Pre-crystallisation

Needed:

- A plastic bowl with 500 g of chocolate pieces;
- A spoon;
- A heat gun or hair dryer;

This method is very simple and can be done with a very small amount of chocolate if necessary. The chocolate should not be bloomed and be already in the right crystalline state. This method effectively utilises well crystallised chocolate rather than removing all crystals by melting the chocolate first.

1. Set the heat gun or hair dryer on a gentle heat and warm the top layer of chocolate in the bowl. When the chocolate is melted on top, turn off the heat and stir the chocolate thoroughly. The chocolate on top has had the cocoa butter crystals broken down by heating to a high temperature, while the chocolate underneath is still at the cold, set temperature. This method systematically breaks down the crystals and then incorporates them back in using the cold chocolate underneath.
2. Once thoroughly stirred the heat and the crystals have been evenly distributed, the process should be repeated until there is a bowl of chocolate with just a few lumps remaining. Turn the heat off and gently press any remaining pieces of chocolate against the side of the bowl. The desired result is a bowl of smooth chocolate that is liquid enough to work with but that has some resistance when stirred with a spoon.

An alternative method to get the same effect utilises a microwave oven to give short, sharp bursts of about 30 s. The chocolate must be stirred thoroughly to move the heat around between each burst of heat. A bain-marie method with a saucepan of hot water with a bowl of chocolate on top can be used. Care should be taken to avoid introducing heat and steam to the working environment, and there is also a danger that the bowl will retain the heat.

18.7.3 Testing chocolate for temper

Prior to working with tempered chocolate it is always worth testing to ensure the right crystals have formed. There are a number of methods to check temper, measuring the temperature of the chocolate is just one of those. But it should be noted that just because the chocolate is at the right temperature it does not mean that the chocolate is tempered. There are special tempermeters (Chapter 24), but they are very expensive and the following simple tests usually provide adequate information.

- Chocolate has a temperature of 28 °C (84 °F) for white chocolate, 30–31 °C (86–88 °F) for milk chocolate and dark chocolate.
- The chocolate when drizzled from a spoon should leave a pattern of ribbons in the bowl which should smoothly disappear when vibrated.
- Take a knife and dip it into the chocolate, clean one side of the knife and leave it, chocolate side up, for approximately 5 min. If the right crystals are present, the chocolate should start to set around the edges where it goes slightly dull.

This should start to spread so that all the chocolate is set and dry to the touch within 5 min. If this process takes less than 5 min the chocolate is too cold and needs warming a little. If it takes much longer than 5 min there are not sufficient crystals present, and therefore additional crystals need adding to the chocolate.

When the chocolate is well tempered there should be no streaks on the chocolate when it has set and hardened. It is only when it has hardened that chocolate should be put in the fridge, usually for about 20 min. This will ensure that the chocolate has a long lasting snap and gloss.

Conclusions

Making chocolates by hand can be incredibly rewarding. Making a profit is however hard work when there are an increasing number of brands and cheaper chocolate products for consumers to choose from. The skills of the artisan should be valued and celebrated in the making and marketing process. Artisan chocolate makers should consider each of the factors identified to select the best product for the market and consider the implications on product specifications, resources required, available capacity and skills. The flexibility of the artisan to respond rapidly and creatively to customers' requests should be celebrated and used to ensure that products are priced appropriately.

Further reading

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