

Sheikh Abdul Haseeb Aamir

Test Performed By:

Dr. /Engr. M Rizwan Riaz

I/C QA & QC, PCL Project, DESCON Engineering Ltd. (7700 TPD Pioneer Cement Project-CP10055)

Client Reference: nil

Dated: 28-01-2019

SOM Lab Ref: CED/SOM/204(Page-1/1)

Dated: 28-01-2019

Test: Tension Test & 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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	1.539	16	15.80	201	196	108.50	136.70	540	554	680	698	30.0	200	15.0	
2	0.847	12	11.72	113	108	68.20	85.50	603	633	756	793	27.5	200	13.8	
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**BEND TEST:**

16mm	Sample bend through 180 degrees Satisfactorily without any crack	<p><b>Note:-</b></p> <p><b>Only Four Samples Received and Tested</b></p>
12mm	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](http://www.uet-civil.edu.pk)

Resident Engineer  
 Prime Engineering Consultancy, Kallurkot Bridge Project

Test Performed By: Dr. /Engr. M Rizwan Riaz

Client Reference: PE-BA-JV/KK-DIK/2018/11

Dated: 28-01-2019

SOM Lab Ref: CED/SOM/205(Page-1/1)

Dated: 29-01-2019

Test: Tension Test & bend Test

Test Specification: ASTM-A 615

Sample Type: Deformed Bar(Nomee Steel Ind.)

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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	2.442	20	19.90	314	311	158.50	203.00	505	510	646	653	25.0	200	12.5	
2	2.475	20	20.04	314	315	151.70	196.50	483	482	625	624	27.5	200	13.8	
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**BEND TEST:**

20mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Three Samples Received and Tested</b>

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Resident Engineer,  
EA Consulting (Pvt.) Ltd. Sukkur- Multan Motorway Project Section -III,

Test Performed By: Dr. /Engr. M Yousaf

Client Reference: RE-EA/M.P-III/309 -2018

Dated: 28-01-2019

SOM Lab Ref: CED/SOM/222 (Page-1/1)

Dated: 30-01-2019

Test: Tension Test

Test Specification: ASTM-F-1554

Sample Type: L - Bolt

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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	1.181	13	13.82	133	150	78.00	89.00	588	520	671	594	20.0	200	10.0	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-  Only One Sample Received and Tested</b>

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Sheikh Abdul Haseeb Aamir

Test Performed By:

Dr. /Engr.

M Rizwan Riaz

I/C QA & QC, PCL Project, DESCON Engineering Ltd. (7700 TPD Pioneer Cement Project-CP10055)

Client Reference: nil

Dated: 28-01-2019

SOM Lab Ref: CED/SOM/204(Page-1/1)

Dated: 28-01-2019

Test: Tension Test & 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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	1.539	16	15.80	201	196	108.50	136.70	540	554	680	698	30.0	200	15.0	
2	0.847	12	11.72	113	108	68.20	85.50	603	633	756	793	27.5	200	13.8	
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**BEND TEST:**

16mm	Sample bend through 180 degrees Satisfactorily without any crack	<p><b>Note:-</b></p> <p><b>Only Four Samples Received and Tested</b></p>
12mm	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](http://www.uet-civil.edu.pk)

Deputy Director (Q.C.D)  
WASA, LDA, Lahore

Test Performed By: Dr. /Engr. M Rizwan Riaz

Client Reference: QCD/ 91

SOM Lab 193 (Page-

Ref: 1/1)

Dated: 24-01-2019

Dated: 2801-2019

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.843	8	1.031	0.79	0.835	19.85	28.72	55410	52420	80170	75850	1.80	8.0	22.5	
2	1.477	6	0.743	0.44	0.434	10.52	16.92	52730	53460	84820	85990	1.60	8.0	20.0	
3	0.650	4	0.493	0.20	0.191	5.96	8.74	65760	68860	96340	100870	1.20	8.0	15.0	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Six Samples Received and Tested</b>
# 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](http://www.uet-civil.edu.pk)

