

EQUIPMENTFUNCTION

R-72

DIRECT CHLORINATED EDC POST REACTOR. REACTS EXCESS ETHYLENE.

D-72

EDC POST REACTOR LIQUID BED DRUM.

E-72

BED CIRCULATION COOLER.

E-2E

D-72 VENT CONDENSER.

E-3E

POST REACTOR PROPYLENE CONDENSER.

REACTIVE POTENTIALSOLUTION

1. LIQUID CHLORINE

A. ALL CHLORINE LINES ARE STEAM TRACED.

B. CHLORINE LIQUEFACTION TEMPERATURE IS CALCULATED FROM PRESSURE AT R-72 METER RUN.

C. LOW CHLORINE TEMPERATURE ALARM.

D. REACTOR SHUTDOWN PROCEDURE WITH DIRECT INTERCOM TO CHLORINE PLANT.

2. VAPOR PHASE REACTION

A. HIGH TEMPERATURE ALARM (90°C) AND HIGH TEMPERATURE SHUTDOWN (93°C) AT D-72 TOP.

B. HIGH TEMPERATURE ALARM (90°C) AND HIGH TEMPERATURE SHUTDOWN (93°C) AT E-2E INLET.

C. TEMPERATURE MONITOR AND ALARM (+10) E-3E VENT OUTLET.

D. TEMPERATURE MONITOR AND ALARM ON VENT TO FIRETUBE BOILER.

E. LOW D-72 LEVEL SHUTDOWN.

REACTIVE POTENTIAL

SOLUTION

3. REACTOR BALANCE

A. CHLORINE FLOW IS SET BY ON-STREAM ANALYZER TO MAINTAIN 3% EXCESS CHLORINE IN THE VENT TO THE FIRETUBE BOILER.

B. ETHYLENE ANALYZER SAMPLES VENT FLOW.

4. LOSS OF AIR

CHLORINE CONTROL VALVE IS SPRING LOADED TO CLOSE.

5. LOSS OF POWER

THE TRIP SCHEME WILL ACTIVATE TO SHUT THE CHLORINE CONTROL VALVE.