

distilleria
MAROLO

Corso Canale 105/ 1 – Alba (CN) Italy

Premium Brands, Inc.

69-13 Fleet Street - Forest Hills, NY 11375-5165

tel.: (718)263-4094 - fax: (718)263-4409 - E-mail: PremiumB@aol.com

www.marolo.com

--- <http://www.paoloboselli.com>

"GRAPPA" and Its Production

What is grappa

"Grappa" is the Italian legal name given to the distilled spirit obtained through the distillation of the **pomace** or marc of pressed grapes (**skins, seeds, small quantity of pulp, must and wine**).

It is a brandy (eau-de-vie) unique in its kind even if there are, especially in Europe, other products obtained from the distillation of pomace. The basic difference is that grappa is obtained through the distillation of pomace by boiling water and the extraction of alcohol present in it through a **flow of hot steam**, while other brandies or eau-de-vie, including the famous French marc, are obtained with the *distillation of the washing waters of the pomace*.

Clearly this second system of extraction is definitively more diluted and the distillation of these pomaces generates products less rich in flavor (not so extracted) and poorer in terms of perfumes and secondary aromas, unlike the Italian grappa. To produce grappa means not only to get alcohol, but to create a product that carries to the palate the characteristics of the identity of the grape varieties used.

Good quality pomace comes from softly pressed grapes.

The mono-variety pressed grapes are the basic raw material used by the good "grappaioli" (grappa makers).

MAROLO only distills pomace coming from quality grapes grown in vineyards recognized for their prestigious locations. The pomace from red grapes arrives at the distillery DESTEMMED, while the pomace of the white grapes, particularly MOSCATO GRAPES, are destemmed at the distillery.

The pomace, at the moment of distillation, optimally retains between 4-5 degrees of alcohol (8-10 Proof) for red grapes and between 2-4 degrees (4-8 Proof) for white grapes. Depending on the type of fermentation, the resulting pomace will either be more or less rich in alcohol content.

There are three essential factors in the production of grappa. If any of the below listed factors is missing, the resulting grappa will be less than satisfactory. The three essential conditions are:

A) Fresh well fermented pomace

- B) The utilization of a distilling plant of slow extraction, (they could be called “lazy plants”)**
- C) Lastly, the “hand” of the master grappa maker, “il maestro grappaiolo”**

One of the most important factors for a quality grappa is to distill FRESH WELL FERMENTED pomace. Therefore, time is of the essence. Marolo distills only FRESH pomace and, for this reason, his distillation cycle lasts no more than 90 days, from mid-September to December 15th. The “industrial” producers keep distilling even up to 5 months.

Distillation methods

There are two distillation methods: the first, a **continuous distillation**, finds its application in the industrial production of grappa; the second, a **discontinuous distillation**, is used by small distillers.

In the continuous distillation method, the pomace is introduced in a big column passed through, from the bottom to the top, by a flow of hot steam at a constant temperature. The steam rising to the top becomes rich in alcohol and, when condensing, generates an alcoholic mixture. This rough liquid is processed in a rectifying column yielding a distilled spirit that varies in alcohol content from 136 to 154 proof.

Our attention in this moment is focused on obtaining an “imperfect” product, but “imperfect to the point of being good!” Therefore, a good grappa is always born with an alcohol content that varies from 136 to 154 proof (from 68% alc. by vol. to 77%).

Grappa, according to Italian law, is distilled at a maximum of 172 proof (86% alc. by vol.). However, this is not in contradiction with what was said before about the optimum range of the distillation (from 136 to 154 proof). It is a fact that, chemically, the pomace distilled at 172 proof has a more rectified alcohol and thus has less impurities. This is a finer product, but also a “poorer” product. The grappa maker who must deal with an inadequately fresh pomace, {often with a “stored” pomace that spoils when exposed to the air}, must distill at the maximum allowed level of 172 proof in order to avoid “bad smelling” grappa. He is not interested in a product that keeps, as much as possible, of the original aromas of the grapes, but in a leaner product, immune from a mold smelling alcoholic liquid.

The objective of a good distillation is to preserve the PERFUMES and to remove the ODORS. **Using FRESH pomace and distilling at lower alcohol content will result in a product that expresses PERFUMES.** Distilling “old” and “stored” pomace will require extra effort to keep away the bad ODORS, which is exactly what is done when distilling at the highest allowable level. Conclusion: two different grappas can be produced at 84 proof, one, distilled at 136 proof will express “character” and the identity of the grape variety from whence the pomace originates, the other one distilled at 172 will be a “flat” grappa.

