

A TELECOMMUNICATIONS OVERVIEW FOR PRECISION ENGINEERS

Dan E. Luttrell
Core Technology Manager, Machine Research
Corning Incorporated

Abstract for ASPE 2000 Annual Conference

Demand for telecommunication bandwidth has accelerated dramatically over the last 15 to 20 years. It is estimated that bandwidth requirements now double every 100 days! This growth is driven primarily by increase in data traffic, and the trend is predicted to continue for the foreseeable future.

Key technologies that have enabled this growth include optical fibers, large signal routers, erbium doped fiber amplifiers (EDFA's), and wavelength division multiplexing (WDM). Optical network devices under development, such as add-drop modules and optical switches, will enable this trend to continue and pave the way to an all optical network.

Many challenges face the industry that is developing to supply devices for the growing fiber optic communications network. Precision Engineering will be a key enabling technology for the development of network devices and the manufacturing processes and equipment needed to build these devices in volume. This presentation will attempt to give an overview of the evolving fiber optical network and then speculate on the role Precision Engineering could play in its development.

