

Muhammad Shafiq
 Engineer's Representative, NESPAK (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Bilal A Khokhar

Client Reference: 3957/13/MS/10/187

Dated: 25-04-2019

SOM Lab Ref: CED/SOM/720 (Page-1/1)

Dated: 26-04-2019

Test: Tension Test

Test Specification: ASTM-F-1554

Sample Type: J- Bolt (25mm Diameter)

Gauge Length: 50 mm

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	kg/m	mm	mm	mm ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.305	23	23.15	415	421	324.50	402.00	781	771	968	955	12.5	50	25.0	
2	3.277	23	23.05	415	417	315.70	400.20	760	757	963	959	15.0	50	30.0	
3	3.297	23	23.12	415	420	318.00	399.20	765	758	961	951	12.5	50	25.0	
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Witnessed By: Hassan Saqlain, AE. (IDAP)

BEND TEST:

--	No Bend test performed	Note:- Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Muhammad Iqbal Sajid
Project Manager, Lahore Motorway City

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: R.I/LMC/04/-19

SOM Lab

Ref: 721(Page-1/1)

Dated: 25-04-2019

Dated: 26-04-2019

Test: Tension Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed

Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.501	6	0.749	0.44	0.441	12.69	19.85	63620	63470	99480	99260	1.10	8.0	13.8	
2	1.499	6	0.749	0.44	0.441	12.76	20.00	63970	63830	100250	100020	1.00	8.0	12.5	
3	1.493	6	0.748	0.44	0.439	12.97	19.98	65000	65140	100150	100380	1.10	8.0	13.8	
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BEND TEST:

--	No Bend test performed	Note:- Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Director,

Test Performed By:

Dr. /Engr. M Yousaf

For NESCON Associates, Lahore (Prpject: Vital Bulk Oil Depot, Khanqa Dogran, Hafizabad)

Client Reference: nil

SOM Lab 722 (Page-

Ref: 1/1)

Dated: 26-04-2019

Dated: 26-04-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Guage Length: 8 inch

Sample Type:

Deformed Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.497	6	0.748	0.44	0.440	12.64	19.39	63360	63360	97180	97180	1.20	8.0	15.0	
2	1.016	5	0.617	0.31	0.299	10.40	13.32	73970	76700	94790	98270	1.00	8.0	12.5	
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Witnessed By: Ijaz ul Haq

BEND TEST:

6 Sample bend through 180 degrees Satisfactorily without any crack

5 Sample bend through 180 degrees Satisfactorily without any crack

Note:-

**Only Four Samples
Received and Tested**

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Major ® Pervez Akhtar
 Ess Ess Associates Engineering Consultants, Rawalpindi

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: nil

SOM Lab

Ref: 723(Page-1/1)

Dated: 25-04-2019

Dated: 26-04-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.606	6	0.775	0.44	0.472	15.72	20.61	78790	73450	103310	96310	1.20	8.0	15.0	
2	1.599	6	0.774	0.44	0.470	15.39	20.49	77160	72230	102700	96150	1.20	8.0	15.0	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Amna / Noor
32-C /1, Gulberg -III, Lahore,

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: ST/ TF/01/19

SOM Lab

Ref: 724(Page-1/1)

Dated: 26-04-2019

Dated: 26-04-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.575	8	0.982	0.79	0.757	24.87	32.31	69440	72470	90210	94150	1.50	8.0	18.8	
2	1.431	6	0.732	0.44	0.421	13.68	17.89	68570	71670	89670	93720	1.30	8.0	16.3	
3	0.660	4	0.497	0.20	0.194	5.98	8.94	65990	68030	98580	101630	1.30	8.0	16.3	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Six Samples Received and Tested
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Amjad Saeed
Resident Engineer, NESPAK (Pvt) Ltd Ltd Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: 3994/103/AS/01/95

SOM Lab

Ref: 726(Page-1/1)

Dated: 25-04-2019

Dated: 26-04-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Kisan Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.655	8	0.997	0.79	0.780	26.78	36.75	74760	75720	102590	103910	1.40	8.0	17.5	
2	2.662	8	0.998	0.79	0.782	25.56	35.22	71350	72080	98320	99330	1.30	8.0	16.3	
3	1.493	6	0.748	0.44	0.439	13.61	19.90	68210	68370	99740	99970	1.10	8.0	13.8	
4	1.489	6	0.747	0.44	0.438	13.63	19.98	68320	68630	100150	100600	1.00	8.0	12.5	
5	0.670	4	0.501	0.20	0.197	6.80	8.33	74980	76120	91840	93240	1.00	8.0	12.5	
6	0.672	4	0.501	0.20	0.197	6.52	8.48	71940	73040	93530	94950	0.90	8.0	11.3	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Twelve Samples Received and Tested
# 8	Sample bend through 180 degrees Satisfactorily without any crack	
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4(S. 5,6)	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Maj Adnan khalid®

Test Performed By: Dr. /Engr.

Nauman
Khurram

By Dir MTL, Infra Dev Works IVY Green, Sector-Z, DHA Ph-VIII - (M/S MCC Ruba)

Client Reference: 408/241/E/Lab/522/2094

SOM Lab

Ref: 729(Page-1/1)

Dated: 09-04-2019

Dated: 26-04-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed Bar (City Steel)

Gauge Length: 8 inch

Sample Type:

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.668	8	0.999	0.79	0.784	23.14	37.00	64600	65100	103300	104090	1.50	8.0	18.8	
2	2.648	8	0.995	0.79	0.778	22.91	36.85	63950	64930	102880	104460	1.50	8.0	18.8	
3	0.670	4	0.501	0.20	0.197	6.37	9.89	70260	71330	109040	110700	1.10	8.0	13.8	
4	0.671	4	0.501	0.20	0.197	6.07	9.17	66890	67900	101170	102710	1.10	8.0	13.8	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Six Samples Received and Tested
# 4	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk