Laboratory In Charge **Test Performed By:** **Dr. /Engr.** **S. Asad Ali Gillan**

Transtech Engineering Corporation, Haveli Bahadar Shah, Jhang,1263 MW Punjab Thermal Power Plant, Jhang.

Client Reference: **TEC/UET/19043102** **Dated:** **12-04-2019**

SOM Lab Ref: **CED/SOM/645(Page-1/1)** **Dated:** **12-04-2019**

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

Sample Type: **Deformed Bar (Ittefaq 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	2.433	20	19.87	314	310	167.90	212.70	534	542	677	687	27.5	200	13.8	179
2	2.419	20	19.81	314	308	173.00	216.00	551	562	688	702	25.0	200	12.5	179
3	2.432	20	19.86	314	310	170.20	215.00	542	550	684	695	25.0	200	12.5	165
4	2.437	20	19.88	314	310	166.50	211.50	530	537	673	682	25.0	200	12.5	165
5	2.441	20	19.90	314	311	167.50	212.50	533	539	676	684	30.0	200	15.0	622
6	2.420	20	19.81	314	308	167.50	212.50	533	544	676	690	32.5	200	16.3	622
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BEND TEST:

20mm	Sample bend through 180 degrees Satisfactorily without any crack
20mm	Sample bend through 180 degrees Satisfactorily without any crack
20mm	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

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

Production Manager, Style Textile Mills (Pvt) ltd.

Client Reference: **nil** **Dated :** **12-04-2019**

SOM Lab Ref: **CED/SOM/649(Page-1/1)** **Dated :** **12-04-2019**

Test: **Tension 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	1.564	16	15.92	201	199	112.90	141.50	562	568	704	712	27.5	200	13.8	
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BEND TEST:

--	No Bend test performed

Note:-

Only One Sample Received and Tested

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

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

Project Manager, Buch International Hospital, Multan

Client Reference: **BIH/BV/3/4/18/13** **SOM Lab Ref:** **646(Page-1/1)**

Dated: **03-04-2019** **Dated:** **12-04-2019**

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	1.478	6	0.743	0.44	0.434	15.87	19.69	79560	80660	98720	100080	1.00	8.0	12.5	
2	1.457	6	0.738	0.44	0.428	14.80	19.27	74190	76270	96570	99280	1.00	8.0	12.5	
3	0.666	4	0.500	0.20	0.196	5.76	7.49	63510	64810	82620	84310	1.50	8.0	18.8	
4	0.648	4	0.492	0.20	0.190	5.58	7.39	61490	64730	81500	85790	1.40	8.0	17.5	
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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

Asif Pervaiz Butt
PM, Pace Cercle, Lahore

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

Client Reference: nil
Dated: 11-04-2019

SOM Lab Ref: 650(Page-1/1)
Dated: 12-04-2019

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	2.633	8	0.993	0.79	0.774	22.53	35.83	62890	64190	100030	102100	1.10	8.0	13.8	
2	2.596	8	0.986	0.79	0.763	22.43	35.24	62610	64830	98380	101860	1.40	8.0	17.5	
3	1.617	6	0.778	0.44	0.475	15.46	20.36	77510	71800	102040	94520	1.20	8.0	15.0	
4	1.612	6	0.777	0.44	0.474	15.41	20.34	77260	71720	101940	94620	1.10	8.0	13.8	
5	0.650	4	0.493	0.20	0.191	6.07	7.92	66890	70040	87340	91460	1.20	8.0	15.0	
6	0.646	4	0.492	0.20	0.190	6.37	8.23	70260	73960	90720	95490	1.10	8.0	13.8	
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BEND TEST:

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

Note:-
Only Nine Samples

# 4	Sample bend through 180 degrees Satisfactorily without any crack	**Received and Tested**

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

Manager Sales
Mughal Iron And Steel Industries Ltd. Lahore

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

Client Reference: **nil**
Dated: **12-04-2019**

SOM Lab Ref: **651(Page-1/2)**
Dated: **12-04-2019**

Test: **Tension Test & Bend Test**
Gauge Length: **8 inch**
Test Specification: **ASTM-A-615**
Sample Type: **Deformed Bar(Mughal Supreme 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	2.652	8	0.996	0.79	0.779	27.34	35.17	76330	77400	98180	99570	1.40	8.0	17.5	
2	1.486	6	0.746	0.44	0.437	15.09	19.78	75620	76140	99130	99810	1.60	8.0	20.0	
3	1.049	5	0.626	0.31	0.308	10.55	13.17	75060	75550	93700	94310	1.50	8.0	18.8	
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Witnessed By: **Nadeem Ahmad**

BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	**Note:-**
# 6	Sample bend through 180 degrees Satisfactorily without any crack	**Only Six Samples Received and Tested**
# 5	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

