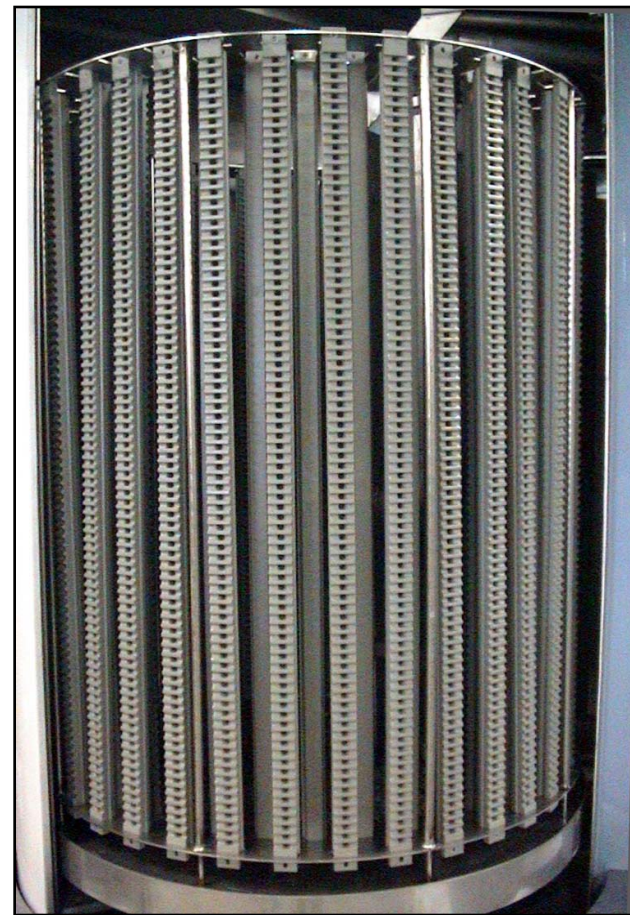


### Background

This large pharmaceutical company makes a wide variety of pills and capsules. In their packaging plant, there are several high speed filling lines where different types of pills are being loaded into bottles. A machine called a "slat counter" is what actually counts and dispenses the pills into the bottles.

### Problem

Before they can run a different type of pill in a given filling line, the "slat counter" machine has to be torn down, cleaned, and sanitized. All traces of the previous substance must be removed. The hardest parts to clean are the "pill slats" themselves. There are 72 of these slats in a counting machine. These plastic slats have small holes that catch the pills which the customer was hand cleaning. They had a special room for this cleaning procedure and employees dedicated to this one single task.



### Solution/System

Design a fully automated cleaning system that can wash, rinse, and dry 72 slats in one cycle—the average cycle time is only 30 minutes. The pill slats are fixtured vertically on a turntable, two(2) peripheral circles of parts, 36 slats per circle. Using the PLC, the customer can pre-program one or more multi-stage cleaning cycles. Water use is minimized, detergent is automatically injected and the temperature is carefully monitored. The system: a CE-3000 Sanitation System with a 37" dia turntable and 44" work height, all wetted parts are stainless steel, automatic filling and dumping of water, injector pump for detergent, high volume centrifugal blower for drying, fixtures available for all slat lengths and the contact points are plastic.