Conclusions and future developments

Chocolate panning produces some very attractive, nibbling sized items of confectionery which are well appreciated by the consumer.

Even today, many people still regard chocolate panning as an art and there is still a role for the skilled confectioner in smaller, more traditional operations. Great care is required during the processing and, if all steps are followed carefully, high-quality products are produced. Short cuts seldom work and attempts at cost savings often create large quantities of waste. As our fundamental understanding of the processes improves, batch sizes and automation are increasing. However, we are still some way off a continuous process for chocolate panning, although continuous processes for the base coating and polishing steps exist.

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Appendix: Manufacturers of panning equipment

There are many manufacturers of pans, belt and drum coaters and inclusion/exclusion on this list does not imply any recommendation or otherwise.

- Bosch Packaging www.boschpackaging.com (belt coating and polishing machines).
- DRIAM Anlagenbau GmbH, Aspenweg 19–21, D-88097 Eriskirch, Germany (e.g. Driamat, Driacoater – large-scale drum coaters).
- DT&G Limited, Park Works, Old Bidstone Road, Birkenhead CH41 8BP, UK (Finn belt coaters).
- Ets Dumoulin et Cie, 5 Rue Auguste Perdonnet, ZI Le Closeau, 77220 Tournan En Brie, France (automatic high-capacity panning systems).
- Freund-Vector Corp., 675 44th Street, Marion, IA 52302, USA (laboratory to production coaters).
- MacIntyre Chocolate Systems/LADCO, Sir William Smith Road, Kirkton Industrial Estate, Arbroath, DD11 3RD, UK (chocolate coating pans).
- Nicomac srl, Via Curiel 12, I-20060 Liscate, Italy (laboratory to production drum coaters).
- Thomas Engineering Inc., 575 W. Central Road, Hoffman Estates, IL 60195, USA (bench- to production-scale Accela cota drum systems).
- The Schebler Company, 5665 Fenno Road, PO Box 1008, Bettendorf, IA 52722, USA (Revolv belt and drum coaters).

CHAPTER 17
Chocolate rework

Edward Minson and Randall Hofberger

17.1 Introduction

Rework is a fact of life for manufacturers of all food products and this includes those handling chocolate and confectionery (compound) coatings.

Almost equally universal is the policy that "we should create no rework". This lofty goal is admirable but certainly not practical in everyday operations. Indeed, the very nature of chocolate processing and handling inevitably results in the generation of rework. As machinery making fat-based coatings should definitely not be cleaned out with water-containing solutions (see Chapter 25), product changeovers and "cleaning" are often accompanied by the generation of significant quantities of rework.

17.2 Rework

Rework can be minimised by techniques including:

- Proper order of processing;
- Appropriate equipment layout and installation;
- Evaluation of and training in proper processing procedures;
- Selection of suitable quality raw ingredients;
- Proper front end design of the product. Consider developing it with expected amount of rework incorporated into the finished product. Make a confection that is robust in formula and processing so that little rework is ever generated.

Rework generation can often be minimised by processing products in the right order. It is relatively easy to go from a white coating base to a darker chocolate, but difficult to go in the other direction without the generation of significant rework quantities in the cleaning stage.

Proper equipment layout can often assist in minimising rework when multiple products are being processed. The investment in extra piping or efficient pigging systems (see Chapter 12), for example, can help maintain the separation of different coatings and fats. If possible, all pipelines should be slightly sloped to

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