

The flow chart of dryer



Mesh Belt Drying Quotation

Raw material:Hemp flower Fuel: natural gas or diesel

Input Capacity:1000 pounds/hr, based on temperature 90 Fahrenheit. Input

moisture:85%, output moisture:8-12%.

The drying machine can adjust from 0-120 degree centigrade.

Purpose: Extraction of cbd and cannabinoids



		Giobai Hemp Solutions										
	Description	Specs	Total									
	Gas burner	NG: 50 cubic meters/hr LP: 35 kilo/hr	10,000 (sourced from US)									
	Heat Exchange Furnace	Fuel:gas Size:12' x 7' x 7' Motor power:22kw Fan 12C, Exhaust fan:2.2kw Time to reach operating temp: 5min	15,000									
	Feeding conveyor with distributor	Motor power:YCT-3kw(the conveyor and drying machine use the same transmission motor) Mesh: Stainless steel Width:6' Length:20'	10,000									
	Drying equipment	Width:6.5' Length:40' 4 layers Door material:SS201 Drying area:894 square feet Drying time:2.5-5 hours. Fan:12C Air volume:30084-48825m³/h	75,000									
	Discharge conveyor	0.12kw L: 13' W:16" H: 5'	7500									



Control panel	1.Control the motor power of dryer 2.Control the speed of dryer 3.Control the temperature of dryer	2,500	
Total FOB Price		\$120,000	

Shipping fee from US Port to client destination varies based on client location and daily shipping rates. Client to pay full shipping cost. Client responsible for current tariff rates at time of shipping.

Warranty: 1 year after Commissioning

Installation and Service

After-sales service:

- * Licensed engineer goes to client's facility site for installation of equipment, until the drying machine produces dried material and unit is fully tested and operational. Client responsible for supplying 2-3 workers to aid in the installation under the direction of the Engineer. Time frame is estimated to be about 10 days for 1 complete unit. Client responsible for the following:
- *Engineering fees and flight/travel expenses(Estimated 10 days:Daily Engineer Rate of \$600, lodging and food rate of \$200/day) estimated at \$8000. Manufacturer set rate (rate may vary). Invoiced by Manufacturer.
- * Equipment warranty: 1 year. During operation time within 1 year, if the equipment has quality issues, manufacturer will replace defective equipment. Spare parts sent with purchase.

 Additional spare parts with Distributor.

Payment terms

* * Services still available after warranty expires

Delivery Time: approximately 60 days upon receipt of down payment.

Terms of payment: 50% will be paid as deposit. 50% remaining total must be paid prior to shipping. If additional engineering time is required beyond 10 days, client will be invoiced for final amount separately based on the daily rate.

Documents Supplied: 1) Commercial invoice

- 2) Equipment packing list 3) Bill of lading
- 4) No Tariff:

Agricultural Use HTS CODE: 9817.00.5000



Q. How long has the manufacturer been in business?

A. Our manufacturer was established in 2005 and is known as one of the best manufacturers for industrial drying equipment. Occupying a modern complex spanning over 53,000 square feet, the company has earned an excellent reputation in the industry by successfully exporting high-efficiency dryers to over 90 countries and regions, including Russia, central Asia, Brazil, United States, Canada, Europe, and the Middle East. Compliant with requirements and standards of CE and ISO certification, the company's drying machines can meet the requirements of various materials and different production scales.

Q. Why do I need a mesh-belt dryer?

A. Each planting season, hemp farmers cultivate many thousands of plants but the industry lacks sufficient capacity to efficiently and cost-effectively dry large seasonal harvests. Hang-drying methods are labor-intensive, and simply do not make financial sense if you grow more than a few acres. The mesh-belt hemp dryer is a sustainable, innovative, and cutting-edge technology to help automate your hemp drying activities and benefit your long-term competitiveness. Our advanced low temperature drying equipment is engineered to maintain a high level of attention to detail, quality, sanitation and consistency. This is the right tool to dry your hemp crop like a real professional.

Q. What makes mesh-belt dryers different from the competitors?

A. Dehydration is necessary to preserve the hemp biomass for later use as food additives or extraction for medicinal purposes. Mesh-belt hemp dryers continuously dry large quantities of plant material in a short period of time, and without requiring much production footprint. These technologies allow the operator to adjust the thermal energy in the hemp dryer to evenly evaporate water without over-drying or over-heating the hemp. This clear advantage provides a superior output, improved flavor and texture, while preserving robust hemp oils and aromas.

