**CHEMINDUSTRIAL LAB NEUTRALIZER questionnaire**

**Instructions:**
ChemIndustrial makes a full range of automatic and semi-automatic neutralizers for lab wastes. Prices are highly dependent on configuration, capacity and degree of automation.

This **LAB NEUTRALIZER** questionnaire will help you define your own project requirements and it will provide ChemIndustrial with the information needed to provide a realistic price.

Complete a separate questionnaire for each neutralizing system needed on your project. Use attachments as needed to give us comprehensive information.

Need help with this questionnaire? Call, fax or e-mail us using the contact information at the bottom of this page.

**Customer company:**

**Customer contact:**
Person:  
Title:  
Address 1:  
Address 2:  
Phone:  
Fax:  
e-mail:  

**Customer project name:**

**Customer project location:**

**Previous system:**
Will this system replace another system:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

If YES, please provide a short description of the prior system.

If YES, why is the prior system being replaced?
Select degree of automation required in the new system:

- Automatic pH control only
  - Liquid to be treated will be added manually to the neutralizer
  - Neutralized liquids will be drained manually
- Full automation
  - Automatic pH control
  - Liquid to be treated will arrive via pipework
  - Neutralized liquids will pump out automatically

Other:
- Please describe:

Help us with configuration

- Describe the Lab facility. Is it EXISTING NEW
- Is the lab in one building? YES NO
- Is the lab on: A SINGLE FLOOR SEVERAL FLOORS?
- Are lab wastes completely separated from other streams that don’t require neutralization? YES NO
- Does lab waste exit via one outflow? YES NO
- Is neutralizer location already designated? YES NO
- Can lab waste gravity flow to the location? YES NO
- Is the selected location close to the waste outflow point? YES NO
- How much installation space is available
  - Length=
  - Width=
  - Height=

Help us size the system:

- Lab schedule:
  - Lab mainly operates 8 hours per day YES NO
  - Significant operations outside the 8 hour day? YES NO

- How much liquid do you need to neutralize?
  - maximum quantity per minute: Liters Gallons
  - maximum quantity per 24 hours: Liters Gallons

If no volumetric information is available, provide a description of the lab waste sources:
- How many sinks?
- How many continuous streams such as rinsing, cooling, etc?
- List and quantify other liquid lab waste sources needing treatment:
Help us select the right chemical feed sub-system:

What is the acceptable range of pH values at the outflow of the new system?
- pH 6.0 to pH 9.0?
- Other (specify):

Will your wastes be acidic some or all the time?  
- YES  
- NO

What neutralizing agent will we use when the waste stream is acidic?
- 50% NaOH
- Other (please describe)

Will your wastes be basic at least some or all the time?  
- YES  
- NO

What neutralizing agent will be used when the waste stream is basic?
- Concentrated H2SO4
- Other (please describe)

Characteristics of liquids to be treated:

- Clean Liquid  
- Liquid with suspended solids  
- Slurry

Describe constituents that require neutralization:

Temperature range of liquids to be treated
- Minimum: = 0°F or 0°C
- Maximum = 0°F or 0°C

Viscosity of liquid to be treated (provide value if known):
Or is like (describe by marking scale):
- Water  
- Motor Oil  
- Molasses

Density or Specific Gravity of liquid to be treated:

Expected Quantity per hour:
- Minimum: = Units
- Normal = Units
- Maximum = Units

Expected Quantity per 24 hour day:
- Minimum: = Units
- Normal = Units
- Maximum = Units

Help us understand your available utilities:

What electric service is available?

<table>
<thead>
<tr>
<th>Circle available services</th>
<th>60Hz</th>
<th>50Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-phase</td>
<td>120Vac</td>
<td>220Vac</td>
</tr>
<tr>
<td>Three-phase</td>
<td>208Vac</td>
<td>240Vac</td>
</tr>
<tr>
<td></td>
<td>220Vac</td>
<td>220Vac</td>
</tr>
</tbody>
</table>

Are there special electrical requirements?  
- Explosion proof  
- Other

Is compressed air available?  
- YES  
- NO
Help us understand the logistics of your project:
When do you expect to go ahead with this project?

Who will design the piping and electrical connections?

Who will install the system?

Who will commission the system?

Who will operate the system?

Does the designated operator have experience with automated process systems?

Other Notes:
Please provide any other information relevant to this project: