

Khalid Mahmood

Resident Engineer, NESPAK JV Turk Pak Resident Const. Supervision for Establishment of D. G. Khan (M/s ZKB)

Test Performed By:

Dr. /Engr.

M.Rizwan
Azam

Client Reference: 4161/RE/SFMKB/DGK/091

SOM Lab Ref: 3168(Page-1/3)

Dated: 24-10-2020

Dated: 27-10-2020

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar(Kamran 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	2.611	8	0.988	0.79	0.767	27.22	37.94	75980	78260	105920	109100	1.30	8.0	16.3	
2	2.636	8	0.993	0.79	0.775	24.36	34.35	68020	69330	95900	97760	1.60	8.0	20.0	
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Witnessed By: M. Irfan, Site Inspector, NESPAK

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

Khalid Mahmood

Resident Engineer, NESPAK JV Turk Pak Resident Const. Supervision for Establishment of D. G. Khan (M/s ZKB)

Test Performed By:

Dr. /Engr.

M.Rizwan
Azam

Client Reference: 4161/RE/SFMKB/DGK/092

SOM Lab Ref: 3168(Page-2/3)

Dated: 24-10-2020

Dated: 27-10-2020

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	2.588	8	0.984	0.79	0.761	25.84	33.74	72140	74890	94200	97790	1.50	8.0	18.8	
2	2.603	8	0.987	0.79	0.765	25.08	33.38	70010	72300	93200	96250	1.60	8.0	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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Witnessed By: M. Irfan, Site Inspector, NESPAK

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

Khalid Mahmood

Resident Engineer, NESPAK JV Turk Pak Resident Const. Supervision for Establishment of D. G. Khan (M/s ZKB)

Test Performed By:

Dr. /Engr.

M.Rizwan
Azam

Client Reference: 4161/RE/SFMKB/DGK/097

SOM Lab Ref: 3168(Page-3/3)

Dated: 26-10-2020

Dated: 27-10-2020

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar(Kamran 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	1.486	6	0.746	0.44	0.437	14.27	20.10	71540	72030	100760	101450	1.00	8.0	12.5	
2	1.488	6	0.746	0.44	0.437	13.56	19.69	67960	68430	98720	99390	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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Witnessed By: M. Irfan, Site Inspector, NESPAK

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

Javed Iqbal
 Manager, MM Tower Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: Nil

SOM Lab

Ref: 3169(Page-1/1)

Dated: 23-10-2020

Dated: 27-10-2020

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	0.615	4	0.480	0.20	0.181	6.47	8.56	71380	78870	94420	104340	1.00	8.0	12.5	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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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

Safiya Homrs
Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: Nil

SOM Lab

Ref: 3170(Page-1/1)

Dated: 27-10-2020

Dated: 27-10-2020

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar

ASTM-A-615

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	0.637	4	0.488	0.20	0.187	4.71	6.98	51940	55550	77000	82350	1.00	8.0	12.5	
2	0.636	4	0.488	0.20	0.187	4.74	7.08	52270	55910	78130	83560	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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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

Javed Iqbal
Manager, MM Tower Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: Nil

SOM Lab

Ref: 3173(Page-1/1)

Dated: 23-10-2020

Dated: 27-10-2020

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	2.626	8	0.991	0.79	0.772	23.34	31.91	65170	66690	89070	91150	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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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

S. Shaukat Hussain

Incharge (Civil) For Managing Director, Sui Northern Gas Pipelines Ltd. Lahore

Test Performed By:

Dr. /Engr.