Q. Will using a mesh-belt hemp dryer affect my crop?

A. Our simple, labor-saving, low-temperature drying technologies are designed to ensure the highest value of dried output. Electronic controls allow operators to dial-in optimum air volume, belt speed, and temperature. Continuous movement of the four separate mesh belts ensures an even and consistent dehydration throughout the plant material. Four high-quality food-grade



stainless steel mesh belts protect your high-value crops from rough handling and contamination, and convenient door handles allow panel access to view the status of the drying operation. We believe that proper use of our mesh-belt hemp dryer will increase your bottom line.

Q. Does the dryer have temperature control?

A. Yes, the mesh-belt hemp dryer effectively and accurately controls temperatures. If you use natural gas or propane as the fuel source, the gas burner has sensors to control the temperature of the dryer unit. The sensor is placed between dryer and big fan. If the set temperature is exceeded, then the flame of the burner will decrease. If the temperature drops below the set point temperature, then burner flame will increase. The user also can adjust the conveyor belt speed and temperature of drying machine. Temperature settings are in Celsius, and can be set to hold the drying temperature at a specific setting.

Q. Does the conveyor auto-adjust speed to temperature variations?

A. Yes, the dryer speed is fully adjustable. The feeding conveyor and drying machine use a single transmission part, so they operate at the same speed. The discharge conveyor speed is also adjustable. The feeding conveyor features a distributor, which our engineer will install on the dryer and adjust the dryer speed and material thickness spread on the conveyor. After these initial adjustments for the material, the engineer will set the temperature on control panel. This allows the user to easily operate the machine while maintaining a consistent temperature in the dryer.

Q. Is there a heat recovery system?

A. No, a heat recovery system is useless because the drying temperature for hemp is set at a very low 90 degrees Fahrenheit (32.2 degrees Celsius). The moisture content of the material is very high, close to 80-85%. During the drying process, the moisture and heat will exit from the top of the dryer. There is relatively little heat in these exhaust gases, but the moisture content is very high. Therefore, we do not recommend recycling via a heat recovery system.

Q. Can you recommend your most popular mesh-belt hemp dryer?

A. The GX series Mesh-Belt Hemp Dryer is the manufacturer's flagship line. We offer a choice of five reasonably priced hemp dryers that are perfect for the American market. The GX-12 model is rated for up to 500 kg ($\sim 1,000 \text{ pounds}$) of



wet material input per hour and discharging about 100 kg ($\sim 220 \text{ pounds}$) per hour of dried material. The GX-12 is our largest dryer available, but we offer custom-sized dryers for any scale operation. Our affordable prices finally make it possible for many farmers to buy their own mesh-belt hemp dryers.

Q. How should the hemp material be prepared for drying?

A. Best drying results are obtained when the plant material is reduced to a uniform size and consistency (with minimal stem), depending upon your particular situation. You should choose the right harvesting method to best ready your hemp material for drying.

Q. What type of facility and infrastructure is required?

A. You can use a warehouse-style building with 3,000 to 5,000 square feet open space, with at least 14-foot high ceilings, depending on your particular operational needs. The work area should be covered to protect the dryer and intake conveyor from weather events. You should allow enough room for trucks to deliver plant material delivery, forklifts to maneuver, and perhaps include post-drying storage areas. Some hemp entrepreneurs are planning large-scale drying facilities with six or more GX-12 dryers. Please ask us to custom-design your multiple-dryer facility with a smart layout and workflows.

Q. Do I need permits to operate the dryer?

A. We recommend that you perform adequate due diligence on your installation site before placing your dryer order. You may need both electrical and gas connections, and perhaps mechanical permits (depending on the particular site or zoning). The standard GX drying equipment from China is CE-rated, which means that it's perfectly fine to operate in European countries. CE is also fine for operating in many United States agricultural settings or rural areas that qualify for a permit exemption. Commercial buildings or warehouses might have different requirements, so you should check with your local permitting officials in advance. Some contractors could be unfamiliar with CE-rated equipment, and city or county inspectors might insist on modifications before issuing permits.

Q. Do you have options for customers requiring UL/CSA listed equipment?

A. Yes, we solve these problems by offering custom GX-12 dryers with an upgraded steel exterior finish, corrosion-resistant internal components, UL/CSA-rated motors, enhanced UL/CSA-rated control box with additional moisture and



temperature sensors, and an efficient UL/CSA furnace/blower. These dryers also feature a redesigned discharge conveyor that allows for filling bags directly after drying.

