The Following is the requested estimate/bid and contract for the commissioned 3.5+ BBL (120+/- gallon total volume) Brewery system as discussed between: ___________________ & Russ Dunham w/ Quiet Giant Brewing Co. LLC (QGB)

This Estimate includes but is not limited or held to the following description, prices and materials may vary depending on suppliers and any future additions or changes:

1a) Power: Fully Electric

The Brewery will be an electric system, powered by a 50 amp single phase 240 V powered temperature control module. It will run on duel 5500 W elements for a total of 11,000 W. There will be two elements in the HLT tank and two elements in the Boil Kettle. Just for the record a reminder, all four elements cannot run at once. Your power control module will also come with three necessary temperature control probes, One each inserted to each of the brew house kettles. Time needed to bring 100 gallons of water to strike temperature (conditions vary) : roughly 90 seconds +/- per gallon.

Additional Power Upgrade (Highly recommended above 120 gallons):

Because of the massive size of this system, to reduce long HLT/ boil times, we also offer an additional 11000w power upgrade. Though optional, this recommendation is Highly Suggested. When you exceed 120 gallons with 11k watts, brew time increase. This upgrade includes a 2nd 50a 240v power box with all necessary power cables, temp probes and 4 additional 5500w elements w/ housings. Compatible with any electric brewery size offered. Cut your batch times in half with this upgrade, Doubling you production, Just plug it in and go! (Requires 2 separate 50 amp 240v circuits and receptacles. Not included) NOTE: Be warned that with out this power increase, if going above 120 gallons or 3.5 BBL, QBG is not responsible if you are unable to reach/achieve or maintain proper temperatures or achieve boil while brewing.

Additional Cost: $5000.00 Sign:_______________________Date:________

1b) Power: Fully Gas/Propane

The Brew-House will be a manual Natural Gas Powered system. Under the boil kettle and the HLT tanks will be 1 (each) 150,000 - 200,000 Jet style burner. Each of the 3 vessels that make up the brew house will have the proper shielding to protect from the high heat out put from these burners.. The system Will not only have the proper dial
thermometers. The system itself is manual, there is no form of automation which includes no pilot light. Includes push button igniter. Time needed to bring 100 gallons of water to strike temperature (conditions vary): roughly 125 seconds +/- per gallon. QBG is not responsible for hooking up the gas from the building to the brewery, this is the buyer's responsibility. See page 8 for safety and installation guidelines.

**Upgrade manual gas to "semi-automation":**

Includes PDI controllers for each vessel, an enclosed stainless steel power control box mounted to the system, electrically controlled gas valves w/ hardware and pilot light with electric push button ignition. This system will still need the same continual watchful eye of a brew-master for safety but will greatly and safely reduce the constant adjustments and kneeling usually required for a manual gas system.

Cost: $5000.00  
Sign:_____________________________  Date:____________

2) **Construction & General Description:**

The system will be constructed out of Brand new, 2" stainless steel square tubing w/ 1/16' wall thickness, and 3 open top Brand New stainless steel 120 gallon drum's. These drums now come standard with crevasse less bottoms and are smooth sided for faster cleaning!

The drums will have removable ring clamp style lids with handles, and additional handles on the sides for moving and cleaning use. The HLT tank also comes with a HERMs system constructed out of half inch stainless steel tubing, 50 feet long in total length, Coiled and including shut off ball valves. This brewery will come with proper man-way/clean outs required on the vessels typically this is 10" in diameter. Also included is the two piece false bottom for the mash tun along with a sluice and paddle for easy mash clean out.

3) **Construction Layout:**

The lay out of the brew-house will be that the stainless steel staining linear platform is and the 3 vessels are positioned on the top, also linear. The power control module (if you decide to purchase it) will be mounted to the brew system at the upper platform level eye level roughly, for ease of use and protected from any chance of boil over and/or spillage. This system will be hose piped not hard piped. The gas delivery system to the burners will meet all required restaurant and city codes for safety. The grain mill can either be mounted to the standing platform but removable (recommended) or left detached for you to mount elsewhere. The system will be mobile, mounted to 8-1000lb commercial-duty casters capable of holding the breweries fully loaded operational weight. **NOTE: It is extremely dangerous to move the brewery while in use. Do not move the brewery while in use.** The brewery comes complete with all required butterfly valves, 3 piece valves, clamps, gaskets, sight glasses, handles lids, casters, hoses Etc.
4) Additional features and gear included:

- Your brewery will also come with dual (x2) Chugger or March pumps and all necessary fittings and ball valves for these. These are not the standard 7.2 GPM pumps sold with the smaller systems we offer. These are the larger up to 17 GPM pump that run on 115v and have roughly 20 feet of head pressure with a 1/2 pipe delivery.

