



Figure 5-11 Piping and decoking of the heater (courtesy of Red Bag/Bentley Systems, Inc.). After tubes become headed, steam is injected at the convection inlets, valves 1, 2, 4, and 5 are closed; 3 is open. To start burning, steam flow is reduced and air is introduced by opening valve 4. For reverse flow, valves 2, 3, 4, and 6 are closed; 1 and 5 are open. Valve 2 is opened only if reverse burning is required. While pass 1 is being decoked, steam is injected into pass 2 to keep the tubes cool.