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

Zhuweijie, Jiangsu No. 1, Electric Power Cont Co. Ltd(JEPCC1) (1263MW Punjab Power Plant, Jhang)

Client Reference: nil **Dated:** 21-11-2020

SOM Lab Ref: CED/SOM/3304(Page-1/1) **Dated:** 23-11-2020

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

Sample Type: M S 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	2.546	20	20.31	314	324	147.20	207.20	469	455	660	640	37.5	200	18.8	
2	2.546	20	20.32	314	324	150.70	208.00	480	465	662	642	30.0	200	15.0	
3	1.633	16	16.27	201	208	109.70	135.70	546	528	675	653	35.0	200	17.5	
4	1.621	16	16.22	201	207	110.70	136.70	551	536	680	662	30.0	200	15.0	
5	0.985	12	12.64	113	126	54.70	80.70	484	436	714	643	35.0	200	17.5	
6	0.987	12	12.65	113	126	54.70	80.20	484	436	709	638	37.5	200	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

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 Nine Samples Received and Tested

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

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

Dy. Manager QA/QC, Quaid-E-Azam Business Park, Sheikhupura

Client Reference: QA/QC/QABP/GHE/01 **Dated:** 19-11-2020

SOM Lab Ref: CED/SOM/3307(Page-1/1) **Dated:** 23-11-2020

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

Sample Type: M S 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	0.998	12	12.72	113	127	72.20	94.20	638	569	833	742	25.0	200	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

12mm	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

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

Sr. Engineer(Civil), KCP (W&S) Post Off ice KCP Colony Girote Chowk Jauharabad

Client Reference: KCP(W&S)-Hosp-(Hostels)/2019 **SOM Lab Ref:** 3305(Page-1/1)

Dated: 04-11-2020 **Dated:** 23-11-2020

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	0.658	4	0.496	0.20	0.193	6.32	8.92	69700	72220	98360	101930	1.30	8.0	16.3	
2	0.655	4	0.494	0.20	0.192	6.27	8.86	69130	72010	97680	101750	1.50	8.0	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

Sub Divisional Officer
SSTH Multan Road Lahore

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

Client Reference: SS. DC()/805
Dated: 12-11-2020

SOM Lab Ref: 3306(Page-1/1)
Dated: 23-11-2020

Test: Tension Test & Bend 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	1.463	6	0.740	0.44	0.430	16.48	20.03	82620	84540	100400	102740	1.10	8.0	13.8	
2	1.462	6	0.740	0.44	0.430	15.82	19.90	79300	81150	99740	102060	1.20	8.0	15.0	
3	0.664	4	0.498	0.20	0.195	6.19	9.33	68230	69980	102860	105490	1.00	8.0	12.5	
4	0.669	4	0.501	0.20	0.197	6.19	9.45	68230	69270	104200	105790	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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

Inspector of Works
Pakistan Railway Headquarter Office Lahore

Test Performed By: **Dr. /Engr.** M Rizwan Azam

Client Reference: 62-W/0/201/Lose
Dated: 23-11-2020

SOM Lab Ref: 3308(Page-1/1)
Dated: 23-11-2020

Test: Tension Test & Bend 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	2.703	8	1.005	0.79	0.794	25.40	36.26	70920	70560	101230	100720	1.70	8.0	21.3	
2	2.697	8	1.005	0.79	0.793	25.86	36.21	72200	71930	101080	100700	1.20	8.0	15.0	
3	0.669	4	0.501	0.20	0.197	6.09	8.53	67110	68130	94090	95520	1.60	8.0	20.0	
4	0.668	4	0.500	0.20	0.196	5.88	8.41	64860	66190	92740	94630	1.40	8.0	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Witnessed By: Muhammam Nabeel Aslam

BEND TEST:

# 8	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