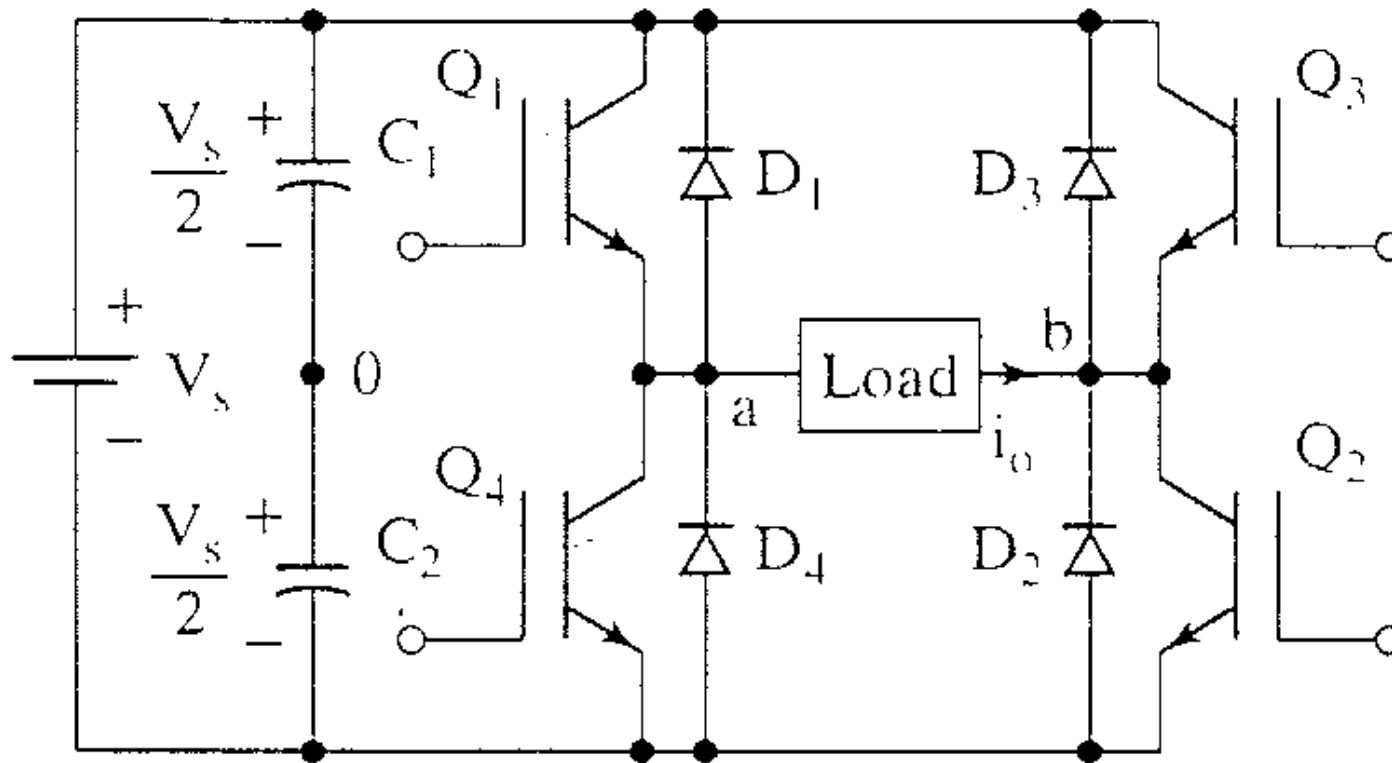
