



— Chocolate Processing Line
Innovative 5-Roll Refining



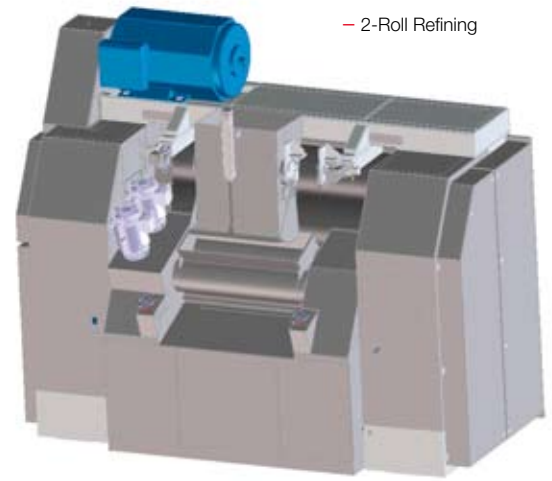
Lehmann Chocolate Processing Line

Innovative 5-Roll Refining

Use the experience of more than 175 years in traditional chocolate manufacturing. Since then the company F.B. Lehmann has been one of the key players in the production and installation of turn-key chocolate production lines. Combining high technology machinery to create a turn-key line is a guarantee of high quality chocolate production under the most modern hygienic and safety aspects.



— 5-Roll Refining



— 2-Roll Refining

Recipe preparation

Fully automated systems for storage, transport and dosing of bulk ingredients as well as for liquid ingredients prepare the different ingredients of the chocolate recipe according to requirements. Changes to recipes can be made completely from the PLC recipe storage buffer without any action required by the operators. The mixer is designed according to the line capacity and prepares three to four batches of chocolate recipe per hour. Highly efficient mixing agitators prepare a homogenous recipe mix, ready for further refining on the downstream machines.

Two Roll Lehmann Pre-Refiner

The Lehmann pre-refiner is equipped with a buffer on top, ready to take the complete batch of chocolate discharged from the mixer. First refining and calibrating of the crystal sugar particles is done by means of the two rolls, discharging the product further on towards a conveyor and to the five roll refiners downstream. High wear resistant rolls together with proven components on hydraulic controls, drive technology and gap adjustment provide consistent and reliable production of pre-ground chocolate, ready for further refining.

Lehmann Five Roll Refiners

Based on the wide experience of hundreds of machines supplied to the market, Lehmann has developed and re-designed the technology of five roll refiners. Features as the stainless steel body and the easy removable feeding and discharge hoppers are providing a high quality production under most modern hygienic aspects. Easy cleaning and maximum product safety has been the intention for this unique design. Variations of technical options are giving an easy adaption to the required production modes.



— Lehmann chocolate production line

Innovation: Individual drives

Lehmann Five Roll Refiners

Placing the machines to a high capacity chocolate production line, the feeding rolls can be adjusted by separate gear drives while the other rolls are driven by a common drive unit. In case the machine shall be operated as a stand alone solution on many different recipes, separate gear drives on all the five rolls can be chosen in order to provide maximum flexibility and a wide range of different parameter settings. Hydraulic pressure, cooling temperature, revolution speed of each roll as well as the friction ratio can be adjusted to every recipe by the PLC. Optional closed water loops for rollers cooling is a further option to improve the cooling performance of the machines.

Innovation:

Lehmann integrated 2 & 5 Roll Refining

For small capacity applications F.B. Lehmann has developed an innovative concept, combining a two roll pre-refiner with a five roll refiner to create a stand-alone chocolate production machine.

Turn-Key System

Flexible and proven transport systems and storage systems complement the machinery to create turn-key lines, installed according to customer requirements and adapted to any factory conditions. High end control units provide all of the features required for traceability and product quality management.

Conches

Lehmann chocolate production lines are equipped with the most modern conching systems. The quality of traditionally produced chocolate is guaranteed by fully automated conches. Feeding of the chocolate chips from the refiners, dry conching, adding of cocoa butter and lecithin, wet conching as well as temperature control is performed from the PLC according to the pre-selected recipe. Highly efficient agitators are create a perfect aroma distribution from the cocoa liquor to the sugar as well as perfect viscosity values. Highest quality chocolate in terms of flavour and flow rate values is the result of treatment by these Conches.



Excellent innovations. Global services.

Royal Duyvis Wiener and F.B. Lehmann combines almost 200 years of innovative experience in process innovations, machine construction and maintenance services. A unique combination of expertise for which Royal Duyvis Wiener B.V. is known worldwide. The head office is situated in the very heart of the world famous Dutch cocoa and cocoa butter processing industry. F.B. Lehmann GmbH is situated in Aalen Germany.

Competitive in cocoa and chocolate equipment

The core business of Duyvis (1885), Wiener (1899) and F.B. Lehmann (1834) is clear: the engineering, manufacturing and installation of production machinery for the cocoa and chocolate industry. A solid foundation of cutting edge innovation and dedicated development teams results in an impressive level of service. Across the world Duyvis, Wiener and F.B. Lehmann's industrial solutions are hard at work 24/7 in every industrial environment, particularly in the cocoa and chocolate industry.

With F.B. Lehmann, Royal Duyvis Wiener is able to supply a variety of innovations from Lehmann roasting (nibs and beans) and Wiener grinding to the Duyvis cocoabutterpresses and powder technology, as well as supply equipment to produce chocolate in the traditional way (Lehmann 5-roll refining) up to the latest all-in-one Wiener chocolate technology. The group of companies offers solutions for the complete process from cocoa bean to chocolate.

Wiener and F.B. Lehmann joining Duyvis

Wiener has been part of the Duyvis Group since 2004. Globally acknowledged as an innovative manufacturer and supplier of cocoa and chocolate production machinery; stand alone or turnkey. A valued partner for both the cocoa and chocolate and ice cream, bakery and confectionery industries. F.B. Lehmann GmbH is the latest acquisition (2010) of Royal Duyvis Wiener.

F.B. Lehmann is well known for its bean intake, winnowing, roasting and horizontal grinding equipment, as well as its unique machinery for state-of-the-art 5-roll refiners. The unique combination of companies and technologies is a guarantee of the highest industry standards and excellent service.

Guaranteed continuity

The Duyvis Wiener Lehmann team also modifies, repairs and maintains every type of cocoa and chocolate industrial installation globally. There is no problem so challenging that the Royal Duyvis Wiener team cannot provide a suitable solution, either preventative or curative. The result is an undisrupted production process minimizing down time and providing optimum yields.

Remarkable development

The engineers, technical and process development experts at both Royal Duyvis Wiener and F.B. Lehmann work closely and constructively together on intelligent process and product innovations. The laboratories in Koog aan de Zaan (The Netherlands) and Aalen (Germany) provide all of the facilities imaginable for testing food products in general and cocoa, chocolate and confectionery products in particular. Know-how which is directly accessible from an extensive process database.

Give us your challenge!

Give us your challenge and we will help improve your quality and reduce your costs to produce cocoa, compound and chocolate.

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