Title: "All Metal Prevailing Torque Type Hexagon Nuts" ii. S.No. 15: DIN 980 (Type V or
1.0 Scope:	Referred Documents: Latest version of all the referred documents:		metallic inserts".  There is no		M) - All Metal Prevailing Torque Type
1.1	Srl no. 15, DIN 980V: Metric DIN 980V All Metal Prevailing Torque Type Hex Lock Nuts		separate specification DIN 980V. The specification DIN 980 has mention of two design as: DIN 980V — Prevailing Torque All Metal Nut without metallic inserts (torque by controlled distortion of threads)		Hexagon Nuts.

			DIN 980M - Prevailing Torque All Metal Nut with metallic inserts (torque by metal insert).		
4.0	Specification for Fasteners				
Coating Requirement	Minimum 1000 hours salt spray test according to ISO 9227 / ASTM B117/ ISO 10683			It should be mentioned the coating as Zink flake coating with SST life up to 1000 hr	Firm's comment is in line with this clause. Hence, no change is envisaged.
8.2 (M&P)	Machines/equipment shall be available (In-House or at Sister Concern Facility) with the manufacturers for manufacturing of fasteners for use in bogies of Passenger Coaches.			Not all machines mentioned in the spec, are applicable for washer manufacturing also. Few machines are related to bolt & nut manufacturing.  Machine list sr. nos. x, xi, xii, xiii, xiv, xix are only applicable for Inter Lock Washer/Serrated Washer	Firm's comment is in line with this clause. Hence, no change is envisaged. However, the same is clarified in Para No. 3.1.
viii)	Coating Chamber / Room / Tank along with other facility for coating of fasteners as per this specification.	Doubling of the process/ Machine:  8.2 (xxii) -Geomet coating chamber (Geomet is a brand of Zinc Flake Coating).			Firm's comment may be considered as acceptable and S No. 8.2 (xxii) - Geomet coating chamber has been removed as M&P requirement of coating chamber is already mentioned

				at S.No. 8.2 (viii).
ix)	Shot Blasting Chamber / Room using stainless Steel shots of sizes 0.250mm/0.275mm.	Doubling of the process/ Machine:  8.2 (xxiii) - Shot Blasting		Firm's comment may be considered as acceptable and S No. 8.2 (xxiii) — Shot Blasting has been removed as M&P requirement for Shot Blasting is already mentioned at S.No. 8.2 (ix).
8.3	Testing facilitiesrequired for manufacturing and supply of fasteners for use in Bogies of Passenger Coaches.		Item nos. iii, vi, xxii, xiii, xvi, xxvii, xxviii are applicable for interlock washer, remaining machines are not applicable. They are for Bolts & Nut.	Firm's comment is in line with this clause. Hence, no change is envisaged. However, the same is clarified in Para No. 3.1.
i)	Microscope/Profile projector for threads laps.	Doubling of the process/ Machine:  8.3 (xxviii) - Profile/contour checking	 	Firm's comment may be considered as acceptable and S No. 8.3 (xxviii) — Profile/contour checking has been removed as T&P requirement for Microscope/ Profile projector for threads laps is already mentioned at S.No. 8.3 (i).
xii)	Junker Vibration Testing Machine and Fatigue test for product	Doubling of the process/ Machine:	 	Discussed with firms during VC

assembly.	8.3 (xxviii) - Junker Vibration Testing Machine 8.3 (xxvi) - Fatigue testing		and it is noted that Junker Vibration Testing is applicable for assembly as well as also applicable for wedge lock washers. Hence, no change is envisaged in clause nos. 8.3 (xii), 8.3 (xxvi) & (xxviii).
			(XXVIII).