

Secretery Jamia
Jamia Tul Muntazar (Trust), H-Block, Model Town, Lahore (Pakistan)

Test Performed By: Dr. /Engr.

M Irfan UI Hassan

Client Reference: 137-

SOM Lab

Ref: 1323(Page-1/1)

Dated: 02-09-2019

Dated: 02-09-2019

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	2.693	8	1.004	0.79	0.791	22.32	36.60	62330	62250	102170	102040	1.30	8.0	16.3	
2	2.644	8	0.995	0.79	0.777	22.02	36.21	61470	62500	101080	102770	1.20	8.0	15.0	
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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

Cantonment Executive Officer
Sargodha

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: SC/Cont/01/516-A

SOM Lab

Ref: 1324(Page-1/1)

Dated: 28-06-2019

Dated: 02-09-2019

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	2.545	8	0.976	0.79	0.748	24.03	35.32	67080	70840	98610	104140	1.80	8.0	22.5	
2	1.575	6	0.768	0.44	0.463	13.17	19.47	66020	62740	97590	92740	1.50	8.0	18.8	
3	0.655	4	0.494	0.20	0.192	7.10	8.89	78350	81620	98020	102110	1.40	8.0	17.5	
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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

Faisal Mubarik Shabbir
Khan(Retd.)

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

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

Client Reference: 700/3/Girls School/Ph-XI/Projs/2579

SOM Lab

Ref: 1327(Page-1/1)

Dated: 02-09-2019

Dated: 02-09-2019

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	2.618	8	0.990	0.79	0.769	22.73	36.56	63460	65200	102080	104870	1.30	8.0	16.3	
2	2.614	8	0.989	0.79	0.768	22.85	36.56	63810	65630	102080	105000	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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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

Project Coordinator

Test Performed By:

Dr. /Engr.

S. Asad Ali
Gillani

CAMCE Pakistan Branch Office, China CAMC Engineering Co., Ltd. Lahore

Client Reference: CAMCE/CHB/002

SOM Lab

Ref:

1328(Page-1/1)

Dated: 02-09-2019

Dated:

02-09-2019

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	2.566	8	0.980	0.79	0.754	21.22	32.77	59250	62080	91490	95860	1.30	8.0	16.3	
2	2.644	8	0.995	0.79	0.777	21.15	32.57	59050	60040	90920	92450	1.50	8.0	18.8	
3	2.630	8	0.992	0.79	0.773	20.92	32.52	58400	59680	90780	92780	1.40	8.0	17.5	
4	1.473	6	0.743	0.44	0.433	12.59	18.78	63100	64120	94120	95640	1.30	8.0	16.3	
5	1.470	6	0.742	0.44	0.432	12.64	18.96	63360	64530	95040	96800	1.30	8.0	16.3	
6	1.467	6	0.741	0.44	0.431	12.79	18.96	64130	65470	95040	97020	1.40	8.0	17.5	
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Witnessed By:

Muhammad Sohaib, QC, Engineer, CAMChafiq Ali, DHA, Lahore

BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Ten Samples Received and Tested
# 8	Sample bend through 180 degrees Satisfactorily without any crack	
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 6	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

Tahir Mahmood Ch
Project Manager, Gattwala Commercial Hub, Faisalabad

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

Client Reference: G. C. H./MT-01

SOM Lab 1330(Page-
Ref: 1/1)

Dated: 02-09-2019

Dated: 02-09-2019

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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.680	8	1.002	0.79	0.788	27.78	37.46	77550	77750	104580	104850	1.20	8.0	15.0	
2	2.688	8	1.003	0.79	0.790	27.49	37.31	76750	76750	104160	104160	1.10	8.0	13.8	
3	1.487	6	0.746	0.44	0.437	14.14	19.49	70870	71360	97690	98370	1.30	8.0	16.3	
4	1.494	6	0.748	0.44	0.439	14.14	19.34	70870	71030	96930	97150	1.30	8.0	16.3	
5	0.668	4	0.500	0.20	0.196	6.68	8.53	73630	75130	94090	96010	1.00	8.0	12.5	
6	0.668	4	0.500	0.20	0.196	6.75	8.58	74420	75940	94650	96580	0.90	8.0	11.3	
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BEND TEST:

# 6	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

Arsalan Arshad

Project Manager, Depac (Const. of Dr. Maqbool Ahmad Block King Edward Medical University (KEMU) Lahore)

Test Performed By:

Dr. /Engr.

S.Asad Ali Gillani

Client Reference: T-26/03/19

SOM Lab Ref: 1331(Page-1/1)

Dated: 02-09-2019

Dated: 02-09-2019

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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.674	8	1.000	0.79	0.786	25.76	34.73	71920	72280	96960	97450	1.20	8.0	15.0	
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Witnessed By: M Jawad Ahmad

BEND TEST:

# 8	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

Test Performed by: Dr. Irfan UI Hassan

Syed M. Usman Aslam
Manager Civil Engineering
Engro Fertilizer Ltd.

