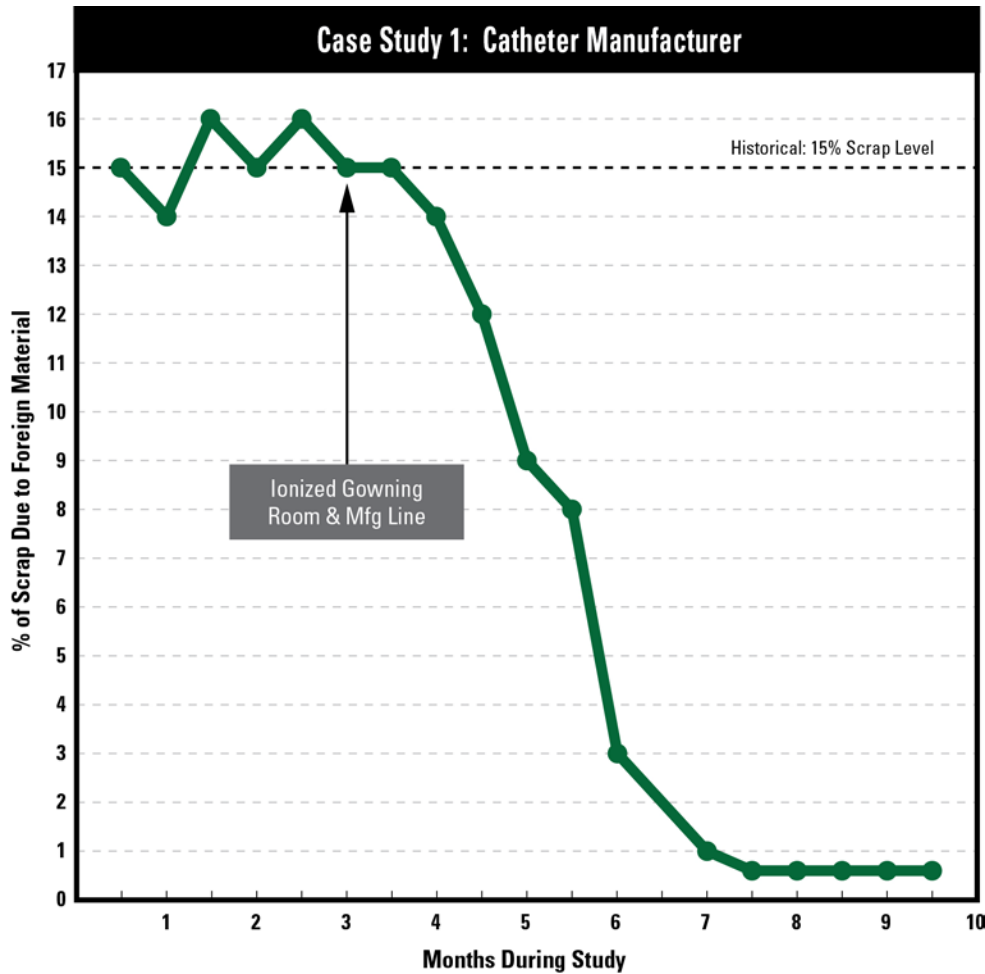


Yield Improvement: Catheter Manufacturer

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This is a case study for a major **catheter manufacturer**. Their yield losses from particle contamination (scrapped product) historically were around 15%. Simco-Ion defined the types of ionization needed and installed a ceiling based room ionization system above one of their more problematic manufacturing lines as well as in their gowning room. Overhead ionizing blowers were also implemented at the entrances and exits to the gowning room. The facility monitored the scrap levels after activating the ionization systems and the summary chart is below.



Observing the data above, the room system ionization (gowning room and pilot manufacturing line together) was activated in the 3rd month of the study. Up until then, scrap levels were at their historic 15% level. Once the ionization was activated, the scrap levels fell to insignificant levels. We note here that it took over 4 months to reach that final level, as room ionization systems take a few months to “clear out” particles that are statically attached to the ceiling, walls, equipment, etc. This is a typical result in the many life sciences manufacturing facilities reporting the benefits of room ionization. In fact, when room ionization systems are first activated, the first day or so of operation usually results in a visual dust cover over all the objects below. For that reason, it is important to cover all microscopes, equipment, etc. with plastic sheet covers so that they are not affected from the “particle dump” when room system ionization is first activated. Until the ionization systems were installed and activated at this facility, particle contamination yield losses were the number 1 cause of product scrap. After the ionization was implemented (with particle contamination yield losses falling to insignificant levels), particle contamination losses fell completely off of their Pareto charts (not in their top 10 causes at all for scrapped product).