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

Mughal Iron And Steel Industries Ltd. Lahore

SOM Lab

Client Reference: **nil** **Ref:** **651(Page-2/2)**

Dated: **12-04-2019** **Dated:** **12-04-2019**

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	2.698	8	1.005	0.79	0.793	24.94	34.20	69640	69380	95480	95120	1.40	8.0	17.5	
2	1.509	6	0.751	0.44	0.443	14.24	19.13	71380	70900	95910	95260	1.50	8.0	18.8	
3	1.042	5	0.624	0.31	0.306	9.89	14.24	70350	71270	101310	102640	1.20	8.0	15.0	
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Witnessed By: **Nadeem Ahmad**

BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	**Note:-**
# 6	Sample bend through 180 degrees Satisfactorily without any crack	**Only Six Samples**

# 5	Sample bend through 180 degrees Satisfactorily without any crack	**Received and Tested**

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

Amjad Hussain
Resident Engineer, LAC (JV) NVEC, Circle Sahiwal

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

Client Reference: RE/SWL/408
Dated: 03-04-2019

SOM Lab Ref: 652(Page-1/1)
Dated: 12-04-2019

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	2.593	8	0.985	0.79	0.762	25.15	32.67	70210	72790	91210	94560	1.20	8.0	15.0	
2	1.506	6	0.751	0.44	0.443	15.26	19.83	76490	75970	99380	98710	1.20	8.0	15.0	
3	0.656	4	0.496	0.20	0.193	6.09	8.15	67110	69540	89930	93190	1.20	8.0	15.0	
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BEND TEST:

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

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

Only Six Samples Received and Tested

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

Hafiz Muhammad Wasif Iqbal **Test Performed By:** **Dr. /Engr.** **S Asad Ali Gillani**

Project Manager-Civil, Kohinoor Textile Mills (Pvt) Ltd. Lahore

Client Reference: **nil** **SOM Lab Ref:** **653(Page-1/1)**

Dated: **11-04-2019** **Dated:** **12-04-2019**

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	2.644	8	0.995	0.79	0.777	24.72	34.40	69010	70170	96050	97650	1.50	8.0	18.8	
2	2.630	8	0.992	0.79	0.773	25.03	34.68	69870	71400	96820	98940	1.30	8.0	16.3	
3	1.481	6	0.744	0.44	0.435	14.37	19.83	72050	72870	99380	100520	1.00	8.0	12.5	
4	1.472	6	0.743	0.44	0.433	14.95	20.44	74960	76170	102450	104100	1.10	8.0	13.8	
5	0.654	4	0.494	0.20	0.192	5.93	7.97	65420	68150	87910	91570	1.20	8.0	15.0	
6	0.656	4	0.496	0.20	0.193	5.98	8.05	65990	68380	88800	92030	1.50	8.0	18.8	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	**Note:-**
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	**Only Nine 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 Kasur**

Dy Dir MTL, Const. of Security Det Mouza Ahlu. PH-X - (M/S EMAAN Engrs)

Client Reference: **408/241/E/Lab/515/NIL** **SOM Lab Ref:** **654(Page-1/1)**

Dated: **12-04-2019** **Dated:** **12-04-2019**

Test: **Tension Test & Bend Test** **Test Specification:** **ASTM-A-615 Deformed Bar (Saeed Kasur)**

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	1.467	6	0.741	0.44	0.431	12.20	19.16	61160	62440	96060	98070	1.30	8.0	16.3	
2	1.471	6	0.742	0.44	0.432	12.20	19.13	61160	62300	95910	97680	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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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

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Wajid Ali Shah **Test Performed By:** **Dr. /Engr.** **M Rizwan Riaz**

GM - Works, FF Steel Lahore

Client Reference: **Nil** **SOM Lab Ref:** **655(Page-1/1)**

Dated: **14-04-019** **Dated:** **12-04-2019**

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	0.666	4	0.500	0.20	0.196	6.19	8.23	68230	69630	90720	92570	1.50	8.0	18.8	
2	0.661	4	0.497	0.20	0.194	6.09	8.12	67110	69190	89590	92360	1.30	8.0	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

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

Director Project, Filigree, Lahore (Client: Spark World Electronics (Pvt) Ltd.)

Client Reference: nil **SOM Lab Ref: 656(Page-1/1)**

Dated: 12-04-2019 **Dated: 12-04-2019**

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	1.655	6	0.787	0.44	0.486	17.38	21.27	87120	78870	106640	96540	1.10	8.0	13.8	
2	1.661	6	0.788	0.44	0.488	22.50	26.20	112770	101680	131310	118400	1.00	8.0	12.5	
3	1.052	5	0.627	0.31	0.309	10.45	12.92	74340	74580	91890	92180	1.10	8.0	13.8	
4	1.038	5	0.623	0.31	0.305	10.06	12.59	71580	72750	89570	91030	1.20	8.0	15.0	
5	0.664	4	0.498	0.20	0.195	7.24	9.02	79810	81860	99480	102030	1.00	8.0	12.5	
6	0.658	4	0.496	0.20	0.193	7.14	8.61	78690	81540	94990	98430	1.20	8.0	15.0	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	**Note:-**

# 5	**Sample bend through 180 degrees Satisfactorily without any crack**	**Only Nine 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		