What is claimed is:

1. A method of reducing performance variability in a filtration scaling device used to estimate the requirements of a full scale filtration device, the method comprising:

a. determining ~~the~~ a performance distribution of a plurality of membranes or filtration media;

b. selecting a subset of said distribution, said subset having a known range of performance with said distribution;

c. inserting the plurality of the membranes or filtration media from said subset into said filtration scaling device; and

d. assigning a scaling safety factor to said filtration scaling device, wherein said scaling factor is directly proportional to ~~the~~ a product of ~~the~~ a full scale device high end potential performance within said distribution and the scaling device high end potential performance within said subset of said distribution, and inversely proportional to the product of the scaling device low end potential performance within said subset of said distribution and the full scale device

low end potential performance within said distribution.

2. The method of claim 1, wherein said subset of membranes is a single membrane.

3. The method of claim 1, wherein said scaling factor is the product of the full scale device high end potential performance within said distribution and the scaling device high end potential performance within said subset of said distribution, divided by the product of the scaling device low end potential performance within said subset of said distribution and the full scale device low end potential performance within said distribution.