

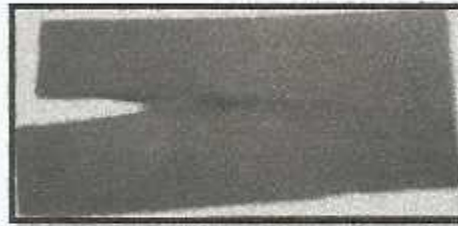


TEAR STRENGTH TEST REPORT

Report No : AT & TC/TSTR /91/2014
Date : September 01, 2014
Customer Name : **National Engineering Services Pakistan (Pvt) Limited**
Customer's Reference : Ref: SA-281/MBP/MK/104/36
Date : August 07, 2014
Project Name : Rawalpindi-Islamabad Metro Bus Project
(Rawalpindi Package-I)
Part Name : **Elastomeric Bearing Pad (From Lot)**
Quantity : 01 Sample Inter Buna Spain



Specimen Layer of Bearing Pad



Tested sample

TEST PARAMETERS:

Test Standard : ASTM D 624

TEST RESULTS:

Description	Observed Kgs/cm ²	Specified Kgs/cm ²	Remarks
Tear strength	46	13 (Min)	Within the Limit



AKBER JAWED MIR
MANAGER (TECHNICAL)



AT&TC

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TENSILE STRENGTH/ELONGATION & HARDNESS TEST REPORT

Report No. : AT & TC/TSTR/ELOG/HRD-CHG-R /8/2014
Date : September 01, 2014
Customer Name : **National Engineering Services Pakistan (Pvt) Limited**
Customer's Reference : Ref: SA-281/MBP/MK/104/36
Date : August 07, 2014
Project Name : Rawalpindi-Islamabad Metro Bus Project
(Rawalpindi Package-I)
Part Name : **Elastomeric Bearing Pad (From Lot)**
Quantity : 01 Sample Inter Buna Spain



Bearing pad sample



Outer layer samples

Test Standard : **ASTM D412** (Tensile Strength & Elongation)
Test Standard : **ASTM D2240** (Hardness Shore A)

Original Properties

Description	Observed	Specified	Remarks
Hardness Shore A	62 to 63	60±5	Within the Limit
Tensile Strength Kgf/cm ²	162	160 Min.	Within the Limit
Elongation %	455	350 Min.	Within the Limit




AKBER JAWED MIR
MANAGER (TECHNICAL)



AT&TC

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COMPRESSION SET TEST REPORT

Report No : AT & TC/CST/110/2014
Date : September 01, 2014
Customer Name : **National Engineering Services Pakistan (Pvt) Limited**
Customer's Reference : Ref: SA-281/MBP/MK/104/36
Date : August 07, 2014
Project Name : Rawalpindi-Islamabad Metro Bus Project
(Rawalpindi Package-I)
Part Name : **Elastomeric Bearing Pad (From Lot)**
Quantity : 01 Sample Inter Buna Spain



Bearing Pad Sample



Tested Sample (Inner layer of Bearing Pad)

TEST PARAMETERS:

Test Standard : ASTM-D395
Temperature : 70 °C
Period of Test : 22 Hours.

TEST RESULTS:

Description	Observed	Specified	Remarks
Compression Set	18.30 %	25 % (Max)	Within limit



**AKBER JAWED MIR
MANAGER (TECHNICAL)**



AT&TC

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LOW TEMPERATURE BRITTLENESS TEST REPORT

Report No. : AT & TC/LTR/63/2014
Date : September 01, 2014
Customer Name : **National Engineering Services Pakistan (Pvt) Limited**
Customer's Reference. : Ref: SA-281/MBP/MK/104/36
Date : August 07, 2014
Project Name : Rawalpindi-Islamabad Metro Bus Project
(Rawalpindi Package-I)
Part Name : **Elastomeric Bearing Pad (From Lot)**
Quantity : 01 Sample Inter Buna Spain



Upper Layer of the Bearing Pad



Tested Sample

TEST PARAMETERS:

Test Standard : ASTM D 736
Temperature : -40 °C
Period of Test : 5 Hours.

TEST RESULT:

- After completion of the test (5 Hrs), No abnormalities such as cracks and break has been observed on the sample.



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MANAGER (TECHNICAL)



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LOW TEMPERATURE STIFFNESS TEST REPORT

Report No : AT & TC/LTR /88/2014
 Date : September 01, 2014
 Customer Name : National Engineering Services Pakistan (Pvt) Limited
 Customer's Reference : Ref: SA-281/MBP/MK/104/36
 Date : August 07, 2014
 Project Name : Rawalpindi-Islamabad Metro Bus Project
 (Rawalpindi Package-I)
 Part Name : Elastomeric Bearing Pad (From Lot)
 Quantity : 01 Sample Inter Buna Spain



Bearing Pad Sample



Dumbbell

TEST PARAMETERS:

Test Standard : ASTM D 797
 Temperature : Young Modulus at 35 °C

TEST RESULTS:

Description	Observed	Specified	Remarks
Low Temperature Stiffness	265 Kg/cm ²	350 Kg/cm ²	Within the limit



Akber Jawed Mir

AKBER JAWED MIR
MANAGER (TECHNICAL)



AT&TC

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OZONE AGING TEST REPORT

Report No : AT & TC/OZN /379/2014
Date : September 01, 2014
Customer Name : **National Engineering Services Pakistan (Pvt) Limited**
Customer's Reference : Ref: SA-281/MBP/MK/104/36
Date : August 07, 2014
Project Name : Rawalpindi-Islamabad Metro Bus Project
(Rawalpindi Package-I)
Part Name : **Elastomeric Bearing Pad (From Lot)**
Quantity : 01 Sample Inter Buna Spain



TEST PARAMETERS:

Test Standard : **ASTM-D1149**
Temperature : **38°C ± 2 °C**
Ozone Concentration : **100±5 PPHM**
Elongation : **20%**
Period of Test : **100 Hours.**

TEST RESULTS:

- After completion of the test (100Hrs), **No abnormalities such as discoloration and cracks have been observed.**



AKBER JAWED MIR
MANAGER (TECHNICAL)



AT&TC

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