

PRICELESS

REVENOOR ALCOHOL STILLS

THE REVENOOR COMPANY INC ©

"SERVING THE WORLD WITH STILLS"



25 GALLON ELECTRIC SYSTEM 32 GALLON CAPACITY PER DAY

Make your **OWN** automobile, tractor or lawnmower fuel, receive **TAX CREDITS**.

Start your **OWN DISTILLERY** and make a **NEW BEVERAGE!**

All copper alcohol stills from **1.5** gallon to **1,000** gallons and larger.

Available in electric, wood or propane.

Please contact Terry D. Wilhelm

P.O. Box 602, Yamhill, Oregon 97148

To order call 503.662.4173 / 503.662.4166 FAX

www.revenoor.com

terry@revenoor.com

DISTRIBUTORSHIPS WELCOME

An Introduction to Producing Alcohol as a Fuel

We at **THE REVENOOR CO** have been in the alcohol producing industry for the last three generations and although we produced and sold an “illegal moonshine beverage” the art of producing alcohol fuel is basically the same. Alcohol fuel is no more than moonshine whiskey.

Is making alcohol legal?

To produce alcohol fuel, the only requirement is a simple permit issued by the Alcohol and Tobacco Tax and Trade Bureau. It costs nothing and we know of no one ever being turned down. We furnish you with the application form with the purchase of a still. The application and all your questions can be answered on a great website. www.ttb.gov. The form TTB F 5110.74 is the Alcohol Fuel Producers Permit that you can download.

Is alcohol fuel new?

The first model cars were run on alcohol, as were many tractors and industrial motors. About that time gasoline became so plentiful and inexpensive that it was not practical to continue the use of alcohol. Germany fought the remainder of the war with alcohol when their petroleum lines were cut off. As long as there have been races, race cars, stoves and lanterns, there has been alcohol fuel. All Indy cars now race on ethanol. If they can race, you know we can drive to town on ethanol.

Alcohol – the clean fuel!

As earlier generations who used alcohol lamps will testify, alcohol burns clean, does not pollute and can be burned in a closed room without toxic or odor effects – without the need for mechanical ventilation systems. Because it is such a clean burning fuel, you need not use the smog devices on your engine as you are emitting only carbon dioxide which is essential for our plant life to produce clean fresh oxygen and water. So if you are using only alcohol as a fuel, you can remove your smog devices and recover the power and mileage you have lost by having these devices on your automobile. Smog devices rob an average 7 % of your fuel. Alcohol is also widely used in marine stoves, etc. since an alcohol fire may be extinguished with water.

Alcohol burns more completely than gasoline. You may recall the days when spark plugs were wired to the tailpipes of cars to make flames shoot out the tailpipes. This occurred because the gasoline was not being completely burned in the engine. It passed right through the engine and out the exhaust system.

Octane – Prices and Shortages

Do you really think gas prices are going to come down and stay down? Can you see any reason why they won't keep escalating? What about shortages caused by foreign oil supplies (by wars)? Are you prepared to produce your own fuel in the event of another shortage or gas rationing? Most people feel that there is nothing that they can do to stop the oil barons. But at the same time we support them by buying their products. They know they can charge whatever price they wish and we will pay it. We have seen shortages and high gas prices first in 1973 and as recent in 2003.

There is an alternative

Alcohol has been a proven product and motor fuel for nearly a century. It comes from products grown on top of the earth surface. It is non-polluting. It emits only CO₂ (carbon dioxide) which is essential to plant life, and water, which is essential to most all types of life. Alcohol has a much higher octane rating (108) than gasoline. There are very few of us in a position to produce gasoline, but very few of us who can not produce our own alcohol fuel.

Alcohol and Gasoline (Gasohol)

There are few advantages in mixing alcohol and gasoline together. If you intend to do so, you will need at least 195 proof alcohol to avoid separation of the alcohol and gasoline. But 160 to 180 proof **ETHANOL** used straight is **A MUCH BETTER FUEL**. We urge you to conduct your own simple comparison test by placing a small amount of alcohol and a small amount of gasoline into clean separate containers and light each afire. You will notice a difference in the clean blue flame of the alcohol and the dirty yellow flame and the black smoke of the gasoline. After the two fuels have completely burned and the flame has gone out, take a white cloth or tissue and wipe the containers. There will be no black residue from

the alcohol. After conducting the experiment, can you image the reactions of the public, if alcohol was in use worldwide and filthy gasoline was introduced as a replacement?

What does “Proof” Mean?

One percent alcohol represents two proof alcohol. Example: 100 proof is 50 % alcohol and 50 % water. Therefore, 160 proof is 80 % alcohol and 20 % water.

