



Chlorine is added to raw water for disinfection purposes but can be damaging to many types of industrial water treatment equipment, including distillers.

A well-designed system does not require feedwater chlorination and will produce pure distilled water regardless of the biological loading on the feedwater side. Nevertheless, feedwater is often chlorinated either by the municipal water supply or by the equipment owner to a level of 0.5 to 1.5 mg/L of free, residual chlorine.

Low levels of chlorine can lead to a phenomenon called stress corrosion cracking of the stainless-steel surfaces in the distiller. One mechanism for this attack is a pitting effect which notches the metal and results in the formation of stress risers. This promotes a brittle-type failure at stress levels well below the yield strength of the material.



All chlorine in the feed should be removed to prevent this. This is commonly performed using an activated carbon filter which can be positioned in the feed line between a water softener and the distiller.

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