



AD

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AMERICAN DISTILLER: A SOURCE OF INFORMATION ON THE DISTILLING PROCESS

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The ADI is the collective voice of the new generation of progressive beverage, medical and aromatic distillers, and is dedicated to the mission of disseminating professional information on the distilling process. The ADI has filed for a designation as a 501(c) Non Profit Corporation.

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Distilled Spirits Labeling — The COLA Process

by Marc E. Sorini

The primary regulator of distilled spirit labeling is the Bureau of Alcohol, Tobacco & Firearms (“ATF”), although other federal and state agencies also play limited roles.

This article discusses the certificate of label approval, or “COLA,” process that ATF imposes on distilled spirits labels, leaving other labeling issues and the related topics of formulas, cartons and containers, and advertising for later articles.

Under the Federal Alcohol Administration Act, ATF requires producers and importers to obtain pre-approval of distilled spirit label designs before the labels are used in interstate commerce (e.g., across state or national borders). ATF accomplishes this through its COLA system: Except for minor changes allowed to previously-approved labels, distillers must obtain an approved COLA for each label design. The changes allowed without a new COLA are listed on the back of the COLA application form, ATF Form 5100.31, available online at <http://www.atf.treas.gov/forms/msword/f510031.dot>.



Illustration by Adam McLean

Procedure for Submitting

To obtain a COLA, the bottler and/or packer of the product must submit two completed copies of the executed COLA form bearing all labels appearing on the bottle to ATF Headquarters in Washington, DC. These are reviewed for compliance with the law by the ATF’s Alcohol Labeling & Formulation Division (“ALFD”). During business hours, ALFD’s customer service team (tel: 202-927-8140) makes itself available for questions by industry members.

An ATF-approved formula must accompany many COLA applications, including those for flavored spirits, liqueurs and cordials. Obtaining an approved formula from ATF generally

takes between three and eight weeks; distillers should factor the timing of formula approval into their business plans. Other COLA applications – generally those with painted-on or translucent labels – must include a filled bottle so that ATF can confirm that colored products do not affect the legibility or contrast of mandatory label information. Finally, some containers must receive “distinctive liquor bottle approval” if opaque decanters do not reveal the fill level of the bottle.

COLA applicants can file by mail, overnight delivery, in person, or through several trade associations, lawfirms and consultants that provide label “walkover” services. In-person delivery, either by the applicant or an agent, saves time by avoiding both the mails and ATF’s internal mail-routing system. ATF hopes to commence electronic COLA filing in early 2003.

Approval/Rejection

After review of a COLA application, ATF will either approve the application, reject the application, or approve the application with “qualifications.” ATF aims to process all applications within nine calendar days of receipt, but delays are common, particularly where labels must pass through ATF’s mailroom. In special circumstances, an applicant can request expedited treatment, but must present ALFD with cogent written reasons for doing so at the time of filing.

When ATF rejects a label, it will return the original applications with a “Corrections Sheet” that briefly explains the reasons for denial. The distiller may then resubmit the corrected applications (attaching, where necessary, corrected labels) along with the Corrections Sheet to ATF for another attempt at approval. If the distiller believes ATF rejected the application in error, it can try to persuade ALFD to change its position. Many labeling disputes are clarified and resolved through informal discussions between ALFD officials and the distiller or its attorney or consultant.

An approval with qualifications allows the distiller to use the approved label subject, however, to one of any number of restrictions imposed by ATF. As with rejections, ATF is generally willing to discuss COLA qualifications that the distiller believes are in error. A more formal appeals procedure is available for rejections or qualifications, but the length of time ATF takes to consider and decide such appeals limits its usefulness.

An approved COLA allows the distiller to commence bottling the product for sale in interstate commerce. Moreover, an approved COLA generally precludes any later ATF punishment for use of the approved label provided, of course, that the label accurately reflects the contents of the bottle. ATF may revoke previously-approved COLAs, but the revocation procedure allows the bottler to continue using the label until ATF completes the revocation process, which may take a year or longer if the COLA holder exercises its rights to contest and appeal a revocation.