Q. What are the electrical requirements?

A. We recommend that all USA customers use 3-phase power if available at the installation site. The factory cannot wire mesh-belt dryers for single-phase power. The GX dryer is an industrial machine and requires the stable power provided by 3-phase electricity to drive the main 15kw and 27kw motors. The GX model dryer can be wired for 208v, 240v, or 460v 3-phase at 60hz. (460v-rated equipment is recommended for a 480v system to account for voltage drop due to starting or line losses.) Please confirm your facility electrical capacities and wiring preferences before placing your order. Many large facilities have ample power on site, while some farmers have used diesel generators to provide 3-phase electric power in remote locations and closer to the fields.

Q. What are the fuel source options?

A. Natural gas or propane is used in most installations, but other heat source furnaces are available (e.g., electric, diesel, coal, wood, biomass briquettes). We recommend natural gas as the most cost-effective fuel source for the dryer furnaces, but it really comes down to operator preferences and availability.

Q. What is the electrical power draw of the dryers?

A. The power draw depends on your fuel source choice. The total power requirement is 20kw (50A at 240V, 3-phase, 60Hz) to operate the GX-8. The total electrical power draw for a gas-fired GX-12 is 27.75kw or 67A at 240v 3-phase, 60Hz (or 34A at 480V 3-phase, 60Hz). Note that the large 22kw main motor for the GX-12 requires reliable start-up power. After the dryer is fired up and operating, the power draw drops significantly. Customers choosing all-electric GX-12 dryers with the P50 heat pump should expect a power draw of 45kw or 108 amps at 240v 3-phase, 60Hz (or 54 amps at 480v 3-phase, 60Hz). Please refer to the specification sheet in the Gallery for details.

Q. Can I use a 3-phase converter?

A. Yes, you can use a phase converter where utility 3-phase is unavailable or too expensive to install. A phase converter is simply a rotating machine, much like a motor, that converts single-phase utility power into 3-phase electricity to



operate 3-phase equipment. One of our customers successfully uses a transformer and rotary phase converter for his single-phase to 3-phase power. We recommend sourcing the phase converter through your commercial electrical contractor supply company, and perhaps set up an account to get the best deal. Be sure to know your correct facility input voltage so they can suggest the right equipment for your particular situation.

Q. Can I use a generator to produce electric power?

A. If 3-phase power is not available, the factory recommends using a 50kw or 70kw diesel generator producing 3-phase electric power to run the whole drying machine set. The GX-8 dryer requires a 50kw diesel generator to power the main 15kw motor. The GX-12 dryer features the larger 22kw main motor, which requires a 70kw diesel generator for reliable start-up power. After the dryer is fired up and operating, the power draw drops significantly. Customers have successfully used one 100kw diesel generator to power two sets of GX-12 dryers.

Q. Can the dryer be used with a diesel burner using indirect air?

A. Yes, the mesh-belt dryer can use a diesel burner as the fuel source if it produces a minimum of 500,000 kcal heat. The fuel consumption of the burner will be 30kg/h based on the diesel value of 10,996 kilocalorie/kg. The burner blows heat into the heat exchange furnace (inside the pipe), and the outside air enters into the furnace outside the pipe. The outside air and hot air make an exchange, and the suitably dry hot air enters into the dryer via forced fan blower. This drying machine uses both heat and strong air to dry. The volume can reach 30,000-50,000 cubic meters per hour, so it can dry the material very quickly.

Q. Does the dryer require a separate burner?

A. Yes, we recommend purchasing a commercial gas or oil burner manufactured by RW Beckett Corporation (USA). The Beckett CG25 commercial gas burner works with either natural gas or propane, and provides the flexibility to operate at a remote farm with tanked LP gas. The CG25.3 burner head has a BTU range Lo fire 1.1MBH manifold psi 1.2"WC to Hi fire 2.0MBH manifold pressure of 3.5"WC. Incoming gas pressure requirement is 6"WC. For diesel applications, we recommend the Beckett CF2500 commercial oil burner. Oil Burners are less expensive than gas burners when under 20gph, but more service and maintenance are involved with oil burners. We coordinate your burner order with the Commercial Field Sales Manager at RW Beckett to ensure you get the



right equipment at the best prices. As an alternative, customers may purchase the RS50 gas burner manufactured by Riello (Italy).

