



**QM-C-7.1/Rubber/0001**  
**Inspection Plan(Check Sheet)**

**Item:** Rubber Buffer Pads for freight stock  
**Specn. :** R-36  
**Amd.:**  
**Drg. No. & Alt.:** W/BD-2267, Alt.6

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1. Firm's Name :
2. Date (period) of inspection :
3. Contract Details :
  - (a) Contract No. & Date :
  - (b) Order placing authority :
  - (c) Specification No. :  
(as mentioned in contract)
  - (d) Drawing No. :  
(as mentioned in contract)
4. Quantity on Order :
5. Quantity offered for inspection on date :
6. Consignee :  
Delivery period :

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Inspecting official of RDSO



**Summary of Results**  
**Lot size :- 20000 Nos.**

Sl. No.	Parameters	Specified Value	Observation	
			Max.	Min.
7.1	Visual Check	Rubber shall be smooth and free from foreign materials. Pin holes, crack & trapped air blisters and other visual flaws etc. & marking.		
7.2	Dimension Check	By Go-NoGo gauge		
7.3	Physical properties before ageing			
7.3.1	Hardness	73 – 83 Shore A		
7.3.2	Tensile Strength	Min 140 Kg/cm <sup>2</sup>		
7.3.3	Elongation at rupture	225 % (Min.)		
7.3.5	Compressive Set	30 % (Max.)		
7.4	Static Load Deflection			
	Free height ( 16 pads )	512 +8/-8 mm		
	Load at a height of 467 mm	2 t max		
	Capacity	1030 Kgm min		
	Load at a height of 340 mm	40 t max		
	Permanent set in free height of the pack	2.5 % max		
7.5	Impact Endurance test			
	Stored energy	Min 70 % of the corresponding stored energy recorded under clause 7.4 & no sign of bond failure		
7.6	Metal plate examination			

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### 7.1 Visual check

Specified sample size – 32 pads

Actual sample size.

<b>Pad. No.</b>	1	2	3	4	5	6	7	8	9	10	11
Visual check											
<b>Pad. No.</b>	12	13	14	15	16	17	18	19	20	21	22
Visual check											
<b>Pad. No.</b>	23	24	25	26	27	28	29	30	31	32	
Visual check											

### 7.2 Dimensional check

Specified sample size – 32 pads

Actual sample size.

<b>Pad. No.</b>	1	2	3	4	5	6	7	8	9	10	11
Dimensional check											
<b>Pad. No.</b>	12	13	14	15	16	17	18	19	20	21	22
Dimensional check											
<b>Pad. No.</b>	23	24	25	26	27	28	29	30	31	32	
Dimensional check											

### 7.3 Physical properties before ageing :

#### 7.3.1 Hardness : (Shore A )

Specified sample size – 32 pads

Actual sample size.

<b>Parameters</b>	<b>Specified Value</b>	1	2	3	4	5	6	7	8	9	10	11
Hardness	73 – 83 Shore A											

<b>Parameters</b>	<b>Specified Value</b>	12	13	14	15	16	17	18	19	20	21	22
Hardness	73 – 83 Shore A											

<b>Parameters</b>	<b>Specified Value</b>	23	24	25	26	27	28	29	30	31	32	
Hardness	73 – 83 Shore A											

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### 7.3.2 Tensile Strength :

Specified sample size – 5 pads

Actual sample size.

Parameters	Specified Value	1			2			3		
		a	b	c	a	b	c	a	b	c
Thickness mm	1.8 – 2.0 mm									
Width mm	3.9 – 4.1 mm									
Area sq. cm	0.0702 – 0.0902									
Load at break Kg	---									
Tensile strengths	Min 140 Kg/cm <sup>2</sup>									
Average										

Parameters	Specified Value	4			5		
		a	b	c	a	b	c
Thickness mm	1.8 – 2.0 mm						
Width mm	3.9 – 4.1 mm						
Area sq. cm	0.0702 – 0.0902						
Load at break Kg							
Tensile strengths	Min 140 Kg/cm <sup>2</sup>						
Average							

### 7.3.3 Elongation at break :

Specified sample size – 5 pads

Actual sample size.

Parameters	Specified Value	1			2			3		
		a	b	c	a	b	c	a	b	c
Original length mm	20.0 mm									
Length at break Kg	65(Min.)									
Elongation	225 % (Min. )									
Average										

Parameters	Specified Value	4			5		
		a	b	c	a	b	c
Original length mm	20.0 mm						
Length at break Kg	65 (Min.)						
Elongation	225 % (Min. )						
Average							

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### 7.3.4 Compression set :

Specified sample size – 5 pads

Actual sample size.

Parameters	Specified Value	1			2			3		
		a	b	c	a	b	c	a	b	c
Original length	6.0 – 6.6									
Thickness after ageing										
Thickness of spacers	4.69 – 4.71									
Compression set	30 % Max									
Average										

Parameters	Specified Value	4			5		
		a	b	c	a	b	c
Original length	6.0 – 6.6						
Thickness after ageing							
Thickness of spacers	4.69 – 4.71						
Compression set	30 % Max						
Average							

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**7.4 Static Load Deflection-(Graphs are required to be plotted) :**

Specified sample size – 2 pack  
Actual sample size.

7.4	Static Load Deflection		1	2
	Free height (16 pads )	512 + 8/-8 mm		
	Load at a height of 467 mm	2 t max		
	Capacity	1030 Kgm min		
	Load at a height 340 mm	40 t max		
	Permanent set in free height of the pack	2.5% max		

**7.5 Impact Endurance Test:**

Specified sample size – 2 pack  
Actual sample size.

7.7	Impact Endurance Test			
	Stored energy	Min 70% of the corresponding stored energy recorded under clause 7.4 & no sign of bond failure		
	Permanent Set	2.5% max.		

**7.6 Metal Plate Examination :**

Specified sample size – 5 pads  
Actual sample size.

Parameters	Specified Value	1	2	3	4	5
Metal Plate	No sharp edges & burs					

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