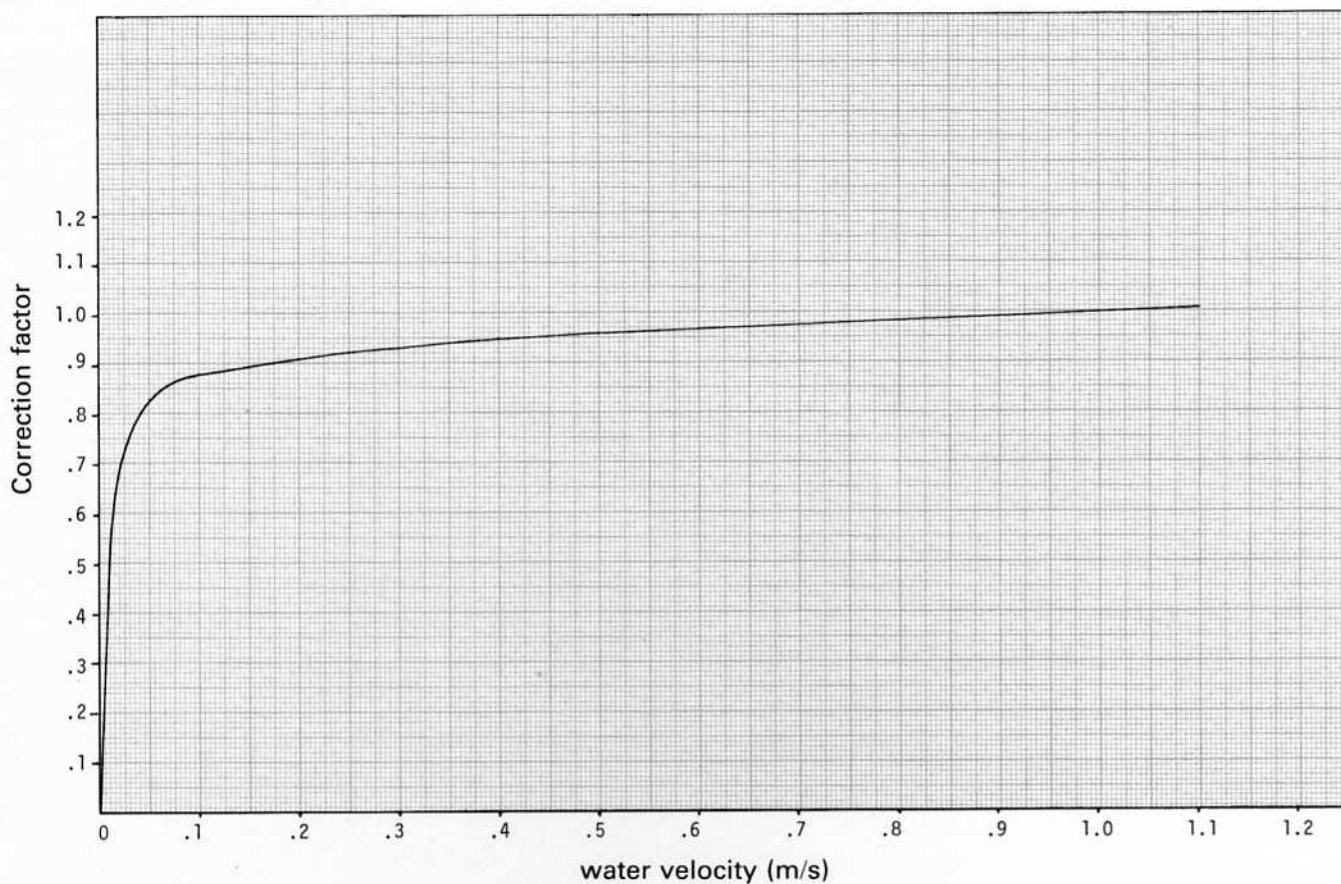


EMISSION CORRECTION FACTOR VS WATER VELOCITY

(based on B.G. Perimeter output table where correction factor equal 1 at 1m/s water flowrate)



Three graphs were also produced. Graph 1 shows the correction factor against water velocity, based on the output tables.

Graph 2 gives the outputs at a flow water temperature of 76°C and 20°C room air temperature for three element sizes. These are plotted against the mass water flow rate. The outputs are for a 1 metre length of tubing in a casing 610mm high and 100mm wide.

Graph 3 is of the same format as graph 2 but gives outputs for a temperature difference of 56°C.

The reason for giving two similar graphs is as follows:

As the water flow rate decreases the temperature drop across the element increases, therefore if a plot is made of output against water flow temperature the mean water temperature will not be constant. Similarly, if a plot of output against mean water temperature is carried out then the flow water temperature will not be constant.

It must be remembered that the output tables are based on MEAN water temperatures and room air temperatures.