Ethanol versus Methanol

The **REVENOOR** stills described and offered in the catalog are sold for the production of ethanol (ethyl – alcohol). Ethanol is made from grains, potatoes, sugar beets, etc. Methanol (methyl-alcohol) or wood alcohol has only about 2/3’s the BTU’s (British Thermal Units – a measure of energy) as that of ethanol and therefore is a less efficient fuel, as it gets less mileage per gallon.

Alcohol as a Beverage & Water Stills

REVENOOR stills are safe for distilling water for drinking purposes and other uses. For distilling water, you will need a charcoal filter (listed on the accessories page). **REVENOOR** stills have also been used as mint distillers as well as distilling different chemicals that react to other metals. We have had over the years a number of customers who have gone on to produce and market beverage alcohol using our copper stills and equipment. All our copper stills are able to produce beverage grade alcohol such as brandies, liquors, whiskey, vodka, etc.

Tax Credits

Alcohol fuel producers may qualify for **TAX CREDITS** (tax credits come right off the total of your tax liability, not a deduction.) There is up to 51 cents per gallon Federal tax credit for every gallon of fuel alcohol you produce. A number of states offer further tax incentive on property and income.

Alcohol Furnace Fuel / Green houses

Most oil burning furnaces have a carburetor with an adjustable jet that will burn alcohol. Your furnace filters will very seldom have to be replaced because alcohol is such a clean burning fuel with no fumes. Alcohol gives off carbon into the air instead of carbon monoxide.

It is very beneficial to burn alcohol in greenhouses. Some studies report up to 200 % increase due to carbon dioxide and water vapor emission promoting extra growth in plants.

Automobile Conversions

Our “**SIMPLE SOUR MASH TO SIMPLE ALCOHOL FUEL**” book contains a complete section on this subject, in addition to much more valuable and useful information relating to alcohol.

Sour Mash Method

We use and recommend the **SOUR MASH METHOD** for making alcohol. With this method, the mash is not cooked. This enables you to use your mash over and over. The process is simple:

1. You make a “mash” out of corn, grains, potatoes, sugar beets, fruits, etc. with water, yeast and a sweetening agent such as molasses.
2. The mash makes a “beer” during the fermentation.
3. The “still” takes the alcohol out of the beer during distillation. Only the liquid beer is placed in the cooker using the **SOUR MASH** method. This enables you to use your mash over and over. Cooked mash can be used only once.

If you choose to cook your mash using enzymes, all **REVENOOR** stills will work equally well using this method.

What about instructions?

We furnish a complete set of instructions in a free copy of our “**SIMPLE SOUR MASH TO SIMPLE ALCOHOL FUEL**” book and a free copy of our “**REVENOOR STILL OPERATORS MANUAL**” with the purchase of each **REVENOOR** still. Using these two books, you should have no difficulty. We have customers reporting up to 198 proof one time through, although you would only need 160 to 180 proof to run straight alcohol in your car.

One Year Warranty

REVENOOR stills are covered by limited warranty for one year after date of purchase. Within this one year from the date of purchase, the **REVENOOR** will repair or replace your still if it is found to be deficient by reason of defect in either workmanship or materials. This warranty will not apply if your still has been damaged in transit, (you should open and inspect your still for damage upon receipt, because the shipper is responsible for damage in transit) if it is damaged from abuse, misuse, negligence, or accident, if it is improperly installed or in anyway modified. Should it be necessary for the still to be returned to our factory for repairs, transportation cost to and from our factory are the owner's responsibility and must be prepaid.

Style and Capacity of still

Each of the **REVENOOR** stills are designed with a temperature controlled tower or column for added efficiency. The 5, 10, 25, 50 and 100 gallon stills are solid copper built to last a lifetime. The 300 and 1,000 gallon stills have a heavy duty, treated steel cooker and solid copper detachable column. The 300 and 1,000 gallon stills are offered in copper as an option for beverages.

The gallon size of the still is the cooker capacity. Example, a five gallon **REVENOOR** still holds five gallons of "beer," a 25 gallon still holds 25 gallons of "beer" etc. Each unit is listed with the actual alcohol production rates on the page that describes the still in more detail. As you will notice, the larger stills are more efficient and take considerably less attention.

Safety and Maintenance

REVENOOR stills are manufactured of very high-quality materials and are completely safe. Each **REVENOOR** still is built with a safety valve and operates on less than one pound of pressure. The temperatures for operation are from 173 to 210 degrees F. (78.3 to 98.8 C.) Alcohol doesn't ignite from fumes like gasoline will, therefore, it is much safer than gasoline, although it is a flammable liquid and must be treated as such. Since you are placing only the liquid in the still, maintenance and cleaning is no problem, as they very seldom need maintenance. These are very heavy duty, high-grade solid copper units with silver soldered fittings, built to last a lifetime and need only an occasional washing out.

