

Oil/air regulation

1 Oil/air regulator

The oil and air regulation for the burner are handled by two servomotors. The oil flow is regulated by a valve, which is regulated by a servomotor. The air damper is regulated by a second servomotor. Figure 1 illustrates the regulator system. The servomotors are controlled by the control system during start-up/stop and operation of the burner.

Illustration of the regulator system

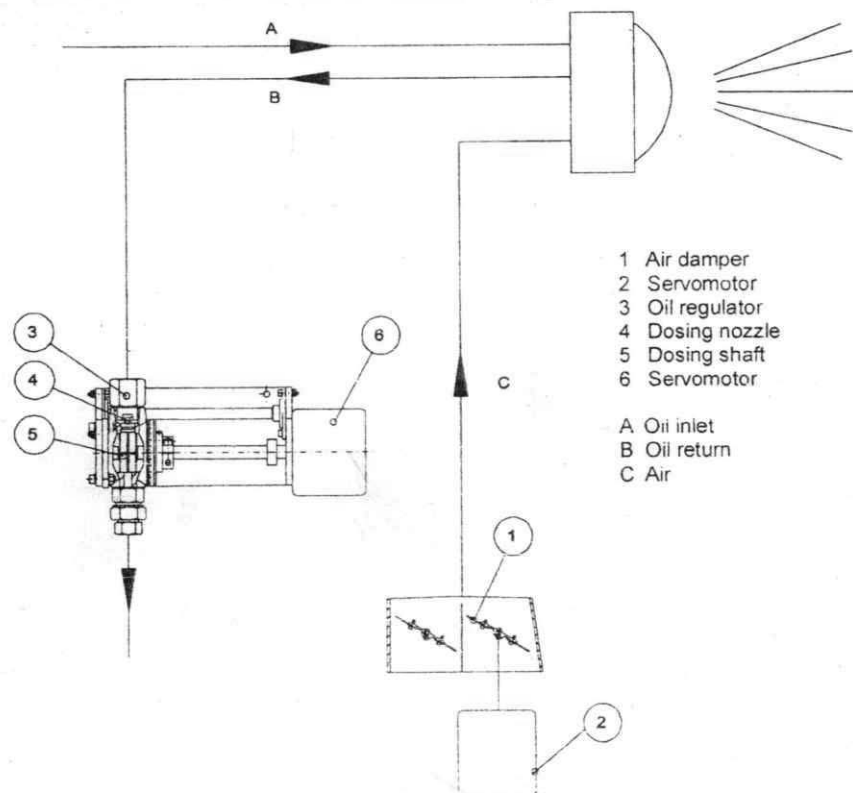


Figure 1

oilburn-m30.cdr

The oil quantity burned is determined by nozzle size and oil pump pressure. The oil regulator regulates the return oil flow according to the capacity demand. At partial load the oil regulator is open so that the oil throughput in the valve is at maximum and the return oil flow pressure at minimum. At full load the oil regulator is closed whereupon the oil throughput is at minimum and the pressure at maximum. The air quantity is matched to the fired oil quantity by means of the control system, which controls the servomotor for the air dampers.