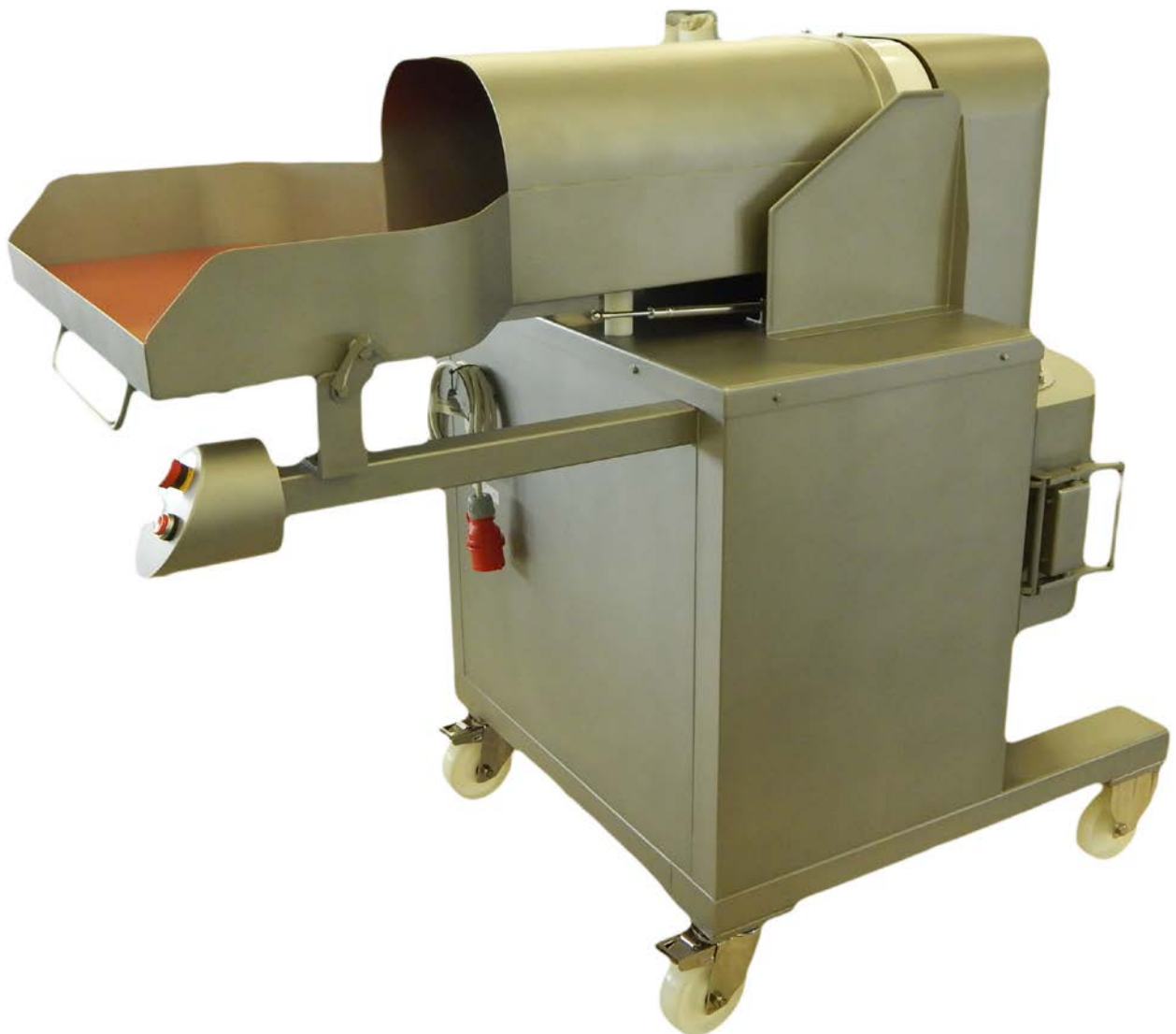


Operating Manual Fruit Declumper

FAM 16

Translation of the German Original



Generated:	Reviewed:	Revised:	Status: 300 released	Page 2 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

SAFETY GUIDELINES

This operating manual provides information which the operator of the device needs to observe in order to ensure personal safety and to prevent damage to property. All safety issues are pointed out by warning triangles and classified according to their degree of risk:



DANGER!