Penalties

ATF possesses broad powers to punish distillers for bottling prior to obtaining a COLA, including the ability to first suspend, then revoke, a distiller’s basic permit – the federal license needed to distil. ATF often compromises mislabeling charges for monetary fines, which can be quite large in extreme circumstances: In the past several years ATF settled mislabeling proceedings against two wineries for \$750,000 each.

For products that a distiller does not plan to sell in interstate commerce, ATF requires distillers to submit a “certificate of exemption from label approval” by checking the appropriate box on the COLA form. All exemptions issued by ATF bear the qualification “For sale in [state] only.”

Practical Tips for Distillers

The COLA process generally does not present an insurmountable hurdle for the would-be distiller, although it may occasionally frustrate a particular marketing idea. In my experience, most problems arise from a failure to anticipate the formula and COLA process in timing a particular product introduction or labeling change. Distillers should try to obtain formulas and submit COLA applications early, pay careful attention to the legalities of label design, and avoid ordering production labels until after receiving ATF COLA approval. These simple steps usually can tame the COLA process from a potential disaster to a mere bureaucratic hurdle.

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Book Reviews

compiled by Tony Ackland

Mike Nixon and Mike McCaw have produced a great new book, *The Compleat Distiller*. This is an extremely comprehensive reference, covering many different still designs and operations. It has a lot of information on construction, as well as great explanations of the theory of distilling. If you’re only after one book, make this the one. It’s available either in hardcover or electronically. You can purchase it at <http://www.amphora-society.com>.

John Stone has put out a new book, *The Carriage Still*. Review from the Web site (<http://www.gin-vodka.com>) as follows:

This book describes the construction of an elegant top-of-the-line fractionating still for amateurs. It was created by a research scientist who has been designing and constructing stills for over 17 years, and should be read by any hobbyist who likes to have the very best.

As will be seen from the book cover, the still is mounted in a cabinet which holds the boiler. The top of this cabinet supports the glass column, the collection bottle, the digital thermometer and the distiller’s notebook.

CONTINUED ON PAGE 4

Gin — An Overview

by Alan S. Dikty

“Why don’t you slip out of those wet clothes and into a dry martini?”

— Robert Benchley

The Basis of Gin

Gin and its Dutch cousin genever (jenever in Belgium) are white spirits that are flavored with juniper berries and so-called botanicals (a varied assortment of herbs and spices). The spirit base of gin is primarily grain (usually wheat or rye), which results in a light-bodied spirit.

Genever is made primarily from “malt wine” (a mixture of malted barley, wheat, corn and rye), which produces a fuller-bodied spirit similar to malt whisky. A small number of genevers in Holland and Belgium are distilled directly from fermented juniper berries, which produces a particularly intensely flavored spirit.

The chief flavoring agent in both gin and genever is the highly aromatic blue-green berry of the juniper, a low-slung evergreen bush (genus *Juniperus*) that is commercially grown in northern Italy, Croatia, the United States and Canada. Additional botanicals can include anise, angelica root, cinnamon, orange peel, coriander and cassia bark. All gin and genever makers have their own secret combination of botanicals, the number of which can range from as few as four to as many as 15.

Distillation of Gin

Most gin is initially distilled in efficient column stills. The resulting spirit is high-proof, light-bodied and clean with a minimal amount of congeners (flavor compounds) and flavoring agents. Genever is distilled in less-efficient pot stills, which results in a lower-proof, more flavorful spirit.

Low-quality “compound” gins are made by simply mixing the base spirit with juniper and botanical extracts. Mass-market gins are produced by soaking juniper berries and botanicals in the base spirit and then redistilling the mixture.

Top-quality gins and genevers are flavored in a unique manner. After one or more distillations the base spirit is redistilled one last time. During this final distillation the alcohol vapor wafts through a chamber in which the dried juniper berries and botanicals are suspended. The vapor gently extracts aromatic and flavoring oils and compounds from the berries and spices as it travels through the chamber on its way to the condenser. The resulting flavored spirit has a noticeable degree of complexity.

Classifications of Gin

London Dry Gin is the dominant English style of gin. As a style it lends itself particularly well to mixing. London Dry

gin is the dominant gin style in the United Kingdom, former British colonies, the United States and Spain.

