

# CASE STUDY

## A kraft paper mill in Eastern India



### Problem

- Impact on machine production due to poor condensate evacuation
- Poor condensate recovery (65%)
- High back pressure (2.5 barg) in main common tank
- Boiler pressure not maintained
- High specific steam consumption (2.1-2.2 ton per ton of paper)

### Objective

To optimise specific steam consumption with improve productivity and condensate recovery factor

### Solution

Forbes Marshall carried out a detailed study of the plant and engineered a thermal grouping cascade based solution for effective utilisation of flash steam, alongwith with the following solutions

- [Steam flow meter](#) and condensate flow meter
- [Pressure, differential and level control loops](#)
- [Mini distributed control system](#)

### Benefits

- Specific steam consumption brought down to 1.6 - 1.7 ton per ton of paper
- Improvement in condensate recovery - from 55% to 90%
- Boiler pressure maintained at desired levels
- Realtime monitoring and control of all parameters
- 6% increase in productivity