Death, severe bodily injury or considerable damage to property will occur if the respective precautions are not taken.



WARNING!

Death, severe bodily injury or considerable damage to property may occur if the respective precautions are not taken.



CAUTION!

Minor bodily injury or damage to property may occur if the respective precautions are not taken.



NOTE!

Important information on the product, on handling procedures or on a specific part of the documentation you should pay particular attention to.

Qualified personnel

The FAM16 fruit declumper may be commissioned and operated by qualified personnel only. A person is deemed qualified in regard to the safety regulations contained in this operating manual if he or she has received training and instructions on the system.

Please note:

The manufacturer cannot be held liable for accidents or damages caused by the non-observance of the safety instructions, by inadequate procedures or by inappropriate use.



WARNING!

The FAM16 fruit declumper may only be used for the applications described in the specifications and technical description and with the spare parts recommended by Brunner-Anliker AG.

Smooth and safe operation of the product depends on its professional and correct transport, storage, installation and assembly as well as on its proper and careful handling and maintenance.

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Switzerland

Disclaimer

We reviewed the contents of this publication to ensure compliance with the described FAM16 fruit declumper. As differences cannot, however, be completely excluded, we cannot guarantee absolute compliance. The information provided in this publication is reviewed at regular intervals and the changes are included in the subsequent issue.

We welcome any suggestions for improvements.

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Generated:	Reviewed:	Revised:	Status: 300 released	Page 4 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

PREAMBLE / IMPORTANT INFORMATION

Purpose of this operating manual This operating manual is meant to support the specialist in familiarizing with and handling the FAM16 fruit declumper.

Readers This operating manual is intended for all those installing, operating and maintaining the FAM16 fruit declumper made by Brunner-Anliker AG.

Notification obligation The operating manual and applicable regulations must be kept in a place accessible to the operating and maintenance personnel



NOTE!

In addition to the operating manual, all those handling the IR 250 must observe and be instructed on the generally applicable and mandatory regulations relevant to accident prevention.

Scope of application of this operating manual

This operating manual applies to the FAM16 fruit declumper.



NOTE!

Functional modifications to the FAM16 fruit declumper annul all liability and warranty claims.

Obligations of the operating company

The operator is obligated to operate the FAM16 fruit declumper in flawless condition only. Hazard spots between the FAM16 fruit declumper and customer equipment must be secured by the operator.

Please read this operating manual carefully and completely. Contact us immediately in case of uncertainties. Do not operate the device before all uncertainties have been clarified. By commissioning the equipment, you confirm that you have read and understood the operating manual contents.



HAZARD!

Accidents may occur if the FAM16 fruit declumper is not used as intended or in improper or defective condition.

Generated: Ralph Moretti 12 Feb 2018	Reviewed: Michel Benkovics	Revised: Ralph Moretti 24.01.2023	Status: 300 released Document number:	Page 5 of 27 Index CA
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Table of contents

1	Introduction	8
2	Intended use	8
2.1	Limitation of liability	8
3	System components	9
3.1	Front view (operator side)	9
3.2	Rear view	10
4	Scope of supply	11
4.1	Scope of supply	11
4.2	Accessories	12
5	Transport and installation instructions	13
5.1	Consignment	13
5.2	Start-up	13
6	Operation	14
6.1	Preparing the machine	14
6.2	Fruit processing	18
7	System maintenance	19
7.1	Cleaning	19
8	Troubleshooting	21
8.1	Delivered fruit too big - fruit not completely declumped	21
8.2	Delivered fruit too small - fruit crushed or cut	21
8.3	Obstruction - nothing goes in, nothing goes out	21
8.4	Service line	22
9	Spare parts	22
9.1	Disposal	22
10	Transfer to third parties	22
11	Technical specifications	23
11.1	Dimensional drawing	24
12	CE Conformity Declaration	25
13	Warranty	27