What size do I need?

When making your decision on which size and type of still you want, you should first decide the amount of fuel you wish to produce. Then decide the type of heat best suited for your area and needs. The average auto uses 800 gallons of fuel per year and a single acre of sugar beets for example would yield about 1200 gallons of alcohol. If you purchase all of your ingredients you can still produce your own fuel for less than the price of gasoline. Each still size is listed with the related equipment following. The following **REVENOOR** stills offered will produce the specified amount of alcohol per run if your mash contains at least 15 % alcohol content in your beer and the time element for production is figured from the time the still is up to temperature.

Some folks have more time to produce fuel then do others. Therefore you may wish to set up a larger plant to produce a lot of fuel at one time and then shut it down until your reserves are running low. Or even keep a larger unit running continuously and sell your excess at a profit.

Assembly

The only tools needed to complete assembly of the **REVENOOR** five, ten, twenty-five and fifty gallon size stills are two 8" to 10" adjustable wrenches.

How soon will I receive my still?

Full payment is due with the order of the **REVENOOR** 1 ½, 5, 10, 25 and 50 gallon size stills. All Revenoor stills are built after you place your order. The 1 ½, 5, 10 and 25 gallon stills usually ship in 30 days. The continuous systems and related equipment are made to your special order and normally take 45 days before shipping. We require a minimum 65 % deposit on all special orders to start and the balance to be received before shipment of order unless otherwise instructed in a written bid. On all special orders the 65 % deposit must be forfeited if the order is cancelled or not accepted. All stills are shipped freight COD or can be picked up at our location.

Trade-Ins

If you prefer to start out with a smaller unit to get the feel of alcohol production and then wish to move up to a larger sized unit, we will allow you full price paid on a larger unit. Of course, your trade-in must still be in good condition so it can be resold. However, if you have purchased your still from a dealer, you will have to make arrangements for a trade-in with them. We also have several units in stock that are trade-ins that are discounted from the original price. These trade-ins are completely reconditioned and carry a normal one year warranty the same as a new unit. Since stock on trade-in stills fluctuate almost daily, it will be necessary to phone or write us for availability.

Prices subject to change without notice!

We hope the information we have furnished you is helpful and we look forward to helping you to be fuel independent. Some of our customers have purchased units from us and have put them aside for future use or for emergency purposes.

This is also a smart idea for three major reasons:

1. They beat the rapidly rising inflation factor or price increases caused from raw materials, labor, etc.
2. The U.S. Government is still issuing free permits and tax credits.
3. They have the unit when they want and need it.

Propane-Fired Stills

The propane models are supplied with a cast iron burner, heating head, adjustable regulators, pilot assembly, thermal couple and safety shut down.

ALL PRICES ARE F.O.B. factory (unless otherwise stated.)

The following high quality accessories are included with each of the **REVENOOR** stills:

Free instruction manual	Free “ Simple Sour Mash to Simple Alcohol Fuel ” book
Stainless Steel Thermometers	Safety pop-off valve
Vinometer (beer Hydrometer)	Hydrometer (for testing proof of alcohol)
Large plastic beaker	Yeast

Barters or Trades of Products or Services

Do you have a product or a service that you think that we might be interested in? Currently, we are looking for someone to overhaul and semi restore a John Deere 70 Diesel tractor. We are also interested in a D4/D6 CAT Crawler with hydraulics.

The following are US Government published production yields for various crops. Keep in mind that with the sour mash method that these yields are $\frac{1}{4}$ the total since many crops can be used 4 times for fermentation.

Material	Yield per ton In Gallons	Yield per acre In Gallons	Material	Yield per ton In Gallons	Yield per acre In Gallons
Wheat	85.0	79.0	Corn	84.00	214.0
Buckwheat	83.4	34.2	Raisins	81.4	101.7
Grain sorghum	79.5	121.00	Rice, rough	79.5	175.0
Barley	79.2	83.0	Dates, dry	79.0	126.0
Rye	78.8	54.0	Prunes, dry	72.0	82.8
Molasses, blackstrap	70.4	45.0	Sorghum cane	70.4	500.0
Oats	63.6	57.0	Figs, dry	59.0	29.5
Sweet potatoes	34.2	190.0	Yams	27.3	94.0
Potatoes	22.7	299.0	Sugar beets	22.9	412.0
Figs, fresh	21.0	31.5	Pineapples	20.0	78.0
Jerusalem artichokes	20.0	1200.0	Sugar cane	15.2	
Grapes (all varieties)	15.1	90.4	Apples	14.4	140.0
Pears	11.5	49.3	Peaches	11.5	84.0
Plums	10.9	21.8	Carrots	9.8	121.0

