Z. H. Kazmi **Test Performed By:** **Dr. /Engr.** **Bilal Ahmed Khokhar**

Principal Architect, For Z. H. Kazmi & Associates, Lahore

Client Reference: **nil** **SOM Lab Ref:** **265(Page-1/1)**

Dated: **08-02-2019** **Dated:** **08-02-2019**

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	2.538	8	0.975	0.79	0.746	25.15	33.81	70210	74350	94400	99960	1.00	8.0	12.5	
2	1.647	6	0.785	0.44	0.484	17.15	21.73	85940	78130	108940	99030	1.10	8.0	13.8	
3	0.610	4	0.477	0.20	0.179	6.03	7.90	66550	74360	87120	97340	0.90	8.0	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

Executive Engineer (UCET)
University of Sargodha

Test Performed By: Dr. /Engr. **Bilal Ahmed Khokhar**

Client Reference: SU/XEN/351
Dated: 07-02-2019

SOM Lab Ref: 266(Page-1/1)
Dated: 08-02-2019

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	2.559	8	0.979	0.79	0.752	24.67	34.32	68870	72350	95820	100660	1.50	8.0	18.8	
2	2.559	8	0.979	0.79	0.752	24.74	34.22	69070	72560	95530	100360	1.30	8.0	16.3	
3	1.715	6	0.801	0.44	0.504	15.24	20.39	76390	66690	102190	89210	1.40	8.0	17.5	
4	1.705	6	0.799	0.44	0.501	17.13	22.14	85840	75390	110980	97470	1.20	8.0	15.0	
5	0.656	4	0.496	0.20	0.193	7.41	8.92	81720	84690	98360	101930	1.00	8.0	12.5	
6	0.656	4	0.496	0.20	0.193	7.75	9.09	85430	88530	100270	103910	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

Batala Steel
Lahore

Test Performed By: **Dr. /Engr.** **Bilal Ahmed Khokhar**

Client Reference: **nil**
Dated: **08-02-2019**

SOM Lab Ref: **268(Page-1/1)**
Dated: **08-02-2019**

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	1.467	6	0.741	0.44	0.431	14.19	20.31	71130	72610	101780	103910	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 6	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

Amjad Saeed **Test Performed By:** **Dr. /Engr.** **Ubaid A Mughal**

Resident Engineer, NESPAK (Pvt) Ltd. Lahore. (M/S NLC Engineers)

Client Reference: **3994/103/AS/01/64** **SOM Lab Ref:** **269(Page-1/1)**

Dated: **06-02-2019** **Dated:** **08-02-2019**

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

Gauge Length: **8 inch** **Sample Type:** **Deformed Bar(Kisan 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	2.686	8	1.002	0.79	0.789	24.69	32.90	68930	69010	91840	91950	1.10	8.0	13.8	
2	2.620	8	0.990	0.79	0.770	25.03	33.05	69870	71680	92260	94660	1.00	8.0	12.5	
3	1.033	5	0.622	0.31	0.304	11.26	13.68	80140	81720	97330	99250	1.20	8.0	15.0	
4	1.092	5	0.639	0.31	0.321	11.77	14.48	83760	80890	102980	99450	1.40	8.0	17.5	
5	0.683	4	0.506	0.20	0.201	6.93	8.79	76440	76060	96900	96420	1.20	8.0	15.0	
6	0.666	4	0.500	0.20	0.196	7.29	9.07	80370	82010	100050	102090	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 5	Sample bend through 180 degrees Satisfactorily without any crack
# 5	Sample bend through 180 degrees Satisfactorily without any crack
# 4(Sr.5,6)	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

Malil Muhammad Adil
Director, Malik Steel Depot, Lahore

Test Performed By: **Dr. /Engr.** **Bilal Ahmed Khokhar**

Client Reference: **nil**
Dated: **08-02-2019**

SOM Lab Ref: **270(Page-1/1)**
Dated: **08-02-2019**

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	2.578	8	0.982	0.79	0.758	22.17	31.62	61900	64510	88280	92000	1.60	8.0	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

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

Alpha Hardware,9 Beadon Road, Lahore

Client Reference: **Nil** **SOM Lab Ref:** **271(Page-1/1)**

Dated: **08-02-2019** **Dated:** **08-02-2019**

Test: **Tension 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	0.660	4	0.497	0.20	0.194	6.75	8.43	74420	76720	92960	95840	1.00	8.0	12.5	
2	0.657	4	0.496	0.20	0.193	6.95	8.61	76660	79450	94990	98430	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

Engr. Rameez Khalid **Test Performed By:** **Dr. /Engr.** **Ubaid A Mughal**

Resident Engineer, Dr. AQ Khan Hospital MPEC-Civil, Lahore (Allied Engineering Consultants (Pvt) Ltd.)

Client Reference: **ACE/LHR-1/2019/0131** **SOM Lab Ref:** **272(Page-1/1)**

Dated: **06-02-2019** **Dated:** **08-02-2019**

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	1.471	6	0.742	0.44	0.432	14.19	19.83	71130	72440	99380	101220	1.30	8.0	16.3	
2	1.482	6	0.745	0.44	0.436	13.76	19.47	68980	69610	97590	98490	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