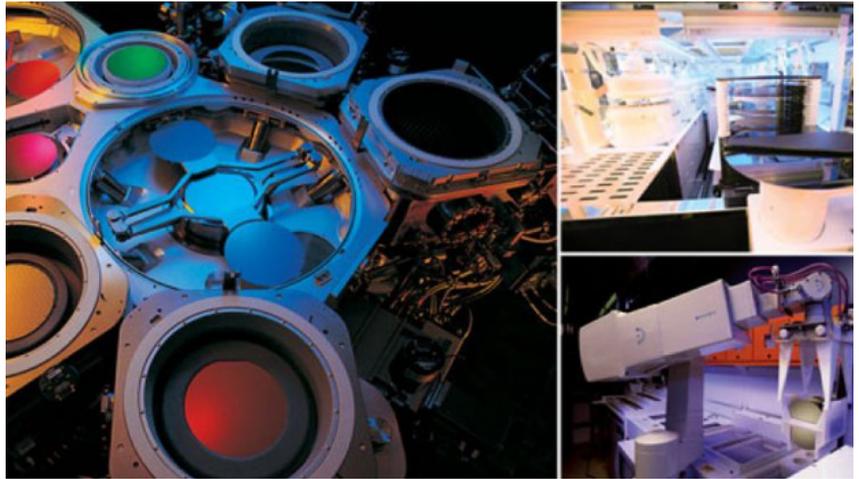


CICOIL[®]

Case Studies

Clean Cables Save the Day

**Class 1 Clean Room Flat Cables
Eliminate Downtime for
Semiconductor Customer**



Background

Customer manufactures high speed pick-and-place assembly systems utilized on semiconductor wafer handling robots. At times the systems run continuously within a cleanroom 24 hours a day, 7 days a week and uninterrupted operation is a must.

Challenge

Current Class 100 clean room round cables need to be replaced every 3 months, and do not meet the upgraded systems Class 10 Clean Room environment requirements. They often also cause friction to the pneumatic tubes also utilized within the cable track. Customer wanted to reduce the number of cables in use, increase production uptime, and find a flexible cable that better utilizes their production space.

Solution

Cicoil offered a highly flexible Class 1 clean room rated cable solution that was able to replace 5 round cables and 4 Teflon[®] tubing assemblies with 2 flat Teflon[®] tubing + electrical conductor combination cables.

Results

Not only was Cicoil able to provide the cables, but were able to provide fully terminated assemblies with the customer's preferred connectors as well. Cicoil's cable assembly technicians are certified to IPC J-STD-001, and IPC-620, for cable soldering and crimping. 100% of Cicoil cables are electrically inspected for all point-to-point and electrical values, ensuring that each and every cable assembly meets 100% of the quality standards required by the most critical application. Per the customer:

"We were very frustrated with losing valuable manufacturing time due to always changing out the shorter than advertised flex life of the various round cables. Cicoil was able to help us reduce the number of cables, clean up disorganized round cable bundles and gave us a reliable cable package we were missing. Even more of a bonus, was the inclusion of the tubing inside of the cable offering long term protection and operation life."

Benefits of Cicoil Flat Cable

- Ultra-flexible, encapsulated cables are Class 1 Clean Room Rated and do not emit harmful particulates
- Unique flat cables last tens of millions of cycles in flexing applications, resulting in operation uptime and reliability
- Low Outgas Flexx-Sil jacketing material meets the Air Cleanliness requirements of ISO 146441, exceeds ASTM E595 outgassing qualifications and are suitable for vacuum environments
- Proven performance in hundreds of semiconductor equipment applications
- Cicoil's Flat cables are resistant to de-ionized water, alcohol, UV light, cold temperatures (-65°C) and many chemicals

A Few Related Customers



Speak with one of our Flexible Cable Solutions Specialists to discuss your inflexible application requirements. Our team of experts will help with all of your cabling, assembly, and value-added needs.

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