Director,  
For NESCON Associates, Lahore

Test Performed By: Dr. /Engr. M Rizwan Riaz

Client Reference: nil

SOM Lab 195 (Page-

Ref: 1/1)

Dated: 2801-2019

Dated: 28-01-2019

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.641	8	0.994	0.79	0.776	28.15	37.00	78600	80020	103300	105170	1.00	8.0	12.5	
2	1.471	6	0.742	0.44	0.432	16.11	19.90	80730	82230	99740	101590	1.10	8.0	13.8	
3	1.031	5	0.621	0.31	0.303	11.67	13.99	83040	84960	99500	101800	1.00	8.0	12.5	
4	0.708	4	0.515	0.20	0.208	6.98	10.62	77000	74040	117130	112630	1.00	8.0	12.5	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Eight Samples Received and Tested</b>
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 5	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](http://www.uet-civil.edu.pk)

Abid Sultan  
Admin Manager, Variant, 25-t-Gulberg- 2, Lahore

Test Performed By: Dr. /Engr. M Rizwan Riaz

Client Reference: VA/23/98

SOM Lab 196(Page-  
Ref: 1/1)

Dated: 29-01-2019

Dated: 28-01-2019

Test: Tension & 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.458	6	0.738	0.44	0.428	15.24	19.54	76390	78530	97950	100700	1.40	8.0	17.5	
2	1.454	6	0.737	0.44	0.427	15.19	19.64	76130	78450	98460	101460	1.00	8.0	12.5	
3	0.655	4	0.494	0.20	0.192	5.86	9.17	64640	67330	101170	105380	1.20	8.0	15.0	
4	0.655	4	0.494	0.20	0.192	5.96	9.23	65760	68500	101730	105970	1.20	8.0	15.0	
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**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Six Samples Received and Tested</b>
# 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](http://www.uet-civil.edu.pk)

Khalid Bashir

Test Performed By:

Dr. /Engr.

M Rizwan Azam

Ittefaq Building Solutions (Pvt) Ltd. Lahore (Project: Poultry House Complex of Ghani Group at Faisalabad)

Client Reference: IBS/GPH/ST01

SOM Lab Ref: 197(Page-1/1)

Dated: 28-01-2019

Dated: 28-01-2019

Test: Tension Test & Bend 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.415	6	0.728	0.44	0.416	12.54	18.52	62850	66470	92840	98200	1.00	8.0	12.5	
2	1.020	5	0.618	0.31	0.300	9.84	12.84	69990	72320	91380	94420	1.00	8.0	12.5	
3	0.686	4	0.507	0.20	0.202	7.80	9.43	85990	85140	103980	102950	1.10	8.0	13.8	
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**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Six Samples Received and Tested</b>
# 5	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](http://www.uet-civil.edu.pk)

Director,  
For NESCON Associates, Lahore

Test Performed By: Dr. /Engr. M Rizwan Riaz

Client Reference: nil

SOM Lab 195 (Page-

Ref: 1/1)

Dated: 2801-2019

Dated: 28-01-2019

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.641	8	0.994	0.79	0.776	28.15	37.00	78600	80020	103300	105170	1.00	8.0	12.5	
2	1.471	6	0.742	0.44	0.432	16.11	19.90	80730	82230	99740	101590	1.10	8.0	13.8	
3	1.031	5	0.621	0.31	0.303	11.67	13.99	83040	84960	99500	101800	1.00	8.0	12.5	
4	0.708	4	0.515	0.20	0.208	6.98	10.62	77000	74040	117130	112630	1.00	8.0	12.5	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Eight Samples Received and Tested</b>
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 5	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](http://www.uet-civil.edu.pk)

S. Shaukat Hussain

Test Performed By:

Dr. /Engr.

