

A COMPARISON OF CLEANROOM PROTOCOL APPROACHES DURING THE CONSTRUCTION PROCESS

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Abstract

Contamination control, which has a direct impact on the productivity and profitability of the manufacturing process, is the central concept around which all cleanrooms are designed, built, and operated. To help control construction contamination, two cleaning methodologies have been used. One method is to clean the facility at the end of the construction, called "final super clean," while the other method, called "clean-build," requires continuous cleaning during construction. The "clean-build" method is the most widely used contamination control method; however, very little is known about the actual benefit of the "clean-build" approach versus the "final super clean" approach. This paper compares two construction methods and outlines some general relationships regarding use of a particular contamination control method on cost, schedule, and cleanliness class conditions.