Recycling your process hydrogen exhaust isn't just good business. **It's smart business.**



SKYRE's H2RENEW[™] product provides on-site gas recycling to recover and purify process hydrogen.

H2RENEW recycles hydrogen process atmospheres used in heat treating, specialty metals, microelectronics, and glass manufacturing.

H2RENEW systems provide a fresh, pressurized, re-supply of hydrogen at a fraction of the cost of delivered hydrogen.

To find out how SKYRE can improve your bottom line contact us at 860-652-9690 or visit:

$H_2 + Impurities$ $H_2 + Impurities$ $H_2 + Impurities$ Impurities $H_2 = 0$ $99.9999\% H_2$ $H_2 = 0$ $H_2 = 0$

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H2RENEW[™] 1760 SCFH Hydrogen Recycling Specifications



PERFORMANCE

Maximum H₂ Recycling Output	SCFH 70 deg F, 1 atm	1760
	kg/Day	100
	Nm ³ /hr, 0 deg C, 1 bar	46
	slm, 70 deg F, 1 atm	830
Product H₂ Purity	%	99.9999
Product Water Content	ppm	1
Product Dew Point	deg C (deg F)	-76 (-105)
Input Gas Pressure	psig	0-1
Product Hydrogen Pressure	psig	0-150
Peak H₂ Yield	%	95
Typical H₂ Yield	%	>80
System Availability	%	>90

H2RENEW extracts hydrogen from the exhaust gas stream of your industrial manufacturing process, purifies and pressurizes it to your specifications and makes it available for reuse at your facility.

The result: recycled hydrogen with the same or better quality and lower cost than that typically being delivered by merchant hydrogen providers or produced by onsite generation technologies today.

POWER SUPPLY

AC Supply Voltage	VAC (3-Phase)	480
Maximum Current Draw	A	100
Nominal Current Draw @ Maximum Load	А	90

ENVIRONMENT

Ambient Temperature	deg C	Indoor Rated
Relative Humidity	%	5 to 100 non-condensing
Altitude	ft	0 to 6,500
Heat Rejection	kW	60

PHYSICAL

Dimensions	(in L x in W x in H)	74 x 48 x 94
Weight	lbs	3600
System Noise	dBA @ 1 meter	84

INTERCONNECT

Electrical	Type (3 Phase, GND)	4-Conductor 2 AWG
H₂ Out Connection	Compression	1/2"
Furnace Waste Inlet Connection	MNPT	2"
H2RENEW Waste Outlet Connection	NPT	1"
N ₂ Supply	NPT	3/8"
Tap Water Connection	NPT	1/4"
Water Drain Connection	NPT	1/4"

CONTROL	
Remote Monitoring Data Transmission	Ethernet
Local Communications	Ethernet

SKYRE develops and manufactures innovative products based on a proprietary, low-cost, large format electrochemical platform. Initially developed for NASA, our H2RENEW systems provide hydrogen purification and recycling in a solid-state device for industrial gas needs.

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