

Ali Raza Qureshi
Project Director (HVDC) NTDC Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: 1455-61/PD/HVDC/NTDC/LHR

Dated: 09-07-2019

SOM Lab Ref: CED/SOM/1124(Page-1/1)

Dated: 17-07-2019

Test: Tension Test & Bend Test

Test Specification: ASTM-A 615

Sample Type: Deformed Bar

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	2.186	20	18.81	314	278	100.20	152.50	319	361	485	549	42.5	200	21.3	
2	2.162	20	18.73	314	275	99.50	150.50	317	362	479	547	45.0	200	22.5	
3	1.055	12	13.08	113	134	45.00	65.20	398	335	576	486	40.0	200	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

20mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Six Samples Received and Tested
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

Engr. Sajid Khawaja
 Manager Civil, Orient , Lahore

Test Performed By: Dr. /Engr. S. Asad Ali Gillani

Client Reference: ORIENT/AFCO/Hotel Tower/Steel/007
 SOM Lab Ref: CED/SOM/1146 (Page-1/1)
 Test: Tension Test & Bend Test
 Sample Type: Deformed Bar

Dated: 17-07-2019
 Dated: 19-07-2019
 Test Specification: ASTM-A-615
 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	3.132	22	22.54	380	399	171.00	264.20	450	429	695	663	32.5	200	16.3	
2	3.136	22	22.55	380	399	171.00	2666.00	450	429	7013	6675	35.0	200	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

22mm	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

Faisal Mubarik Shabbir
Khan(Retd.)

Test Performed By: Dr. /Engr. Nauman Khurram

TBt, TI (M), Lieutenant Colonel, Additional Director Development, DHA Phaes-XI (Rehbar) Lahore

SOM Lab

Client Reference: 700/3/Mosque A/Sec/Ph-XI/Projs/2171

Ref: 1123(Page-1/1)

Dated: 16-07-2019

Dated: 17-07-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed Bar (Saeed

Gauge Length: 8 inch

Sample Type:

Kasur)

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	2.630	8	0.992	0.79	0.773	22.80	37.61	63660	65060	105010	107320	1.20	8.0	15.0	
2	2.637	8	0.993	0.79	0.775	22.70	37.53	63380	64600	104780	106810	1.10	8.0	13.8	
3	1.461	6	0.739	0.44	0.429	13.68	21.68	68570	70330	108680	111470	1.00	8.0	12.5	
4	1.455	6	0.738	0.44	0.428	13.63	21.66	68320	70230	108580	111620	1.00	8.0	12.5	
5	0.646	4	0.492	0.20	0.190	5.93	9.25	65420	68870	101960	107320	1.10	8.0	13.8	
6	0.641	4	0.489	0.20	0.188	5.96	9.12	65760	69960	100610	107030	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Nine 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

Ali Raza Qureshi
Project Director (HVDC) NTDC Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: 1455-61/PD/HVDC/NTDC/LHR

SOM Lab

Ref: 1124(Page-1/1)

Dated: 09-07-2019

Dated: 17-07-2019

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	2.669	8	0.999	0.79	0.784	27.29	37.58	76180	76770	104930	105730	1.30	8.0	16.3	
2	1.604	6	0.774	0.44	0.471	15.97	21.76	80070	74800	109090	101910	1.30	8.0	16.3	
3	0.658	4	0.496	0.20	0.193	6.03	8.41	66550	68960	92740	96100	1.40	8.0	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

Major ® Pervaze Akhtar
 Ess Ess Associates Engineering Consultants, Rawalpindi

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: nil

SOM Lab

Ref: 1127(Page-1/1)

Dated: 13-07-2019

Dated: 17-07-2019

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	2.607	8	0.988	0.79	0.766	26.35	35.22	73570	75870	98320	101400	1.40	8.0	17.5	
2	2.617	8	0.990	0.79	0.769	27.06	35.34	75560	77620	98660	101360	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BEND TEST:

# 8	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

Test Performed by: Dr. Nauman Khurram

Municipal Office (Infra,
Municipal Corporation Gujranwala

Client Reference No.: 42/MO (1)
SOM Lab Ref: CED/SOM/386 (Page-1/1)
Test Type: Tensile Test
Sample Type: Squire Bar

Dated: 01-07-2019

Dated: 17-07-2019

Tensile Test Results

Sample No.	Sample Type	Sample Size (mm)	Yield Load (kN)	Ultimate Load (kN)	Yield Tensile Stress (MPa)	Ultimate Tensile Stress (MPa)	Elongation (%)
1	Squire Bar)	12.7	46.2	64.7	286.44	401.140	25

Test Performed by: .S. Asad Ali Gellani

Nasir Ahmed Chishty
Chief Resident Engineer
Osmani & Co. (Pvt) Ltd
Swat Motorway Project,

Client Reference No.: 293/CRE/QATSMP/2019A

Dated: 16-05-2019

SOM Lab Ref: CED/SOM/1130 (Page 1/1)

Dated: 17-07-2019

Test Type: Tensile Test

Sample Type: Nut Bolt (9-mm Diameter)

Tensile Test Results

Sample No.	Sample Type	Tested Diameter of Bolt (mm)	Ultimate Load (kN)	Ultimate Tensile Stress (MPa)	% Elongation
1	Nut Bolt (9mm)	4.5	11.2	704	20 %

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