

Major Muhammad Azeem, Retd.

Test Performed By:

Dr. /Engr.

Nauman Khurram

Resident Engineer, ProMag (Pvt) Ltd Site Office - DHA, Mattital Road, Multan

Client Reference: Sec-A/Material /009

Dated: 05-04-2019

SOM Lab Ref: CED/SOM/686(Page-1/1)

Dated: 19-04-2019

Test: Tension & Bend Test

Test Specification:

ASTM-A 615

Sample Type: Deformed Bar (Mughal Steel)

Gauge Length:

200 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	0.984	12	12.62	113	125	71.00	88.70	628	568	784	710	22.5	200	11.3	
2	0.980	12	12.61	113	125	71.50	89.70	632	573	793	719	25.0	200	12.5	
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BEND TEST:

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

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

Engr Muhammad Asim Awan
Baba Poultry Engineering, Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: Green/Str/002

SOM Lab

Ref: 687(Page-1/2)

Dated: 18-04-2019

Dated: 19-04-2019

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	1.397	6	0.723	0.44	0.411	15.67	19.80	78530	84080	99230	106230	1.30	8.0	16.3	
2	1.411	6	0.727	0.44	0.415	16.31	19.37	81750	86680	97080	102930	0.90	8.0	11.3	
3	0.687	4	0.507	0.20	0.202	7.51	8.87	82850	82030	97800	96830	0.90	8.0	11.3	
4	0.686	4	0.507	0.20	0.202	7.10	8.61	78350	77580	94990	94050	0.90	8.0	11.3	
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BEND TEST:

# 6	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

Engr Muhammad Asim Awan
Baba Poultry Engineering, Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: Green/Str/002

SOM Lab

Ref: 687(Page-2/2)

Dated: 18-04-2019

Dated: 19-04-2019

Test: Tension Test & Bend Test

Test Specification:

BS-4449

Gauge Length: 2.5 inch

Sample Type:

Tor
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	0.666	4	0.500	0.20	0.196	5.32	7.41	58680	59880	81720	83390	0.60	2.5	24.0	
2	0.661	4	0.497	0.20	0.194	5.35	7.41	59020	60840	81720	84250	0.60	2.5	24.0	
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BEND TEST:

# 4	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

M. Munir
Construction Manager, Kaizen Construction (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: KCL/UET/19419

SOM Lab
Ref: 687(Page-2/2)

Dated: 19-04-2019

Dated: 19-04-2019

Test: Tension Test & Bend Test

Test Specification: ASTM A-615

Gauge Length: 2.5 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	1.504	6	0.750	0.44	0.442	15.16	21.38	75980	75640	107150	106660	1.20	8.0	15.0	
2	0.656	4	0.496	0.20	0.193	6.19	9.43	68230	70710	103980	107750	1.10	8.0	13.8	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Four 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