Generated:	Reviewed:	Revised:	Status: 300 released	Page 6 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

List of illustrations

Fig. 1: Rear view	9		
Fig. 2: Rear view	10		
Fig. 3: Pre-separator hook	Fig. 4: Spiral separator	Fig. 5: Scraper unit	11
Fig. 6: 6-mm Allen® key	11		
Fig. 7: Perforated plate variant	Fig. 8: Spiral separator variant.....	12	
Fig. 9: Locking the caster brake.....	13		
Fig. 10: Observe the rotation direction!	13		
Fig. 11: Opening the hood	Fig. 12: Hood open	14	
Fig. 13: Installing the scraper unit	14		
Fig. 14: Inserting the perforated plate	15		
Fig. 15: Mounting the spiral separator	Fig. 16: Spiral separator mounted	15	
Fig. 17: Mounting the pre-separator hook	Fig. 18: Pre-separator hook mounted	15	
Fig. 19: Adjusting / removing the scrapers	Fig. 20: Adjusting the scrapers	16	
Fig. 21: Scraper arrangement	16		
Fig. 22: Scraper.....	17		
Fig. 23: Twin spiral separator mounted on the bottom	17		
Fig. 24: Lifting the slide	18		
Fig. 25: Locking the chute	19		
Fig. 26: Lifting the plastic plate	19		
Fig. 27: Scraper unit across the plate	20		
Fig. 28: Inserting the plate	20		
Fig. 29: Perforated plate edges.....	21		
Fig. 27: Dimensional drawing.....	24		
Fig. 28: CE conformity declaration.....	25		

List of tables

Table 1 Operator side	9
Table 2 Rear	10
Table 3 Technical specifications	23

Generated:	Reviewed:	Revised:	Status: 300 released	Page 7 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

1 Introduction

Thank you very much for your trust in us and our products.

The machines made by Brunner-Anliker AG are of high quality. The quality assurance measures in place at Brunner-Anliker AG ensure that all machines leave the plant in perfect condition. By purchasing the FAM16 fruit declumper made by Brunner-Anliker AG, you have decided in favor of a sophisticated, state-of-the-art product.

2 Intended use

The FAM16 is the perfect tool for declumping pressed blocks of dried fruit or frozen vegetables into friable and undamaged single products.

Maximum processable block size = 300 x 300 x 200 mm



NOTE!

- The device may only be used for the products approved by the manufacturer.
- Any other use is considered improper and contrary to that originally intended.



HAZARD!

- The manufacturer cannot be held liable for accidents or damages caused by the non-observance of the safety instructions, by inadequate procedures or by inappropriate use of the machine.

2.1 Limitation of liability



NOTE!

The operator of the machine is responsible for the compliance of the entire system with the local regulations regarding the installation and operation of such systems.

After assembly and installation of the machine, it is the operator's duty to verify the safety of the system. The operator must also ensure that exposed system parts which could pose a hazard to the operating personnel are screened or equipped with appropriate safety devices.

Generated:	Reviewed:	Revised:	Status: 300 released	Page 8 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

