

Design Considerations – Hydrogen Gas Supply

The HySTAT H₂ containerised gas production system can accommodate a range production and storage needs. The following questionnaire is designed to begin the process of creating a purpose built H₂ production system to meet your current and future needs.

Production Requirements			
1. What is your application?		5. Storage requirements?	
Power generation – fuel cells	<input type="checkbox"/>	Yes	<input type="checkbox"/>
Electronics manufacture	<input type="checkbox"/>	No	<input type="checkbox"/>
Food production	<input type="checkbox"/>	If yes, how much?	Nm ³
Cooling systems	<input type="checkbox"/>	6. Is demineralised water available on site? Demineralised water is required for H ₂ production.	
Other (please specify):	<input type="checkbox"/>	Yes	<input type="checkbox"/>
2. What purity is required? Current purity levels start at 98.80%.		No	<input type="checkbox"/>
Nominate your purity:	%	7. Is standard water available on site? The HySTAT system can incorporate a reverse osmosis system to demineralise this water.	
3. What is the average and maximum capacity required?		Yes	<input type="checkbox"/>
Average requirement:	Nm ³	No	<input type="checkbox"/>
Maximum requirement:	Nm ³	8. Is cooling water available on site? Cooling water is a production requirement. The HySTAT system can provide a closed loop cooling option (this prevents contamination).	
4. What operating pressure?		Yes	<input type="checkbox"/>
Average pressure:	barg	No	<input type="checkbox"/>
Maximum pressure:	barg		

Project Background			
1. Are you currently using H₂ for an existing process?		7. What is your location?	
Yes	<input type="checkbox"/>	Metropolitan	<input type="checkbox"/>
No	<input type="checkbox"/>	Country/Regional	<input type="checkbox"/>
2. If so, has your volume increased enough to consider on-site production?		Remote	<input type="checkbox"/>
Yes	<input type="checkbox"/>	8. Does your location have access to grid power? We can offer a remote power supply by using the H ₂ generated in fuel cells.	
No	<input type="checkbox"/>	Yes	<input type="checkbox"/>
3. What volume of H₂ are you currently using and what will be the new requirement?		No	<input type="checkbox"/>
Current usage:	Nm ³	If No, nominate current power supply:	
Expected new usage:	Nm ³		
Growth over time:	Nm ³		
4. Can you advise current H₂ purchase price?		9. Do you require a containerized production system?	
Current rate per Nm ³ :	\$	Yes	<input type="checkbox"/>
5. Can you advise current electricity costs for your location?		No	<input type="checkbox"/>
Cost per kW hour:	\$	10. If No, can a production facility be built inside your current building?	
6. Is this for a new or expanded project?		Yes	<input type="checkbox"/>
New	<input type="checkbox"/>	No	<input type="checkbox"/>
Expanded	<input type="checkbox"/>		
11. Please nominate any other factor you consider to be important in our design assessment of your H₂ production requirement.			

These questions enable a preliminary design to be completed to allow for an initial cost assessment for an H₂ production facility meeting your nominated requirements. Depending on the information provided, a more detailed assessment may be required before a formal quotation is provided.

For a printable version of this form, please email info@alberfield.com.au and on provision of a name, email address and phone number, a copy will be emailed to you.