

Abdul Rasheed

Test Performed By:

Dr. /Engr.

Bilal A. Khokhar

General Manager, (Projects) A. S. Enterprises, Engineers & Contractors, Lahore

Client Reference: USD/ASE/04

Dated: 16-05-2019

SOM Lab Ref: CED/SOM/831 (Page-1/1)

Dated: 16-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A 615

Sample Type: M S Deformed Bar(AFCO 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	3.720	25	24.57	491	474	261.50	338.20	533	552	689	714	35.0	200	17.5	
2	3.731	25	24.60	491	475	269.20	344.20	548	567	701	725	27.5	200	13.8	
3	1.554	16	15.88	201	198	95.50	121.50	475	483	604	614	35.0	200	17.5	
4	1.559	16	15.90	201	199	58.50	121.20	291	295	603	611	40.0	200	20.0	
5	0.872	12	11.89	113	111	58.50	77.50	517	527	685	698	32.5	200	16.3	
6	0.869	12	11.88	113	111	98.70	76.70	873	892	678	693	32.5	200	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Nine Samples Received and Tested
16mm	Sample bend through 180 degrees Satisfactorily without any crack	
12mm	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

Assistant Engineer (C)
University of Sargodha

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: SU/P-D(W)/14934

SOM Lab

Ref: 823(Page-1/1)

Dated: 14-05-2019

Dated: 16-05-2019

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	2.591	8	0.984	0.79	0.761	27.42	34.22	76550	79470	95530	99180	1.60	8.0	20.0	
2	2.614	8	0.989	0.79	0.768	27.93	34.63	77980	80210	96670	99440	1.50	8.0	18.8	
3	1.451	6	0.736	0.44	0.426	18.71	22.73	93760	96840	113940	117690	0.80	8.0	10.0	
4	1.460	6	0.739	0.44	0.429	16.06	21.30	80480	82540	106790	109530	1.00	8.0	12.5	
5	0.675	4	0.502	0.20	0.198	7.29	8.87	80370	81190	97800	98780	1.10	8.0	13.8	
6	0.667	4	0.500	0.20	0.196	7.49	9.14	82620	84310	100830	102890	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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BEND TEST:

--	No Bend test performed	Note:- Only Six 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.

M. Irfan Ul-Hassan

By Dir MTL, Const of Mosque , Sector -T, DHA Ph-VIII - (M/S Siddique Sons)

Client Reference: 408/241/E/Lab/574/20

SOM Lab

Ref: 824(Page-1/1)

Dated: 16-05-2019

Dated: 16-05-2019

Test: Tension Test

Test Specification:

ASTM-A-615

Deformed Bar (FF 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	1.628	6	0.780	0.44	0.478	16.00	23.96	80220	73840	120070	110530	1.00	8.0	12.5	
2	1.475	6	0.743	0.44	0.433	15.24	20.05	76390	77620	100500	102130	1.20	8.0	15.0	
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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

Abdullah Khadim
Resident Engineer, DAR Engineering

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: DB-78/DAR/RE/ME/2019/0194

SOM Lab

Ref: 825(Page-1/1)

Dated: 14-05-2019

Dated: 16-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed Bar(Kamran 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	0.644	4	0.491	0.20	0.189	5.73	8.18	63180	66850	90150	95400	1.50	8.0	18.8	A-37
2	0.647	4	0.492	0.20	0.190	5.63	8.10	62050	65320	89370	94070	1.40	8.0	17.5	A-37
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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

Assistant Engineer Bridges,
Pakistan Railways Sukkur

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: 56-W/326/2014

SOM Lab

Ref: 826(Page-1/1)

Dated: 05-05-2019

Dated: 16-05-2019

Test: Tension Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar(AF & Ittefaq 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	1.490	6	0.747	0.44	0.438	14.44	19.75	72400	72730	98970	99420	0.80	8.0	10.0	AF
2	1.494	6	0.748	0.44	0.439	14.29	19.80	71640	71800	99230	99450	1.00	8.0	12.5	AF
3	1.032	5	0.621	0.31	0.303	11.13	13.63	79200	81030	96960	99200	0.60	8.0	7.5	AF
4	1.031	5	0.621	0.31	0.303	11.06	13.97	78690	80510	99360	101650	0.90	8.0	11.3	AF
5	0.616	4	0.480	0.20	0.181	5.27	7.61	58120	64220	83970	92790	0.90	8.0	11.3	Ittefaq
6	0.614	4	0.479	0.20	0.180	5.32	7.59	58680	65200	83750	93050	0.90	8.0	11.3	Ittefaq
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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BEND TEST:

--	No Bend test performed	Note:- Only Six Samples Received and Tested

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

Mansoor Mazhar & Associates
Lahore Cantt

Test Performed By: Dr. /Engr.

Nauman Khurram S. Asad
Ali Gillani

Client Reference: nil

SOM Lab

Ref: 827(Page-1/1)

Dated: 16-05-2019

Dated:

16-05-2019

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	1.526	6	0.755	0.44	0.448	16.56	21.20	83030	81550	106280	104380	1.20	8.0	15.0	
2	1.524	6	0.755	0.44	0.448	16.46	21.10	82520	81050	105770	103880	1.30	8.0	16.3	
3	0.653	4	0.494	0.20	0.192	6.03	8.36	66550	69320	92180	96020	0.80	8.0	10.0	
4	0.656	4	0.496	0.20	0.193	6.44	8.77	71040	73620	96670	100180	0.90	8.0	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Six Samples Received and Tested
# 40	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

Engr M. Qasim Saeed
Lahore (Project: Abdul Kabir Plaza Gulberg -III, Lahore)

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: Nil

SOM Lab

Ref: 828(Page-1/1)

Dated: 16-05-2019

Dated: 16-05-2019

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	2.678	8	1.001	0.79	0.787	28.08	35.60	78400	78700	99380	99760	1.50	8.0	18.8	
2	2.613	8	0.989	0.79	0.768	27.70	34.07	77320	79540	95110	97830	1.40	8.0	17.5	
3	2.737	8	1.012	0.79	0.804	31.77	44.52	88700	87160	124280	122110	1.00	8.0	12.5	
4	0.672	4	0.501	0.20	0.197	6.03	9.23	66550	67560	101730	103280	1.40	8.0	17.5	
5	0.667	4	0.500	0.20	0.196	6.01	9.14	66320	67680	100830	102890	1.50	8.0	18.8	
6	0.672	4	0.501	0.20	0.197	6.07	9.14	66890	67900	100830	102370	1.50	8.0	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

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

Muhammad Ishaq
Junior Research Officer-I, Building Research Station, Lahore

Test Performed By: Dr. /Engr. Bilal A. Khokhar

Client Reference: 154-R/1089

SOM Lab

Ref: 829(Page-1/2)

Dated: 30-04-2019

Dated: 16-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed G-60 (Mughal 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	2.607	8	0.988	0.79	0.766	24.13	33.08	67360	69470	92350	95240	1.10	8.0	13.8	
2	2.617	8	0.990	0.79	0.769	24.03	32.90	67080	68910	91840	94340	1.20	8.0	15.0	
3	1.488	6	0.746	0.44	0.437	14.90	19.39	74700	75220	97180	97850	1.40	8.0	17.5	
4	1.482	6	0.745	0.44	0.436	15.01	19.62	75210	75900	98360	99260	1.30	8.0	16.3	
5	1.038	5	0.623	0.31	0.305	10.65	15.01	75790	77030	106750	108500	1.20	8.0	15.0	
6	1.035	5	0.622	0.31	0.304	10.55	14.85	75060	76540	105670	107750	1.30	8.0	16.3	
7	0.668	4	0.500	0.20	0.196	6.85	9.12	75540	77080	100610	102660	1.00	8.0	12.5	
8	0.666	4	0.500	0.20	0.196	6.70	9.09	73850	75360	100270	102320	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Twelve Samples Received and Tested
# 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: Please always confirm the results of above report on web www.uet-civil.edu.pk

Muhammad Ishaq
Junior Research Officer-I, Building Research Station, Lahore

Test Performed By: Dr. /Engr. Bilal A. Khokhar

Client Reference: 154-R/1089

SOM Lab

Ref: 829(Page-2/2)

Dated: 30-04-2019

Dated: 16-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed G-40 (Mughal 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	2.622	8	0.991	0.79	0.771	19.34	28.49	53990	55320	79540	81500	1.70	8.0	21.3	
2	2.613	8	0.989	0.79	0.768	19.39	28.49	54130	55680	79540	81820	1.80	8.0	22.5	
3	1.487	6	0.746	0.44	0.437	11.54	16.38	57840	58240	82110	82680	1.70	8.0	21.3	
4	1.479	6	0.744	0.44	0.435	11.48	16.67	57540	58200	83540	84500	1.80	8.0	22.5	
5	0.664	4	0.498	0.20	0.195	5.17	7.82	56990	58460	86220	88430	1.60	8.0	20.0	
6	0.667	4	0.500	0.20	0.196	5.22	7.44	57560	58730	82060	83730	1.50	8.0	18.8	
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BEND TEST:

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

Abdul Rehman
Assistant Engineer (Civil) University of Okara

Test Performed By: Dr. /Engr. M Irfan UI Hassan

Client Reference: 299-

SOM Lab

Ref: 830(Page-1/1)

Dated: 14-05-2019

Dated: 16-05-2019

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	1.543	6	0.759	0.44	0.453	14.98	19.88	75110	72960	99640	96780	1.20	8.0	15.0	
2	1.562	6	0.764	0.44	0.459	15.55	20.36	77920	74700	102040	97810	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