

Maqsood Hussain
Quality Incharge, Islamabad Steel Mill Gujranwala

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: nil
SOM Lab Ref: CED/SOM/3660 (Page-2/2)

Dated: 14-01-2021

Dated: 15-01-2021

Test: Tension Test
Sample Type: Deformed Bar (Islamabad Supreme)

Test Specification: ASTM-F-1554

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	0.898	12	12.05	113	114	61.70	74.70	546	542	660	656	32.5	200	16.3	
2	0.899	12	12.07	113	114	62.00	75.00	548	542	663	656	32.5	200	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

Wajid Ali Shah
GM - Works, FF Steel Lahore

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

Client Reference: Nil

SOM Lab

Ref: 3656(Page-1/1)

Dated: 14-01-2021

Dated: 15-01-2021

Test: Tension Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar(FF 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	1.058	5	0.629	0.31	0.311	10.67	14.53	75930	75690	103340	103010	1.10	8.0	13.8	
2	1.018	5	0.617	0.31	0.299	9.96	13.68	70860	73460	97330	100910	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

Senior Ersearch Officer-I

Building Research Station, C & W, Department, Govt. of Punjab, Lahore

Test Performed By:

Dr. /Engr.

Nauman
Khurram

Client Reference: 154-R/130

Dated: 14-01-2021

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref:

3658 (Page-1/1)

Dated:

15-01-2021

ASTM-A-615

Deformed Bar(Pak Iron& 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	2.642	8	0.994	0.79	0.776	25.35	36.51	70780	72050	101940	103780	1.30	8.0	16.3	
2	1.537	6	0.759	0.44	0.452	14.88	19.88	74600	72620	99640	96990	1.50	8.0	18.8	
3	0.683	4	0.506	0.20	0.201	6.73	8.82	74190	73820	97230	96750	1.20	8.0	15.0	
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BEND TEST:

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

Maj Adnan khalid®

Test Performed By: Dr. /Engr.

Nauman
Khurram

By Dir MTL, Infra Development Works, Sector - R, DHA Ph -VII - (M/S DHA - C)

Client Reference: 408/241/E/Lab/15/4R/HW

SOM Lab

Ref: 3659(Page-1/1)

Dated: 15-01-2021

Dated: 15-01-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Koh-I-Noor 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	1.500	6	0.749	0.44	0.441	13.93	21.00	69850	69690	105260	105020	1.50	8.0	18.8	
2	1.499	6	0.749	0.44	0.441	13.76	20.90	68980	68820	104750	104510	1.40	8.0	17.5	
3	0.665	4	0.498	0.20	0.195	6.47	9.76	71380	73210	107580	110330	1.20	8.0	15.0	
4	0.662	4	0.498	0.20	0.195	6.49	9.73	71610	73440	107350	110100	1.30	8.0	16.3	
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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

Test Performed by: .S. Asad Ali Gillani

Vision Engineering Services,
New Kot Juspat Shahdara Town Lahore

Client Reference No.: Nil

Dated: nil

SOM Lab Ref: CED/SOM/3655 (Page 1/4)

Dated: 15-01-2021

Test Type: Tensile Test

Sample Type: Nut - Bolts (20mm)

Test Specification: ASTM – F-606

Tensile Test Results

Sample No.	Sample Type	Tested Diameter of Bolt (mm)	Ultimate Load (kN)	Ultimate Tensile Stress (MPa)	% Elongation
1	Nut- Bolt (20 x 80mm)	14.0	95.2	618.2	30.0

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

Test Performed by: .S. Asad Ali Gillani

Vision Engineering Services,
New Kot Juspat Shahdara Town Lahore

Client Reference No.: Nil

Dated: nil

SOM Lab Ref: CED/SOM/3655 (Page 2/4)

Dated: 15-01-2021

Test Type: Tensile Test

Sample Type: Nut - Bolts (20mm)

Test Specification: ASTM – F-606

Tensile Test Results

Sample No.	Sample Type	Tested Diameter of Bolt (mm)	Ultimate Load (kN)	Ultimate Tensile Stress (MPa)	% Elongation
1	Nut- Bolt (20 x 80mm)	14.0	146.5	951	40.0

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

Test Performed by: .S. Asad Ali Gillani

Vision Engineering Services,
New Kot Juspat Shahdara Town Lahore

Client Reference No.: Nil

Dated: nil

SOM Lab Ref: CED/SOM/3655 (Page 3/4)

Dated: 15-01-2021

Test Type: Tensile Test

Sample Type: Nut - Bolts (12mm)

Test Specification: ASTM – F-606

Tensile Test Results

Sample No.	Sample Type	Tested Diameter of Bolt (mm)	Ultimate Load (kN)	Ultimate Tensile Stress (MPa)	% Elongation
1	Nut- Bolt (12 x 35mm)	8.0	35.2	700	30.0

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

Test Performed by: .S. Asad Ali Gillani

Vision Engineering Services,
New Kot Juspat Shahdara Town Lahore

Client Reference No.: Nil

Dated: nil

SOM Lab Ref: CED/SOM/3655 (Page 4/4)

Dated: 15-01-2021

Test Type: Tensile Test

Sample Type: Nut - Bolts (12mm)

Test Specification: ASTM – F-606

Tensile Test Results

Sample No.	Sample Type	Tested Diameter of Bolt (mm)	Ultimate Load (kN)	Ultimate Tensile Stress (MPa)	% Elongation
1	Nut- Bolt (12 x 35mm)	8.0	33.7	670.0	20.0

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

Test Performed by: .S. Asad Ali Gillani

Haseeb A. Khawaja
Deputy Team Leader
TPB Consultants,

Client Reference No.: TPBC/2020/MISC/5593
SOM Lab Ref: CED/SOM/3530 (Page 2/2)

Dated: 22-12-2020
Dated: 30-12-2020

Sample Type: Nut - Bolts (16mm, 12mm & J-Bolt (3/8"))
Test Type: Hardness Test

Hardness Test Details:

Machine used: Avery Rockwell Hardness Testing Machine
(Minor Load: 10 Kgf Major Load: 90.0 kgf Scale: B)

Hardness Test Results

Sample No.	Sample Type	Hardness	Sample Type	Hardness
1	Bolt 16mm	HR – 95.83 – B	Nut	HR – 78.83 – B
2	Bolt 12mm	HR – 94.33 – B	Nut	HR – 71.66 – B
3	J-Bolt 3/8"	HR – 92.0 – B	Nut	HR – 91.16 – B

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

Test Performed by: Dr. Asad Ali Gillani

General Manager
United Wire Products Co.
G. T. Road Salamatpura Bus Stop.Lahore

Client Reference No.: Nil

Dated: 15-01-2021

SOM Lab Ref: CED/SOM/3657 (Page 1/2)

Dated: 15-01-2021

Test Type: Tensile Test

Sample Type: Hot Dip Wire (SWG-16)

Tensile Test Results

Sample No.	Sample Type	Sample Dia (mm)	Ultimate Load (kN)	Ultimate Tensile Strength (MPa)	Ultimate Tensile Stress (ksi)
1	Hot Dip Wire SWG-16	1.6	0.7	348.16	50.496

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

Test Performed by: Dr. Asad Ali Gillani

General Manager
United Wire Products Co.
G. T. Road Salamatpura Bus Stop.Lahore

Client Reference No.: Nil
SOM Lab Ref: CED/SOM/3657 (Page 2/2)
Test Type: Tensile Test
Sample Type: Hot Dip Wire (SWG-16)

Dated: 15-01-2021

Dated: 15-01-2021

Tensile Test Results

Sample No.	Sample Type	Sample Dia (mm)	Ultimate Load (kN)	Ultimate Tensile Strength (MPa)	Ultimate Tensile Stress (ksi)
1	Hot Dip Wire SWG-16	1.6	0.7	348.16	50.496

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

Test Performed by: Dr. Asad Ali Gillani

General Manager
United Wire Products Co.
G. T. Road Salamatpura Bus Stop.Lahore

Client Reference No.: Nil
SOM Lab Ref: CED/SOM/3657 (Page 1/2)

Dated: 15-01-2021

Dated: 15-01-2021

Test Type: Tensile Test

Sample Type: Hot Dip Wire (SWG-16)

Tensile Test Results

Sample No.	Sample Type	Sample Dia (mm)	Ultimate Load (kN)	Ultimate Tensile Strength (MPa)	Ultimate Tensile Stress (ksi)
1	Hot Dip Wire SWG-16	1.6	0.7	348.16	50.496

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

Test Performed by: Dr. Asad Ali Gillani

General Manager
United Wire Products Co.
G. T. Road Salamatpura Bus Stop.Lahore

Client Reference No.: Nil

Dated: 15-01-2021

SOM Lab Ref: CED/SOM/3657 (Page 2/2)

Dated: 15-01-2021

Test Type: Tensile Test

Sample Type: Hot Dip Wire (SWG-16)

Tensile Test Results

Sample No.	Sample Type	Sample Dia (mm)	Ultimate Load (kN)	Ultimate Tensile Strength (MPa)	Ultimate Tensile Stress (ksi)
1	Hot Dip Wire SWG-16	1.6	0.7	348.16	50.496

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

Test Performed by: Dr. Asad Ali Gillani

General Manager
United Wire Products Co.
G. T. Road Salamatpura Bus Stop.Lahore

Client Reference No.: Nil

Dated: 15-01-2021

SOM Lab Ref: CED/SOM/3657 (Page 1/2)

Dated: 15-01-2021

Test Type: Tensile Test

Sample Type: Hot Dip Wire (SWG-16)

Tensile Test Results

Sample No.	Sample Type	Sample Dia (mm)	Ultimate Load (kN)	Ultimate Tensile Strength (MPa)	Ultimate Tensile Stress (ksi)
1	Hot Dip Wire SWG-16	1.6	0.7	348.16	50.496

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

Test Performed by: Dr. Asad Ali Gillani

General Manager
United Wire Products Co.
G. T. Road Salamatpura Bus Stop.Lahore

Client Reference No.: Nil

Dated: 15-01-2021

SOM Lab Ref: CED/SOM/3657 (Page 2/2)

Dated: 15-01-2021

Test Type: Tensile Test

Sample Type: Hot Dip Wire (SWG-16)

Tensile Test Results

Sample No.	Sample Type	Sample Dia (mm)	Ultimate Load (kN)	Ultimate Tensile Strength (MPa)	Ultimate Tensile Stress (ksi)
1	Hot Dip Wire SWG-16	1.6	0.7	348.16	50.496

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