3 System components

3.1 Front view (operator side)

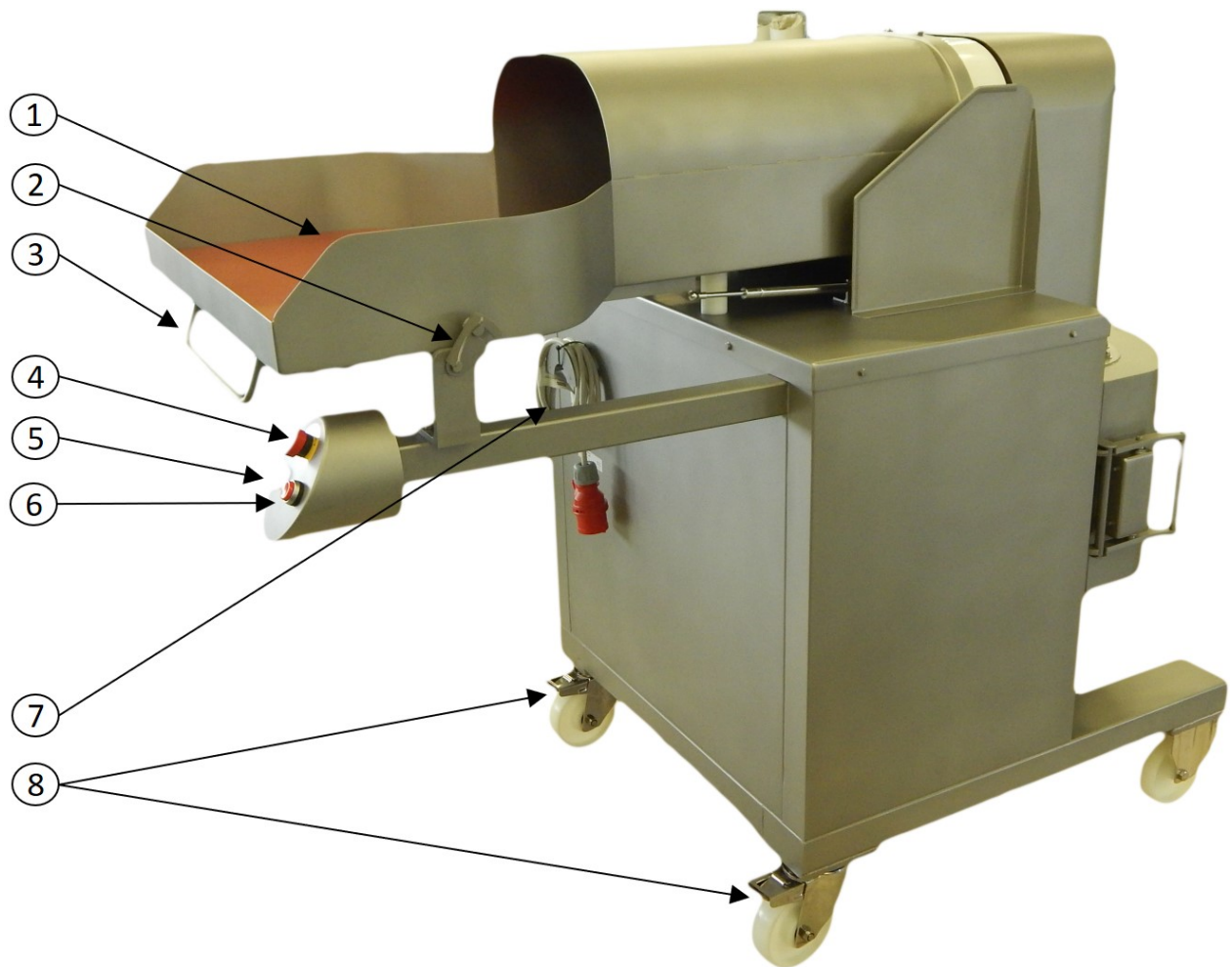


Fig. 1: Rear view

Table 1 Operator side

Item	Item
1 Chute	5 ON switch
2 Chute lock	6 OFF switch
3 Lift handle	7 Cable holder with power cable
4 EMERGENCY OFF switch	8 Swivel casters with brakes

