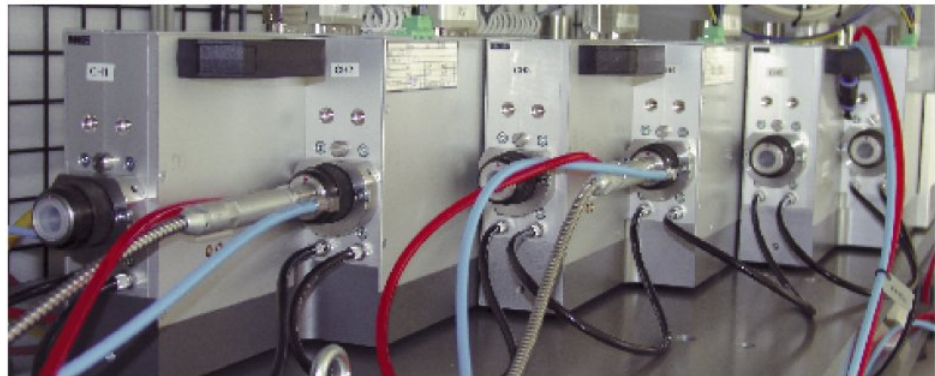
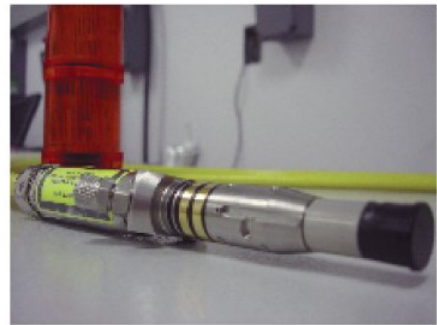


The availability of coupling light from one fiber to others greatly expands IPG's fiber laser capabilities. A single laser can be used as power source for multiple work cells reducing the total cost of capital equipment and doing different applications. For instance, one laser could weld with a 300 micron fiber in one cell and cut with a 100 micron fiber in another. Not to mention a great advantage is the ease of replacement of a process fiber in case of accidental damage while the main laser source stays intact and operational for other channels.



*Six channel beam switch*

Available 2, 4, 6 or 8 channels, beam switches can be used with up to 10 kW power levels. Depending on the power level, feeding fibers can be 50 or 100 microns and the beam can be coupled to as small as 100 and 150 micron, respectively, featuring unbeatable beam quality in comparison with solid-state lasers. The beam can be switched to any channel from any position within 50 ms. A state of the art safety system constantly monitors the position of mirrors, fiber interlocks, scattered light inside beam switch cavity, water flow for optical connectors and other important parameters.



*IPG high power fiber connector*

The optical couplers or beam switches could be integrated inside the main laser cabinet or provided in a separate cabinet for remote installation on the work floor outside the laser for more flexibility and convenience.