HABIBULLAH BHUTTO **Test Performed By:** **Dr. /Engr.** **Asad Ali Gillani**

WRDSP Consultants.Zhob(Balochistan Water Resources Development Sector Project)(NCB-06)

Client Reference: **4078/061/HAB/01/NCB-06/1463** **Dated :** **02-11-2023**

SOM Lab Ref: **CED/SOM/3148(Page-1/1)** **Dated :** **08-11-2023**

Test: **Tension Test & Bend Test** **Test Specification:** **ASTM-A 615**

Sample Type: **M S Deformed Bar (Agha 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	1.007	13	12.77	133	128	59.00	83.70	445	461	631	654	27.5	200	13.8	
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BEND TEST:

13mm	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

Professional Const.Services Lahore.(ABL DR Center Faisalabad)

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

Client Reference: PCS/23/Eng-214C
Dated: 08-11-2023

SOM Lab Ref: 3145 (Page-1/3)
Dated: 08-11-2023

Test: Tension Test & Bend Test
Test Specification: ASTM-A-615 Deformed Bar
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	2.652	8	0.996	0.79	0.779	29.05	32.26	81110	82250	90070	91340	1.40	8.0	17.5	
2	2.633	8	0.993	0.79	0.774	28.70	36.44	80110	81770	101740	103840	1.30	8.0	16.3	
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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

Professional Const.Services Lahore.(ABL DR Center Faisalabad)

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

Client Reference: PCS/23/Eng-214-A
Dated: 08-11-2023

SOM Lab Ref: 3145 (Page-2/3)
Dated: 08-11-2023

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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.044	5	0.625	0.31	0.307	11.98	18.40	85210	86050	130900	132180	1.20	8.0	15.0	
2	1.050	5	0.627	0.31	0.309	11.57	15.11	82310	82580	107480	107830	1.30	8.0	16.3	
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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

Professional Const.Services Lahore.(ABL DR Center Faisalabad)

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

Client Reference: PCS/23/Eng-214-B
Dated: 08-11-2023

SOM Lab Ref: 3145 (Page-3/3)
Dated: 08-11-2023

Test: Tension Test & Bend Test
Test Specification: ASTM-A-615 Deformed Bar
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	1.506	6	0.751	0.44	0.443	18.01	22.68	90290	89670	113690	112920	1.10	8.0	13.8	
2	1.504	6	0.750	0.44	0.442	17.64	22.43	88400	88000	112410	111900	1.20	8.0	15.0	
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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

M. Ali Haider Ch. **Test Performed By:** **Dr. /Engr. Asad Ali Gillani**

PE Prosperity Consultants Lhr.(EPC/Turnkey Basis Of 132/11.5 KV Grid Station #1 DHA Gujranwala)

SOM Lab

Client Reference: **DHA Guj/GRID/777** **Ref:** **3146 (Page-1/1)**

Dated: **06-11-2023** **Dated:** **08-11-2023**

Test: **Tension Test & Bend Test** **Test Specification:** **ASTM-A-615**

Gauge Length: **8 inch** **Sample Type:** **Deformed Bar (Kamran 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	2.649	8	0.995	0.79	0.778	26.35	35.22	73570	74700	98320	99840	1.40	8.0	17.5	
2	2.647	8	0.995	0.79	0.778	25.35	33.89	70780	71870	94620	96080	1.50	8.0	18.8	
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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

ES Consultant (Pvt) Ltd. **Test Performed By:** **Dr. /Engr.** **Asad Ali Gillani**

Lhr.(M/Storey Comercial Building Complex at OPF H/Scheme,Khayaban-e-Jinnah Raiwind Rd,Lhr)

Client Reference: **ESC/OPF-ISL/6054** **SOM Lab Ref:** **3150 (Page-1/1)**

Dated: **08-11-2023** **Dated:** **08-11-2023**

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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.477	6	0.743	0.44	0.434	14.48	19.27	72560	73560	96570	97910	1.10	8.0	13.8	
2	1.474	6	0.743	0.44	0.433	14.32	19.18	71790	72950	96160	97720	1.30	8.0	16.3	
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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

