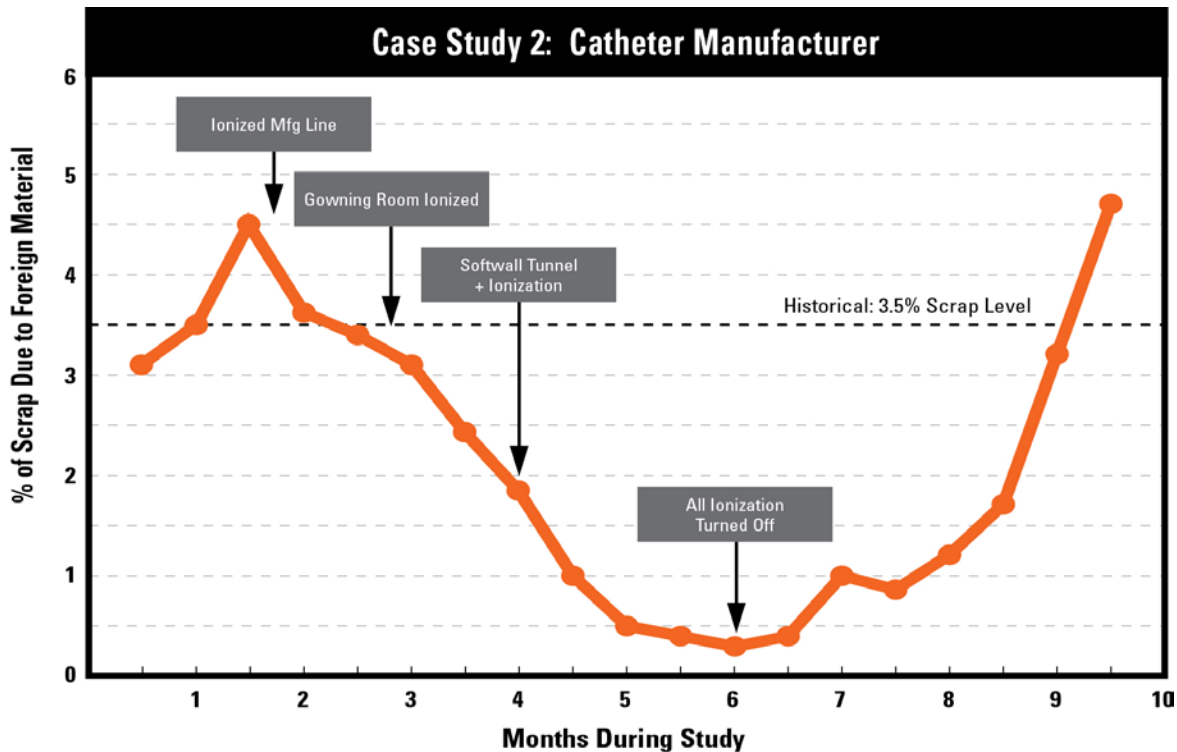


Yield Improvement: Catheter Manufacturer

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This is a 9 month case study for a major **catheter manufacturer**. Their yield losses from particle contamination historically were around 3.6%. Simco-Ion defined the ionization systems needed and installed a ceiling based room ionization system above one of their more problematic manufacturing lines initially. A month or two later, overhead ionizing blowers were implemented at the entrances and exits to the gowning room. Room system ceiling ionizers were not implemented (although highly recommended by Simco-Ion for this pilot line study). The facility monitored their scrap levels due to particle contamination causes after activating the ionization systems and the summary chart is below.



Observing the data above, the ceiling based room system ionization (above the pilot manufacturing line) was activated in the 2nd month of the study. Up until then, scrap levels were at their historic 3.6% level (which would shoot up to over 5% on occasion). A month later, the gowning room was outfitted with overhead ionizing blowers at the entrance and exit. A month after that, a soft wall walkway with ionization was installed to insure personnel were continually ionized in all areas during the study. (This more simulated the case where complete room system ionization is in all areas of a facility – from gowning room through manufacturing.) Four months after the initial ionization implementations were activated, the scrap levels had fallen to 0.5%. We note here that it took about 3 months to reach that final 0.5% 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 facilities reporting the benefits of room ionization.

Management at this facility then directed the ionization equipment to be shut off completely, to determine which of several change factors was responsible for the improvement in scrap loss. A gradual rise in the scrap rate ensued over the next few months, and returned to the historic 3.6% level (and even above). This provided proof positive that the ionization system was indeed responsible for the reduced scrap levels.