1 ½ Gallon \$ 779

Made of high grade heavy duty components with the capacity to produce about **1 quart of alcohol in 30 minutes**.
No heat source provided.
Highly polished option \$ 60



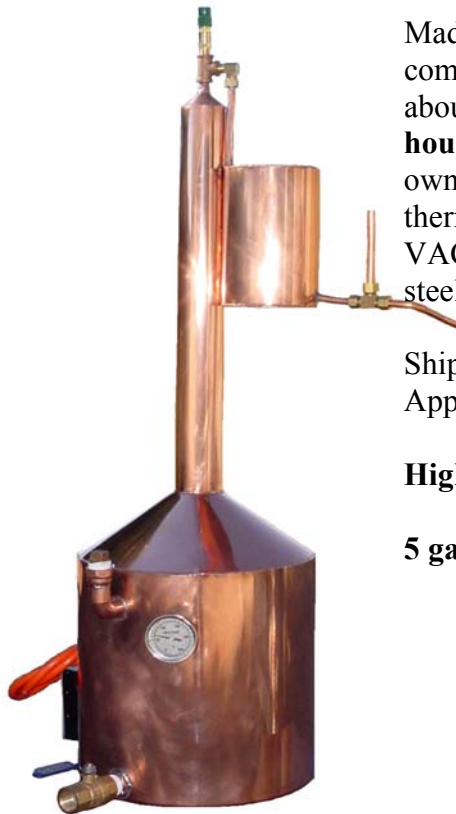
Five Gallon Electric or Propane \$ 1115

Made of high grade heavy duty components with the capacity to produce about **2 to 3 quarts of alcohol in an hour**. This model is designed with its own heat source, complete with thermostat, ready to plug into any 115 VAC household outlet. Includes stainless steel thermometer in base of still

Shipping weight approximately 37 lbs.
Approximately 42" high.

Highly polished option \$ 60

5 gallon electric pictured at left



Ten Gallon Electric or Propane \$1,565

Solid copper unit features safety valve, 2 stainless steel thermometers and have their own heat source. Produces about **1 to 1 ½ gallons of alcohol in 2 hours**. The electric 10 gallon is thermostatically controlled with 115 Volt power source to plug into any standard household outlet. The 10 gallon electric has a ball valve as standard. Free instruction books

Optional items:

Highly polished option \$ 60

Internal solar/steam coils \$ 350.00

Brass Water Gauge Set: includes site glass, water ball valves and protection rods \$ 125.00

Aluminum insulation jacket \$ 375.00

10 gallon electric is approximately 56" high and shipping weight is 90 lbs.

10 gallon with optional jacket shown at right





5 Gallon Removable Top Electric or Propane \$ 1960

The removable top model allows for the infusion of flavors into your alcohol. A removable top allows for easier cleaning and makes putting non-liquid items into your still much easier. This is great for you grappa folks! Made of high grade heavy duty components with the capacity to produce about **2 to 3 quarts of alcohol in an hour**. This model is designed with its own heat source, complete with thermostat, ready to plug into any 115 volt household outlet. Includes stainless steel thermometer in base of still.

Optional items:

Highly polished option \$ 60

Stainless steel removable basket that fits inside to hold your special items. \$ 275.00

Shipping weight approx. 41 lbs. Approx. 42" high.

Ten Gallon Removable Top Electric or Propane \$ 2685

The removable top model allows for the infusion of flavors into your alcohol. A removable top also allows for easier cleaning and makes putting non-liquid items into your still much easier. Made of high grade heavy duty components with the capacity to produce **1 to 1 ½ gallons of alcohol in 2 hours**. This model is designed with its own heat source, complete with thermostat, ready to plug into any 115 volt household outlet. Includes two stainless steel thermometers.

Optional items:

Highly polished option \$ 60

Stainless steel removable basket that fits inside to hold your special items \$ 275.00

Brass Water Gauge Set: Includes site glass, water ball valves and protection rods \$ 125.00

Shipping weight approx. 56 lbs. Approx. 58" high



25 Gallon Propane Still for Only \$ 3215.00 Or our Popular Electric Model for Only \$ 2685.00

Comes standard with 2 stainless steel thermometers: one in the cooker and one in the temperature controlled tower for easier temperature monitoring. This model produces from **3 ½ to 4 gallons of alcohol in about three hours**. It is made of extra heavy duty high grade solid copper and comes standard with its own propane heating unit and base or electric heating unit. Includes brass & glass site level. The 25 gallon electric still has its own self contained heating unit and is thermostatically controlled. The unit requires 220 volt electric power with two 30 amp breakers. The 25 gallon electric is approx. 66” high with a shipping weight of 150 lbs. The propane model is approx. 73” high with a shipping weight of 170 lbs.

