New Cleanroom Gowning Area Technology Proves to be Beneficial
Jay Hamlin, Pat Malone, Brad Meyer

Background:
Hybrid Manufacturing areas are controlled environments called “cleanrooms”
Gowning rooms are entries located adjacent to cleanrooms
Items used for containing “people particles” are “donned” or “put on” in the gowning room before entering the cleanroom (bouffants, face masks, garments, ESD shoes, and gloves)
Blue Tacky Mats are floor mats used to capture dirt from our “street shoes” as we enter the gowning room
Bldg 8 spent $24,000 on Blue Tacky Mats in 2009
Bldg 8 threw approximately one ton (2028 lbs) of used plastic tacky mat sheets in the trash in 2009

Method:
A Project Plan was developed and presented to Hybrid Manufacturing Management
Financial feasibility was analyzed - $40,000 will be spent on the Dycem floor material and installation, which is 20 months worth of Blue Tacky Mats- the Dycem material should last for 5 years or 60 months. A financial benefit is forecasted
Management approves the project plan
Airborne particle counters were added to gowning room Aug 24th
Collected 12 weeks of particle data with Blue Tacky Mats in use
Dycem material was installed on November 27th, 2009

Results:
Airborne particles in the Bldg 8 gowning room are reduced 75%
No more huge release of particles when dirty top sheets of the Blue Tacky Mat stacks are being peeled off
People are bringing dirt out of the cleanroom via their ESD shoes

Summary of the Dycem Cleanzone Premier Floor Covering:
Much cleaner – way less airborne particles in gowning room
Saves money – in the 5 year life of the Dycem floor material, $80,000 will have been saved over buying Blue Tacky Mats
Saves time – Custodians report 2 hours per day savings
More GREEN – significantly less plastic going into the trash- more than 5 tons of plastic over the next five years not going into the landfill

An Opportunity for Improvement was Identified
A new permanent “Tacky Mat” substitute was introduced by Dycem Corporation
Material is called “Dycem Cleanzone Premier Floor Covering”
No peel off layers, the Dycem floor material is cleaned with a Steam Cleaner (no chemicals or detergent used for cleaning)
Lifetime for the Dycem floor material is 5 years- in that time, bldg 8 will have spent $120,000 on Blue Tacky Mats

The benefits of the Dycem material were anticipated to be:
• Less particles in the gowning room
• Less expense (no blue tacky mats would need to be purchased)
• More Green (no more plastic tacky mat sheets in the trash)