Technical Note 32 LabSense Application Questionnaire

Pi are committed to ensuring that you get the best experience from your LabSense. To ensure that the LabSense is suitable to meet your coagulation control objectives we need the following information to get every installation right first time, every time. When you have completed the form please email it to your local sales organisation or direct to the factory.

Contact Info

Name
E-mail
Mobile No
Plant Name
Town
Country
Date



Application

1. Raw Water Data (please indicate units e.g. MGD, m³/hr, ml/min, etc.):

Flow	Typical:	Min:	Max:
Alkalinity	Typical:	Min:	Max:
рН	Typical:	Min:	Max:
TOC/UVA	Typical:	Min:	Max:
Turbidity (NTU)	Typical:	Min:	Max:
pH (Post Coag)	Typical:	Min:	Max:

2. Is jar testing routinely performed? Yes_____ No _____

3. Primary Coagulant

Please list actual coagulant type (aluminum sulphate, ferric chloride, polyaluminum chloride/PAC etc.), and chemical concentration if known (e.g. 48.5% aluminum sulphate, 8% Al₂O₃). If coagulant is a pre-hydrolised product (e.g. PAC), please list basicity of the product.

Chemical Concentration¹ _____% Weight/SG² _____Basicity (PAC/PAS) _____% Because WTP's can calculate their dosage various ways, we ask that you provide both the feed rate in ml/min as well as the ppm or mg/l dosage. This allows us to work out how dosage is being calculated (e.g. as liquid product, as dry aluminum sulphate, as aluminum oxide, or as aluminum). This is very important to establishing the proper instruments settings on the LabSense for automatic titration and dosage determination purposes.

Coagulant Feed Rate (e.g. ml/min)	Typical:	Min:	Max:
Coagulant Dosage (ppm or mg/l)	Typical:	Min:	Max:

4. Secondary Coagulant

A secondary coagulant is defined as any inorganic or organic product that is fed along with the primary coagulant that aids in charge neutralisation (e.g. a low molecular weight polymer like DADMAC). Please list actual coagulant type (aluminum

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sulphate, ferric chloride, polyaluminum chloride/PAC etc.), and chemical concentration if known (e.g. 48.5% aluminum sulphate, 8% Al₂O₃). If coagulant is a pre-hydrolised product (e.g. PAC), please list basicity of the product.

Chemical Concentration ¹ %	Weight/SG ²	Basicity (PAC/PAS)	%
Coagulant Feed Rate (e.g. ml/min)	Typical:	Min:	Max:
Coagulant Dosage (ppm or mg/l)	Typical:	Min:	Max:

5. Flocculant

Flocculant is a high molecular weight polymer that is fed to bridge coagulated particles into larger floc agglomerations. Please list actual polymer type and polymer concentration.

Anionic/Cationic Concentration¹ _____%

Coagulant Feed Rate (e.g. ml/min)	Typical:	Min:	Max:
Coagulant Dosage (ppm or mg/l)	Typical:	Min:	Max:

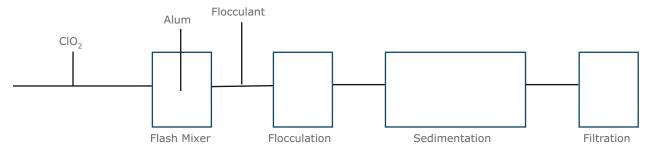
¹ Provide the chemical concentration value that is used in the dosage calculation (e.g. 48% is commonly used for Alum when calculating as dry aluminum sulphate).

² Provide the weight or specific gravity of the chemical.

6. List all other chemicals (chlorine, caustic, potassium permanganate, filter aids etc.), that are fed upstream of filtration along with their typical dosage.

Drawing

Please provide a simple plant diagram (hand sketch) that describes the process and shows points of chemical addition. Something like this:



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