

Pioneering Craft Chocolate Technology

OUR MISSION & VISION

Our mission is Pioneering Craft Chocolate Technology.

Our vision is to create and empower chocopreneurs & foodpreneurs from anyone and anywhere through

- Equipment Patented, long lasting & easily upgradeable
- Education Empowering Chocopreneurs© webinars & networking events
- Exposure Help to exhibit at international chocolate festivals.

OUR STORIES

We have been a catalyst in the "bean to bar" market by helping to start the business with minimum investment for anyone anywhere in the world. Our customers thank us for helping them realize their dreams.

In 2013, CocoaTown received Innovation in Fine Chocolate Products from Fine Chocolate Industry Association (FCIA). In 2020, won Globe Award – Exporter of the Year – Small Business Category in 2021 by Georgia Department of Economic Development.

OUR APPROACH

We make it easy to scale up the production from 500 g test batches of chocolate liquor to manufacturing bulk quantities of 90 kg in a batch. The complete line of machines consists of Roasters, Crackers, Winnowers, Melangers/Grinders & Tempering machines for making high quality, healthy craft chocolate from cocoa beans (Bean to Bar industry).

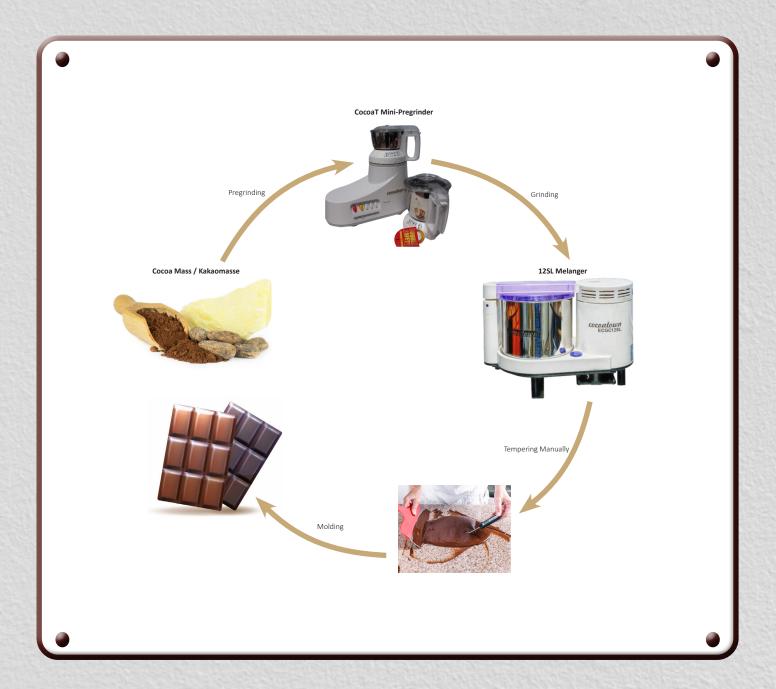
OUR PHILOSOPHY

We focus on sustainability in three areas

- 1. Environment by providing machines made of food grade stainless steel that last for more than 16 years to give high ROI
- 2. Farming our customers pay more to farmers. Farmers can sell semi-processed or processed products instead of selling produce at commodity prices
- 3. Our customers' businesses