Optional items: Highly polished option \$ 160 Aluminum insulation jacket \$ 375.00

Internal solar or steam coils, ready to hook to your solar heat system or steam generator \$ 350.00



25 Gallon Continual Fermenting System with All Poly Vats

25 Gallon Electric System \$ 6715.00

25 Gallon Propane System \$ 7305.00

Continual fermentation system for the 25 gallon still includes:

- 2 – 90 gallon heavy duty fermentation vats with lids
- 1 – 90 gallon heavy duty holding vat with lid
- 1 – 90 gallon heavy duty cooling vats with thermometers
- 1 – Bronzed piped input and discharge pump

This system includes all copper pipe fitting, unions and valves to plumb these vats in tandem to hook directly to your still (no welding or soldering required). With this system, one fermentation vat will be ready one day and the other the next day. This will produce **about 8 to 9 gallons a day**. All fittings are silver soldered. Includes brass screens in fermentation vats. System can be completely assembled with 2 adjustable wrenches in just minutes. System is 3' x 17' but can be turned to any angle with provided adapters. Maybe "L" shaped for example. This system does require manual care but will enable you to change batches with the turn of a valve rather than with a bucket and funnel. Also includes ball valves that open or close with just a quarter turn of a handle which makes it readily visible whether a ball valve is open or closed.

25 Gallon Continuous Fermentation System without Still \$ 3900.00 All Copper Vat Option \$ 4900.00

If your needs are for more fermentation vats to reach your daily goal of alcohol, please contact us. We can tailor the system to meet any fermentation or holding needs that you may have.

50 Gallon Electric \$ 4475.00 or 50 Gallon Propane \$ 5124.00

Also made of high quality heavy duty copper with brass & glass site-level and safety valve. Comes standard with insulation and aluminum projective jacket. Includes 2 stainless steel thermometers. **An exceptionally productive unit!** Produces about **7 ½ gallons of alcohol in about 4 hours**. The electric model has 240 VAC manifold 13,500 watt heat exchanger. The propane model burner rated at 80,000 BTU's, heating time approx. 2 hours. Approx. 89" high. Shipping weight approx. 275 lbs.

Internal solar or steam coil option: Ready to hook to your solar heat system or steam generator \$ 485

50 Gallon Continual Fermentation System -- Our Most Popular Small Plant!



50 Gallon Still with 6 Vat System \$ 8390.00

The same as the 25 gallon continuous system except it has 3 fermentation vats, 2 cooling vats and 1 holding vat.

50 Gallon Continuous Fermentation System without Still \$ 4950.00 All Copper Vat Option \$ 7700

If your needs are for more fermentation vats to reach your daily goal of alcohol, please contact us. We can tailor the system to meet any fermentation or holding needs that you may have.

100 Gallon Electric \$ 6,715 or 100 Gallon Propane \$ 8,256



Also made of high quality heavy duty copper with brass & glass site-level and safety valve. Comes standard with insulation and aluminum projective jacket. Includes 2 stainless steel thermometers. **An exceptionally productive unit!** Produces about **19 to 22 gallons of alcohol in about 5 hours.**

The electric model has 240 VAC manifold 18,000 watt heat exchanger. The propane model is a 2 burner set-up rated at 130,000 BTU's, heating time approx. 2 1/2 hours. Approx. 95" high. Shipping weight approx. 375 lbs.

Internal solar or steam coil option: Ready to hook to your solar heat system or steam generator – Call for pricing.

100 Gallon Continuous Fermentation System \$ 18,482

Looks similar to the 50 gallon system except the fermentation vats are larger!

- 2 – 500 gallon fiberglass fermentation vats with lids
- 1 – 500 gallon fiberglass holding vat with lid
- 2 – 90 gallon fiberglass cooling vats with lids

This system includes all copper pipe fittings, unions, pump, thermometers, valves and controls to plumb these vats in tandem to hook directly to your still. With this system, you will have 5 batches to run every day if you have your mash fermenting in consecutive batches. Each batch or run will produce about 20 gallons of alcohol for a total of 100 gallons of alcohol from five batches each day from your 15 % (alcohol content) beer. Area needed for this system less than 500 square feet.



REVENOOR 300 Gallon Wood-Fired or Electric \$ 8955

The **REVENOOR 300** gallon is for the more serious minded producer, as it produces **about 45 gallons every 8 hours**. The cooker is made with 3/16" treated steel to give you year after year of dependable service. It has a heavy-duty temperature controlled column made of solid copper which is detachable from still for shipment. There is also a large water-cooled condenser. Standard equipment includes brass & glass site-level and insulated aluminum jacket. Electric unit has 240 volt, 40,000 watt manifold heat exchanger with pump. Also included are 2 built-in stainless steel thermometers and 25 pounds of distillers yeast. Approx. 12' 4" high. Shipping weight about 1200 pounds.