Q. How much fuel does the dryer consume?

A. Fuel consumption is largely determined by kilocalorie and moisture inside the material to be dried. Normally, 600kcal of heat is required to reduce 1kg water. We need to consider thermal loss, so we calculate that 1100kcal heat is needed to reduce 1kg water. For propane gas installations, the GX-12 drying machine requires 36 m³/hour. Note that fuel consumption is not fixed. When the atmospheric temperature is high, the dryer will use less fuel. If the temperature is low or the material moisture is higher, the dryer will use more fuel. The drying temperature is fully adjustable from 0-120 degrees Celcius. Based on user experience, the best hemp drying results are achieved at 90 degrees Fahrenheit (32.2 degrees Celsius). We calculate that the GX-12 dryer will consume about 35 liquid propane gallons per hour, with a fuel cost per hour of about \$70.

Q. Do you suggest any business ideas for the dryer?

A. As an additional revenue stream, you might offer stationary or mobile hemp toll-drying services to other farmers in your area. You can easily pay for your dryer in a single season by offering toll-drying services. The typical starting rate is \$4.00 per dry pound, depending on the particular market. Your ROI can be realized between 16 and 35 days. Other agricultural crops also can be dehydrated in the mesh-belt dryer, for a diverse revenue-generating capability.

Q. How many people are needed to operate a hemp dryer?

A. This depends on efficiency, but a crew of three could easily operate the machine. It's designed to be a labor-saving tool that is capable of outputting more than one ton of dried material per day. Proper logistics and material handling will keep the machine continually fed with freshly-harvested material for drying, and which further reduces labor expenses.

Q. Are there any ongoing maintenance expenses?

A. Most of the bearings have grease zerts, and the chains require periodic lubrication to reduce wear. The motor gearboxes have sight glasses to ensure oil levels are maintained. We recommend that you observe proper maintenance to ensure smooth operation throughout each harvest season. Keep the dryer and all components protected from the elements during the off-season.



Q. Does the company offer a guarantee?

A. The manufacturer offers a one-year manufacturer's quality guarantee on equipment and components. High-quality hardened steel construction of all components helps ensure a long service life. Before shipment, each dryer undergoes a factory equipment test for a minimum of 7 hours to ensure that all components are properly functioning.

Q. Do you offer USA-based customer service and technical support?

A. Yes, we offer service and support for all GX mesh-belt dryers.

Q. How is the dryer shipped from China to the United States?

A. These dryer shipments go to the major coastal ports, including the Great Lakes and various river ports. The entire shipping and delivery process is very straightforward, but you must complete some forms for importation.

Q. What about import tariffs and customs clearance?

A. Your shipping and transit representative will handle all the details -- including customs clearance -- to ensure no glitches along the way. Communications regarding your shipment is both timely and informative. We strive to ensure that the customer experience is seamless from beginning to end. Agricultural Use HTS CODE: 9817.00.5000

Q. Who is responsible for delivery and unloading?

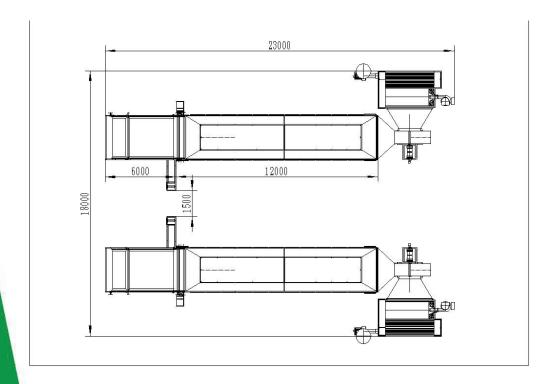
A. The shipping and transit company will engage a separate transportation company to deliver from the port to the site. Each dryer set is shipped and delivered in two 40-foot HC containers: one with 19 pieces; and one with the main dryer unit, and most likely delivered on separate days.

We recommend acquiring the right equipment to unload safely and efficiently. You will need forklifts, construction lull, and/or a boom crane for the heavy pieces. Forklifts are recommended for lifting and sliding the equipment from the containers. The dryer box has a rigid frame, and a forklift can pick up from the side. The dryer box also has welded pick point rings at each of the four top corners to allow customers to attach straps to those four points, and lift with a boom crane.



Q. Do I need a factory engineer to complete the installation?

A. Many customers have successfully self-installed the mesh-belt dryers without factory engineer assistance. Please ensure that proper site infrastructure and roughed-in utilities are ready for the installation. You should prepare a space about 100' x 35' (or about 3,500 square feet) for each dryer placement. In all situations, you should hire a licensed electrician and HVAC contractor to finish the connections and fire up the gas burner. The entire installation process takes between 10 and 14 days on average.