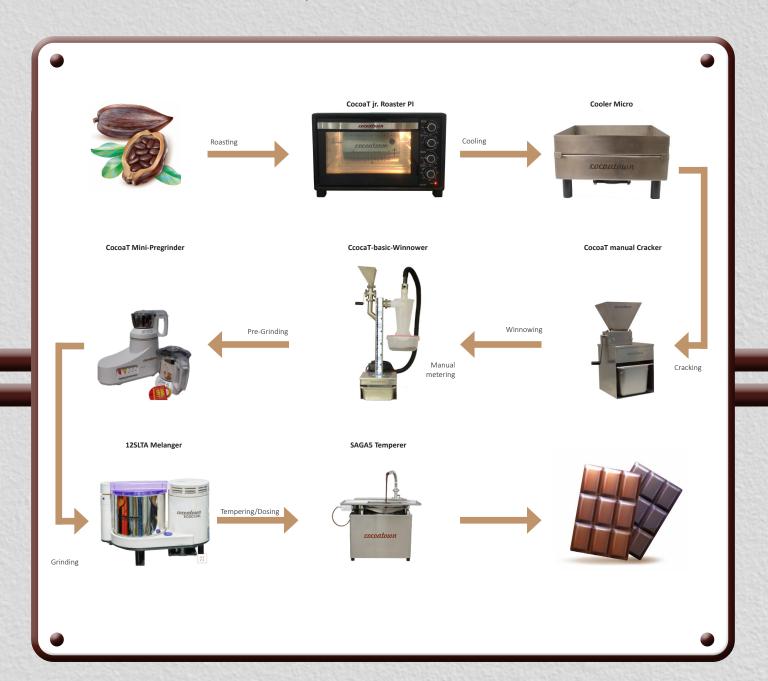
HOBBY KIT

For Starters and Chocoholics



ENTRY KIT

Explore - Start the business



PROFESSIONAL KIT

Exhibit - Showcase the Process



COMMERCIAL KIT

Expand - Grow & Scale Up the Business



ROASTERS

- Variable temperature control upto 500 °F (260° C)
- · Rotating drum for uniform heating

• Also used for roasting nuts, seeds etc

CocoaT jr. Roaster PI



- For roasting 2 4 lb (1.7 kg) of cocoa beans
- 2 separate heating elements with independent controls
- 0 120 minute analogue timer
- Voltage: 220V
- Power: 1500 Watts, 6 Amps
- Dimensions: 22" x 18" x 15" (56 x 38 x 46 cm)
- Weight: 25 lb (12 kg)

CocoaT commercial Roaster



- Can roast 20 lb (10 kg) of cocoa beans
- · No fume hood needed
- Sampling port to test the beans without interrupting the process
- Voltage: 220V, single phase
- Power: 2700 Watts, 11.8 Amps
- Dimensions: 30" x 20" x 25" (76 x 501 x 634 cm)
- Weight: 50 lb (23 kg)

COOLERS

- To stop the roasting process quickly
- Beans are cooled in less than 5 minutes

- Prevents overcooking from residual heat
- Keeps the flavor of the beans

Cooler Micro



- Voltage: 110V or 220V
- Frequency: 50Hz
- Dimensions: 12" x 12" x 9" (30 x 30 x 23 cm)
- Weight: 8 lb (4 kg)

Cooler Macro



- Cools 20 lb (10 kg) of roasted cocoa beans
- Use top tray as collection tray
- 220V single phase
- Dimensions: 18" x 19" x 27" (46 x 48 x 69 cm)
- Weight: 100 lb (45 kg)

CRACKERS

CocoaT manual Cracker



- Capacity: 30 lb (14 kg) of cocoa beans in 1 hour
- Special patented rollers to pull the shell away from the nibs
- Beans are cracked into bigger pieces for easier & efficient winnowing
- All food contact components are made of food grade stainless steel
- Dimensions: 15" x 14" x 23" (38 x 36 x 58 cm)
- Weight: 35 lb (16 kg)

CocoaT power Cracker



- Capacity: 60 lb (27 kg) of cocoa beans in 1 hour
- Special patented rollers loosen the shell
- Beans are cracked into bigger pieces for easier & efficient winnowing
- All food contact components are made of food grade Stainless steel
- Can be ordered with 110V or 220V
- Dimensions: 14" x 15" x 24" (36 x 38 x 61 cm)
- Weight: 52 lb (25 kg)

WINNOWERS

CocoaT basic Winnower



- Capacity: 20 30 lb (9 14 kg) with manual metering dispenser
- Capacity: 40 50 lb (18 23 kg) with motorized metering dispenser
- To separate husk from nibs
- Manual or motorized metering dispenser
- Advanced airflow techniques
- Unique cyclone separator
- Up to 99.9% nibs/husk separation in single pass
- Can be upgraded to deluxe Winnower
- 750 W Vacuum
- 110V or 220V
- Dimension: 25" x 17" x 16" (64 x 43 x 41 cm)
- Weight: 35 lb (16 kg)

CocoaT deluxe Winnower



- Capacity: 20 30 lb (9 14 kg) with manual metering dispenser
- Capacity: 40 50 lb (18 23 kg) with motorized metering dispenser
- Bestseller: Rated best cost effective, compact Winnower in the world
- To separate husk from nibs
- Maximum yield of nibs
- Manual or motorized metering dispenser
- Advanced airflow techniques
- Unique cyclone separator
- Up to 99.9% nibs/husk separation in single pass
- 750 W Vacuum
- 110V or 220V
- Dimensions: 25" x 17" x 16" (64 x 43 x 46 cm)
- Weight: 45 lb (22 kg)

CocoaT InnoWinno Winnower



- Capacity: Cracks & winnows up to 220 lb (100 kg)/hour
- InnoWinno Winnower is a revolutionary piece of equipment for artisan chocolate makers. This equipment is based on several years of research and advanced technology
- Includes hopper extension, power Cracker, collection box and control panel
- Hopper extension with 40 lb (18 kg) of beans capacity
- Bean Transfer system to transport cocoa beans from the sack to the hopper
- Patented multi-stage separation system
- Husk is collected in a closed container
- Takes up only 20 sq. ft space
- Dimensions: 60" x 48" x 96" (152 x 123 x 234 cm)
- Weight 220 lb (100 kg)

COCOAT & ALPHA MELANGERS/GRINDERS

- · Grinding and conching
- Stone on stone grinding
- The whole roller stone assembly is removable in one piece for easy cleaning etc.
- · Motor keeps cool even after 2 days of grinding
- Grinds down to 15µ

- Also used for nut butters such as marzipan, Gianduja, pistachio butter, peanut butter & cashew butter, seed butters, nut milks & rice milks, Tahini, Hummus etc
- Multiple sizes to suit the needs & budget 4.5 kg -90 kg/batch (10 lb - 200 lb)

Abi 10



- Capacity: 8-10 lb (4.5 kg) of chocolate liquor/batch
- Abi 10 melangers are the Economic model for testing the concept
- Stays cool even after 36 hours of use
- Basic model with polypropylene roller holder
- Deluxe model with stainless steel roller holder
- Maintenance kit optional
- Motor: 1/5 HP 220V
- Weight: 35 lb (16 kg)

12SLTA Melanger



- Capacity: 8-10 lb (4.5 kg) of chocolate liquor/batch
- Release the tension for the conching cycle
- Conical stones for chocolate
- Optional: Mini Drum Set for micro batches, Cylindrical roller stone assembly, SS Wiper, SS lid, emergency shut-off switch, chococleaner, chocokneader etc
- Complete kit with all the accessories available for budget conscious, 12SL Melanger with fixed tension available
- Motor: 1/5 HP 110V or 220V
- Dimensions: 18" x 10" x 11" (46 x 25x 28 cm)
- Weight: 35 lb (16 kg)

ALPHA12 (ECGC 12SQSS) Melanger



- Capacity: 12 lb (5 kg) of chocolate liquor
- Miniature version of the bestseller ALPHA100 (ECGC 65E) Grinder
- Conical stones for chocolate
- Optional: Mini Drum Set maintenance kit, cylindrical roller stone assembly
- Complete kit with all the accessories available
- Emergency Shut-off
- Also available with variable speed motor
- Motor: 150W, 110V or 220V
- Dimension: 18" x 18" x 24" (46 x 46 x 61 cm)
- Weight: 64 lb (30 kg)

COCOAT & ALPHA MELANGERS/GRINDERS

- Almost all of the parts are made of stainless steel
- · Granite stone on stone grinding
- · Minimum use of delrin
- · Tilting mechanism for easy handling
- Simple to use & care

- Grinds to 15-18µ product
- · Works for decades with minimum maintenance
- High return on investment
- Optional

 Maintenance kit, Nib feeder & Stone lifter available
- · Conching attachment available for Alpha100

