



FIBER OPTIC INDUSTRY

FIBER OPTIC LASER PROCESSING LINE



Fiber Optic Assembly Line

The Challenge

Due to the immaturity of the fiber optic industry, little automation existed. Owens Design would have to develop the connector carousels, the stripping mechanisms, the cleaning, and bonding modules from scratch. Development schedule was critical as the market for the assemblies was exploding and any delay in reaching the market would mean loss of precious market share.

The Solution

Owens Design took over the complete design and manufacture of the component loading and stripping modules allowing our client to focus on completing their proprietary polishing module. We developed the fiber handling, cleaning, and stripping, as well as the system automation and software controls. The industrial design of the machine was critical as our client was developing funding sources and planned to OEM the system as well.

The Situation

As the race to fulfill ever increasing demand for fiber optic assemblies began, one of the largest manufacturers began an ambitious program to develop an automated line to assemble 5 types of high dollar fiber optic transducers. The manufacturer was developing a proprietary polishing process internally and needed a partner to develop the component loading, stripping, and bonding stations. Owens Design was chosen based on our innovative approach and experience with flexible manufacturing architectures.



Artistic Rendering of Complete Assembly Line



Innovative Connector Feed Station



Close up of Fiber Connector Feeding Mechanism