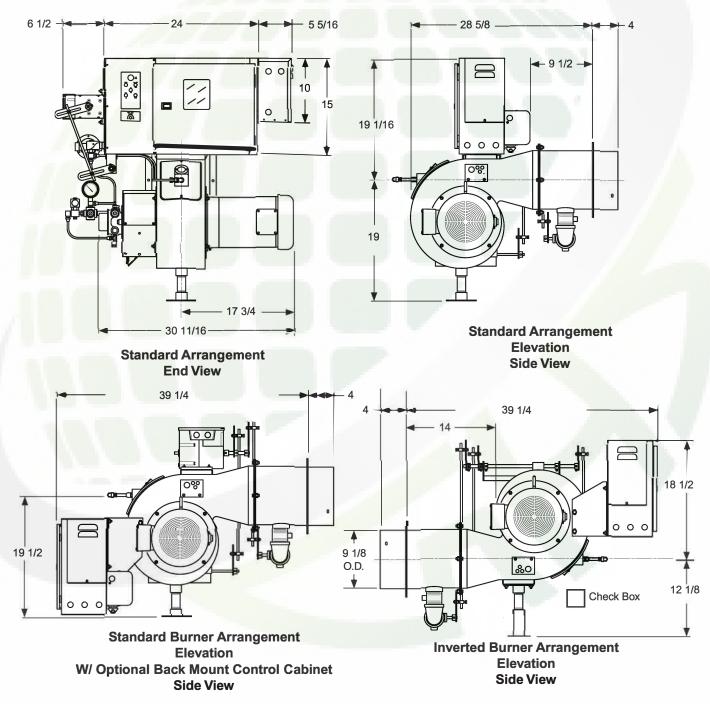






Fuels Burned and Control Systems

- Natural Gas, Propane, Digester or Mixed Gases
- Light #2 through Heavy #6 Fuel Oil
- Low Fire Start, Low-High-Low, Modulating or Micro Modulation
- Control Circuit Requires 120 vac, 60 Hz, Single Phase Voltage Supply



Model JB2 burners are listed by Underwriters Laboratories, Inc. (UL / ULC). Also by the State of Massachusetts Fire Marshal, City of New York Board of Standards and Appeals, State of Minnesota and can be packaged to meet specific requirements of IRI, FM, GE GAP, NFPA, MIL spec. or other special insurance or local code requirements.

			No. 2 Oil					No. 2 Oil		
	STANDARD UL EQUIPMENT ND IMPORTANT OPTIONS	Gas	Pressure Atomized	Air Atomized		1	ANDARD UL EQUIPMENT ND IMPORTANT OPTIONS	Gas	Pressure Atomized	Air Atomized
	Motor, Fan and Air Inlet Control	Х	Х	Х			Main Manual Shutoff Valve	Х		
	Air Flow Switch	Х	Х	Х			Main Safety Shutoff Valve	Х		
	(2) Burner Mounted Control Panel, Switch and Indicator Lights		х	х		Fuel	Second Safety Shutoff Valve	Х		
<u>5</u>							Main Gas Regulator	Х		
General	Flame Safety Control	Х	Х	Х		Gas Fi	Gas Checking Valve	Х		
Ō	Ultra Violet Scanner	Х	Х	Х		ပြိ	High and Low Gas Pressure Switches	Х		
ı	Motor Controller (single phase voltage)	Х	Х	Х			Metering Valve (modulating systems)	Х		
ı	Motor Starter w/Overloads (3 PH volt)	Х	Х	Х			Normally Open Vent Valve	Opt.		
	Fuel Selector Switch	Duel Fuel Burners Only								
	Proven Gas Pilot Ignition	Х		Х			Oil Drawer Assembly with Diffuser		X	Х
	(1) JB2-30 and JB2-50	Х	X	Х			Oil Nozzles		X	Х
_	Pilot Solenoid Gas Valve	Х		Х			Integral Oil Pump (JB2-07 to JB2-20)		Х	
lgnition	Pilot Gas Regulator & Manual Valve	Х		Х			Remote Oil Pump (JB2-30 to JB2-50)		Х	Opt.
<u></u>	Pilot Gas Ignition Transformer	X		Х			Two Safety Shutoff Valves		Х	Х
	Direct Spark Oil Ignirtion		(3)		11	l e	Low Air Atomizing Switch			Х
	Direct Spark Oil Ignition Transformer		(3)			Oil Fuel	Low Oil Pressure Switch (STD when using remote oil pump)		х	х
	Inverted Housing	Х	Х	Х			Oil Pressure Gauge		Х	Х
Options	Alternate Control Cabinet Positioning	Х	х	х			Oil Metering Valve (modulating system)		х	х
ŏ	Remote Control Panel	Х	Х	Х			Future Gas Combustion Head		Opt.	Opt.
	Fuel Metering CAM-NETIC II	Х	Х	Х			Air Compressor			Х

^{1.} The configuration of each unit will vary with specific job requirements such as input rating, electrical specification and special agency approval codes. The above chart shows those items standard to a basic burner plus a few options that may be added.