ALPHA25 Grinders/Melangers



- Capacity: 10-25 lb (11 kg) of chocolate liquor/ batch
- Gears + belt driven
- Control panel: 220V, 1 phase input
 Motor: 0.5 HP, 220V, three phase
- Dimensions: 20" x 22" x 31" (51 x 58 x 79 cm)
- Weight: 200 lb (90 kg)

ALPHA100 (ECGC-65E) Grinders/Melangers



- Capacity: 100 lb (45 kg) of chocolate liquor/batch
- Used by award-winning craft chocolate makers since 2006
- · Optional conching attachment
- Control panel: 220V, 1 phase or 3 phase input
- Motor: 2 HP, 220V, three phase
- Dimensions: 36" x 36"x 62" (91 x 91 x 157 cm)
- Weight: 650 lb (300 kg)

ALPHA50 (Abi 50) Grinders/Melangers



- Capacity: 50 lb (23 kg) of chocolate liquor/batch
- Choice of Basic or Deluxe control panel
- · Direct drive with gear motor
- · No belt
- Control panel: 220V, single phase input
- Motor: 1 HP, 220V, three phase
- Dimensions: 24" x 30" x 35" (51 x 76 x 89 cm)
- Weight: 300 lb (140 kg)

ALPHA200 (Abi 200) Grinders/Melangers



- Capacity: 200 lb (90 kg) of chocolate liquor/batch
- Largest capacity in our current line up
- Control panel: 220V or 440V, 3 phase input
- Motor: 5 HP, 220V/440V, 3 phase
- Dimensions: 42" X 33" X 52" (107 x 84 x 132 cm)
- Weight: 1000 lb (450 kg)

TEMPERING MACHINES

SAGA5 Tempering Machine



To craft chocolatemakers and chocolatiers who need a tempering machine that

- Is compact
- Saves time & money
- Is easy to use & clean
- Preserves the fine flavors of chocolate
- Provides high ROI for the investment

CocoaTown is introducing SAGA 5Tabletop, continuous tempering machine that

- Tempers 8 lb/hour (4 kg/hour)
- Includes a Vibrating table
- Is WIFI enabled and can be controlled from phone or tablet
- Has energy saving cycle (activate it when not in use)
- Is easy to clean completely in 1 hour with minimum waste of chocolate
- Includes vibrating table
- Optional doser attachment
- Is available in 110V or 220V
- Costs \$7000 + S&H

Specifications:

- Bowl Capacity: 14 lb (6 Kg)
- Food contact area: Stainless steel
- Temperature Control System Tank, Auger, Outlet pipe
- Motor: 2 HP
- Dimensions: 18.5" x 20" x 33" (47 x 50 x 84 cm)
- Weight: 150 lb (67 kg)

TOOLS & KITS

CocoaT Mini Pre grinder



- Multipurpose unit which grinds, cracks, juices and pulverizes
- For cracking cocoa beans in small quantities
- For pre grinding cocoa nibs into powder
- For powdering sugar
- Takes only 5 seconds/batch
- Pre grinding nibs and sugar reduces grinding time in the melanger/grinder
- For breaking shelled nuts to smaller pieces
- Also for making juices
- Incl. 2 jars. The small jar is for grinding nibs, sugar etc. The bigger jar for juices
- Small jar for 1/2 cup of ingredients
- Motor: 750W for 110V, 550W for 220V
- Dimensions: 12" x 6" (30 x 15 cm)
- Weight: 10 lb (4.5 kg)

CocoaT Bean Cutter



- Tool to cut 50 beans at once
- For farmers, cocoa buyers and researchers
- To evaluate the quality of the beans
- · Easy to use
- Can handle any size beans small or big
- Made of anodized aluminum
- Easy to replace blade
- Dimensions: 19" x 5" x 1" (48 x 13 x 3 cm)

Other Available Evaluation Tools

- pH meter
- Moisture meter
- IR Thermometer
- Grindometer
- Digital Micrometer

Complete Melanger Kits



- Complete melanger/grinder kits are available that include all accessories and maintenance kits
- Save money on S&H + cost when purchasing the complete kit
- Saves on future S&H charges for individual parts
- Reduces downtime
- Maintenance kits also available for purchase
- Kits are available for following melangers:
 - 12SL
 - 12SLTA
 - ALPHA12
 - ALPHA25
 - ALPHA50
 - ALPHA100
 - ALPHA200

Accessories & Parts

Here is a short list of popular parts. Please visit our website or contact us to order other parts or accessories

SS Lid for 12SLTA



Mini Drum Set



Cylindrical Roller Assembly Mini drum



SS Roller Stone Assembly Abi 10



Cylindric Roller Stone Assembly 12 SLTA



Conical Roller Stone Assembly ALPHA12



Choco Kneader for ECGC...



Chococleaner for melangers



SS Regular Drum

12SL 12SLTA



SS Wiper Assembly ALPHA12



Stone Lift Mechanism ALPHA100



Basic Control Panel- ALPHA100 Deluxe Control Panel ALPHA100



Motorized Metering Dispenser for CocoaT Winnowers



Delrin Roller Inserts for Alpha100 Grinder



Tension Gauge Mechanism ALPHA100



SS Wiper for ALPHA100



Grow with us



Grow with us



Making Bean-to-Bar Chocolate the Authentic way

In recent years the bean to bar chocolate making process has seen a rise in popularity as user-friendly equipment becomes more readily available. Advances in chocolate making equipment have taken us a long way from the Mayan method of grinding cocoa nibs by hand to make a chocolate drink. However, user friendly equipment is only one part of the bean to bar process.

Learning to make and sell your own chocolate is an exciting prospect; but, in order to be successful, the process also involves investing the time to learn the chocolate making process. Learning the sources of cocoa beans and perfecting your own recipe are just as important as having the right equipment.

Below is a synopsis of the general chocolate making process: how chocolatemakers roast, crack, winnow, grind, conch and temper to produce award winning chocolates.

There are four major varieties of beans:

- Forastero: The hardiest and most productive variety of cocoa, likely originated in Amazon basin. Grown around the world, Forastero beans account for over 90% percent of the world's cacao.
- Criollo: The rarest and most prized cocoa beans. Known for its delicate fragrance and complex flavor, this bean is native to regions consisting of current day Columbia and Venezuela, though it was found throughout Mesoamerica. Criollo beans account for less than 1% of the world's cocoa.
- Trinitario: A hybrid of the flavorful Criollo and hardy Forastero beans, Trinitario beans are considered "flavor beans" and originated in Trinidad. These beans account for less than 5% of the world's cacao.
- Nacional or Arriba: Cacao from Ecuador, considered a finer strain of Forastero.
- Other Rare varieties of beans such as Piurra, Cincho are also used to make chocolate.
- Beans from related species such as Theobroma Bicolor, Theobroma Grandiflora (Cupuacu in Brazil) are also made into chocolate.

Just like coffee beans, cocoa beans have characteristics specific to their geographical origin. The cocoa butter content and flavor profiles are unique to a certain region and variety of beans. Cocoa farmers harvest and cut the pods to expose the cocoa beans and pulp. The beans and pulp are then placed in fermentation baskets, or wooden troughs, for several days. During the fermentation process, the pulp drains away and the beans develop a darker color and flavor.

The fermented beans are then dried in the sun. The drying process reduces the moisture content in the beans from about 60% to approximately 6%. Both the fermentation and drying processes happen in the fields where the cocoa trees are cultivated. A handful of chocolate makers are quite knowledgeable in the finesse these processes require, and help educate the farmers to ensure that these processes are completed correctly. Once the beans are dried, they are inspected and sold. So, when you buy the beans, you can concentrate on the chocolate making process.