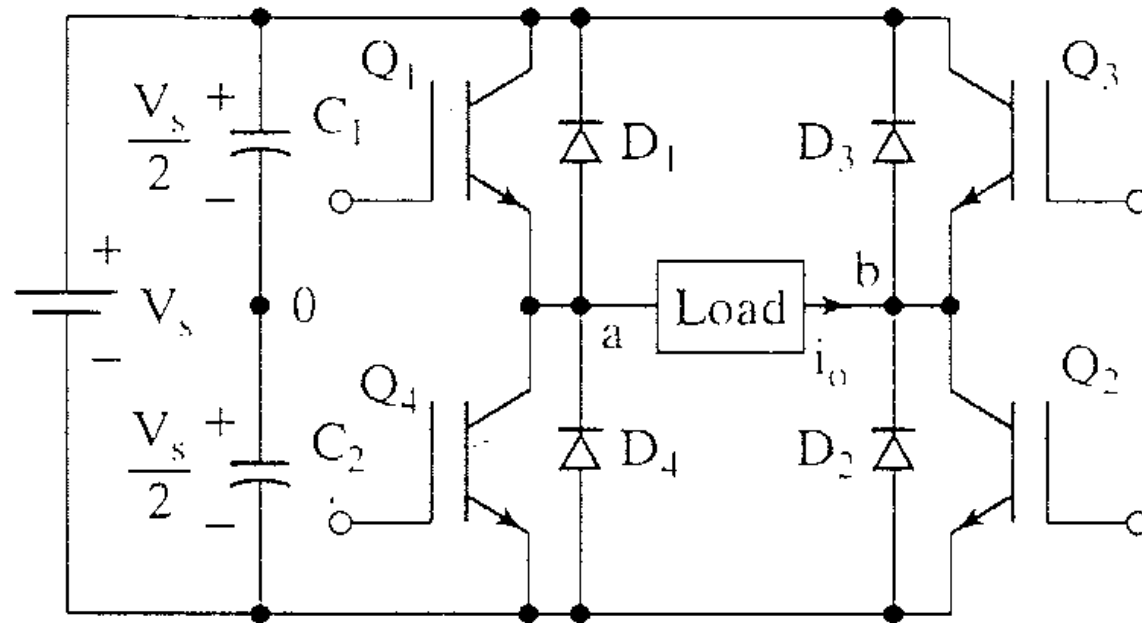


