

Title:

DEECOM™: A New Eco-Technology for Cleaning Metal Filters

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Over the past three decades, the market for polymers has grown. Many of the plastics applications use complex and costly metal filters and/or parts which require cleaning. Current cleaning technologies involve the use solvents, chemicals, superheated steam, and high temperature oxidation methods. *The DEECOM™ technology provides an environmentally sound alternative to Hydrolysis, Pyrolysis and Solvent Cleaning for polymer melt filters.*

Each of the processes involves issues with one of more of the following:

1. Damaging steps to the filters/parts.
2. Environmental issues.
3. Costly processes

Following these considerations, the Longworth Group of companies embarked upon a fundamental study of a novel pressure swing technique designed to physically disrupt the polymer. The mechanism of the new process results in post cleaning procedures that eliminate or minimize the issues listed above.

This paper describes the development of the novel, patented, and solvent free low temperature cleaning process, known as **DEECOM™**.