Plymouth Gin is relatively full-bodied (when compared to London Dry Gin). It is clear, slightly fruity and very aromatic. Originally the local gin style of the English Channel port of Plymouth, modern Plymouth gin is nowadays made only by one distillery in Plymouth — Coates & Co., which also controls the right to the name Plymouth gin.

Old Tom Gin is the last remaining example of the original lightly sweetened gins that were so popular in 18th-century England. The name comes from what may be the first example of a beverage vending machine. In the 1700s some pubs in England would have a wooden plaque shaped like a black cat (an “Old Tom”) mounted on the outside wall. Thirsty passers-by would deposit a penny in the cat’s mouth and place their lips around a small tube between the cat’s paws. The bartender inside would then pour a shot of gin through the tube and into the customer’s waiting mouth. Limited quantities of Old Tom-style gin are still made by a few British distillers, but it is, at best, a curiosity item.

Genever or **Hollands** is the Dutch style of gin. Genever is distilled from a malted grain mash similar to that used for whisky. Oude (“old”) genever is the original style. It is straw-hued, relatively sweet and aromatic. *Jonge* (“young”) genever has a drier palate and lighter body. Some genevers are aged for one to three years in oak casks. Genevers tend to be lower proof than English gins (72-80% ABV is typical). They are usually served straight up and chilled. The classic accompaniment to a shot of genever is a dried green herring. Genever is traditionally sold in a cylindrical stoneware crock. Genever-style gins are produced in Holland, Belgium and Germany.

Gin Regions

The United Kingdom produces mostly dry gin, primarily from column stills. British gins tend to be high proof (90° or 45% ABV) and citrus-accented from the use of dried lemon and Seville orange peels in the mix of botanicals. British gins are usually combined into mixed drinks.

Holland and **Belgium** produce genever, mostly from pot stills. Genevers are distilled at lower proof levels than English gins and are generally fuller in body. Many of these gins are aged for one to three years in oak casks. Some genever producers now market fruit-flavored genevers, the best known being black currant. Dutch and Belgian genevers are usually chilled and served neat.

Germany produces a genever-style gin called *Dornkaat* in the North Sea coast region of Frisia. This spirit is lighter in body and more delicate in flavor than both Dutch genever and English dry gin. German gin is usually served straight up and cold.

Spain produces a substantial amount of gin, all of it in the London Dry Style from column stills. Most of it is sold for mixing with cola.

The United States is the world's largest gin market. London dry gin accounts for the bulk of domestic gin production, with most of it being produced in column stills. American dry gins tend to be lower proof (80° or 40% ABV) and less flavorful than their English counterparts. This rule applies even to brands such as Gordon's and Gilbey's, which originated in England. America's best-selling gin, Seagram's Extra Dry, is a rare cask-aged dry gin. Three months of aging in charred oak barrels gives the gin a pale straw color and a smooth palate.

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The Martini and the Meaning of Life

The best known of hundreds of gin-based mixed drinks is the gin and white vermouth combination called the martini. As is usually the case with most popular mixed drinks, the origins of the martini are disputed. One school of thought holds that it evolved from the late-19th-century Martinez cocktail, a rather cloying mixture of Old Tom-style gin and sweet vermouth. A dissenting sect holds that it was created in the bar of the Knickerbocker Hotel in New York City in the early 20th century. The ratio of gin to vermouth started out at about 2 to 1, and it has been getting drier ever since. The great British statesman Winston Churchill, who devoted a great deal of thought and time to drinking, was of the opinion that passing the cork from the vermouth bottle over the glass of gin was sufficient.

BOOK REVIEWS – CONTINUED FROM PAGE 2

The distillation column is made from 38 mm glass tubing so that the operator and his friends have the pleasure of seeing the distillation in progress. No glass-blowing is involved, however, just the machining of brass couplings. There are 14 diagrams and photographs, many in color.

The still can deliver 11-12 liters of ultra pure vodka per batch, using ordinary cane sugar as substrate. Spirits such as whiskey, brandy, rum, gin, schnapps and liqueurs can also be made using the appropriate starting material.

The book is easy to read, with many clear explanations and diagrams. The still design is that of his “top of the line” model — a further development of the inline one in the Gin-Vodka book.