Propane Option \$ 2,499

Internal Solar or Steam Coils – Price upon request
ready to hook to your heat system or steam generator

Solid Copper Option (for beverage purposes) \$ 4,900
300 gallon solid copper still made with 3/16" thick high-grade copper, with detachable copper column

Continual Fermentation System \$ 51,855

For the 300 gallon **REVENOOR** still to run two batches or runs everyday, the following system will include:

- 2 – 1250 gallon fiberglass fermentation vats with lids
- 1 – 1250 gallon fiberglass holding vat with lid
- 2 – 1250 gallon fiberglass cooling vats with lids
- 1 – 1250 gallon fiberglass blending & storage vat with lid

This system includes all copper pipe fittings, unions, pump, thermometers, valves and controls to plumb these vats in tandem to hook directly to your still. With this system, you will have 2 batches to run every day if you have your mash fermenting in consecutive batches. Each batch or run will produce about 45 gallons of alcohol for a total of 90 gallons of alcohol from two batches each day from your 15 % (alcohol content) beer. Area needed for this system – 500 square feet minimum.

System without Still \$ 42,900

REVENOOR 1,000 GALLON

The **REVENOOR** 1,000 gallon is designed to fit most of the fuel needs for both farm and industrial size operations. This model produces about **150 gallons of alcohol in a period of about 12 hours**. The cooker is made of treated ¼” steel will all extra heavy-duty components.



The standard model includes a temperature controlled tower, circulating water cooled condenser and insulation with aluminum jacket for added efficiency. Also standard are the brass & glass site-level and ball valves. The Still comes with two stainless steel thermometers, all instruments and a 22 pound container of distillers yeast. Column is made of copper and is completely detachable for shipment. Approx. 16’6” tall with a shipping weight of about 3,000 lbs.

Electric \$ 14,390

Propane option \$ 3,345

Manually Operated Continual System \$ 81,000

For the 1,000 gallon **REVENOOR** still to run 2 batches or runs every day, the following system will include:

- 4 – 1250 gallon fiberglass fermentation vats with lids included
- 1 – 1250 gallon fiberglass holding vat with lid
- 2 – 1250 gallon fiberglass cooling vat with lid
- 1 – 1250 gallon fiberglass blending & storage vat

Solid Copper Option for beverages \$ 5,100

1,000 gallon solid copper still made with 3/16” thick high-grade copper, with detachable copper column

This system includes all copper pipe fittings, unions, pump, thermometers, valves and controls to plumb these vats in tandem to hook directly to your still. With this system, you will have 2 batches to run every day if you have your mash fermenting in consecutive batches. Each batch or run will produce about **150 gallons of alcohol for a total of 300 gallons of alcohol** from two batches each day from your 15 % (alcohol content) beer. AREA needed for this system – 1200 square feet with 16’6” ceilings.

System only without still \$ 62,000

A typical **REVENOOR** alcohol producing plant using a 1,000 gallon size still and equipment for an operation that is almost completely automatic. It will produce about **300 gallons of alcohol every day, seven days a week**. This system includes a 1,000 gallon still, 4 fermentation vats, 2 cooling vats, 1 holding vat and 1 blending & storage vat. These are all 1250 gallon, high quality, special resin fiberglass vats with removable lids.

The building required for this size of an operation should be about 24' x 40' with 16'6" ceiling and with automatic vent fans on each end. It should be insulated and have a concrete floor which is sloped to the center and drained. You will also need a 200 amp disconnect and fresh water supply.

Blueprints, Photos and Engineering Fees

Additional information is available on our 1,000 gallon and modular 1,000 gallon systems. When ordering, please indicate production requirements. Most economical feed stocks in your area, least expensive or accessible heat source, average in ground water temperature during summer and winter months, average ambient temperature during summer and winter months. We also need to know what related equipment or buildings you have now or plan to have to work with the system. Remember, these prints are tailored to your specific needs and the more information you can give us the better they will apply to them. Please send \$ 7,500.00 for a complete set of layout blueprints, space and utility requirement. This \$ 7,500.00 fee is 100 % refundable when applied to any 1,000 gallon system.

Specialty Manufacturing

We will construct an alcohol plant for you to meet your specifications and designs from your blueprints or drawings. Or we will build any part of it for you.

