

From : QC Dept.
 To : Managing Director
 Subject : T Tape sample received from Erez 18th 2011



Date April 18th 2011

Dear Sir

2 samples of the T Tape were received (one with 10cm spacing & the other with 20cm spacing)were tested & Flow rate & other pipe mechanical results were as follows:

1 - 10cm sample

Pipe Inner diameter = 16.4mm

Pipe outer diameter = 16.8mm

Average thickness =0.19mm

Pipe wall thickness :

0.2	0.2	0.18	0.19
0.2	0.2	0.18	0.17

Flow rate (LPH) results at 0.5 bar - 1.2 bars is in the below table :

Sample #	0.5 bar	0.8 bar	1 bar	1.2 bar
1	0.61	0.84	0.94	1.02
2	0.62	0.86	0.96	1.04
3	0.57	0.8	0.9	1
4	0.61	0.8	0.9	0.97
5	0.63	0.81	0.93	1.02
6	0.65	0.85	0.99	1.08
7	0.64	0.81	0.92	1.04
8	0.61	0.86	0.97	1.07
9	0.61	0.8	0.91	0.98
10	0.65	0.81	0.92	1.04
11	0.65	0.89	0.97	1.07
12	0.62	0.8	0.91	1.03
Average LPH	0.62	0.83	0.94	1.03
SD	0.02	0.03	0.03	0.03
COV %	3.76	3.76	3.27	3.36
EUC %	95.8	96.4	96.5	95.5

2 - 20cm sample

Pipe Inner diameter = 16.4mm

Pipe outer diameter = 16.8mm

Average thickness =0.2mm

Pipe wall thickness :

0.21	0.22	0.21	0.22
0.21	0.2	0.19	0.18

Flow rate (LPH) results at 0.5 bar - 1.2 bars is in the below table :

Sample #	0.5 bar	0.8 bar	1 bar	1.2 bar
1	0.72	0.92	0.98	1.05
2	0.71	0.89	1.06	1.16
3	0.68	0.9	1	1.11
4	0.67	0.95	1.05	1.18
5	0.7	0.9	1	1.16
6	0.7	0.93	1.06	1.1
7	0.68	0.91	1.04	1.17
8	0.75	0.97	1.02	1.13
Average LPH	0.70	0.92	1.03	1.13
SD	0.03	0.03	0.03	0.04
COV %	3.69	2.98	2.99	3.88
EUC %	95.9	97.1	96.4	95.3

The pipe mechanical Tensile properties were tested under ASTM D638 Standard & results are :
Tensile Stress @ Break = 33.3 Mpa
Elongation @ Break = 115%
Pipe wereput under high operating pressure of 2 bars for 1 hour & it passed the test .

Observation :

1 - Flow rate results are good in Uniformity under different operating pressures.

regards
Mahdi