

**Test Performed By:** S. Asad Ali Gillani

Muhammad Nadeem Akhtar  
RE NESPAK  
Lahore  
(Lahore Ring Road Southern Loop Prpject)

**Client Reference:** Nespak/LRRA/MNA/SL-3/136

Dated: 21-03-2024

**SOM Laboratory Reference:** CED/SOM/3873(Page-1/1)

Dated: 26-03-2024

**Test:** Compressive Strength Tests

**Sample Type:** Cat Eyes White, Yellow (Flexo Brand)

### Test Results

Sr. No.	Sample Type	Top Dimensions (mm)	Bottom Dimensions (mm)	Thickness (mm)	Inclination (Degree)	Compression Load (Kg)
1	Cat Eye (Yellow)	70.2 x 45.5	88.5 x 101.3	18.8	32.12°	20234

**Note:** Please always confirm the results of above report on web: [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Test Performed by: S. Asad Ali Gillani

Muhammad Nadeem Akhtar  
Resident Engineer  
Nespak Lahore

(Lahore Ring Road Southern Loop (SL-3) Project)  
Client Reference No.: Nespak/LRRA/MNA/SL-3/135

Dated: 21-03-2024

SOM Lab Ref: CED/SOM/3874(Page 1/1)

Dated: 26-03-2024

Test Type: Tensile Test

Test Specification: ASTM-A 36

Sample Type: 1-MS Base Plate Strips (20mm)

(Source:- Jamal Pipe Industries)

2- MS Strip for Electric Pole Sheet (4.5mm)

### Tensile Test Results

Sr. No.	Sample Type	Size of strip (mm)	X Section Area (mm <sup>2</sup> )	Yield Load (kN)	Ultimate Load (kN)	Yield Stress (MPa)	Ultimate Tensile Stress (MPa)	Elongation (inch)	% Elongation
1	MS Base Plate Strips (20mm)	24.4 x 20.1	490.44	135.0	197.0	275.26	401.68	0.90	45.00
2	MS Strips (4.5mm)	25.2 x 5.1	128.52	40.0	52.20	311.24	406.16	0.80	40.00

Note: Please always confirm the results on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

PK Steel  
Lahore.

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

Client Reference: Nil  
Dated: 25-03-2024  
Test: Tension Test Test  
Gauge Length: 8 inch

SOM Lab  
Ref: 3864 (Page-1/1)  
Dated: 25-03-2024  
Test Specification: ASTM-A-615  
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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.222	6	0.676	0.44	0.359	5.81	7.56	29130	35700	37920	46470	2.50	8.0	31.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only One Sample Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

PK Steel  
Lahore.

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

Client Reference: Nil

SOM Lab

Ref: 3865 (Page-1/1)

Dated: 25-03-2024

Dated: 25-03-2024

Test: Tension Test 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.562	4	0.458	0.20	0.165	4.69	6.22	51710	62680	68570	83120	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only One Sample Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Assistant Resident Engineer

Test Performed By:

Dr. /Engr.

Wasim Abbas

Nespak EPCM-PICIIP Sahiwal.(Rehb/Improv of Water Supply System Sahiwal-Lot 1)

Client Reference: 3976/11/FA/01/Lot-1/01/810

SOM Lab

Ref:

3867(Page-1/1)

Dated: 12-02-2024

Dated:

26-03-2024

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.654	4	0.494	0.20	0.192	6.44	8.21	71040	74000	90490	94260	1.20	8.0	15.0	
2	0.653	4	0.494	0.20	0.192	6.49	8.21	71610	74590	90490	94260	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

# 4	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Prime Steel Re-Rolling Mills  
Sheikhupura.

Test Performed By: Dr. /Engr. Asad Ali

Client Reference: Nil

SOM Lab

Ref: 3868 (Page-1/1)

Dated: 26-03-2024

Dated: 26-03-2024

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Prime Steel Skp)