Accessories: ALL PRICES INCLUDE SHIPPING AND HANDLING

0 to 200 proof alcohol hydrometer (to test alcohol after distilling)	\$ 46.00
Plastic beaker with stand (to use as a container for alcohol testing)	\$ 15.00
Beer Hydrometer (Vinometer) (to test alcohol content of beer before distilling)	\$ 46.00
Charcoal Filter with Brass Fittings (for filtering out impurities or distillate oils, if you intend to distill water in your still, this filter is needed)	\$ 27.95
Highest Quality Stainless Steel Thermometer With ¼ " m.i.p. threads (included with each still) sold separately at this price	\$ 45.00
Distillers Active Dry Yeast 1 ½ pound bag	\$ 17.95
pH Testing Kit	\$ 5.50
Fermentation Lock	\$ 7.50
Automotive Alcohol Fuel Pre-heater (solid copper complete with all fittings, some people use these units to preheat gasoline for extra mileage increase)	\$ 85.00
Brass & Glass site level gauge with protection rods	\$ 75.00

Enter the Word of Aromatherapy Distill Your Own Essential Oils “The Essential Oil 7.5 Gallon Distiller”

This attractive all copper distiller is perfect for making essential oils via steam or hydro distillation. It is also excellent for creating your own flower and plant (“hydrosols”). The system is divided into three components: **RETORT, BIRD’S BEAK** and **CONDENSER**

RETORT – The retort is the cylinder that holds your plant material and water. Capacity: Approximately 1 cubic foot, 7.5 gallons or 28.4 liters. On the retort, there is a sight glass to keep track of the water within. The heater, which is attached to the bottom (vertical) of the retort, can be plugged into any outlet. Temperature is already set for boiling water. On the propane model, a low pressure propane burner sits under the retort and is controlled by an adjustable gas regulator. A drain valve is also on the bottom of the cylinder for emptying the water after distillation.

Two fittings on the retort permit adding water during distillation or can be used for connection of distillate water. The fittings are designed for “hard-piping” your water source. They can be adapted for hoses.

BIRD’S BEAK – The Bird’s Beak attaches to the top of the retort. The top of the retort has been fitted with a food grade gasket and provides an excellent seal against steam leaks. The cone of the Bird’s Beak is attached as a “lid” secured in place with stainless steel wingnuts. The cone is equipped with a thermometer (Fahrenheit) to monitor the temperature. Steam from the retort travels through the Bird’s Beak on its way to the condenser.

CONDENSOR – The purpose of the condenser is to cool the steam generated in the retort, causing the steam to revert to liquid form. The condenser requires a constant flow of cold water. Steam enters through the top of the condenser. There are two fittings on the vertical side of the condenser, one at the top and one at the bottom. The fittings are designed for ½ “ tubing. Cold water is introduced at the bottom fitting and exits through the top fitting. Water can be supplied from a sink tap.

An alternative is to connect a submersible pump, which sits in a bucket of cold water (ice should be added to the bucket as well as water). The water is pumped into the bottom fitting and is returned into the bucket from the top fitting. This allows distillation away from a water source, during lectures and demonstrations, in the garage or out in the field (power source is required)

The **Essential Oil Distiller** is only available through **The Essential Oil Company**. Please contact **Robert** at:

The Essential Oil company
8225 SE 7th Ave
Portland, Oregon 97202
800.729.5912 FAX: 503.872.8767
<http://essentialoil.com>
Robert@essentialoil.com



Electric portable top distiller shown at right



Reclaim Acetones, Paint Thinners and Solvents with our Recycling Stills – Body and Paint shops, fiberglass shops, manufacturers that paint their products are some popular places for these efficient units.

Tests have shown that these units will clean your lacquer thinner to virgin quality. Acetone can be reclaimed for approximately 10 cents a gallon.

We have two basic units:

A 15 gallon model which processes 15 gallons of waste in about 2 hours or a 110 gallon unit which takes about six hours processing time.

15 Gallon \$ 4,000 110 Gallon \$ 8,500

These units usually pay for themselves in less than a year.

Our own book on The Alcohol Industry:

Over 60 years alcohol production and research experience are reflected in”

“SIMPLE SOUR MASH TO SIMPLE ALCOHOL FUEL”

Our new book contains 208 full 8 ½” by 11” pages on sour mash and other mash-making procedures, fermentation, auto conversion, recipes, latest tax credits and incentives and much, much more.

Only \$40.00 including shipping and handling.