Single-phase full-bridge inverter

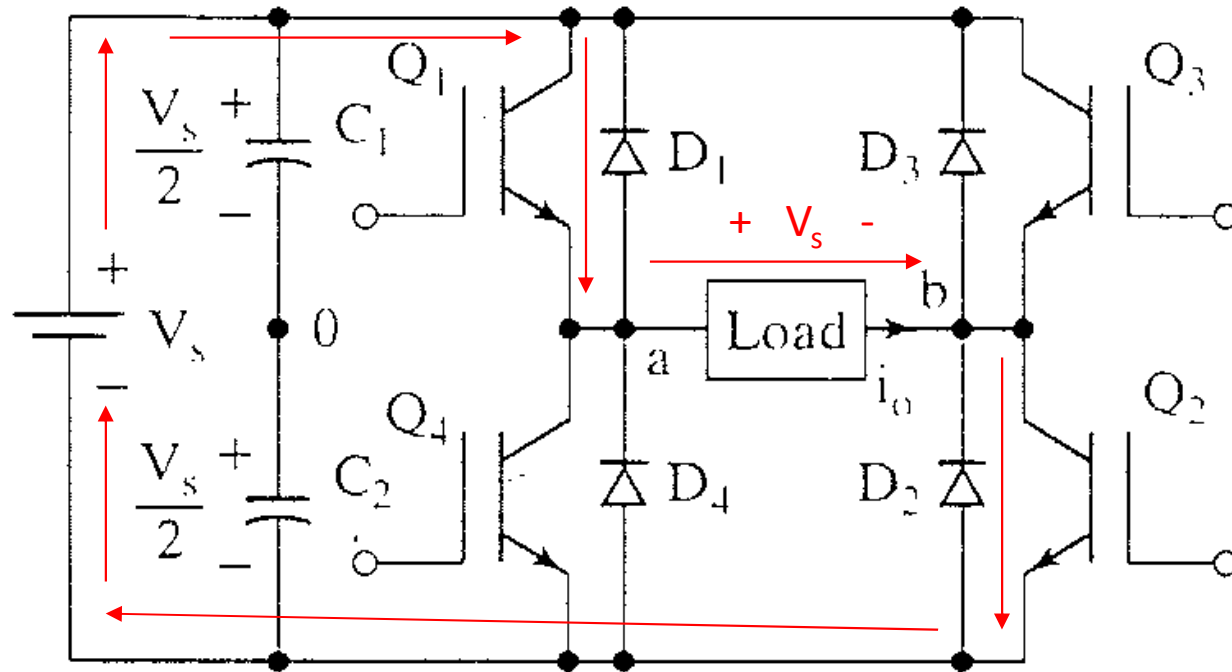


Operational Details

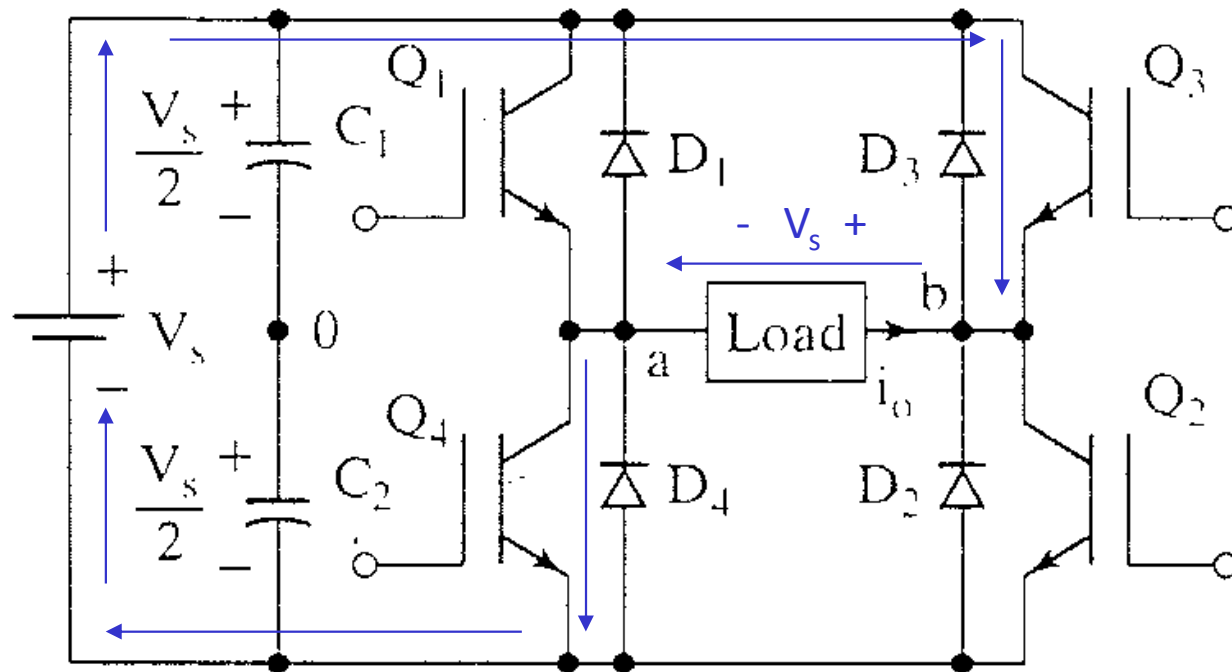


- Consists of 4 choppers and a 3-wire DC source
- Q_1 - Q_2 and Q_3 - Q_4 switched on and off alternately
- Need to isolate the gate signal for Q_1 and Q_3 (upper)
- Each pair provide opposite polarity of V_s across the load