Test Performed by: Dr.Asad Ali Gillani

Engr. Hannan Sami,

Building Standards Ltd. Lahore

Client Reference No.: GT/LTR/231106-040 **Dated: 06-11-2023**

SOM Lab Ref: CED/SOM/3151(Page 1/2) **Dated: 08-11-2023**

Test Type: Calibration of Tension Meter (Dillon)

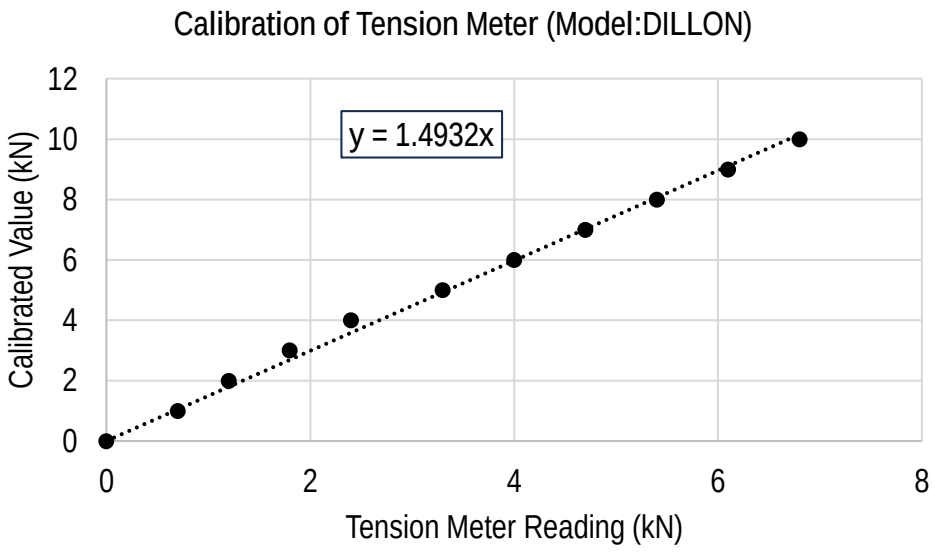
This is with reference to your above-mentioned letter, the calibration of Tension Meter (DILLON) on 3/8" & 7/16" diameter wires has been carried out and the results are given below. It is to be noted that the said calibration has been done in the absence of standard calibration rod of above noted Tension meter (DILLON).

CALIBRATION RESULT OF 3/8" DIAMETER WIRE

Tension Meter Reading, kN	0	0.7	1.2	1.8	2.4	3.3	4.0	4.7	5.4	6.1	6.8
Calibrated Value, kN	0	1	2	3	4	5	6	7	8	9	10

Calibration Curve for 3/8" Diameter Wire

Calibrated Value (kN) = 1.4932 x Tension Meter Reading in kN



Test Performed by: Dr.Asad Ali Gillani

Engr. Hannan Sami,

Building Standards Ltd. Lahore

Client Reference No.: GT/LTR/231106-040 **Dated: 06-11-2023**

SOM Lab Ref: CED/SOM/3151(Page 2/2) **Dated: 08-11-2023**

Test Type: Calibration of Tension Meter (Dillon)

This is with reference to your above-mentioned letter, the calibration of Tension Meter (DILLON) on 3/8" & 7/16" diameter wires has been carried out and the results are given below. It is to be noted that the said calibration has been done in the absence of standard calibration rod of above noted Tension meter (DILLON).

CALIBRATION RESULT OF 7/16" DIAMETER WIRE

Tension Meter Reading, kN	0	1.5	2.8	4.5	6.1	8.3	10	11.7	13.9	14.5	17.3	18.8	20.2	21.3
Calibrated Value, kN	0	2.2	4.2	6.2	8.2	10.3	12.1	14.2	16.2	18.2	20.1	22.1	24.2	26.1

Calibration Curve for 7/16" Diameter Wire

Calibrated Value (kN) = 1.2057 x Tension Meter Reading in kN