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.480	6	0.744	0.44	0.435	12.03	19.29	60290	60990	96670	97780	1.30	8.0	16.3	H-3
2	0.666	4	0.500	0.20	0.196	5.20	7.59	57330	58500	83750	85460	1.40	8.0	17.5	H-2
3	0.658	4	0.496	0.20	0.193	5.86	9.50	64640	66980	104770	108570	1.20	8.0	15.0	H-1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Six Samples Received and Tested
# 4	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](http://www.uet-civil.edu.pk)

Sub Divisional officer,

**Test Performed By:** Dr. /Engr. Wasim Abbas

BSD No.15,Lhr.(Const Of BWall Right Side Situated at Mouza Badoki Tehsil Model Town,Lahore)

**Client Reference:** 442

**SOM Lab**

**Ref:** 3869 (Page-1/1)

**Dated:** 21-03-2024

**Dated:** 26-03-2024

**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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.665	4	0.498	0.20	0.195	6.34	8.33	69920	71710	91840	94190	1.40	8.0	17.5	
2	0.658	4	0.496	0.20	0.193	6.37	8.21	70260	72810	90490	93770	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

# 4	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Umair Latif, Dev Engr

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

University of Punjab.(Const Of New Academic Block at Hailey College Of Banking & Finance at A.I.C)

**Client Reference:** D-3640-DE

**SOM Lab**

**Ref:** 3870 (Page-1/1)

**Dated:** 13-03-2024

**Dated:** 26-03-2024

**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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.680	8	1.002	0.79	0.788	25.03	35.12	69870	70040	98040	98290	1.30	8.0	16.3	
2	2.687	8	1.003	0.79	0.790	24.06	34.05	67160	67160	95050	95050	1.40	8.0	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Engineer's Representative

Test Performed By: Dr. /Engr. Wasim Abbas

Metroplan-Asian JV Lahore.(Estb of Jinnah Institute of Cardiology at Jinnah Hospital Lahore)

Client Reference: Metroplan-Asian JV JIC-JHL-RE-166-2024

SOM Lab

Ref: 3871 (Page 1/1)

Dated: 26-03-2024

Dated: 26-03-2024

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: M S Deformed Bar(Pak 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.668	8	0.999	0.79	0.784	24.08	31.14	67220	67730	86940	87610	1.20	8.0	15.0	
2	2.648	8	0.995	0.79	0.778	23.92	30.91	66790	67820	86290	87620	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Resident Engineer NESPAK

Test Performed By: Dr. /Engr. Wasim Abbas

JV TurkPak Lhr.(Const Of Green Building For EMC,EPD and Allied New Entities Estb Under PGDP)

Client Reference: NESPAK-TURKPAK JV/RE/GBL/2024/14

SOM Lab

Ref: 3872 (Page-1/1)

Dated: 26-03-2024

Dated: 26-03-2024

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (Markhor 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.615	8	0.989	0.79	0.768	24.89	34.27	69500	71490	95680	98420	1.50	8.0	18.8	
2	2.643	8	0.995	0.79	0.777	25.15	34.61	70210	71380	96620	98230	1.40	8.0	17.5	
3	1.497	6	0.748	0.44	0.440	14.58	20.71	73070	73070	103830	103830	1.30	8.0	16.3	
4	1.500	6	0.749	0.44	0.441	14.85	20.61	74450	74280	103310	103080	1.10	8.0	13.8	
5	0.667	4	0.500	0.20	0.196	6.93	9.38	76440	78000	103420	105530	1.00	8.0	12.5	
6	0.670	4	0.501	0.20	0.197	7.03	9.33	77560	78750	102860	104420	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  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](http://www.uet-civil.edu.pk)

Yasir Ahmad  
GM-Works FF Steel Lahore.

**Test Performed By:** Dr. /Engr. Wasim Abbas

**Client Reference:** Nil

**SOM Lab**

**Ref:** 3875 (Page-1/1)

**Dated:** 14-03-2024

**Dated:** 26-03-2024

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:** Deformed Bar (FF Steel)

ASTM-A-615

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.029	5	0.620	0.31	0.302	9.70	13.22	69040	70870	94060	96550	1.20	8.0	15.0	1
2	1.029	5	0.620	0.31	0.302	9.81	13.17	69770	71620	93700	96180	1.30	8.0	16.3	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only Two Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)