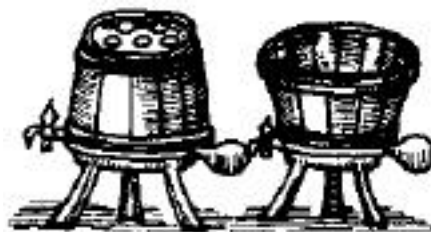
n *Making pure corn whiskey — a professional guide for amateur and micro distillers* from <http://www.magma.ca/~smiley/main.htm>:

The book gives full plans and details for building a Nixon/Stone type of column still, and then goes into great detail in describing how to use it to make pure corn whiskey. There are detailed construction steps (including finished photos of the still — removing all doubt as to whether or not it's really been done) make the construction of the still simple, and the recipe and instructions for making corn mash (with the grain, be it flaked, whole grain, or flour or meal) and distilling it into a *very* palatable product — including solid information on “making the cut” (essential to making good whiskey). For all of those who have, or want to build, a still capable of making 95% alcohol, this is the book to buy. For those who already have a still capable of turning out 95%, the book will be very useful for making a good whiskey (I have seen the instructions on “making the cut” in this book used to make some very fine

rum as well). For those interested in making something other than essence based booze or just plain gin and vodka, and are tired of drinking potstill whiskey that gives you an upset stomach after only one glass — this is your book. I purchased mine online at <http://www.magma.ca/~smiley/main.htm> for \$28.50 (Canadian). Delivery was prompt and the book gives the beginner the insight of a master whiskey distiller by just reading it — highly recommended.

Making Pure Corn Whiskey is up near the top of my list of distilling books to buy. Ian has a great knowledge and understanding of the distilling process, and has explained it very clearly and in a straightforward style. Instructions for building the still are well explained, with many photos to help. He has only suggested a heat input of 750W with this particular design. However, I reckon it could easily handle 1500W (and, hence, half the distilling time) if the column were increased up to 2” diameter. The method of preparing corn mash is also well covered. The best bit, though, is a well laid out method for determining how to make the various “cuts” between the foreshots, heads, middle run, and tails, with tables and examples to help guide you. He clearly explains how by changing the timing of these cuts, you are able to alter the taste/profile of the whisky, too.

Look for more book reviews in the next issue of *American Distiller*.



The Evolution of Neutral Spirits Production

by Don Outterson

It was a giant leap forward for progress and efficiency when the continuous-column patent still forced the pot still out of mass production in the early 1800s. As is the case with most progress, however, there was a downside. In this situation, it caused many legal and ethical problems for the distilling industry.

“In 1826 Robert Stien of the Kilbagie distillery in Clackmanshire, Scotland, patented a continuously operating still for whisky production. However,

this invention was superseded in 1830 with the introduction by Aeneas Coffey of an improved version of this type of still. The appearance of continuous stills sparked off a

period of turmoil in the Scotch whisky industry, it being claimed that the

product from the continuous distillation of a mash that contained unmalted grain (described as a neutral or “silent spirit-

it”) could not be called whisky, since it had not been distilled in the traditional pot still. The battle was waged for about three quarters of a century; and in 1908 a royal Commission decided that malt whisky and grain-neutral spirit, when blended, could be labeled whisky.”¹

Before the invention of the column still, vodka and other neutral spirits were produced by two or three passes on the pot still, with strict adherence to the center cut, or “spirit cut,” on the last pass. This was collected (with the distillation hydrometer) only in the range of 70–85% abv. The unaged spirit was then diluted (with distilled water) to 40–50% and repeatedly filtered through activated carbon until neutrality was attained. Because the neutral-cut range was so much smaller than the full traditional whisky-cut range, a lot of product was wasted just to produce a young, drinkable spirit.

The direct production of neutral spirits with the column still solved the problem of waste by harvesting the entire volume of alcohol outside of the pot still's spirit-cut range. This was done by the use of vertical plates, each of which acted as an additional redistillation pass. Column-distilled spirits were being subjected to eight to 10 successive distillation passes. While removing the congeners (impurities), the flavors were also being stripped out.