3.2 Rear view

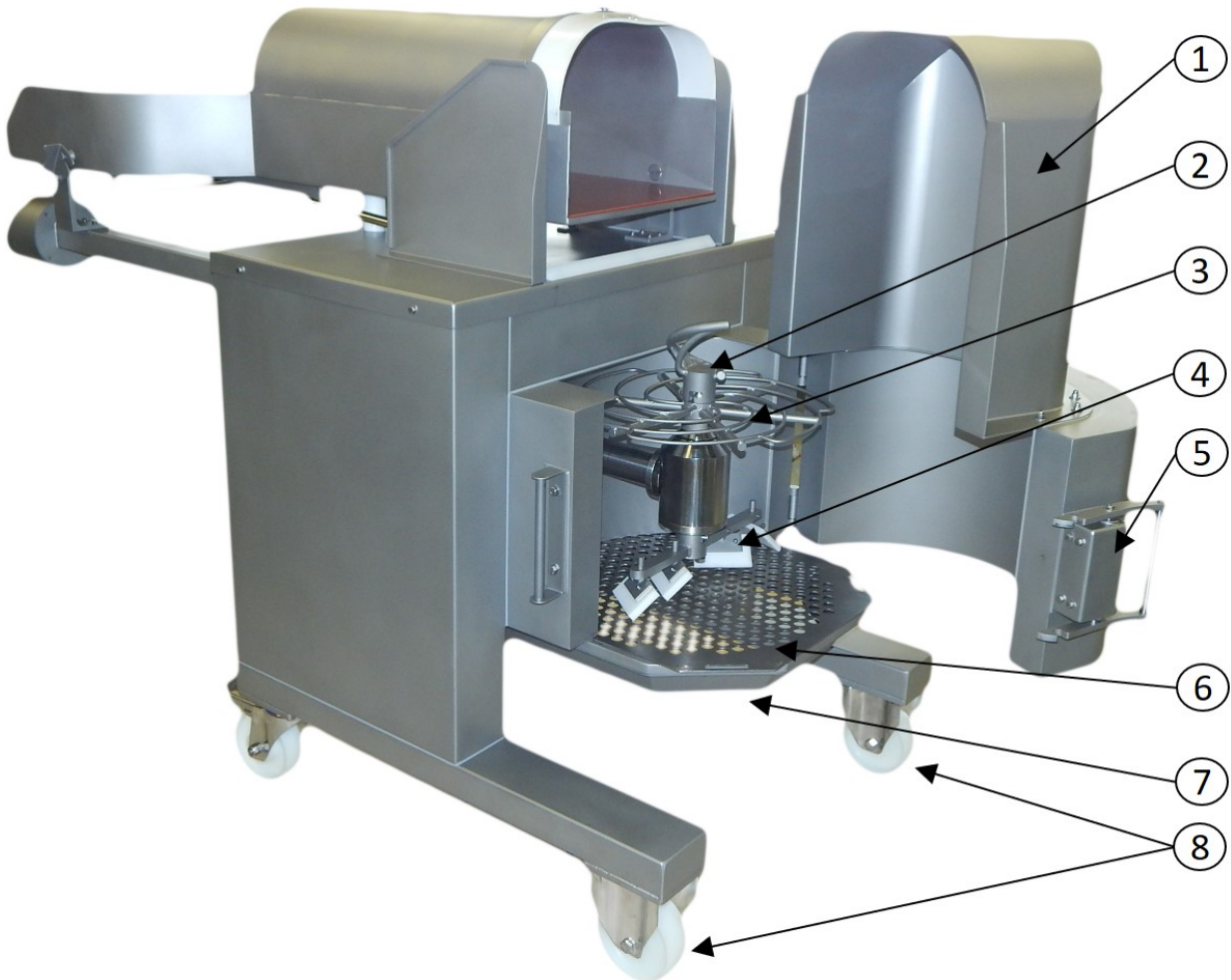


Fig. 2: Rear view

Table 2 Rear

Item	Item
1 Declumper hood	5 Lock
2 Pre-separator hook	6 Perforated plate
3 Spiral separator	7 Outlet
4 Scraper unit	8 Rigid casters

4 Scope of supply

4.1 Scope of supply

The FAM16 consignment consists of the machine itself, the operating manual, pre-separator hook, spiral separator, scraper unit, 19-mm socket wrench and 6-mm Allen® key.