M. Irfan UI
Hassan

Client Reference: CC/DMIS/MLN

Dated: 27-10-2020

Test: Tension Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 3174(Page-1/1)

Dated: 27-10-2020

ASTM-A-615

Deformed Bar (AFCCO 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	2.689	8	1.003	0.79	0.790	27.90	35.73	77890	77890	99750	99750	1.30	8.0	16.3	
2	2.675	8	1.000	0.79	0.786	27.01	36.82	75420	75800	102790	103310	1.10	8.0	13.8	
3	1.509	6	0.751	0.44	0.443	19.37	21.78	97080	96420	109190	108450	1.00	8.0	12.5	
4	1.491	6	0.747	0.44	0.438	19.18	22.65	96160	96600	113530	114050	1.20	8.0	15.0	
5	0.687	4	0.507	0.20	0.202	7.08	9.48	78130	77350	104540	103510	1.10	8.0	13.8	
6	0.680	4	0.505	0.20	0.200	7.00	9.48	77230	77230	104540	104540	1.10	8.0	13.8	
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Witnessed By: Syed Zulfiqar Ali & Ali Sikandar, Axis Developer

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

Muhammad Faizan
Project Engineer, NETRACON Technologies (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: NTT-HO/FSDW-GS/030

SOM Lab

Ref: 3175(Page-1/1)

Dated: 27-10-2020

Dated: 27-10-2020

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	2.644	8	0.995	0.79	0.777	28.70	36.39	80110	81450	101600	103300	1.20	8.0	15.0	
2	2.635	8	0.993	0.79	0.774	28.51	36.26	79600	81240	101230	103320	1.30	8.0	16.3	
3	2.650	8	0.996	0.79	0.779	27.98	35.58	78120	79220	99320	100720	1.00	8.0	12.5	
4	1.488	6	0.746	0.44	0.437	15.65	19.54	78430	78970	97950	98620	0.90	8.0	11.3	
5	1.494	6	0.748	0.44	0.439	15.46	19.64	77510	77690	98460	98690	1.20	8.0	15.0	
6	0.676	4	0.503	0.20	0.199	5.93	9.19	65420	65750	101390	101900	1.00	8.0	12.5	
7	0.681	4	0.505	0.20	0.200	5.96	9.30	65760	65760	102520	102520	1.20	8.0	15.0	
8	0.681	4	0.505	0.20	0.200	5.96	9.35	65760	65760	103080	103080	1.20	8.0	15.0	
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Witnessed By: Sohaib Ali, NESPAK

BEND TEST:

# 8(Sr 1&2)	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Sixteen Samples Received and Tested
# 8(Sr 3)	Sample bend through 180 degrees Satisfactorily without any crack	
# 6(Sr 4&5)	Sample bend through 180 degrees Satisfactorily without any crack	
# 4(Sr.6&7)	Sample bend through 180 degrees Satisfactorily without any crack	
(Sr. 8)	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

Brigadier Muhammad Akhtar
(Retd.)

Project Director, New Metro City, Kharian Sarai Alamgir

Test Performed By:

Dr. /Engr.

M. Irfan Ul
Hassan

Client Reference: PD/NMC/20/110

Dated: 26-10-2020

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 3176(Page-1/1)

Dated: 27-10-2020

ASTM-A-615

Deformed Bar (FF 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	2.440	8	0.955	0.79	0.717	20.23	30.09	56490	62240	84010	92560	1.40	8.0	17.5	
2	1.436	6	0.733	0.44	0.422	12.41	16.62	62190	64840	83290	86840	1.30	8.0	16.3	
3	0.636	4	0.488	0.20	0.187	5.45	8.07	60140	64320	89030	95220	1.40	8.0	17.5	
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BEND TEST:

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

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

Maj Adnan Khalid ®

Dy Dir MTL.

