

EPRI Boiling Water Reactor Condensate Filter Demineralizer Precoat Materials Report

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Technical Update, March 2011

EPRI Project Manager
S. Garcia

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ABSTRACT

This report summarizes condensate filter demineralizer precoat materials usage in boiling water reactors (BWRs) that participate in the Electric Power Research Institute (EPRI) BWR Chemistry Monitoring effort. The most recent available information from each of 19 BWR units is included.

Keywords

BWR
BWR water chemistry
Condensate polishing
Filter demineralizer

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INTRODUCTION

This report summarizes Condensate Filter Demineralizer precoat materials usage at BWRs that participate in the EPRI BWR Chemistry Monitoring effort. The most recent available information from each of nineteen BWR units is included. Each plant was assigned a unique identification letter that was used for some charts in this report.

A separate report summarizing resin usage in BWR condensate deep bed demineralizers (1022673) has also been updated with 2010 data.

2

CONDENSATE FILTER DEMINERALIZER PRECOAT MATERIALS PRACTICES

Information on precoat materials usage in BWR condensate filter demineralizers (CF/Ds) is presented in Figures 2-1 through 2-3. Filter septa designs used with precoat materials at participating BWRs are shown below:

- Wound Yarn: Cofrentes; Duane Arnold; Fermi 2; Leibstadt; Mühleberg; Ringhals 1
- Upright Pleated: Fermi 2; Hatch 1 & 2; Monticello; Peach Bottom 2 & 3; Quad Cities 1 & 2
- Upright Pleated with Wound Yarn Precoat Retention Layer: Columbia; Fermi 2; Mühleberg; Vermont Yankee
- Upright Pleated with Meltblown Precoat Retention Layer: Browns Ferry 1, 2 & 3; Cooper; Monticello; Peach Bottom 2 & 3; Quad Cities 1 & 2