^{3.} Maximum rate for direct spark is 20 GPH at low fire or 35 GPH at high fire. (standard on straight oil burners, pressure atomized)

Model JB2 - Sizing and Application Data											
Model	Maximum		Burner Firing		Gas Train			Oil Pump Motor HP		Air	
Number	Furnace Pressure	Capability Range		Motor HP	Pipe Size	(3) Inlet Press (in wc)		Pressure	Air	Compressor Motor HP	
	1 TOOGGIO		#2 Oil gph			LFS, LHL	Modulation	Atomizing	Atomizing		
JB2-07	2	900 / 2800	10 / 20	3/4	1 1/2"	10 / 14"	13"	Integral	N/A	N/A	
JB2-10	2	900 / 3500	10 / 25	1	2"	8 / 14"	9 / 14"	Integral	Optional	2	
JB2-15	2	900 / 3500	10 / 25	1 1/2	<mark>2"</mark>	<mark>8 / 14"</mark>	9 / 14"	(Integral)	Optional	<mark>2</mark>	
JB2-20	2	1200 / 4200	12 / 30	2	2"	(4) 12 / 14"	(3) 13 / 14"	Integral	Optional	2	
JB2-30	2.5	1200 / 5300	12 / 37.8	3	2 1/2"	N/A	13 / 14"	3/4	Optional	2	
JB2-50	2.5	1200 / 6000	12 / 42.8	5	2 1/2"	N/A	2-5 psi	3/4	Optional	2	

^{3.} Lower pressures may apply to reduced inputs.

The above maximum ratings are based on 0 furnace pressure, an altitude of 1000 feet, 90°F air temperature and 60 HZ electrical supply. Use the following corrections for higher temperatures and altitude. Capacity decreases by 17% for 50 Hertz.

Capacity decreases by 4% for each 1000 feet above 1000 foot altitude.

Capacity decreases by 6% for each 1 inch of furnace pressure.

Capacity decreases by 2% for each 10°F increase in air temperature over 90°F.

Gas input ratings based on 1000 BTU/cu ft. and 0.64 specific gravity. Sizes and pressure will vary with different gas properties.

Oil input ratings are based on 140,000 BTU/gal. for ASTM #2 fuel oil.

The vessel draft must be between -0.1 and +0.1 wc.

Essential Ordering Information and Data:

Power Supply - Confirm 120-60-1 for control circuit and electrical supply for burner motor(s) (voltage, frequency and phase).

Describe Boiler or Heater to be Fired - Including the manufacturer, model number, furnace pressure and furnace size.

Firing Rate - Define firing rates in MBH for gas and GPH for oil.

Fuel to be Burned - Type of gas and/or oil, including the BTU value.

Approval Agency - UL, FM, IRI (GE GAP), CSD-1, NFPA, Mil spec and local codes, if applicable.

Flame Safety Control Preferred - Honeywell or Fireye controls. Gas Train Components Preferred - ASCO/ITT, Honeywell or Landis Control System - ON-OFF, Low Fire Start, Low High Low, Modulation, Posi-Control. Required Options - Mounting plate, limit controls, etc.

^{2.} Indicator lights are "Power On", "Call for Heat", "Fuel On" and "Flame Fail" for hard wired panels. "Alarm", "Low Water", "Power", "Call for Heat", "Ignition On", and "Fuel On" for circuit board light panels.

^{4. 11-14&}quot; with IRI and LFS or LHL. 12-14" with IRI and modulation.

Our company

Global Hemp Solutions is your all inclusive post-harvest processing and extraction equipment provider. We have partnerships with some of the world's largest and best manufacturers. We not only provide you with the best equipment to help make you successful, we are there every step of the way even after the installation of the equipment. We value long term relationships and are truly here to serve you.



All prices and shipping times subject to change. Please contact us for updated lead times and pricing.