Client Reference No.: Nil

Dated: 31-08-2019

SOM Lab Ref: CED/SOM/1325(Page-1/4)

Dated: 02-09-2019

Test Type: Toughness Parallel to Grains

Sample Type: Wood

Test Results: Toughness Parallel to Grains

Machine Used	Charpy's Impact Testing Machine
Weight of Hammer	50.5 Lbs = 22.91 kg
Radius at center of fork	700 mm
Angle of fall without specimen	51°
Sample	Standard Charpy (Bending Type)

Sr. No	Sample Type	Angle of fall after Rupture	Energy (N-mm)	Remarks
1	Nw -1	35	29864.9	Test are Carried out charpy's Impact testing Machine
2	Nw - 2	36	28270.43	
3	Ow - 1	42	17907.21	
4	Ow - 2	46	10279.17	

* Nw = New Wood

Ow = Old Wood

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

Test Performed by: Dr. Irfan UI Hassan

Syed M. Usman Aslam
Manager Civil Engineering
Engro Fertilizer Ltd.

Client Reference No.: Nil

Dated: 31-08-2019

SOM Lab Ref: CED/SOM/1325(Page-2/4)

Dated: 02-09-2019

Test Type: Shear Parallel to Grains

Sample Type: Wood

Test Results : Shear Parallel to Grains

Sample No.	Wood Type	Original Size of Wood (mm x mm x mm)	Shear Load (kN)	Shear Strength (Mpa)
1	Nw - 1	53 x 53 x 68	4.85	1.79
2	Nw - 2	53 x 53 x 68	5.37	2.07
3	Ow - 1	50 x 50 x 68	8.60	3.44
4	Ow - 2	50 x 50 x 68	8.05	3.15

* Nw = New Wood

Ow = Old Wood

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

Test Performed by: Dr. Irfan UI Hassan

Syed M. Usman Aslam
Manager Civil Engineering
Engro Fertilizer Ltd.

Client Reference No.: Nil

Dated: 31-08-2019

SOM Lab Ref: CED/SOM/1325(Page-3/4)

Dated: 02-09-2019

Test Type: Direct Tension

Sample Type: Wood

Test Results: Director Tension

Sample No.	Sample Type	Size of Wood Sample (mm x mm x mm)	Tensile Load (kN)	Tensile Strength (MPa)
1	Nw – 1	5.0 x 11.0 x 600	5.60	101.82
2	Nw – 2	5.7 x 10.6 x 600	4.50	74.47
3	Owd – 1	6.0 x 10.8 x 600	11.62	179.32
4	Old – 2	6.3 x 11.1 x 600	7.85	112.25

* Nw = New Wood

Ow = Old Wood

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

Test Performed by: Dr. Irfan UI Hassan

Syed M. Usman Aslam
Manager Civil Engineering
Engro Fertilizer Ltd.

Client Reference No.: Nil

Dated: 31-08-2019

SOM Lab Ref: CED/SOM/1325(Page-4/4)

Dated: 02-09-2019

Test Type: Density Degradation

Sample Type: Wood

Test Results : Density Degradation

Sample No.	Sample Type	Sample Size of Wood (mm x mm x mm)	Density (Kg/m ²)	Remarks
1	Nw – 1	53.0 x 200.0	514.27	Density computed in given condition
2	Ow – 2	53.0 x 200.0	629.52	

* Nw = New Wood

Ow = Old Wood

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

Test Performed by: Dr. Irfan UI Hassan

Syed M. Usman Aslam
Manager Civil Engineering
Engro Fertilizer Ltd.

Client Reference No.: Nil
SOM Lab Ref: CED/SOM/1226(Page-4/9)
Test Type: MOISTURE CONTECT

Dated: 31-08-2019

Dated: 02-09-2019

Sample Type: Wood

MOISTURE CONTECT: (AFTER 24 HOURS OVEN DYING)

S. No	Wood Type	Moisturect Conctect
1	Ow	18.2%
2	Nw	6.92%

* Nw = New Wood
Ow = Old Wood

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

Test Performed by: Dr. Irfan UI Hassan

Syed M. Usman Aslam
Manager Civil Engineering
Engro Fertilizer Ltd.

