Mohsin Abbas **Test Performed By:** **Dr. /Engr.** Nauman Khurram

QAQC Engineer, Guarantee Engineers (Pvt) Ltd. Lahore

Client Reference: ETP/GE/2020/ME/03 **Dated:** 19-02-2020

SOM Lab Ref: CED/SOM/2285 (Page-1/1) **Dated:** 21-02-2020

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

Sample Type: 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	3.887	25	25.11	491	495	242.20	337.50	493	490	688	682	30.0	200	15.0	
2	3.913	25	25.19	491	498	244.00	337.00	497	490	687	677	27.5	200	13.8	
3	2.490	20	20.10	314	317	185.00	229.50	589	584	731	724	27.5	200	13.8	
4	2.486	20	20.08	314	317	181.50	228.50	578	574	727	722	25.0	200	12.5	
5	1.567	16	15.94	201	200	130.70	155.50	650	655	773	780	27.5	200	13.8	
6	1.574	16	15.98	201	201	125.70	158.70	625	627	789	792	27.5	200	13.8	
7	0.859	12	11.80	113	109	62.00	77.50	548	567	685	709	25.0	200	12.5	
8	0.856	12	11.78	113	109	63.20	79.50	559	580	703	730	25.0	200	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack
20mm	Sample bend through 180 degrees Satisfactorily without any crack
16mm	Sample bend through 180 degrees Satisfactorily without any crack
12mm	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Twelve Samples Received and Tested

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

Syed Samiuddin Ahmed **Test Performed By:** **Dr. /Engr.** S. Asad Ali Gillani

Senior Resident Engineer, ProMag (Pvt) Ltd Site Office - DHA, Mattital Road, Multan

Client Reference: Villas/Masque/411 **SOM Lab Ref:** 2259(Page-1/1)

Dated: 16-01-2020 **Dated:** 28-02-2020

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	0.670	4	0.501	0.20	0.197	6.32	9.55	69700	70760	105330	106930	1.20	8.0	15.0	
2	0.671	4	0.501	0.20	0.197	6.29	9.55	69360	70410	105330	106930	1.10	8.0	13.8	
3	0.661	4	0.497	0.20	0.194	5.56	8.48	61270	63160	93530	96420	1.30	8.0	16.3	
4	5.252	11	1.402	1.56	1.543	35.68	45.87	50440	51000	64850	65570	1.20	8.0	15.0	
5	0.664	4	0.498	0.20	0.195	6.70	8.41	73850	75750	92740	95120	1.20	8.0	15.0	
6	0.651	4	0.493	0.20	0.191	6.95	8.66	76660	80280	95550	100050	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Twelve Samples Received and Tested

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

M. Ashfaq Ch & Sons (Pvt) Ltd.
Lahore

Test Performed By: **Dr. /Engr.** Nauman Khurram

Client Reference: Nil
Dated: 21-02-2020

SOM Lab Ref: 2278 (Page-1/1)
Dated: 21-02-2020

Test: Tension Test
Gauge Length: 8 inch

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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.638	8	0.993	0.79	0.775	28.44	35.09	79400	80940	97950	99850	1.30	8.0	16.3	
2	2.637	8	0.993	0.79	0.775	28.61	35.52	79880	81430	99180	101100	1.20	8.0	15.0	
3	1.490	6	0.747	0.44	0.438	17.02	20.85	85330	85720	104490	104970	1.10	8.0	13.8	
4	1.496	6	0.748	0.44	0.440	16.56	20.54	83030	83030	102960	102960	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

--	No Bend test performed

Note:-

Only Four Samples Received and Tested

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

Maj Adnan khalid®

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

Dy Dir MTL, Infra Dev Works at Sector - R, Pkg -1, DHA-PH- IX - (M/S DHA - C)

Client Reference: 408/241/E/Lab/852/5113

Dated: 20-02-2020

SOM Lab Ref: 2279(Page-1/1)

