

# HYDROGEN-POWERED AGRICULTURE

BLOOH Solution, a company focused on developing innovative and sustainable technologies, has taken a major step towards revolutionizing agriculture by introducing hydrogen as a fuel to power farm machinery. With the growing concern for climate change and the need for sustainable practices, IIS has recognized the need for a more sustainable future and is committed to providing sustainable solutions for agriculture.

One of the major challenges facing the agriculture sector is the high carbon emissions generated by farm machinery. The use of fossil fuels in agriculture contributes significantly to greenhouse gas emissions, which exacerbates climate change. By utilizing hydrogen as a fuel, IIS is offering an alternative to fossil fuels, which can generate more energy with zero emissions.

The company's commitment to sustainable agriculture is reflected in its range of hydrogen-powered tractors, hybrid tractors, hydrogen-powered generators, and hydrogen generators. These machines offer a range of options to help farmers transition towards sustainable farming practices.

Hydrogen-powered tractors are a great option for farmers looking to reduce their carbon footprint. These tractors utilize fuel cells that convert hydrogen into electricity to power the tractor. The only by-product of this process is water vapor, making it a sustainable and eco-friendly option. IIS has also developed hybrid tractors that use a combination of hydrogen fuel cells and electric batteries to power the machinery. This approach helps to reduce emissions while maintaining the efficiency and power of the machinery.

BLOOH Solution also offers hydrogen-powered generators that can provide energy for irrigation systems and other farm equipment. These generators are highly efficient and produce zero emissions, making them a great option for farmers looking to reduce their carbon footprint. Additionally, the company offers hydrogen generators that can produce hydrogen on-site, eliminating the need to transport and store hydrogen, which can be expensive and challenging.



### TRACTORS

### HYDROGEN-POWERED TRACTOR

The HPT-3000 is a hydrogen-powered tractor that utilizes a PEMFC fuel cell to generate electricity to power the tractor. It has a power output of 55 kW, a top speed of 30 km/h, and consumes 1.5 kg of hydrogen per hour. It produces zero emissions, making it a sustainable option for farmers.

Model: HPT-3000

 Fuel Cell Type: PEMFC (Proton Exchange Membrane Fuel Cell)

Power Output: 55 kW (73.8 hp)

Operating Pressure: 350 bar (5,076 psi)

Max Speed: 30 km/h (18.6 mph)

 Fuel Consumption: 1.5 kg of hydrogen per hour (3.3 lbs/hr)

· Emissions: Zero

#### **HYBRID TRACTOR**

The HT-2000 is a hybrid tractor that uses a combination of an electric motor and a fuel cell to power the tractor. It has a power output of 30 kW and a top speed of 25 km/h. It consumes 0.9 kg of hydrogen per hour and produces zero emissions, making it an eco-friendly option for farmers.

Model: HT-2000

Engine Type: Electric Motor

Battery Type: Lithium-Ion

Fuel Cell Type: PEMFC

Power Output: 30 kW (40.2 hp)

Max Speed: 25 km/h (15.5 mph)

Fuel Consumption: 0.9 kg of hydrogen per hour

(1.98 lbs/hr)

• Emissions: Zero



### **GENERATORS**

### HYDROGEN-POWERED GENERATOR

The HPG-5000 is a hydrogen-powered generator that uses a PEMFC fuel cell to generate electricity. It has a power output of 5 kW and consumes 0.6 kg of hydrogen per hour. It produces zero emissions, making it an excellent option for farmers looking to reduce their carbon footprint.

Model: HPG-5000

Fuel Cell Type: PTGER

Power Output: 5 kW

Operating Pressure: 350 bar (5,076 psi)

Fuel Consumption: 1.95 kg of hydrogen per

hour (8.3 lbs/hr)

· Emissions: Zero





#### **HYDROGEN GENERATOR**

The HG-100 is a hydrogen generator that uses a PEM electrolysis process to produce hydrogen on-site. It has a power consumption of 1.2 kW and can produce up to 0.1 kg of hydrogen per hour. It has a maximum operating pressure of 30 bar and a maximum purity of 99.99%. It consumes 0.5 L of water per hour, making it an efficient and cost-effective option for farmers.

Model: HG-100

Electrolysis Type: PEM

Power Consumption: 1.2 kW

Max Hydrogen Production: 0.1 kg/h (0.22 bs/hr)

Max Operating Pressure: 30 bar (435 psi)

Max Purity: 99.99%

Water Consumption: 0.5 L/h (0.13 gal/hr)

### **FARM MACHINES**

## HYDROGEN-POWERED COMBINE HARVESTER

Model: HPC-3000

Fuel Cell Type: HJ-780KT

• Power Output: 55 kW (73.8 hp)

Operating Pressure: 350 bar (5,076 psi)

Cutting Width: 3,000 mm (118 in)

• Grain Tank Capacity: 3,000 L (793 gal)

Fuel Consumption: 1.5 kg of hydrogen per

hour (3.3 lbs/hr)

· Emissions: Zero



## HYDROGEN-POWERED IRRIGATION SYSTEM

Model: HPI-500

Fuel Cell Type: HJ-50K

Power Output: 5 kW

Operating Pressure: 350 bar (5,076 psi)

Water Flow Rate: 500 L/h (132 gal/hr)

• Water Pressure: 3.5 bar (51 psi)

Fuel Consumption: 0.6 kg of hydrogen per hour

(1.3 lbs/hr)

• Emissions: Zero



BLOOH Solution is committed to providing sustainable solutions for agriculture by introducing hydrogen as a fuel to power farm machinery. The company's range of hydrogen-powered tractors, hybrid tractors, hydrogen-powered generators, and hydrogen generators are an excellent option for farmers looking to reduce their carbon footprint and transition towards sustainable farming practices. By embracing hydrogen as a fuel source, IIS is playing a crucial role in creating a more sustainable future for agriculture.

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