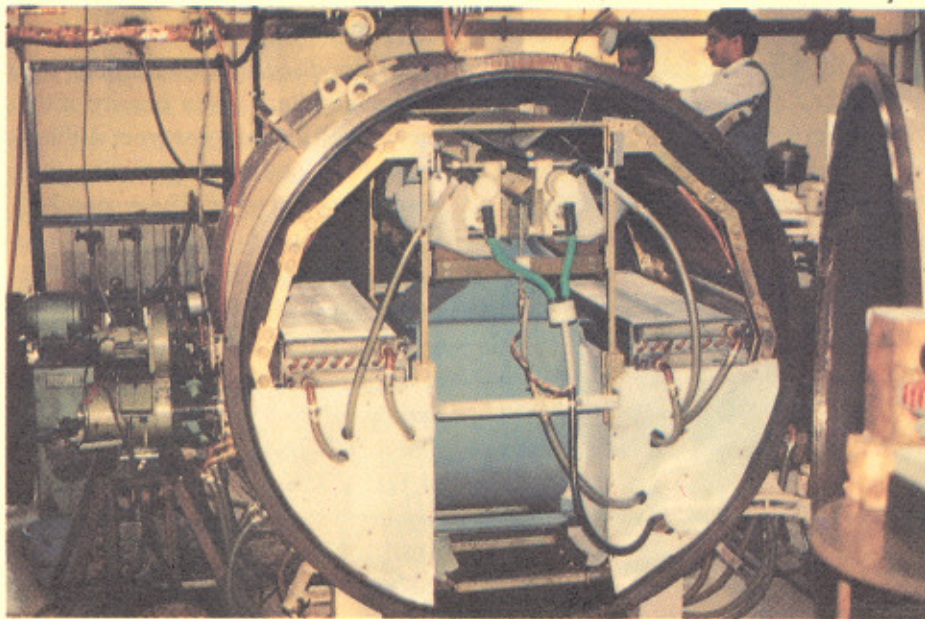


Newsletter

CENTRE FOR ADVANCED TECHNOLOGY

Year - 4

Dec. 1991



RESEARCH AND DEVELOPMENT

LASER PROGRAMME

2.5 kW CW CO₂ Laser

A transverse gas flow high power continuous wave (CW) CO₂ laser has been developed at CAT. While optimisation of the system is still in progress, the laser is already operating at a CW power of more than 2.5 kW in a beam of 30mm diameter and ~2 mrad divergence. The

laser has also been used to cut mild steel sheets of up to 5mm thickness. The photograph on top shows the inside of the laser chamber. Details of the system are discussed in the article appearing in this issue.

High repetition rate N₂ Laser with fiber optic delivery system

A high repetition rate (100 Hz) Nitrogen laser with an average power of 2.5 mW and a fiber optic delivery system