The beer in-feed now starts high on the column, flowing downward against the rising steam. (This is in contrast to starting at the bottom of the traditional pot still.) The column

allows the spent beer to fall to the bottom and cycle out of the system while the alcohol vapors rise to the top and exit via the condenser. This also means that distillation with a column still can be continuous and fully automated. Distillation plates are placed at regular intervals inside the column with return tubes so that spirits with higher alcohols will redistill to ever greater purity.

“Vodka is a pure unaged spirit distilled from various materials and is normally filtered through charcoal. Vodka originated in Poland and Russia and is integral to the social life of these countries. The product dates back many hundreds of years, probably to the twelfth or thirteenth centuries. Finland and Sweden are also major producers. Vodka's popularity in Western countries has increased considerably in the second half of this century.”² Additional flavorings are now allowed by EEC and BATF, including sugar to 2 g/l and citric acid at 150 mg/l.

Neutral spirit can be produced from almost any sugar as long as proper rectification removes the congeners produced in fermentation. Commercial enzymes are used for the highest possible yield. This flexibility allows for crop rotation and world spot market purchase of raw materials without loss of consistent spirit production. Wheat, corn, barley or sugar cane can yield the same product in this manner.

“A wide variety of other flavoured spirits are produced throughout the world, the most famous category being **anis**, **pastis** and **ouzo**. Anis and pastis have their origins in absinthe, a drink created in the late eighteenth century in France using a mixture of herbs including wormwood. Absinthe became very popular in France; however, it was subject to abuse through over-consumption and was considered to contain potentially dangerous components. This resulted in a French government ban on its manufacture in 1915 during the First World War.”³ Pepper-, juniper-, caraway- and citrus-flavored vodkas are also popular.

The continuous-column still has been the single greatest technical advancement in distilling technology. Its impact and effect are yet to be fully realized with the recent advancements in biotechnology.

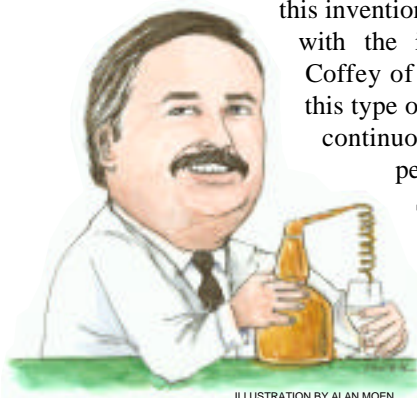
¹The Alcohol Textbook, Alltech, Inc. K. Jacques, PhD, T.P. Lyons, PhD, D.R. Kelsall, Nottingham University Press, 3rd edition 1999, pp 140.

²Fermented Beverage Production, Edited by A.G.H. Lea and J.R. Piggott, Aspen Publishers, Inc. 1995, pp.276.

³Fermented Beverage Production, Edited by A.G.H. Lea and J.R. Piggott, Aspen Publishers, Inc. 1995, pp.276.

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Liquid Spice

Cooking with Distilled Spirits

by Lucy Saunders • www.beercook.com

You can buy gin anywhere, but you may have to go to the Asian supermarket nearest you to find Thai chili-basil paste. It's worth the trip — makes a versatile dipping sauce as well as BBQ seasoning.

Gin Glazed Wings

1-1/2 pounds chicken wings
1 C. oyster sauce
1/4 C. soy sauce
1/2 C. crushed tomatoes
3 T. fresh minced garlic
1 T. fresh minced ginger
As much hot Thai chili-basil pepper sauce as you can stand (start with 1 t.)
4 fl. oz. gin
1/4 C. honey

Directions:

In a large bowl combine oyster sauce, soy sauce, crushed tomatoes, seasonings, gin, and honey. Marinate chicken wings overnight in the sauce.

Cook on grill at a low heat, using drip pan or foil beneath wings to prevent flare-ups.

Yields about 4 servings.

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Lucy Saunders is the editor of beercook.com.

E V E N T S

■ **Whisky Fest.** April 17, 2002 at The Hyatt Regency in Chicago. Sample more than 200 of the finest and rarest whiskies, single malts, scotch, Irish bourbon, Tennessee and Canadian whiskies. Information at www.maltadvocate.com.

■ **Worldwide Distilled Spirits Conference.** Sept. 8-12, 2002 at Roxburghe Hotel in Edinburgh, Scotland. www.distillingconferences.com.

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