



Waste water treatment

Background

- High consumption of inorganic coagulant for treatment of drinkable water;
- Episodes of high water contaminations by aluminium and sulphate;
- Elevated operation and exploration costs mainly in periods of high turbidity upstream the WWTP;
- Sludge compaction difficulty in the lamellar decanter and consequent loss of significant water volumes in the purges.

Implemented Solutions

Partial replacement of inorganic coagulant by organic coagulant in proportions up to 1/30.

Results and Conclusions

- ✓ Reduction of specific consumptions of inorganic coagulant;
- ✓ Reduction of aluminium salts and sulphate contained in drinkable water;
- ✓ Greater treatment capacity and dosage adjustment, mainly in higher turbidity periods;
- ✓ Increase of sludge sedimentation and compaction rate. Reduction of decanter purges.



Fig. 1 – Jar teste – With high turbidity waters.