- The grail mill is a standard Monster Mill mm3 Pro HD unit w/ hopper and hopper extension. This unit can either be mounted to the brewery stand or be on its own separate mobile sand/cart, enclosed to reduce dust and in all stainless steel to match the brewhouse. Please note, you can exchange this mill for any other mill you might find more enjoyable for your operation. Additional charges may apply for additional labor or products requested. We also offer full automated motor driven mill set ups upon request. Just ask!

- Quick release cam and lobe hose fittings for quick disconnect.

- 4+ Varying lengths high temp food grade re-enforced silicone tubing/hose ranging from 6 ft. to 10ft(+/-) each, depending on layout and final measurements.

- There will also be a professional 1“ hose specifically for the liquid delivery to the inlet side of the pumps to help insure proper flow and help guard against dry running the pumps. **NOTE: never dry run or reduce flow on the inlet side of your pumps. This will destroy them.**

- Your system will also come with the 20 or more plate chiller as described in our conversations. Capable of cooling 100 gallons of boiling liquid in roughly 12+/- minutes to desired yeast pitching temperatures. This unit will also have a dial thermometer for temperature control.

- Water level sight glass(s) on the 3 brew house vessels.

**ADDITIONAL REQUESTED DESIGN FEATURES:**

_____ Additional Industrial brewer's hose 1" ID : $13 (per foot)

_____ CPE-c100 1.5"x1" 316L Transfer Pump & Digital pump controller: $2200.00

_____ Yeast Propagation Tank; 5 or 15.5 Gallon (Your choice): $450

Total Cost:______________ Sign:__________________________ Date:___________________
**Fermenters w/ cooling compatible capabilities:**

The Fermenters offered by QBG are all inclusive are constructed of all stainless steel which separate at the mid section for easy cleaning. (Please specify if you want this option or would prefer an open top removable lid style setup which would not separate at the mid point. This means you will have cleaning access only through the top of the fermenter). Included with each unit is a heating/cooling heat exchange stainless steel 50' internal coil which is compatible with either water cooled/heated for temperature control or glycol compatible for chillers, 1.5" tri-clamp ferrules for butterfly valves at the base and mid way up the conical base roughly the 1 to 4 gallon mark. 1/2" NPT fitting for a dial thermostat, and the proper tri-clamp and fittings with seals. If you have a request just ask! We have no problem with requests of any kind within our capabilities and would like to make exactly what you need! Crevasse-less/seamless tanks are also available for an additional cost in materials.

(Danger: *Do not move while in use. May cause serious risk of injury or death!*  
*NOTE: These are not pressure vessels or brite tanks*)

----------------------------------------------------------------------------------

If you are able to purchase any 4 or more fermenters you will receive an additional 5% discount when purchased with a Brewery System! (Applies to the brewery and fermenter base prices only and excludes extras/add-ons.)

----------------------------------------------------------------------------------

**Sizes**

**2+ BBL** - 75 +/- gallons of total volume: $2200.00  
Quantity requested:________ Sign:___________________________ Date:____________

**4+ BBL** - 140+/- gallons of total volume: $3200.00  
Quantity requested:_______ Sign:___________________________ Date:____________

- Seam less/ Crevasse less drum bodies included

**5.5+ BBL** - 180 +/- gallons of total volume: $4000.00  
Quantity requested:_______ Sign:___________________________ Date:____________

- Seam less/ Crevasse less drum bodies included
ADDITIONAL UPGRADES ON THE FERMENTERS:

- Thermo wells and 1/2" NPT fitting are $100.00 additional each

Quantity requested:______ Sign:__________________________ Date:____________

- Sight glass. 1.5" Tri Clamp compatible; Removable and cleanable: $75.00 each

Quantity requested:______ Sign:__________________________ Date:____________

- Sample ports with valves are $100.00 additional each

Quantity requested:______ Sign:__________________________ Date:____________

- Johnson Controls A419ABC-1C Electronic Temperature Control, SPDT
  For digital temperature reading on a fermenter; $100.00 additional each

Quantity requested:______ Sign:__________________________ Date:____________

- Racking Arm & port. Mounted as close to the 1 gallon mark as possible.
  $120.00 additional each

Quantity requested:______ Sign:__________________________ Date:____________

- CIP ready $150.00 additional each

Quantity requested:______ Sign:__________________________ Date:____________

- Simple 'water level' sight glass; Dual 3/8ths compression elbows with either silicon or
  food grade vinyl tube. Removable and cleanable. $150.00 additional each

Quantity requested:______ Sign:__________________________ Date:____________

Total Cost for Add-ons for fermenters: $____________

Sign:__________________________

Date:__________________________
Disclaimers and customer signature of agreement page of afore mentioned bid/estimate.

