Fouling of Air Cooled Condensers On the Air Side

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— As the electrical power demand increases and water resources become more limited, fouling on the air side of Air Cooled Condensers (ACC) is a growing concern. The objective of this study was to experimentally and computationally calculate the convection heat transfer coefficient for both a clean and fouled condenser. Bee pollen was selected as the experimental fouling particle, and engineering data for similar particles were used for the computational model. Both the experimental and computational results showing the negative impact fouling has on the heat transfer will be presented.