Fig. 3: Pre-separator hook



Fig. 4: Spiral separator

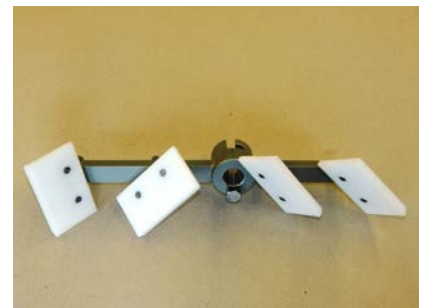


Fig. 5: Scraper unit



Fig. 6: 6-mm Allen® key

Generated:	Reviewed:	Revised:	Status: 300 released	Page 11 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

4.2 Accessories

The FAM16 fruit declumper can be equipped with a variety of perforated plates to suit all types of fruit (e.g. dried fruit).

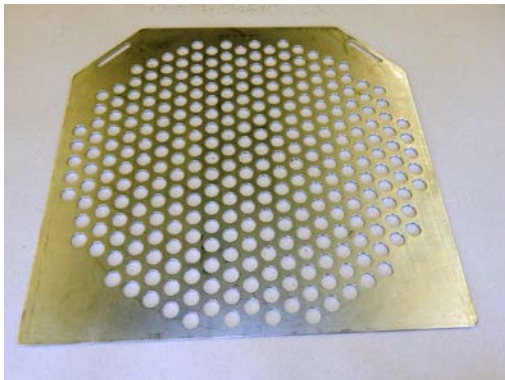


Fig. 7: Perforated plate variant



Fig. 8: Spiral separator variant

Generated:	Reviewed:	Revised:	Status: 300 released	Page 12 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

5 Transport and installation instructions

5.1 Consignment

5.2 Start-up

The mobile machine must be placed on an even surface (do not use on sloping surfaces). Leave enough space around the machine for the provision and infeed of fruit blocks as well as for the container catching the singulated products. The space should allow unobstructed lifting of the chute and opening of the declumper hood.

The machine must be locked in place with the caster brakes: Push the brake down with your foot until they snap into place.



Fig. 9: Locking the caster brake

Connect the cable to high-current power supply (400V).

Check the direction of rotation of the motor: the pre-separator hook must rotate in the indicated direction (counterclockwise)!



Fig. 10: Observe the rotation direction!

Generated:	Reviewed:	Revised:	Status: 300 released	Page 13 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

6 Operation

6.1 Preparing the machine

The machine must be prepared for the fruit to be processed. Ensure that the machine is switched OFF. Open the declumper hood: pull the handle and swing the hood to the side.



Fig. 11: Opening the hood



Fig. 12: Hood open

Mount the scraper unit. Insert from below, push up and onto the drive shaft. The scrapers must face down. The bayonet lock lobes must snap into place. Tighten the hexagonal head screw with the key of the accessories kit to lock the scraper unit securely on the shaft.



Fig. 13: Installing the scraper unit

Generated:	Reviewed:	Revised:	Status: 300 released	Page 14 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

Insert the perforated plate into its frame. Ensure that the right side faces up. The hole size should comply with that of the declumped fruit pieces.



Fig. 14: Inserting the perforated plate

Place the spiral separator on the upper end of the drive shaft. The bayonet lock lobes must snap into place.



Fig. 15: Mounting the spiral separator
Spiral separator mounted



Fig. 16:

Mount the pre-separator hook on the drive shaft. The bayonet lock lobes must snap into place. Tighten the hexagonal head screw with the key of the accessories kit to lock the pre-separator hook securely on the shaft.



Fig. 17: Mounting the pre-separator hook



Fig. 18: Pre-separator hook mounted

Generated:	Reviewed:	Revised:	Status: 300 released	Page 15 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

Adjust the distance and orientation of the four scrapers on the scraper unit. The distance between scrapers and perforated plate should roughly comply with the size of the singulated fruit pieces. The spiral separator indicates the direction of rotation which needs to be observed for scraper adjustment. The stud screws can be loosened and tightened with the key in the accessories kit.



