

FILTER EFFICIENCY

QP911 – 12-oz spunbond polyester with BHA-TEX PTFE membrane (for STS tubes)
 SpiroTubes allow extremely low emissions - less than 1.0 mg/Nm³. This 99.99+% efficiency is a result of the spun bonded filter media and the Preveil expanded PTFE membrane. What effectively happens is that this membrane (or any media for that matter) does indeed load up, and a normal distribution of particle sizes form a dust cake that effectively captures or helps agglomerate the smaller particles and the overall efficiency is much higher than the specific range of fractional efficiency would indicate. Any of the ePTFE membrane products will realize overall efficiency numbers in this range (0.005 gr/dscf down to 0.001 gr/dscf).”

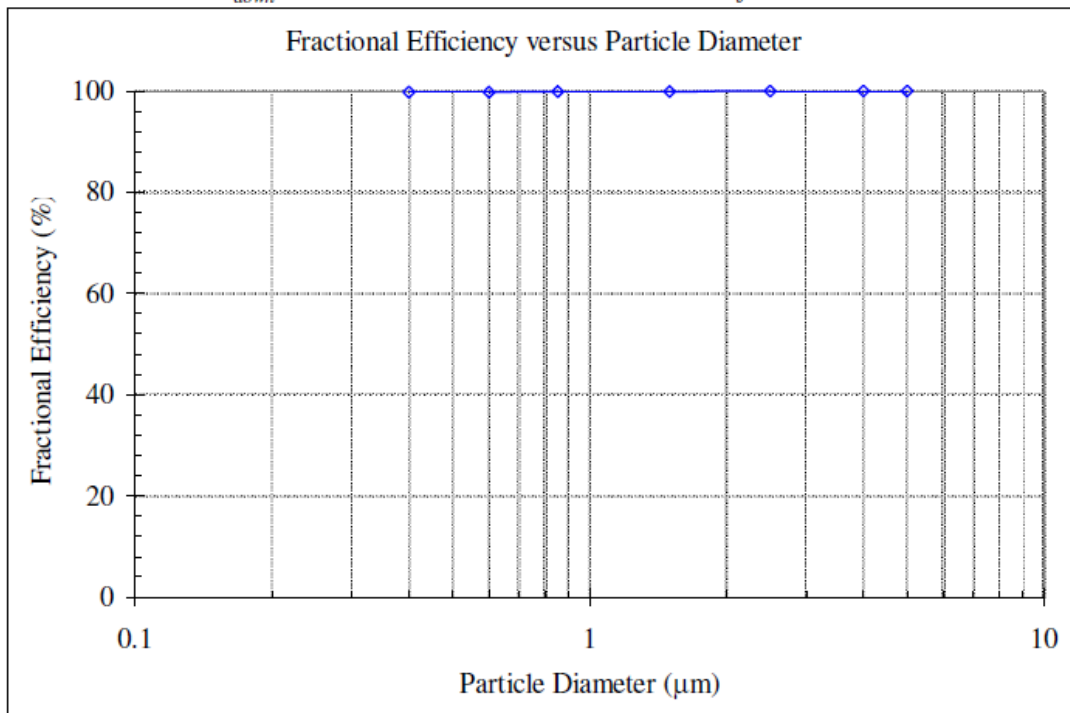
Velocity(fpm)	10.5
Δp (" H ₂ O)	0.717
Size Range (μm)	Fractional Efficiency (%)
0.3-0.5	99.751
0.5-0.7	99.824
0.7-1.0	99.887
1.0-2.0	99.926
2.0-3.0	99.954
3.0-5.0	99.972
>5.0	99.990

$$F_{eff} = \frac{C_{up} - C_{down}}{C_{up}} \times 100\%$$

F_{eff} = Fractional Efficiency

C_{up} = Particle Concentration Upstream of Filter

C_{down} = Particle Concentration Downstream of Filter



SHICK