

PROGRAM



Chocolate Manufacturing: Intense Practical Course - Chocolate (Part I)

Date: 14.07.2025 -25.07.2025

Language: English

Location: ZDS Solingen

Course fee: 6.570,00 €

Included services:

- Refreshments: snacks and drinks
- Lunch and dinner at ZDS refectory
- ZDS-Diploma „Chocolate/Confectionery“



Your instructor:

Guillermo Geschwindner
Dipl.-Ing. Food Technology,
Technical Instructor Sugar
Confectionery and Chocolate

Any Questions?

Please contact our seminar
department:

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WEEK 1 CHOCOLATE

Monday, July 14, 2025

09:30 **Welcome**

09:45 **Theory:**

Cocoa

- Cocoa tree, types and history
- Harvest, fermentation and drying
- Quality criteria

Dr. Silke Elwers, Cooko GmbH

11:30 **Theory:**

Vertical ball mills for the production of chocolate, spreads, and compounds from dosification to finished products

ALPAVIT Champignon Hofmeister GmbH (OKG)

Theory:

Cocoa bean processing

- Cleaning, Roasting (bean, nib, liquor)
- Breaking, Winnowing
- Grinding to liquor
- Cocoa butter and powder

ZDS e.V.

13:00 **Lunch**

14:00 **Practice:**

Cocoa bean evaluation and processing

- Evaluation of different cocoa beans
- Debacterisation
- Breaking and winnowing
- Nib roasting
- Pre- and fine grinding of Cocoa Nibs

ZDS e.V.

17:30 **Final discussion and end of the first day - Dinner**

Tuesday, July 15, 2025

08:30

Theory:

Raw materials: Cocoa butter, cocoa powder, sugar, milk ingredients, flavor

ZDS e.V.

Theory:

Cocoa bean processing

- Cleaning, Roasting (bean, nib, liquor)
- Breaking, Winnowing
- Grinding to liquor
- Cocoa butter and powder

Theory:

Manufacturing of chocolate

- Recipes
- Manufacturing of chocolate (mixing process, refining process, conching process)

ZDS e.V.

10:30

Theory:

Manufacturing of chocolate (tbc)

Vertical ball mills for the production of chocolate, spreads, and compounds from dosification to finished products

Packint Chocolate Machines srl

13:00

Lunch

14:00

Practice:

Chocolate manufacturing

- Bühler group - Mixing, refining (5-roll refining), conching - Milk chocolate
- McIntyre Refiner/Conche - Dark chocolate
- Netzsch Rumba system - White chocolate
- Packint - Ball mill - Milk chocolate

ZDS e.V.

Tasting: Milk chocolates

17:15

Final discussion and end of the day - Dinner

Wednesday, July 16, 2025

- 08:30 **Practice:**
Liquification of chocolate and finishing chocolates
ZDS e.V.
- 09:30 **Theory:**
Netzsch Rumba System
Netzsch-Feinmahltechnik GmbH
- 13:00 Lunch**
- 14:00 **Practice:**
Chocolate tempering (manual tempering, seeding method)
ZDS e.V.
- Practice:**
Netzsch Rumba System
Netzsch-Feinmahltechnik GmbH
- 17:15 Final discussion and end of the day - Dinner**

Thursday, July 17, 2025

- 6:45 **Visit of Sollich KG, Bad Salzflen**
Departure ZDS
- 9:00 **Arrival** at Sollich
- Theory:**
· Tempering of chocolate
· Enrobing
· Cooling
Factory visit and demos

Thursday, July 17, 2025

13.30 **Lunch**

13.30 **Departure**

14.00 **Visit of Ludwig Weinrich GmbH & Co.KG, Herford**
Factory visit and demos

Weinrich's
finest chocolate since 1895

17.00 **Departure** to ZDS

20.00 **Arrival and Dinner** at the ZDS

Friday, July 18, 2025

08:30 **Practice:**
Chocolate tempering exercise by hand, production of seasonal chocolate
hollow figures
ZDS e.V.

10:30 **Practice:**
Coating inlays with chocolate
ZDS e.V.

12:00 **Practical exam of course topics** - Part I

13:00 **Lunch**

In the afternoon visit Chocolate Museum in Cologne!

S | **schokoladen**
museum
Lindt 

WEEK 2 CHOCOLATE

Monday, July 21, 2025

- 08:30 **Theory:**
How to Measure Viscosity and Yield Point of Chocolate
Thermo Fisher Scientific
- 11:00 **Theory:**
Flow properties of chocolate - Practical application PGPR
Palsgaard A/S
- 13:00 **Lunch**
- 14:00 **Theory & Practice:**
Particle Analysis Technology
Sopat GmbH
- 16:00 **Theory & Practice:**
Sugar-reduced chocolates, dairy-free alternatives, specialty chocolates
- 17:15 **Final discussion and end of the day - dinner**

Tuesday, July 22, 2025

- 08:30 **Theory:**
Allergen management
R-Biopharm AG
- 09:30 **Theory:**
Emulsifier Lecithin
Bunge Loders Croklaan B.V.
- 11.00 **Theory:** Cocoa butter alternatives
• CBE
• CBR
• CBS
Bunge Loders Croklaan B.V.

Wednesday, July 23, 2025

- 14:00 **Practice:**
Crystallization of cocoa butter
· Temperindex
· Multitherm - Bühler Crystallization Index
Infopoint Kakao und mehr
- Theory:**
Fat bloom and sugar bloom
Infopoint Kakao und mehr
- 17:15 **Final discussion and end of the day - Dinner**

Thursday, July 24, 2025

- 08:30 **Theory:**
Sensorial evaluation of chocolate (part 2)
Infopoint Kakao und mehr
- 13:00 **Lunch**
- 14:00 **Theory:**
Chonova - Elevating quality & efficiency
- Practice:**
WDS Chocolate bar plant, production and cooling
Johannes Burkard, CHoNova AG
- 17:15 **Final discussion and end of the day - Dinner**

Friday, July 25, 2025

08:30

Theory:

Chocolate panning

ZDS e.V.

Practice:

Chocolate panning

- Precoating
- Engrossing
- Smoothing
- Polishing
- Sealing

ZDS e.V.

End of the seminar part I

13:00

Lunch

14:00

Departure at ZDS

Visit at „Schloss Burg“ Solingen