Q_1 - Q_2 on, Q_3 - Q_4 off, $v_o = V_s$

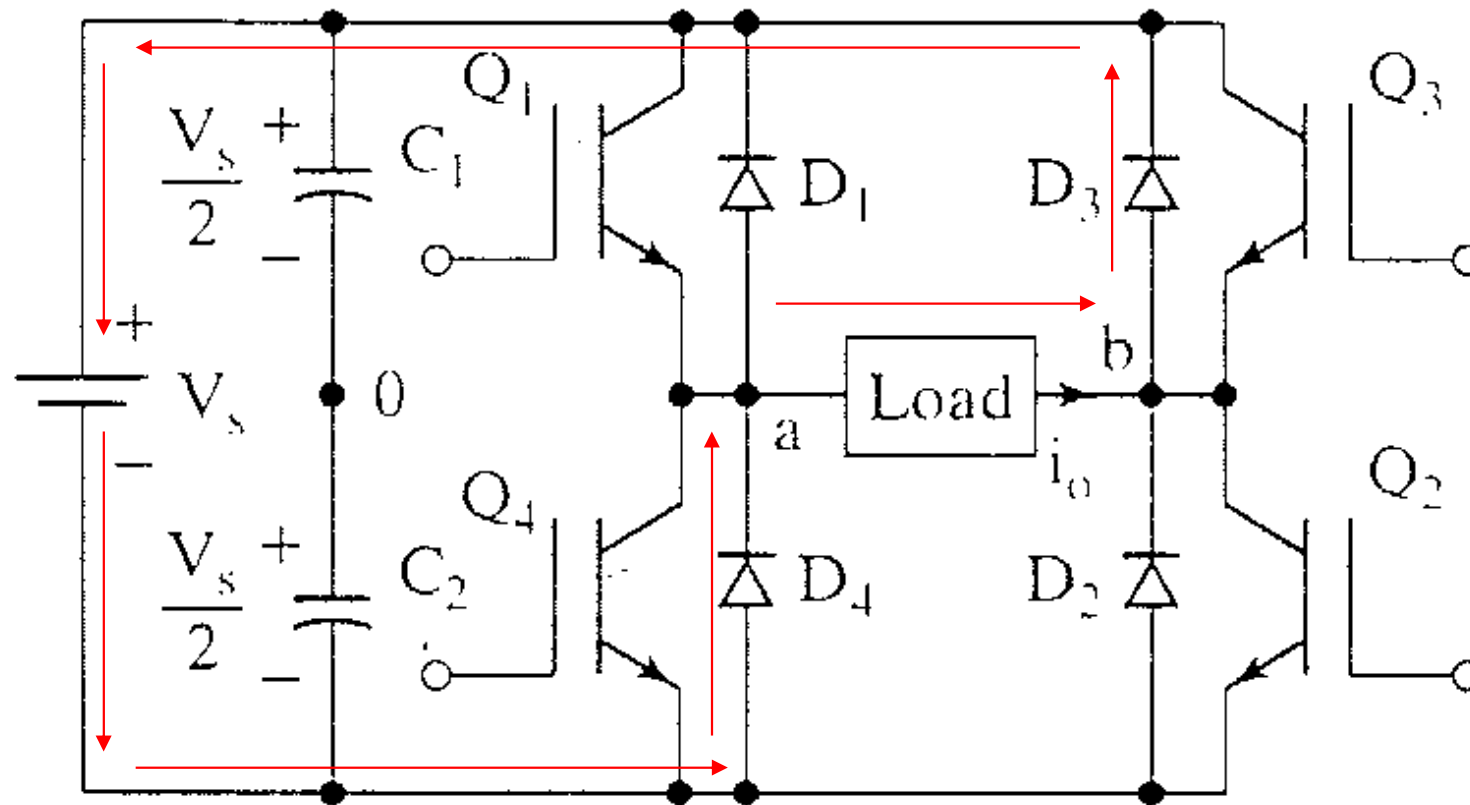


Q_3 - Q_4 on, Q_1 - Q_2 off, $v_o = -V_s$

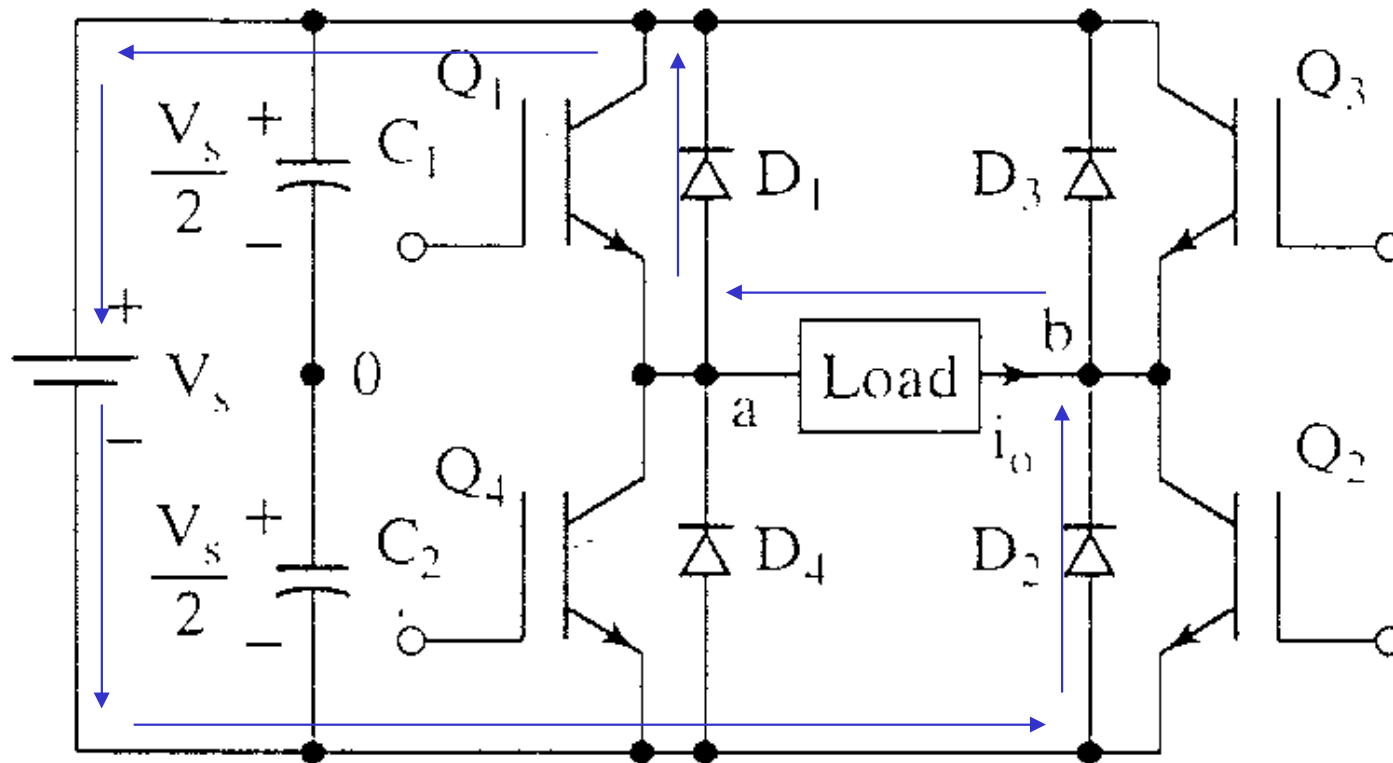


When the load is highly inductive

Turn Q_1 - Q_2 off – Q_3 - Q_4 off



Turn Q_3 - Q_4 off – Q_1 - Q_2 off



Load current for a highly inductive load

