

Owens Design Incorporated

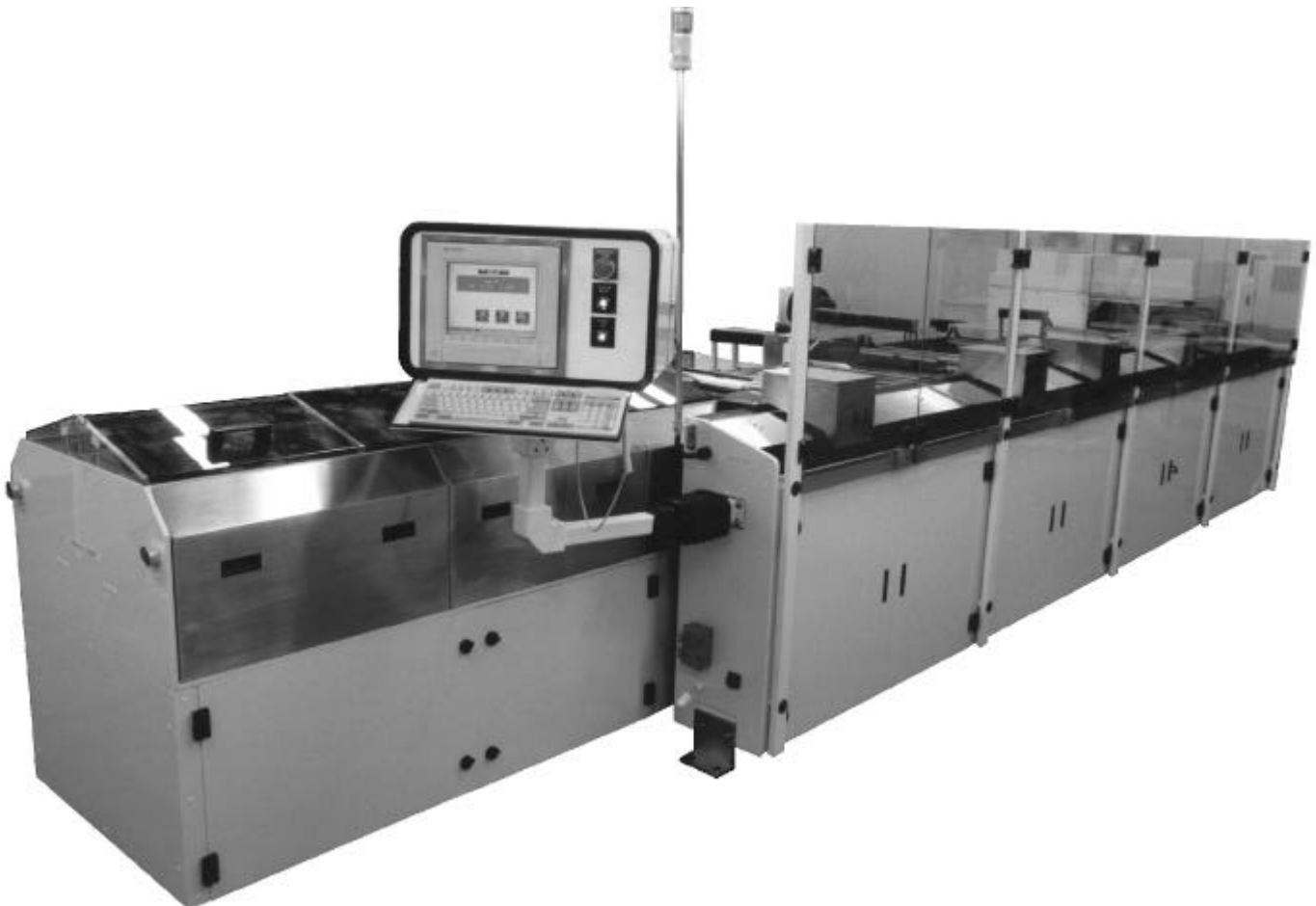
*Production  
solutions you  
can depend on.*

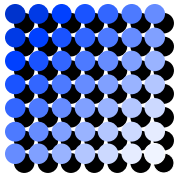
## **Production Equipment Case Study**

*Project: Disk Clean Lines*

*Industry: Computer Hard Disk*

The Hard Disk Media cleanline is a state of the art automated processing line for cleaning hard drive media. Used after the polishing stage, the Hard Disk Media cleanline accepts 2 cassettes of up to 50 disk. The disk are moved between multiple processing steps through a unique cassetteless transfer system. Processing steps include: input buffer, scrubber and various chemical cleaning tanks. The processing order can be easily reconfigured due to the standard module interface to the disk transfer system.





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## Production Equipment Case Study

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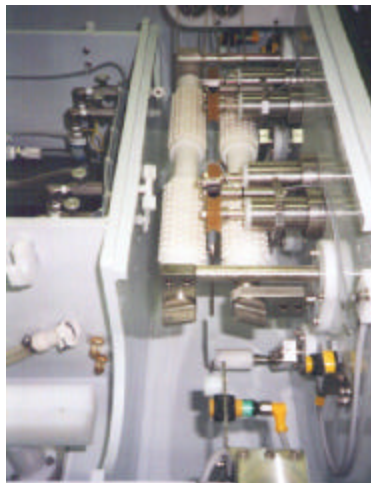
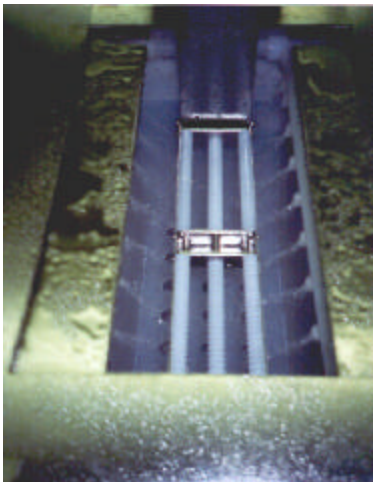
The design of the Hard Disk Media cleanline required meeting stringent throughput goals while maintaining high reliability and low contamination. The cassetteless disk transfer system moves 50 disks between processing modules at one time. This improves throughput while also dramatically reducing the contamination introduced by the cassette. Contamination is also reduced through the use of ultra pure fluid delivery components and by keeping sources of contamination below the disk plane.

Process Modules:	Input Buffer Scrubber Quick Dump Rinse Tank Ultrasonic Tank Dryer Cassette Lidder
Disk Transfer:	Cassette in, Cassetteless thereafter 50 disk / batch transfer
Cleanliness:	Class 100 output
Throughput:	600 disk / hour
User Interface:	WonderWare PC/Touchscreen
System controller:	PLC
Materials:	304 & 316 Stainless Steel, Polypro, Aluminum
Fluid Delivery:	Polypro, PVDF and Teflon wetted valving
Footprint:	94 sq. ft.

Touchscreen



Ultrasonic



Double Scrubber

Quick Dump Rinse