Read this disclaimer carefully. By using buying/using any product from Quiet Giant Brewing Co. LLC, TheElectricBrewery.com and or Spike Innovations or their owner you understand and accept the following terms and conditions:

– Quiet Giant Brewing Co. LLC offers a 6 month warranty against defective parts. This does not include labor, cost of labor or S&H. All 'defective parts' must be shipped back to QGB for examination to determine weather or not the product was misused or defective before any replacement takes place. Our supplier of the electrical panel, The Electric Brewery, includes a 3 month warranty on the power control unit through QGB.

– Ideas, examples, and any other techniques are to be used AT YOUR OWN RISK.

– Quiet Giant brewing Co. LLC is not responsible for, and expressly disclaims all liability for, damages of any kind arising out of improper use of the Products sold by Quiet Giant Brewing Co. LLC.

– All monies paid are nonrefundable as it is spent on materials immediately after being received.

– If there is a alteration in delivery deadline, you will be informed immediately and this has no effect on the product price or down payment received.

– Certain home-improvement projects are inherently dangerous, and even the most benign tool can cause serious injury or death if not used properly. ALWAYS READ SAFETY WARNINGS. You must be particularly careful when dealing with electricity, natural gas or propane – always use common sense. Any advice, guidance or other information by verbal conversation or provided on the Quiet Giant Brewing Co. LLC website, The Electric Brewery.com website, or Spike Innovation website along with any other affiliates or within any of our publications from either the aforementioned or affiliates cannot completely anticipate your situation. If you are at all unsure about completing any aspect of this or any other home wiring project, consult a qualified electrician contractor to perform the service(s) for you.

– Hiring a professional electrician and a professional plumber where necessary is the only information Quiet Giant Brewing Co. recommends. Always follow electrical code requirements specific to your area, and before undertaking any home electrical project, contact your local electrical authority and your insurance company to ensure that you comply with all policies, warranties, regulations and authorities concerning this work.

– The same rules apply for gas line plumbing. Please consult a professional contractor for all plumbing needs for gas and propane, this is for your safety!

– All of the aforementioned is your responsibility. It means your life, treated that way.

– Outside of the warranty is represented here, you the customer agrees to assume all business risk resulting from the application of any of the information or the use of any product/goods/services provided by Quiet Giant Brewing Co. LLC and our affiliates mentioned above.

– A storage fee of $500.00 after the completion date issued to you of the afore ordered brewery equipment may be added on if your final payment is not received within 10 days of being notified of it’s completion, and $25 per day there after till paid in full. Terms and circumstances vary: Just communicate your needs with any forecasted issues you may have and we are willing to work with you.

– By reading and/or signing this you agree to expressly hold Quiet Giant Brewing Co. LLC and it’s partners/associates/affiliates harmless and free of legal action for any property damage, personal injury and or death. This includes loss or damage of any kind that may result from your use of information or services provided, including equipment you’ve purchased. You have been warned and you agree to these terms.

– Please use extreme care again, it means your life, treat it that way!

Thank you for choosing Quiet Giant Brewing Co. LLC! Cheers!

Print:________________________Sign:________________________Date:______________
ADDITIONAL CUSTOMER REQUESTED UPGRADES:

Sign:__________________________ Date:__________________

Total For your 120 gallon total volume **Fully Turnkey** Gas or Electric Brewery:

$18,000.00 - Electric Brew house sub total

OR

$17,000.00 - Gas/ Propane Brew house sub total

$________ - Additional requested materials/items/add-ons. See section 5

$________ - Power upgrade, see section 1.

$________ - Fermenter(s); If requested see section 5

$_______ - Tax. (internet sale. none)

$________ - S&H

-----------------------------------------------------------------------------------

$__________-TOTAL

A 60% non refundable down payment is required at the start of the brewery build. Please copy and return the original contract to the above Po Box. Keep The copy for your records. An invoice/receipt of sale will be issued after the down payment is received. Remaining 40% of balance must be paid prior to shipping.

Print:________________________Sign:________________________Date:_____________

*Also, please note, there is a lead time on some of the particular parts for your brewery, I will need to know your decision ASAP so I can get them ordered and have your project done for you in a timely manner. (Minimum 12+ week lead time.)*

*Thank you very much for your time. Please let me know u have any questions at all! We can build you exactly what you’re looking for and look forward to being on you team!*  

Russ Dunham,  
Quiet Giant Brewing Co. LLC  
Po Box 39216 Lakewood, Wa 98496  
253-778-6714  
Quietgiant253@gmail.com