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

Lab -Incharge, Transtech Engineering Company, Haveli Bahadar Shah, Jhang,

Client Reference: **TEC/UET/20070301** **Dated:** **03-07-2020**

SOM Lab Ref: **CED/SOM/2680(Page-1/1)** **Dated:** **03-07-2020**

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

Sample Type: **Deformed Bar (FF 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	3.854	25	25.00	491	491	256.70	353.20	523	523	720	720	25.0	200	12.5	6550
2	3.865	25	25.04	491	492	256.70	352.50	523	522	718	716	30.0	200	15.0	6550
3	2.444	20	19.91	314	311	150.70	216.20	480	484	688	695	25.0	200	12.5	6143
4	2.412	20	19.78	314	307	152.00	216.20	484	495	688	704	27.5	200	13.8	6143
5	1.536	16	15.79	201	196	98.70	141.00	491	505	701	721	25.0	200	12.5	6103
6	1.535	16	15.78	201	196	99.50	141.20	495	509	702	722	27.5	200	13.8	6103
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

Note:-

Only Nine Samples Received and Tested

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

Mughal Iron And Steel Industries Ltd. **Test Performed By:** **Dr. /Engr.** **S. Asad Ali Gillani**

Lahore

Client Reference: **nil** **Dated:** **03-07-2020**

SOM Lab Ref: **CED/SOM/2677(Page-1/1)** **Dated:** **03-07-2020**

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

Sample Type: **Deformed Bar (Mughal 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	3.945	25	25.31	491	503	299.50	359.50	610	596	732	715	25.0	200	12.5	
2	3.969	25	25.37	491	506	295.20	362.50	601	584	738	718	25.0	200	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

25mm	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

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

Madison Square Developers (Pvt) Ltd. Usman Industries 56-B-3, Gulberg III, Lahore

Client Reference: **Nil** **SOM Lab Ref:** **2675(Page-1/3)**

Dated: **03-07-2020** **Dated:** **03-07-2020**

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

Gauge Length: **8 inch** **Sample Type:** **Deformed Bar (Batala 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	2.610	8	0.988	0.79	0.767	22.34	36.39	62380	64250	101600	104640	1.10	8.0	13.8	
2	2.601	8	0.986	0.79	0.764	21.68	35.14	60530	62590	98100	101430	1.10	8.0	13.8	
3	1.539	6	0.759	0.44	0.452	17.96	23.11	90030	87640	115830	112760	0.90	8.0	11.3	
4	1.536	6	0.758	0.44	0.451	18.37	23.21	92070	89830	116340	113510	0.80	8.0	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

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

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

Madison Square Developers (Pvt) Ltd. Usman Industries 56-B-3, Gulberg III, Lahore

Client Reference: **Nil** **SOM Lab Ref:** **2675(Page-2/3)**

Dated: **03-07-2020** **Dated:** **03-07-2020**

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

Gauge Length: **8 inch** **Sample Type:** **Deformed Bar (Mughal 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	0.661	4	0.497	0.20	0.194	7.59	8.94	83750	86340	98580	101630	0.90	8.0	11.3	
2	0.658	4	0.496	0.20	0.193	7.36	8.77	81160	84100	96670	100180	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 4	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

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

Madison Square Developers (Pvt) Ltd. Usman Industries 56-B-3, Gulberg III, Lahore

Client Reference: **Nil** **SOM Lab Ref:** **2675(Page-3/3)**

Dated: **03-07-2020** **Dated:** **03-07-2020**

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

Gauge Length: **8 inch** **Sample Type:** **Deformed Bar (Mughal 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	2.604	8	0.987	0.79	0.765	26.78	33.49	74760	77200	93490	96540	1.30	8.0	16.3	
2	2.615	8	0.989	0.79	0.768	26.66	33.30	74420	76550	92970	95640	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

Abbas Ali Nasim(RE-II) **Test Performed By:** **Dr. /Engr.** **S. Asad Ali Gillani**

MM Pakistan (Pvt) Ltd. Opp. Subhan Akhtar (PSO) Petoleum Midh Road, Site Mpre, District Sargodha

Client Reference: **DCRIP/RE-II** **SOM Lab Ref:** **2676(Page-2/2)**

Dated: **24-06-2020** **Dated:** **03-07-2020**

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	2.610	8	0.988	0.79	0.767	23.62	33.44	65940	67920	93340	96140	1.20	8.0	15.0	
2	2.631	8	0.992	0.79	0.773	23.65	33.38	66020	67480	93200	95250	1.30	8.0	16.3	
3	1.507	6	0.751	0.44	0.443	13.61	18.55	68210	67750	92990	92360	1.20	8.0	15.0	
4	1.471	6	0.742	0.44	0.432	13.51	18.67	67700	68960	93610	95340	1.20	8.0	15.0	
5	0.669	4	0.501	0.20	0.197	6.22	8.84	68570	69620	97460	98940	1.20	8.0	15.0	
6	0.678	4	0.503	0.20	0.199	6.27	8.89	69130	69480	98020	98510	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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 Nine Samples Received and Tested

