

ULTRAMAX[®] Application Profile

Paper: Energy Savings

Process: Tissue paper mill, with through air flow and yankee drying.

Objectives: Reduce energy cost while maintaining quality, for constant speed.

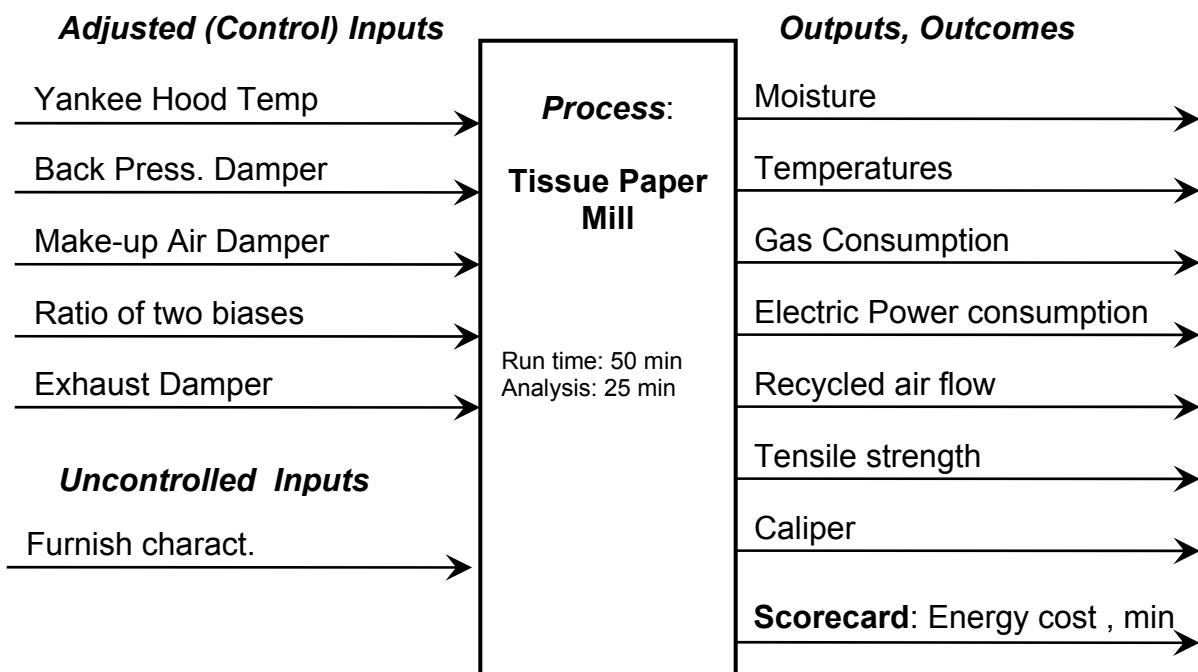
Results Summary: 7.1% reduction in energy cost. The optimum was at wide-open recycled air flow.

Software sensitivity analysis, confirmed by engineering, resulted in the desirability to increase recycle fan and duct sizes. The increase was implemented. The next optimization, not at max recycle capacity, saved another 8.5% energy cost.

Reengineering cost was a fraction of extra annual savings.

Total savings of 15.6%. The solution was applied to eleven other mills (total K\$/yr gains not disclosed).

DECISION INPUT/OUTPUT DIAGRAM



Optimizing the Scorecard implies satisfying constraints (not shown)