

HOLLOW CORE WAVEGUIDE FOR LASER GENERATION OF ULTRASONIC WAVES

Abstract

A laser transmission system for an ultrasonic workpiece detection system operating in the wavelength range between 3 μ m and 5 μ m. The system comprises a source (102) coupled via a first lens assembly (104) and first hollow core waveguide to an optical fibre (108). The system optical exit comprises a further hollow core waveguide (110) coupling the optical fibre to an exit lens assembly (112).

Figure 1