“SIMPLE SOUR MASH TO SIMPLE ALCOHOL FUEL” table of contents

Part one

- The history of alcohol
- Alcohol in industry
- Alcohol motor fuel
- Introduction of gasoline
- The “good old days”
- Modern times
- Your alternatives

Part two

- Fuel independence
- Energy alternatives
- Trading food for fuel
- Farm crop yields

Part three

- Alcohol producers permit
- How to make alcohol
- Hydrometers
- Added tips
- Alcohol storage

Part four

- Commercial enzymes
- Cellulose
- Grinding mash
- Malting
- Cooking
- Sugar & starch crops

Part five

- Federal tax credits
- Federal tax incentives
- Income tax credits
- State tax exemptions
- Business & energy tax credits
- Research tax credits

Part six

- Converting from gasoline to alcohol
- Dual fuel systems
- Diesel conversions
- Factory conversions
- Alcohol furnace fuel

Why Lease?

Preserves existing Bank and Credit lines – This will not show up on your personal credit so it's not exposed to other lenders as a debt.

Leases are secured by the equipment on the lease, not a blanket lien on the business or all equipment they own. Great for intangibles such as software and services.

Very little out of pocket expense – no more than first and last month's payments – sometimes less!

Does not tie up cash or lines of credit that you may need for emergency situations, or whatever you usually use it for!

Quicker approvals and funding to the vendor than a Bank, and no financial statements required now or at any time throughout the term of the lease. This not only means less hassle for you, but it also means there is no chance that the lease can be "called in" if your financials start a negative trend, unlike what the bank can do on a loan.

There is no prepayment penalty. Provides a tax write-off on depreciating assets. Allows you to use your cash for items that add value to your business.

Call Vicki today for even more reasons why to utilize leasing

Vicki Capperauld 800-433-6189 x108 253-395-3803 fax

Tax Benefits of Leasing

It Pays for business owners to know about the IRS Section 179!

IRS Section 179

Under IRS Section 179, equipment purchases, up to the amount shown below, can be expensed (deducted from taxable income) if installed before December 31st. Finance leases qualify for this deduction in their year of inception. Any excess above the expensed amount can be depreciated over 5 to 7 years depending on the equipment type.

The maximum amount of asset cost that can be expensed by year is:

**\$25,000 for 2003 BUT was increased
to \$100,000 in May of 2003 for that year.**

For example, if you purchase or lease a piece of equipment for \$22,000 and install it in 2003, you are eligible to take a \$20,000 tax deduction in 2003. The remaining \$2,000 can be depreciated over the life of the asset.

Finance Lease:

Typically, a finance lease is a full payout, non-cancelable agreement. You are responsible for maintenance, taxes and insurance. The benefit of this lease type is that you can take advantage of IRS Section 179 and expense up to the amount allowed for the year the equipment is installed. You may depreciate any excess on the depreciation schedule for that particular asset.

Example: The equipment is installed in 2004 and the cost is \$35,000. Using IRS Section 179 and assuming a 33% tax bracket, your tax savings would be **\$25,000 x .33 = \$8,250** plus the depreciation value on the remainder of **\$10,000**.

Tax Lease/True Lease:

A tax lease or true lease are leases for which the lessor retains ownership and you as the lessee may be allowed to claim the entire amount of the monthly investment as a tax deduction. Many rental contracts qualify as a true lease.

Example: Monthly investment is \$1,000. Term is 36 months. Assuming a 33% tax bracket, your monthly tax savings would be **\$1,000 x .33 = \$333**. Total savings over the term of the contract would be **\$11,988**.

1208. Election to Expense Certain Depreciable Business Assets

An expense deduction is provided for taxpayers (other than estates, trusts or certain non-corporate lessors) who elect to treat the cost of qualifying property, call Sec. 179 property, as an expense rather than a capital expenditure. The election, which is made on form 4562, is to be attached to the taxpayer's original return (including a late filed original return) or an amended return filed by the due date of the original return (excluding extensions) for the year the property is placed in service and may not be revoked without IRS consent (94FED, 12,120). Employees may make such election on Form 2106.

For 2000, the maximum Code Sec. 179 deduction is \$20,000. The \$20,000 ceiling is reduced by the excess cost of qualified property placed in service during the tax year over \$200,000.

The total cost of property that may be expensed for any tax year cannot exceed the total amount of taxable income (determined after application of the investment limitation) derived from the active conduct of any trade or business during the tax year. Cost disallowed under this rule may be carried forward an unlimited number of years subject to the ceiling amount for each year. To qualify as Code Sec. 1245 property depreciable under Code Sec. 168 and property that is acquired by purchase for use in the active conduct of a trade or business.

An enterprise Zoned business (Code Sec 1397B is entitled to an increased Code Sec. 179 deduction. The standard \$20,000 annual limitation is increased by the lessor of (1) \$20,000, or (2) the cost of section 179 property which is qualified zone property (other than buildings) placed in service during the tax year in one of 9 empowerment zones which may be designated during 1994 and 1995.