Dated: 21-02-2020

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (Saeed Kasur 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	1.502	6	0.749	0.44	0.441	12.46	19.78	62440	62300	99130	98900	1.30	8.0	16.3	
2	1.511	6	0.752	0.44	0.444	12.51	19.72	62700	62130	98870	97980	1.30	8.0	16.3	
3	0.640	4	0.489	0.20	0.188	6.32	9.84	69700	74140	108480	115400	1.00	8.0	12.5	
4	0.642	4	0.491	0.20	0.189	6.37	9.84	70260	74350	108480	114790	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

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

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

Assistant Engineer / Workshops, Pakistan Railways Moghalpura, Lahore

Client Reference: WS/W/63 (2019-2020) **SOM Lab Ref:** 2280(Page-1/1)

Dated: 18-02-2020 **Dated:** 21-02-2020

Test: Tension 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	0.697	4	0.511	0.20	0.205	6.54	10.01	72170	70410	110390	107690	1.10	8.0	13.8	
2	0.692	4	0.508	0.20	0.203	6.52	10.09	71940	70880	111290	109640	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

Abdul Basit
XEN, GE (Air) Lahore

Test Performed By: **Dr. /Engr.** Nauman Khurram

Client Reference: 6862/45/E-6
Dated: 18-02-2020

SOM Lab Ref: 2281 (Page-1/1)
Dated: 21-02-2020

Test: Tension Test
Guage Length: 8 inch

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^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.506	6	0.751	0.44	0.443	16.99	20.90	85180	84600	104750	104040	1.00	8.0	12.5	
2	1.511	6	0.752	0.44	0.444	16.18	20.23	81090	80360	101420	100510	1.10	8.0	13.8	
3	0.668	4	0.500	0.20	0.196	7.21	8.82	79470	81100	97230	99220	1.30	8.0	16.3	
4	0.640	4	0.489	0.20	0.188	6.63	8.72	73070	77730	96110	102250	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

--	No Bend test performed

Note:-

Only Four Samples Received and Tested

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

Muhammad Yasir Khan **Test Performed By:** **Dr. /Engr.** Nauman Khurram

Manager Consuction, Vision Developers (Pvt) Ltd.(National School Barki Road Project)

Client Reference: Nil **SOM Lab Ref:** 2282 (Page-1/1)

Dated: 21-02-2020 **Dated:** 21-02-2020

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	2.562	8	0.979	0.79	0.753	24.72	34.88	69010	72400	97380	102170	1.40	8.0	17.5	
2	1.464	6	0.740	0.44	0.430	14.04	20.44	70360	72000	102450	104830	1.10	8.0	13.8	
3	0.665	4	0.498	0.20	0.195	6.73	9.09	74190	76090	100270	102840	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

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

Syed Salman Liaqat **Test Performed By:** **Dr. /Engr.** S. Asad Ali Gillani

Resident Engineer, Jhall Road Flyover, NESPAK, (Pvt) Ltd. Sahiwal

Client Reference: 4116/03/SSL/2020/032 **SOM Lab Ref:** 2284(Page-1/1)

Dated: 20-02-2020 **Dated:** 21-02-2020

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

Gauge Length: 8 inch **Sample Type:** Deformed Bar (Moiz 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	3.478	9	1.141	1.00	1.022	31.87	47.09	70280	68770	103870	101630	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 9	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

Syed Saulat Raza **Test Performed By:** **Dr. /Engr.** Nauman Khurram

Deputy Director (Tech) Anti-Corruption Establishment, Sargodha Region, Sargodha

Client Reference: ACE-SR-2019/1593 **SOM Lab Ref:** 2286 (Page-1/1)

Dated: 21-02-2020 **Dated:** 21-02-2020

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	1.494	6	0.748	0.44	0.439	15.01	18.76	75210	75390	94020	94230	1.20	8.0	15.0	
2	1.508	6	0.751	0.44	0.443	13.37	17.94	67040	66590	89930	89320	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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