M Rizwan Riaz

Incharge (Civil) For Managing Director, Sui Northern Gas Pipelines Ltd. Lahore

Client Reference: CC/61/FF/Met

SOM Lab

Ref:

199(Page-1/1)

Dated: 28-01-2019

Dated:

28-01-2019

Test: Tension 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.503	6	0.750	0.44	0.442	16.82	22.83	84310	83930	114450	113940	1.10	8.0	13.8	
2	1.506	6	0.751	0.44	0.443	16.21	22.63	81240	80690	113430	112660	1.20	8.0	15.0	
3	0.732	4	0.523	0.20	0.215	5.93	9.55	65420	60860	105330	97980	1.20	8.0	15.0	
4	0.718	4	0.518	0.20	0.211	6.03	9.73	66550	63080	107350	101760	1.40	8.0	17.5	
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**BEND TEST:**

-- No Bend test performed

**Note:-**

**Only Four Samples  
Received and Tested**

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Engr Naveed Sadiq  
Resident Engineer, Orbit Housing, Lahore

Test Performed By: Dr. /Engr. M Rizwan Riaz

Client Reference: Nil

SOM Lab

Ref: 200, 201(Page-1/1)

Dated: 28-01-2019

Dated: 28-01-2019

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.706	8	1.006	0.79	0.795	0.00	50.17	0	0	140070	139190	0.40	8.0	5.0	
2	2.706	8	1.006	0.79	0.795	26.50	37.64	73990	73530	105070	104410	1.30	8.0	16.3	
3	0.658	4	0.496	0.20	0.193	6.39	8.43	70480	73040	92960	96340	1.40	8.0	17.5	
4	0.663	4	0.498	0.20	0.195	6.01	8.02	66320	68020	88470	90740	1.50	8.0	18.8	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  <b>Only Six Samples Received and Tested</b>
# 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](http://www.uet-civil.edu.pk)

Khalid Bashir

Ittefaq Building Solutions (Pvt) Ltd. Lahore (Project: Poultry House Complex of Ghani Group at Faisalabad)

Test Performed By:

Dr. /Engr.

M Rizwan Azam

Client Reference: IBS/GPH/ST01

SOM Lab Ref: 197(Page-1/1)

Dated: 28-01-2019

Dated: 28-01-2019

Test: Tension Test & Bend 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.415	6	0.728	0.44	0.416	12.54	18.52	62850	66470	92840	98200	1.00	8.0	12.5	
2	1.020	5	0.618	0.31	0.300	9.84	12.84	69990	72320	91380	94420	1.00	8.0	12.5	
3	0.686	4	0.507	0.20	0.202	7.80	9.43	85990	85140	103980	102950	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Six Samples Received and Tested</b>
# 5	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](http://www.uet-civil.edu.pk)

Maj Adnan khalid®

Test Performed By: Dr. /Engr. M Rizwan Riaz

Dy Dir MTL, Infra Dev Works of Ph -IX (Pkg-III & IV) Sector -M, DHA Lahore - (M/S NLC)

Client Reference: 408/241/E/Lab/412/900

SOM Lab

Ref: 203(Page-1/1)

Dated: 23-01-2019

Dated: 28-01-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed Bar ( Sj  
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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.616	8	0.990	0.79	0.769	24.72	35.32	69010	70900	98610	101300	1.30	8.0	16.3	
2	2.622	8	0.991	0.79	0.771	24.79	35.39	69210	70920	98810	101240	1.50	8.0	18.8	
3	1.478	6	0.743	0.44	0.434	14.29	20.25	71640	72630	101530	102930	1.20	8.0	15.0	
4	1.495	6	0.748	0.44	0.439	14.78	20.56	74090	74260	103060	103290	1.30	8.0	16.3	
5	0.666	4	0.500	0.20	0.196	6.24	8.87	68800	70200	97800	99790	1.20	8.0	15.0	
6	0.665	4	0.498	0.20	0.195	6.27	8.87	69130	70910	97800	100300	1.00	8.0	12.5	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

--	No Bend test performed	<b>Note:-  Only Nine Samples Received and Tested</b>

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)