

Industry: Electronics
Application: Machining
Material(s): Aluminum
Product(s): Pneumatic Conveyors

Application Profile

Precise Surface Finish Milling

Situation

- Seagate in Northern Ireland produces 0.0015" (0.04mm) thick aluminum disks for hard drives, which are precision machined to a specific ID & OD while held under vacuum. Surface finish is critical so chips must be removed immediately. An existing system from a competitive supplier was unable to perform consistently.

Mayfran Solution

- Pneumatic suction-based chip conveyor with custom-designed hood for at-the-tool chip removal
- Run and stand-by fan units to ensure constant availability

Key Features

- Innovative bell mouth opening behind each vacuum chuck allowed for efficient and immediate chip collection

Customer Benefits

- Reduced defect rates on their 250K disks produced per day, from 5-8% to less than 1%, resulting in tremendous savings

Outcome

- After operating the system for 10 years successfully, this facility closed and the work was transferred to India
- Seagate contracted with Mayfran to install a similar system in India to support the ongoing production

