APPLICATION

Under caustic recovery system / caustic soda recovery plant , Caustic concentration has applications in every industry where dilute caustic is produced due to washing and the concentrated liquor can be reused Various applications where caustic is reused are :

Knit Mercerising

Knit mercerising usually has very few impurities such as size, starch and hence the recycled caustic is also pure. The recycled caustic can be reused for a longer period of time before the cumulative impurities reach unacceptable levels.

Woven Mercerising

Grey knit mercerising has lot of size in the weak liquor and hence the recycled caustic has to be replaced frequently say once in a week Desized Mercerising contains relatively lesser impurities and hence can be recycled longer say around 1 - 2 months Bleached Mercerising hardly contains any impurities and hence caustic can be recycled for 5 - 6 months without having to replace it.
Yarn mercerising

Denim Mercerising

Weight Reduction machine for Polyester
During weight reduction of polyester the weak liquor of caustic generated can be recycled after separation of suspended impurities and oligomers. Black liquor concentration in case of paper industry where the caustic weak lye from the digester is concentrated. The concentrate can then be taken to either a Reboiler or Gasifier or a Fluidised bed dryer for further treatment.
Pet Jar Recycling Units where the old pet jar bottles are cleaned with soap and then washed with caustic . The jars after cleaning produce weak liquor which after recycling can be reused .
Alumina production units generate lot of caustic weak lye

Caustic recovery system / caustic soda recovery , have a payback of not above 6 months due to following reasons Reuse of caustic back in system

Here are a few advantages of a Balaji's –Green EcoEnergy Caustic recovery Plant over its competitors.

Energy Costs
Balaji's –Green EcoEnergy steam consumption is 25% to 30% lower than any other Manufacturer. Considering the fact that the running cost of CRP is almost 3 -4 times the plant cost itself, Balaji's –

Green EcoEnergy customer saves money equal to the plant cost every year.

Condensate quality
Demister pad arrangement ensures good quality of condensate not over 9pH ensuring minimum loss of caustic through condensate.

Control Systems

Entire plant operations can be automated and hence the plant can be monitored by a single person. Advanced Plants are equipped with Level, density, pH controllers along with safety modules and PLC controlled operations with SCADA.

Scope of Supply

Balaji's –Green EcoEnergy offers the plant on truly turnkey basis with no hidden scopes. Purification systems, pumps, filters are all included in the offer whereas most competitors ask client to buy it as optional accessories or get it manufactured onsite as per their specifications at clients cost.

Life of Caustic recovery Plant

Balaji's –Green EcoEnergy considers a higher corrosion allowance and hence designs higher tube thickness (1.6 mm) whereas most competitors consider tube thickness of 1.2 mm, This obviously has higher chances of damages and replacement.

Balaji's –Green EcoEnergy is so confident of its claims that we have been amongst the first to have provided the caustic recovery plant with a data acquisition system where all the inputs and outputs of the plant are connected via sensors to a computer which not only record all parameters and defaults but also can provide the data either current or history in graphical or text format. This data can be transferred to excel format and the economics of the Caustic recovery Plant can be worked out each day