



AMMONIA Supply & Delivery



NEEDS ANALYSIS & DESIGN DEVELOPMENT

- Reformer Design,
- Fueling Design,
- Fuel Storage and Delivery Systems,
- Heating System Design,
- Fuel Cell Systems,
- Engines Systems,
- Safety System Design,
- Monitoring Design,
- Operation and Maintenance Planning.

DESIGNED FOR
2020 & BEYOND

Our Daily Mission: Secure, Safe & Reliable Gas Delivery

When **Secure Supplies** entered the **Nitrogen** Supply Business, Our mission was to *Develop Economical Fixed Nitrogen Production Methods* for Farmers to become *more independent and stable, and reduce the pressure on oil for shopping food ingredients, and the pinning of oil price to farm nutrient inputs and food productions.*

Our Goal was to *mitigate the costs* involved with International shipping food supply, and **Ammonia** Supply to producers.

Today, **Secure Supplies** has achieved a lot towards that Goal, and We continue to *Pursue* deploying such *Solutions Globally.*

Through Our Strategic Partners, We have also achieved a Portfolio of "**Ready Solutions**" for You.

Technology at a Level to **NOW** Offer **Green Ammonia** as a Product and Service.



Authorized Representative



Website

<https://www.secure.supplies/ammonia-urea-n46-prilled-prills>



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SOLUTIONS...

The general Worldwide Production of **Ammonia** is based on **Natural gas** as a feedstock.

These Production Facilities have *high-capacities* and are located at various locations where Natural gas is available.

Secure Supplies offer *Modern Technological Capabilities* which make it possible to move away from large scale plants, and towards small-scale *Ammonia Production*, **Green Ammonia**.

With this approach and Technology, **Secure Supplies** can Provide Customers with *small-scale Ammonia* Plants, ensuring Customer's *Independence* on the Transport Cost and the NH3 price fluctuations.

As a feedstock Natural gas, biogas or flare gas can be used to produce **Ammonia** from Waste Products.

Step 4 - Ammonia Reactor Skid



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Small-Scale Ammonia Production

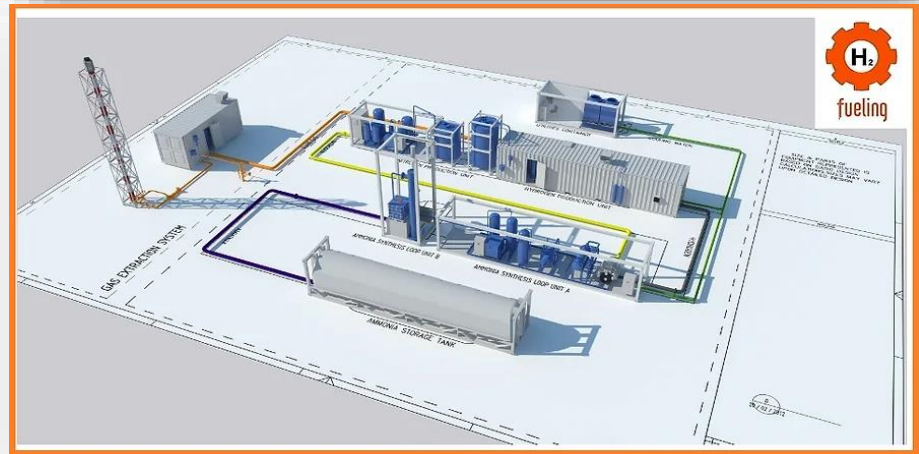
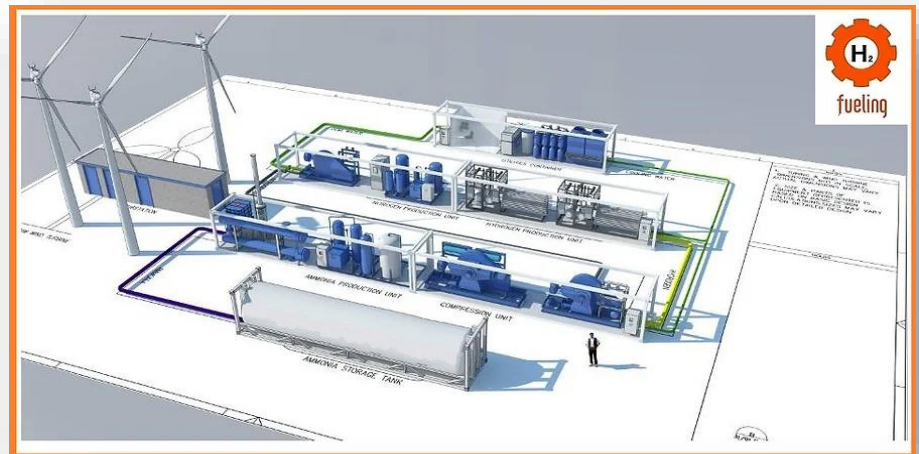
Secure Supplies is able to design a **small-scale Ammonia** Plant with the Hydrogen Nitrogen Units.

As a feedstock for this **Ammonia** Production, Electricity Produced from Renewable Sources (wind turbines, PV) can be used.

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Small-Scale Ammonia Production

As a Basic design, **Secure Supplies** offers three different capacities (**see table**).

Within the range of the capacities, **Secure Supplies** deals with the Supply and Demand of the Energy market, in order to Produce Decentralized **Ammonia**.

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Secure Supplies Green NH3 Renewables to Ammonia

As we have discussed and you also can see on our website and below we have units that can produce 3, 10 and 60 ton ammonia per day. Here below you see what consumptions you need and what will be produced.

Power 2 Ammonia

	Power Consumption				Hydrogen		NH3	
	[Hydrogen]	[Nitrogen]	[NH3]	kwh/hr	nm3/hr	kg/hr	kg/hr	MTD
SA1	1225	72	72	1369	250	22,4	120	2,9
SA10	4410	172	240	4822	900	80,7	433	10,4
SA60	26215	550	1500	28265	5350	480	2572	61,7

Per ton NH3	ELECTROLYSER ALL-IN POWER CONSUMPTION
MWh	
11,39	4,9 Kwh/Nm3
11,14	improved performance
10,99	improved performance

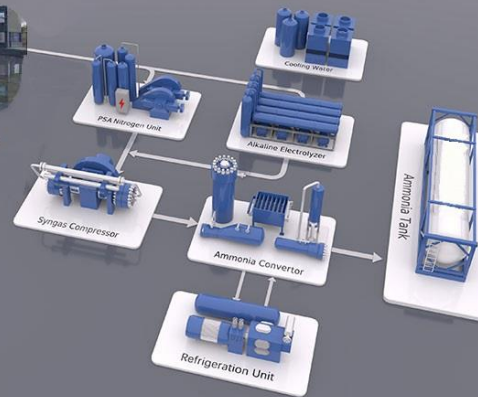
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Secure Supplies



Hydroelectric to Ammonia : H2 O2 N2 NH3



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