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

Mughal Iron And Steel Industries Ltd.
Lahore

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

Client Reference: **nil**
Dated: **03-07-2020**

SOM Lab Ref: **2677(Page-1/1)**
Dated: **03-07-2020**

Test: **Tension Test & Bend Test** **Test Specification:** **ASTM-A-615**
Gauge Length: **8 inch** **Sample Type:** **Deformed Barm(MUGHAL 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	2.615	8	0.989	0.79	0.768	26.93	36.90	75190	77340	103020	105970	1.40	8.0	17.5	
2	2.615	8	0.989	0.79	0.768	26.81	36.72	74850	76990	102510	105440	1.30	8.0	16.3	
3	1.523	6	0.755	0.44	0.448	17.07	22.60	85590	84060	113280	111260	1.20	8.0	15.0	
4	1.516	6	0.754	0.44	0.446	18.86	23.96	94530	93260	120070	118460	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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 Three Samples Received and Tested

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

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

Project Engineer (Civil), Shahid Builders (Pvt) Ltd. Lahore

Client Reference: **SBL/2020/1038** **SOM Lab Ref:** **2678(Page-2/2)**

Dated: **02-07-2020** **Dated:** **03-07-2020**

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	2.616	8	0.990	0.79	0.769	23.19	33.84	64740	66510	94480	97060	1.60	8.0	20.0	
2	2.614	8	0.989	0.79	0.768	23.16	33.59	64660	66510	93770	96460	1.50	8.0	18.8	
3	0.726	4	0.521	0.20	0.213	6.85	10.57	75540	70930	116570	109450	1.00	8.0	12.5	
4	0.681	4	0.505	0.20	0.200	6.32	8.94	69700	69700	98580	98580	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

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

Project Engineer (Civil), Shahid Builders (Pvt) Ltd. Lahore

Client Reference: **SBL/2020/1037** **SOM Lab Ref:** **2678(Page-1/2)**

Dated: **02-07-2020** **Dated:** **03-07-2020**

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	1.520	6	0.754	0.44	0.447	13.66	18.91	68470	67400	94780	93300	1.60	8.0	20.0	
2	1.519	6	0.754	0.44	0.446	13.63	18.96	68320	67400	95040	93760	1.60	8.0	20.0	
3	1.065	5	0.631	0.31	0.313	10.50	13.78	74700	73980	98050	97110	1.40	8.0	17.5	
4	1.051	5	0.627	0.31	0.309	10.30	13.71	73250	73490	97540	97860	1.30	8.0	16.3	
5	0.676	4	0.503	0.20	0.199	6.54	8.99	72170	72530	99150	99640	1.10	8.0	13.8	
6	0.681	4	0.505	0.20	0.200	6.22	8.94	68570	68570	98580	98580	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

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

Note:-

Only Nine Samples Received and Tested

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

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

Resident Engineer, Metroplan-Asian JV, Site Office Talagang Road Mianwali

Client Reference: **Metroplan Asian JV-Nexus-MMCH-RE-272** **SOM Lab Ref:** **2681,2683(Page-1/1)**

Dated: **28-07-2020** **Dated:** **03-07-2020**

Test: **Tension Test & Bend Test** **Test Specification:** **ASTM-A-615 Deformed Bar (SJ Steel)**

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	2.687	8	1.003	0.79	0.790	23.04	35.12	64320	64320	98040	98040	1.20	8.0	15.0	
2	2.702	8	1.005	0.79	0.794	23.55	35.85	65740	65410	100090	99580	1.30	8.0	16.3	
3	1.507	6	0.751	0.44	0.443	17.23	19.69	86350	85770	98720	98050	1.00	8.0	12.5	
4	1.497	6	0.748	0.44	0.440	18.25	20.95	91460	91460	105000	105000	0.90	8.0	11.3	
5	1.465	6	0.741	0.44	0.431	15.49	18.81	77670	79290	94270	96240	1.00	8.0	12.5	
6	1.460	6	0.739	0.44	0.429	17.18	21.78	86100	88300	109190	111990	0.90	8.0	11.3	
7	1.474	6	0.743	0.44	0.433	16.89	20.29	84670	86030	101680	103320	0.90	8.0	11.3	
8	1.490	6	0.747	0.44	0.438	16.92	20.29	84820	85210	101680	102140	1.00	8.0	12.5	
9	1.046	5	0.625	0.31	0.307	11.42	13.91	81230	82020	98990	99960	1.00	8.0	12.5	
10	1.042	5	0.624	0.31	0.306	11.08	13.66	78830	79860	97180	98450	1.10	8.0	13.8	

BEND TEST:

# 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
# 6	Sample bend through 180 degrees Satisfactorily without any crack
Sr. # 5	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Fifteen Samples Received and Tested

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