Grappa is commercialized at around 80 proof, whereas Marolo Grappas are sold at 84 proof. The dropping of proof content is obtained by diluting the high proof spirit using the same process applied in all spirits – rum, whiskey, tequila vodka, gin, cognac, etc, - using distilled water, preferably from springs. At this point, less water has to be added to a product that, from its origin, has a lower alcohol content. Finally, it must be remembered that water is a colorless, odorless and tasteless liquid and therefore does not add anything to the spirit other than a reduction in the alcohol percentage and a dilution of the organoleptic characteristics of the distillate.

The distiller, in the **continuous distillation** method system, is constantly supplied by pomace. *Also the distillation is always made under the same conditions, without the possibility of rapid intervention by the grappa maker. Naturally, the product is a standard one with good chemical characteristics, but without personality.*

On the contrary, the **discontinuous distillation** method implies an intermittent alimentation of the distiller with a pre-established quantity of pomace and, consequently, there is intermittent separation and extraction of the distillate. The pomace is warmed-up with increasing temperatures from the beginning to the end of operations. The actual distillation starts when the evaporation of the alcoholic product contained in the boiler begins. In Italian, this operation in which the pomace is loaded and processed, is called "**cotta**" (**cooked pomace**). In the end, when the pomace is "exhausted" of its alcohol content, the dregs are unloaded from the boiler. Subsequently it is re-loaded with new pomace and another "cotta" is prepared proceeding in the same manner for all following distillations.

It is easy to notice that the management of the distillation is completely different in the two systems above described. In the continuous distillation there is a standardization of the distillate; this means that the product is not determined by the grappa maker, but it is set up before and, therefore it always has constant characteristics.

On the contrary, in the **discontinuous distillation**, constant attention by the grappa maker is necessary to continuously correct the trend of the distillation. He has to use an ever changing manual ability, depending on the characteristics and types of the pomace put in the boiler. This system allows for the production of different products even if the same type of marc and the same boiler is used. The typical characteristic of the discontinuous system is that it allows for a **slow** distillation and a slow and accurate fractioning of the boiling liquid. Consequently, there is extraction of the aromas typical of high quality fine spirits.

The slow and cautious fractioning of the ethereal parts of the "**heads**" (everything that evaporates at a temperature below 173°F or 78°C) and of the "**tails**" (everything that evaporates at a temperature above 212°F or 100°C) allows for the distillation and selective elimination of the "heads" and the "tails" at the beginning and end of each "**cotta**", resulting in the yielding of only the "**heart**," the top of fineness and delicacy of the flavor.

The continuous system, on the contrary, doesn't offer the possibility of executing a slow distillation. Instead, it performs a quick operation; consequently, not always yielding distilled products with the necessary characteristics that apply to grappa of valuable quality and fineness. It must be remembered, in fact, that in order to produce a good distilled spirit one of the most important conditions is the rational fractioning of the raw material under distillation. At the beginning of every distillation process, every aerial part that exhales a disagreeable smell absolutely must be eliminated: these are the "head" products.

Subsequently the "**buon gusto**" products - the "good flavor" products - are distilled. This is called the "heart" of the distillation (everything that evaporates at a temperature between 173°F and 212°F (78°C & 100°C), and these "good flavor" products are obviously stored separately.

At the end of the process, when the alcoholic content lowers because of the exhaustion of the last alcoholic portions and the temperature rises, the "tail" products, those containing impure oils, are also distilled, separated and eliminated.

It is exactly in this careful, methodical and slow separation between the products of "buon gusto" (the "heart") and the bad ones (the "heads" and the "tails") that one can find the first reason for the different techniques of distillation. The mastery of the grappa maker is of paramount importance; with his capabilities, especially patience and intelligence, he can make up for possible defects of the distilling apparatus or of the production process as long as he is working with pomace of good quality. It is up to his technical knowledge and his "artistic feelings" whether he will succeed in obtaining a high quality product with a fine aroma and flavor. For this reason it is better to use discontinuous distillers in order to yield excellent products. It must be remembered that the age-old tradition of cognacs and single malt scotches is based on the discontinuous distillation method.

“Bain-marie” – “Double Boiler” distillation method

The most commonly used system for the discontinuous distillation is the “bain-marie” or “double boiler” distillation. The distiller is formed by two boilers, one inside the other. The internal one, much smaller than the external, is loaded with pomace with the addition of water in the ratio of 50%; this is called “submerged cotta.” The empty space between the two boilers is filled up with water, which heats up and conveys this same heat to the pomace contained in the small boiler. The in between space made of water prevents heat-strokes, a danger in the direct fire distillation. It takes one hour and a half for the distillation of each “submerged cotta,” while it takes only 40 minutes to distill a “direct steam cotta,” which is a method based on distilling pomace discontinuously through a flow of hot steam passing through a many hole perforated spherical container.

Marolo only uses the “double boiler” distillation method, which guarantees an accurate slowness for an optimal extraction.