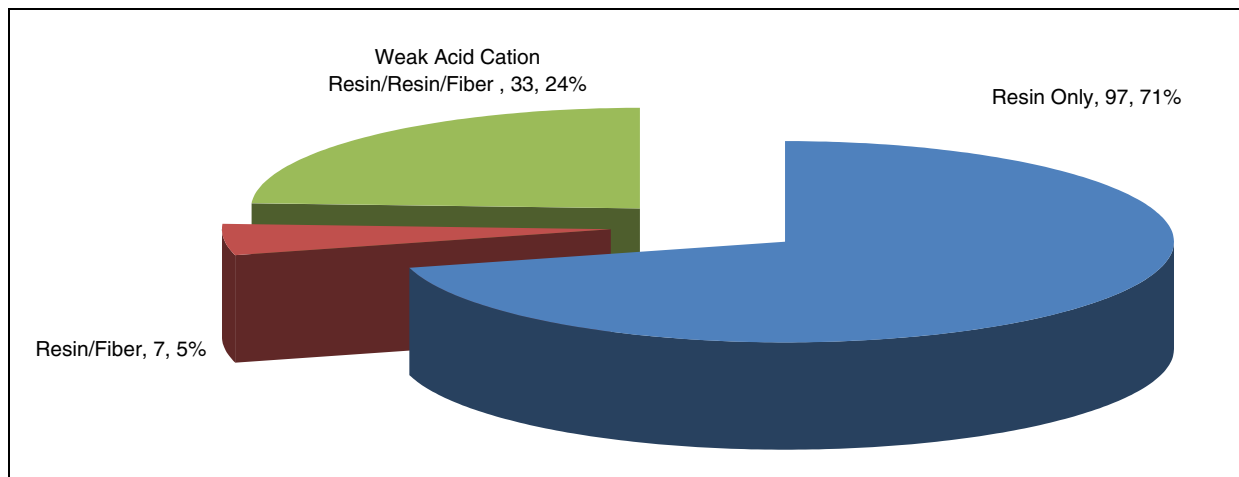


Figure 2-1
Precoat Material Types Used in CF/Ds by Vessel

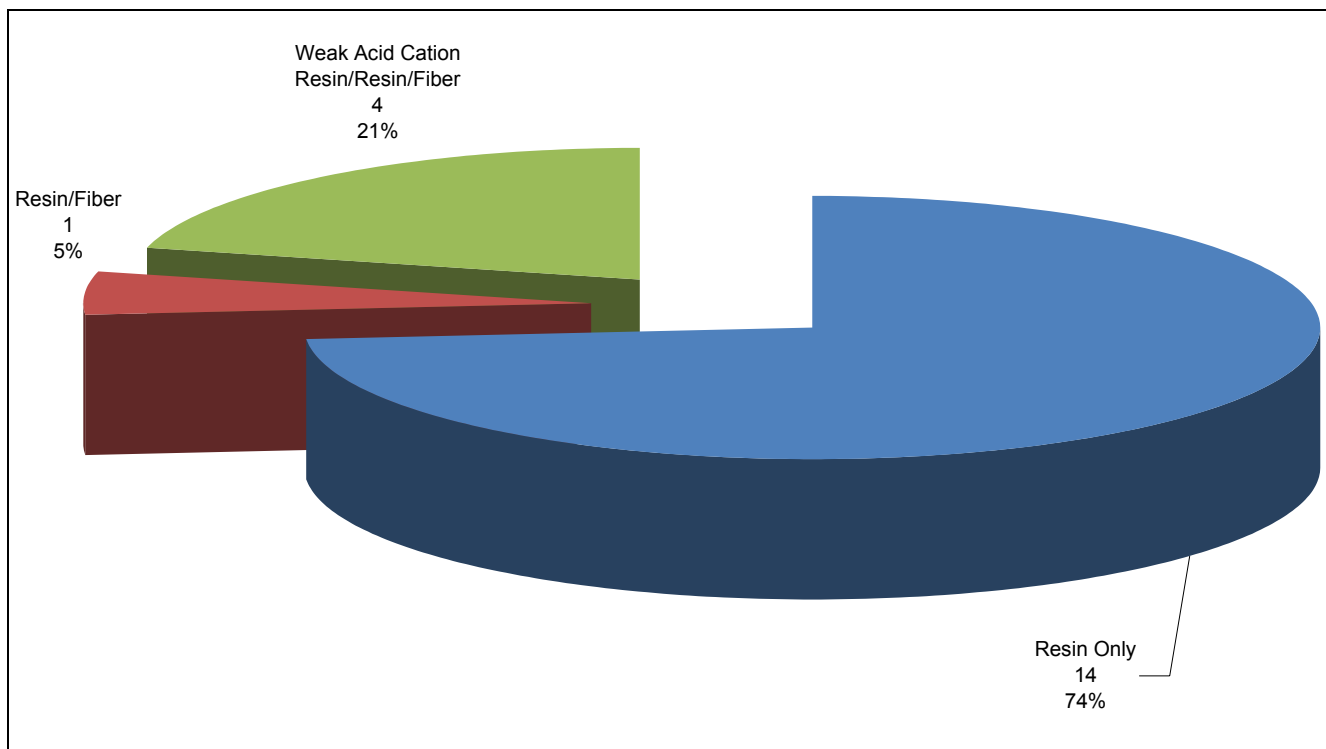


Figure 2-2
Precoat Material Types Used in CF/Ds by BWR Unit

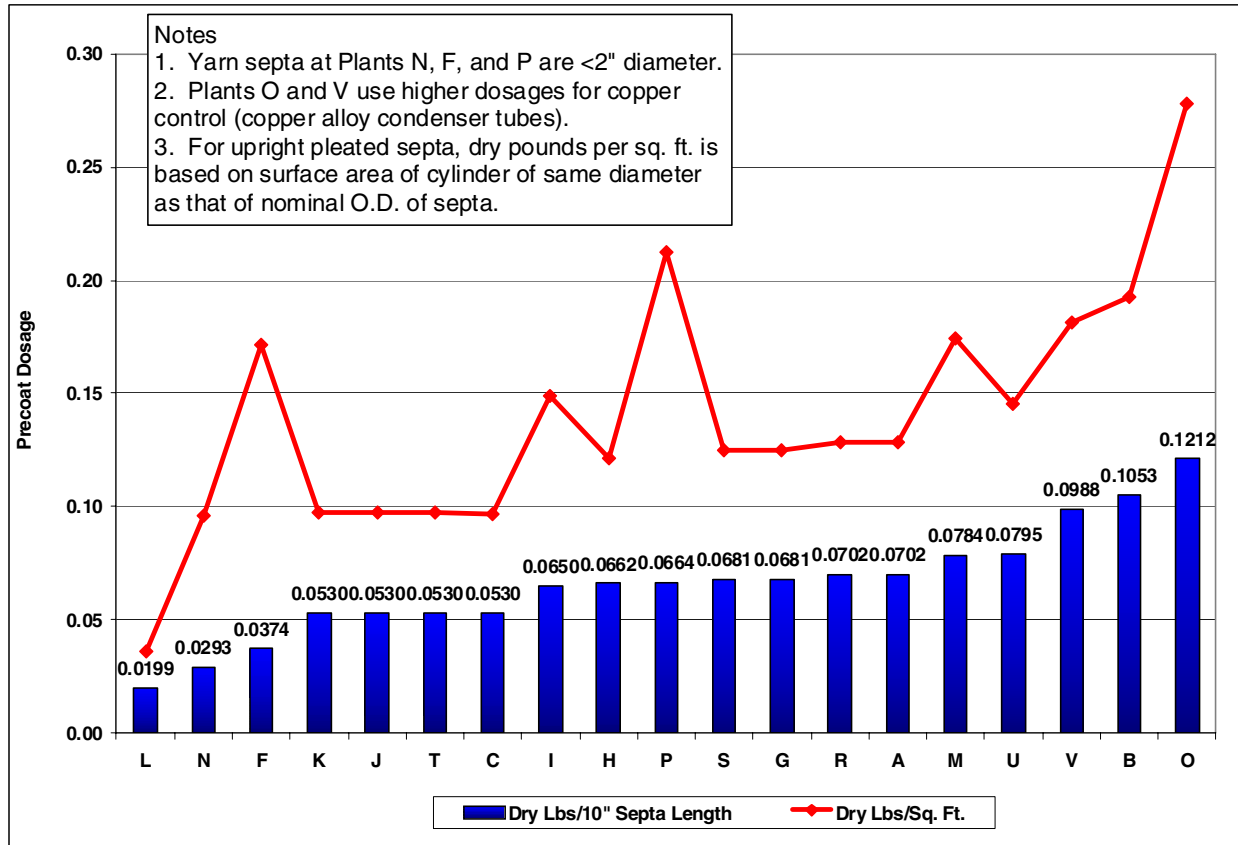


Figure 2-3
Average Precoat Dosage Used in CF/Ds (weighted by number of vessels)

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