



26 July 2000

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Attention : Mr Pierre Massyn

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Dear Mr Massyn

PTH Anti-scaling Device

Thank you for contacting me regarding your novel anti-scaling device. The mechanism by which your device operates is briefly set out below:

Normally calcium carbonate (CaCO_3) precipitates from water in the form known as calcite. This form grows on surfaces (e.g. pipe walls and heating elements) causing scaling and adverse affects associated with it.

The Israeli PTH catalytic converter releases trace concentrations of ions (inter alia Zinc, Zn^{2+}) into the water.

The affect of this is that any calcium carbonate precipitation which may occur will now be in the form of aragonite (not calcite). The great advantage of aragonite is that it does not grow on solid surfaces (e.g. pipe walls and heating elements). Consequently, no blocking of pipes or fouling of elements occurs. Furthermore, existing calcium carbonate scale which may be present will be transformed into aragonite and removed from the surface.

In conclusion, the device is a most effective method of prevention of scaling and is to be highly recommended where hard waters are to be used, especially those ground waters extracted from carbonate bearing geological strata.

Yours sincerely

A handwritten signature in blue ink, appearing to be 'R E Loewenthal'.

PROFESSOR R E LOEWENTHAL