

## USER'S REQUIREMENTS

### Process needs

Process needs		ENERGY CONTROL UNIT		
1	Process equipment	<input type="checkbox"/> Reactor	<input type="checkbox"/> Dryer	<input type="checkbox"/> Filter dryer
2	Capacity	litres		
3	Construction	<input type="checkbox"/> Glass lined	<input type="checkbox"/> stainless st.	<input type="checkbox"/> Hastelloy
4	Thickness	mm		
5	Reactor diameter	mm		
6	Type of jacket	<input type="checkbox"/> Half pipe		<input type="checkbox"/> Double jacket
7		Length m		Nb. of injectors
8		Diameter mm		Volume litres
9		Radius mm		Surface m <sup>2</sup>
10	Included reactor drawing :			
11	Type of agitator	<input type="checkbox"/> turbine	<input type="checkbox"/> propeller	<input type="checkbox"/> Impeller+cp. <input type="checkbox"/> Impeller <input type="checkbox"/> Anchor
12	Mobile diameter	mm		
13	Agitator power	kW		
14	Agitator speed	rpm		
15	Range of process temperatures		⊖ mini °C	⊕ maxi °C
16	Exothermal reaction	kcal/h		at the temperature of °C
17	Process solvent in the reactor :			
18				

### Utilities

19	Heating fluid(s)	<input type="checkbox"/> steam	<input type="checkbox"/> electricity	<input type="checkbox"/> hot fluid
20	Inlet pressure	barg		
21	Outlet pressure	barg		
22	Inlet temperature	°C		
23	Cooling fluid(s)	<input type="checkbox"/> water	<input type="checkbox"/> glycoled w.	<input type="checkbox"/> cooled fluid <input type="checkbox"/> liquid N2
24	Type			
25	Concentration	mass %		
26	Inlet pressure	barg		
27	Outlet pressure	barg		
28	Inlet temperature	°C		

### Layout

29	Factory			
30	Item			
31				
32	Zone	<input type="checkbox"/> no ATEX class	<input type="checkbox"/> ATEX zone1	<input type="checkbox"/> ATEX zone2
33	Temperature class		T	
34	Electricity	Power voltage :	<input type="checkbox"/> 400/660V	<input type="checkbox"/> other :
35		Instrument voltage :	<input type="checkbox"/> 24V=	<input type="checkbox"/> other :
36	Compressed air	Pressure	barg :	
37	Available layout	Height : mm	Wide mm	Depth mm
38				
39	Included layout drawing :			
40	Connection skid-reactor	Length in or out m		Number of elbows
41		DN		
Document acceptance :		<input type="checkbox"/> Conform	<input type="checkbox"/> No conform	Visa                      date



For inquiry	Writer:		
<p><b>Celsius sarl</b>                      184 chemin du Bouray 38200 Villette de Vienne - France                      Tel : +33 (0)4 37 02 27 15      Fax : +33 (0)4 74 54 29 52                      Site : <a href="http://www.celsius-process.com">http://www.celsius-process.com</a>                      E-mail : <a href="mailto:info@celsius-process.com">info@celsius-process.com</a>      All rights reserved</p>	Date:		
	Document n°	Folio	Revision :
		<b>1</b>	<b>A</b>