Client Reference No.: Nil
SOM Lab Ref: CED/SOM/1325(Page-1/4)
Test Type: Toughness Parallel to Grains
Sample Type: Wood

Dated: 31-08-2019

Dated: 02-09-2019

Test Results: Toughness Parallel to Grains

Test: **IMPACT TEST**

IMPACT TEST (V Noch) -According to ISO - 148

Machine Used	Charpy's Impact Testing Machine
Weight of Hammer	50.5 Lbs = 22.91 kg
Height of fall	4.924ft = 1.309 m
Radius at center of fork	700 mm =
Angle of fall without specimen	142°
Sample	Standard Charpy (Bending Type)

Sr. No	Sample Type	Angle of fall after Rupture	Energy (N-mm)
1	High Tensile Steel	125	33745.77
2	High Tensile Steel	125	33745.77

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

Sample No.	Wood Type	Original Size of Wood (mm x mm x mm)	Load	Strength (Mpa)	Remarks
1	Nw – 1	20 x 20 x 120	42		
2	Nw – 2	20 x 20 x 120	41		
3	Ow – 1	20 x 20 x 120	36		
4	Ow – 2	20 x 20 x 120	35		

Test Performed by: Dr. Irfan UI Hassan

Syed M. Usman Aslam
Manager Civil Engineering
Engro Fertilizer Ltd.

Client Reference No.: Nil

Dated: 31-08-2019

SOM Lab Ref: CED/SOM/1226(Page-1/9)

Dated: 02-09-2019

Test Type: Static Bending Secondary

Sample Type: Wood

Test Results: Secondary Bending

Sample No.	Wood Type	Original Size of Wood (mm x mm x mm)	Length of the Tested Sample (mm)	Flexural Load (kN)	Flexural Strength (Mpa)
1	Nw - 1	25 x 25 x 400	350	2.04	66.40
2	Nw - 2	25 x 25 x 400	350	2.83	92.11
3	Ow - 1	25 x 25 x 400	350	1.75	56.96
4	Ow - 2	25 x 25 x 400	350	1.00	32.55
5	Ow - 3	25 x 25 x 400	350	1.67	54.35

* Nw = New Wood

Ow = Old Wood

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

Test Performed by: Dr. Irfan UI Hassan

Syed M. Usman Aslam
Manager Civil Engineering
Engro Fertilizer Ltd.

Client Reference No.: Nil

Dated: 31-08-2019

SOM Lab Ref: CED/SOM/1226(Page-2/9)

Dated: 02-09-2019

Test Type: Static Bending Primary

Sample Type: Wood

Test Results : Primary Bending

Sample No.	Wood Type	Original Size of Wood (mm x mm x mm)	Length of the Tested Sample (mm)	Flexural Load (kN)	Flexural Strength (Mpa)
1	Nw - 1	50 x 50 x 750	700	10.03	81.62
2	Nw - 2	50 x 50 x 750	700	10.78	87.72
3	Ow - 1	50 x 50 x 750	700	4.66	37.92

* Nw = New Wood

Ow = Old Wood

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

Test Performed by: Dr. Irfan UI Hassan

Syed M. Usman Aslam
Manager Civil Engineering
Engro Fertilizer Ltd.

Client Reference No.: Nil

Dated: 31-08-2019

SOM Lab Ref: CED/SOM/1226(Page-3/9)

Dated: 02-09-2019

Test Type: Compression Parallel to Grains

Sample Type: Wood

Test Results: Compression Parallel to Grains

Sample No.	Sample Type	Original Diameter of Wood (mm x mm x mm)	Compression Load (kN)	Compressive Strength (MPa)
1	Nw – 1	50 x 50 x 100	119.0	42.05
2	Nw – 2	50 x 50 x 100	115.8	41.00
3	Owd – 1	50 x 50 x 100	56.6	22.60
4	Old – 2	50 x 50 x 100	60.0	23.92

* Nw = New Wood

Ow = Old Wood

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

Test Performed by: Dr. Irfan UI Hassan

Syed M. Usman Aslam
Manager Civil Engineering
Engro Fertilizer Ltd.

Client Reference No.: Nil

Dated: 31-08-2019

SOM Lab Ref: CED/SOM/1226(Page-4/9)

Dated: 02-09-2019

Test Type: Compression Perpendicular to Grains

Sample Type: Wood

Test Results : Compression Perpendicular to Grains

Sample No.	Sample Type	Original Diameter of Wood (mm x mm x mm)	Compression Load (kN)	Compressive Strength (MPa)
1	Ow – 1	50 x 50 x 62.5	9.30	3.74
2	Ow – 2	50 x 50 x 62.5	8.35	3.34

* Nw = New Wood

Ow = Old Wood

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

Test Performed by: Dr. Irfan UI Hassan

Syed M. Usman Aslam
Manager Civil Engineering
Engro Fertilizer Ltd.

Client Reference No.: Nil
SOM Lab Ref: CED/SOM/1226(Page-4/9)
Test Type: MOISTURE CONTECT

Dated: 31-08-2019

Dated: 02-09-2019

Sample Type: Wood

MOISTURE CONTECT: (AFTER 24 HOURS OVEN DYING)

S. No	Wood Type	Moisturect Conctect
1	Ow	18.2%
2	Nw	6.92%

* Nw = New Wood
Ow = Old Wood

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