Testing of Anchor – Bolt – Const of (U/G) External Works Alongwith Street Light System Pkg – E-3, Sector- L & G, DHA Phase-IX, - (M/S FWO)

Client Reference: 408/241/E/1018-A/485

Dated: 27-10-2020

SOM Lab Ref: CED/SOM/3171(Page-1/1)

Dated: 27-10-2020

Test: Tension Test

Test Specification: ASTM-F -1554

Sample Type: Y Bolt

Gauge Length: 50 mm

S.No.	Dia.		Area	Yield Load	Ultimate Load	Yield Stress	Ultimate. Stress	Elongation	Gauge Length	%age Elongation	Reduction of Area (%)
	Original Diameter	Tested Diameter									
	mm	mm	mm ²	kN	kN	MPa	MPa	mm	mm	%	
1	12	8.3	54.10	-	33.7	-	622	13.8	50.0	27.5	44.2
2	12	8.4	55.41	-	35.7	-	644	12.5	50.0	25.0	49.0
3	12	8.4	55.41	-	34.5	-	622	12.5	50.0	25.0	45.5

Note:-

Only Three Samples
Received and Tested

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

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

Maj Adnan Khalid ®

Dy Dir MTL.

Testing of Anchor – Bolt – Const of (U/G) External Works Alongwith Street Light System Pkg – E-3, Sector- L & G, DHA Phase-IX, - (M/S FWO)

Client Reference: 408/241/E/1019-A/466

Dated: 27-10-2020

SOM Lab Ref: CED/SOM/3172(Page-1/1)

Dated: 27-10-2020

Test: Tension Test

Test Specification: ASTM-F -1554

Sample Type: Y Bolt

Gauge Length: 50 mm

S.No.	Dia.		Area	Yield Load	Ultimate Load	Yield Stress	Ultimate. Stress	Elongation	Gauge Length	%age Elongation	Reduction of Area (%)
	Original Diameter	Tested Diameter									
	mm	mm	mm ²	kN	kN	MPa	MPa	mm	mm	%	
1	12	8.2	52.8	-	35.7	-	676	12.5	50.0	25.0	46.5
2	12	8.2	52.8	-	31.7	-	600	12.5	50.0	25.0	44.7
3	12	8.2	52.8	-	31.7	-	600	11.3	50.0	25.0	44.7

Note:-

Only Three Samples
Received and Tested

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

Test Performed By: S. Asad Ali Gillani

Abdul Khalique Kandhir
Resident Engineer
SMEC International (Pty) Ltd.
Islamabad

Client Reference: 5065060/RE/N-50/P-4/2020/863

Dated: 06-10-2020

SOM Laboratory Reference: CED/SOM/3177(Page-1/1)

Dated: 27-10-2020

Test: Compressive Strength Tests

Sample Type: Reflectorized Pavement Stud (M-3)

Test Specification: ASTM-D4280

Test Results

Sr. No.	Top Dimensions (mm)	Bottom Dimensions (mm)	Thickness (mm)	Inclination (Degree)	Compression Load (Kg)
1	75.0 x 44.5	101.0 x 89.0	16.0	31.25°	11417.0
2	75.0 x 44.5	101.0 x 89.0	16.0	31.25°	11621.0

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

Test Performed by: Dr. Syed. Asad Ali Gillani

Resident Engineer
Pakistan Engineering Services(PES),
Manchura Dam Project District Mansehra

Reference No.: RE/PES/MDP/13/02/2020

Dated: 23-10-2020

SOM Lab Ref: CED/SOM/3178(Page-1/1)

Dated: 27-10-2020

Test: Tensile Test, Elongation at Break, Tear Test, Comp Set Test & Hardness Test.

Sample Type: Neoprene Pad

STRENGTH AND ELONGATION TEST. (AS PER ASTM-D-412)

S. No	Sample Size (mm)	Ultimate Load (kN)	Tensile Strength (Mpa)	Elongation at Break(%)
1	6.5 x 2.5	0.70	43.076	480

TEAR STRENGTH (AS PER ASTM-D-624)

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)
1	12.5 x 2.5	0.32	128

- COMPRESSION SET TEST (AS PER ASTM-D-395)

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	3.0	2.95	1.667

- HARDNESS TEST (AS PER ASTM-D-2240)

S. No	Sample Type	Hardness (Shore A)
1	Bearing Pad	61.17