The next step is roasting, which drives away the moisture from the beans, develops the flavors and kills any bacteria that may be present. If you use a conventional oven, place the beans in a single layer and roast them according to the requirements of your recipe and beans. Make sure to stir the beans intermittently to ensure uniform heating. For small-scale operations, CocoaT roasters with rotating drums help ensure consistent results with minimum intervention. Roasting time varies from 20-45 minutes after the beans reach the 135C depending on the bean variety, origin and cocoa butter content. Roasted beans must be cooled immediately to stop the roasting process (this prevents over-roasting or burning of the beans).

The roasted beans are then cracked to expose the cocoa nibs (the pieces of the cocoa bean that has cocoa solids and cocoa butter) inside the shell. Cracking the beans in a small quantity can be done with rolling pins (that roll the dough for cookies, flat bread etc), mini pregrinders, or manually peeling the shell by hand. For larger quantities, one can use CocoaT manual or power Crackers. These special crackers break the beans into bigger pieces and also pulls the shells away from the nibs.

Winnowing process separates the nibs from the husk (broken shell pieces). Winnowing can be done using a fan, hair dryer or using special tools to toss it in the air or sophisticated winnowers. CocoaT basic or deluxe Winnowers and InnoWinnow commercial winnowers collect the husk in closed containers. They separate the nibs and husks very well resulting in clean nibs for high quality nibs and minimum waste of resources.

The clean nibs are then ground for 24-72 hours to make chocolate liquor. One can use a mini pregrinder to powder the nibs (which reduces the grinding time in the melanger), screw type extruders to make a paste, or added to a melanger or grinder directly. Melangers/Grinders combine the age-old stone-on-stone grinding technique with the modern convenience of electricity. Grind the nibs to size of at least 90 microns and then add sugar. All the melangers/grinders from CocoaTown grind the chocolate liquor to 15-18µ size.

Making Bean-to-Bar Chocolate the Authentic way

Pre-grinding the sugar helps especially when using palm sugar, coconut sugar, or any special sugar with bigger crystals. One piece of advice is to avoid beet sugar, maple sugar, agave sugar etc. that make the chocolate liquor viscous (it prevents the chocolate from flowing freely). Many kinds of alternate sweeteners such as allulose absorb moisture in the air and affect the viscosity of the chocolate liquor. Store bought powdered sugar or confectionary sugar is also not recommended as it contains desiccators like corn starch which alters the viscosity of the chocolate liquor. If the chocolate liquor is viscous for any reason, the grinding speed slows down and takes longer to complete the grinding process. Adding the sugar at the right time is imperative to the texture and taste of the chocolate.

The conching process involves exposing the chocolate liquor to air to drive away volatiles and develop the right flavor for chocolate. The speed, temperature, and duration of the conching process determine the final texture and flavor. In CocoaTown melangers and grinders, grinding and conching happens simultaneously if the sugar is added at the right time.

The next step is tempering the chocolate. This can be done with a tempering machine or by hand on a marble slab. Heat the melted chocolate to 110-117 F°, then slowly cool it to 88-90 F° by stirring in finely-chopped cold chocolate pieces. The process of heating and cooling should be repeated a few times. The tempering process creates the snap and shine that is expected in the finished chocolate. The temperature curve for tempering process varies with the type of chocolates made – White chocolate, dark chocolate, milk chocolate. One can also buy silk (tempered cocoa butter crystals) or make silk from cocoa butter and add it to the chocolate liquor to temper it. More sophisticated way of tempering is to use a tempering machine – batch tempering or continuous tempering machines depending on the volume of chocolates made and budget.

The final step in the process is molding. Custom molds and common tools such as ice cube trays can be used to create chocolates of the desired shape and size. This is only an overview of the bean to bar process. Using the proper equipment will allow chocolate makers to customize the multiple steps in the chocolate making process, allowing them to stand out in a crowded market.

Please note that the tempering steps and temperatures vary with the type of chocolates made – Dark, milk or white chocolate.

Please feel free to contact CocoaTown with your tips, questions and comments.



Bean-to-Bar Bootcamp







Expertise

Our Knowledge Your Business





Pioneering Craft Chocolate Technology

Equipment, Education & Evaluation Tools

Machine Sales

After-Sales-Service

Webinars

Workshops in USA, India and Europe

For USA & World

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