

Ajaz Ahmad Gondal

Test Performed By:

Dr. /Engr.

Nauman
Khurram

Acting Chief Resident Engineer, Trimu Panjnad Barrages Consultants(TPB Consultants)

Client Reference: TPBC/CRE/NCB-01/5004

Dated: 15-12-2020

SOM Lab Ref: CED/SOM/3451(Page-1/1)

Dated: 17-12-2020

Test: Tension Test & Bend Test

Test Specification:

ASTM-A 615

Sample Type: Deformed Bar (Mughal & Ittefaq 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	3.877	25	25.08	491	494	262.50	350.50	535	532	714	710	30.0	200	15.0	
2	3.866	25	25.04	491	492	265.50	354.50	541	540	722	720	32.5	200	16.3	
3	1.581	16	16.01	201	201	88.00	124.20	438	437	618	617	37.5	200	18.8	
4	1.568	16	15.95	201	200	90.20	126.00	449	452	627	631	37.5	200	18.8	
5	1.575	16	15.98	201	201	117.70	149.50	585	587	744	746	30.0	200	15.0	
6	1.568	16	15.95	201	200	119.70	150.50	595	600	749	754	27.5	200	13.8	
7	0.888	12	12.00	113	113	73.50	87.70	650	650	775	776	27.5	200	13.8	
8	0.889	12	12.01	113	113	74.20	88.20	656	655	780	779	25.0	200	12.5	
9	3.877	20	25.08	314	494	260.70	364.00	830	528	1159	738	37.5	200	18.8	
10	3.821	25	24.89	491	487	260.50	366.00	531	536	746	753	35.0	200	17.5	

BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Fifteen Samples Received and Tested
16mm	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

Khamees Ali Managnejo

Test Performed By:

Dr. /Engr.

Nauman Khurram

Chief resident Engineer, Mangi Dam Project. ((Contractor: ZKB)

Client Reference: CRE/MDP/Tech-4765-69

Dated: 15-12-2020

SOM Lab Ref: CED/SOM/3452 (Page-1/1)

Dated: 17-12-2020

Test: Tension Test

Test Specification:

ASTM-F-1554

Sample Type: ROCK 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 ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.925	25	25.23	491	500	245.50	348.00	500	491	709	696	40.0	200	20.0	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Two Samples Received and Tested

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

Muhammad Shafi

Test Performed By:

Dr. /Engr.

S. Asad Ali Gillani

Dy. Manager QA/QC, Quaid-E-Azam Business Park, Sheikhpura

Client Reference: QA/QC/QABP/GHE/03

Dated: 10-12-2020

SOM Lab Ref: CED/SOM/3457(Page-1/1)

Dated: 17-12-2020

Test: Tension Test & Bend Test

Test Specification: ASTM-A 615

Sample Type: M S 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	0.995	12	12.72	113	127	76.70	95.70	678	604	846	754	27.5	200	13.8	
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BEND TEST:

12mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Two Samples Received and Tested

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

Engr. Naveed Sadiq
Resident Engineer, Orbit Developers Private Limited, Lahore

Test Performed By: Dr. /Engr.

S. Asad Ali Gillani

Client Reference: Nil

SOM Lab

Ref: 3453(Page-1/1)

Dated: 17-12-2020

Dated: 17-12-2020

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	0.666	4	0.500	0.20	0.196	7.39	9.96	81500	83160	109820	112070	1.00	8.0	12.5	
2	0.673	4	0.502	0.20	0.198	7.46	9.70	82290	83120	107010	108090	1.20	8.0	15.0	
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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

Syed Khizer Abbas Bukhari
Resident Engineer-1, PMIC (DCRIP) Panjnad Headworks Alipur

Test Performed By: Dr. /Engr.

S. Asad Ali
Gillani

Client Reference: DCRIP/RE/PMIC/-096

SOM Lab

Ref: 3454 (Page-2/2)

Dated: 10-12-2020

Dated: 17-12-2020

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	2.627	8	0.991	0.79	0.772	26.71	34.12	74560	76300	95250	97470	1.30	8.0	16.3	
2	2.619	8	0.990	0.79	0.770	26.37	34.02	73620	75530	94970	97430	1.40	8.0	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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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

Z. H. Kazmi
Principal Architect, Z. H. Kazmi & Associates, Lahore

Test Performed By:

Dr. /Engr. S Asad Ali Gillani

Client Reference: nil

Dated: 16-12-2020

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 3455(Page-1/1)

Dated: 17-12-2020

ASTM-A-615

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	259.33	19.39	1299810	1296860	97180	96960	1.50	8.0	18.8	
2	1.505	6	0.750	0.44	0.442	15.70	19.44	78690	78330	97440	97000	1.40	8.0	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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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

Usman Tanveer

Bin Hussain Associates, Lahore (Pakistan Medical Cooperative Housing Society)

Test Performed By: Dr. /Engr.

S. Asad Ali
Gillani

Client Reference: nil

Dated: 17-12-2020

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 3456 (Page-1/1)

Dated: 17-12-2020

ASTM-A-615

Deformed Bar (Mughal Supreme)

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	0.662	4	0.498	0.20	0.195	7.70	9.25	84870	87050	101960	104570	0.90	8.0	11.3	
2	0.668	4	0.500	0.20	0.196	7.56	9.14	83410	85110	100830	102890	0.90	8.0	11.3	
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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

Maj Adnan khalid®

Dy Dir MTL, Infra Dev Works -Const. of Addl Lab Rooms B-Block, DHA Ph-9, Town - (M/S Tahira Const.)

Test Performed By:

Dr. /Engr.

Nauman Khurram

Client Reference: 408/241/E/Lab/1065/23

SOM Lab Ref: 3458(Page-1/1)

Dated: 17-12-2020

Dated: 17-12-2020

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Ittefaq 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	1.511	6	0.752	0.44	0.444	13.48	20.46	67550	66940	102550	101620	1.40	8.0	17.5	
2	1.532	6	0.757	0.44	0.450	13.10	20.18	65660	64200	101170	98920	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	0.678	8	0.503	0.79	0.199	173.29	9.89	483770	1920480	27610	109590	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