Fig. 19: Adjusting / removing the scrapers



Fig. 20: Adjusting the scrapers

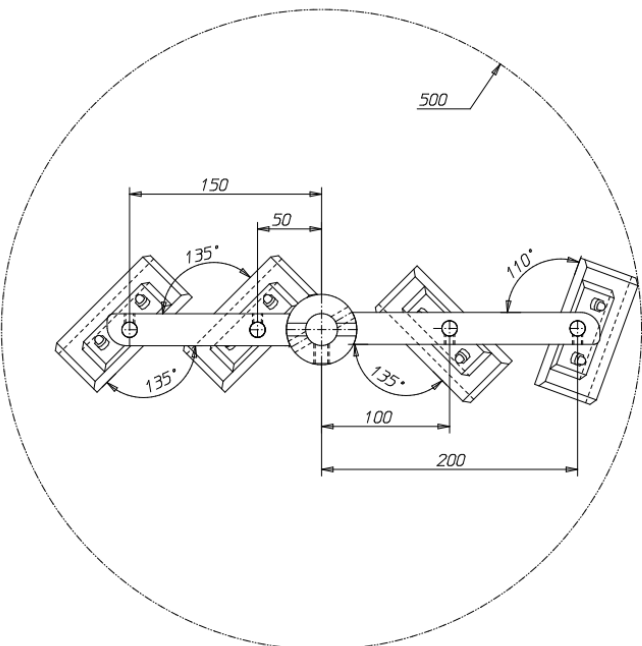
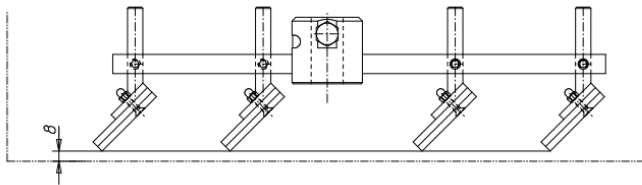


Fig. 21: Scraper arrangement

Generated:	Reviewed:	Revised:	Status: 300 released	Page 16 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA



NOTE!

- Ensure that all screws on the scrapers sit tight and that the scrapers do not rub against the wall!



Fig. 22: Scraper

Instead of the scraper unit and the perforated plate, a second spiral separator can be mounted on the bottom of the machine. Please see our information on the tool configuration required for each type of fruit.



Fig. 23: Twin spiral separator mounted on the bottom

Close the declumper hood. Please note that for safety reasons the drive cannot be started before the hood is closed and secured.

Generated:	Reviewed:	Revised:	Status: 300 released	Page 17 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

6.2 Fruit processing

1. Start the machine.
2. Place a container suitable for collection of the singulated fruit products under the declumper.
3. Unpack the products (fruit) for declumping.
4. Remove the packaging material (e.g. plastic bag).
5. Lift the chute with the handle and slide the block into the machine.



Fig. 24: Lifting the chute



NOTE!

- Plastic bags or other packaging material must not get into the machine.

Generated:	Reviewed:	Revised:	Status: 300 released	Page 18 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

7 System maintenance

7.1 Cleaning

Switch the machine off and unplug the power cable.

To remove the plastic plate for cleaning, block the loading device with the hook to prevent it from springing back.



Fig. 25: Locking the chute

Lift the plastic plate through the oval openings from below, pull out from above.



Fig. 26: Lifting the plastic plate

Open and swing out the declumper hood.

Loosen but do not remove the hexagon head screw on the pre-separator hook.

Rotate the pre-separator hook counterclockwise out of the bayonet lock and pull it off the drive shaft.

Rotate the spiral separator counterclockwise out of the bayonet lock and pull it off from above.

Lift the perforated plate and pull it out of its frame.

Generated:	Reviewed:	Revised:	Status: 300 released	Page 19 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

In case of narrow distances to the scrapers, rotate the scraper unit until it is positioned transversely to the machine rotation direction. Very small distances may require raising of the scrapers to allow removal of the perforated plate.



Fig. 27: Scraper unit placed transversely to the plate

After removal of the perforated plate, loosen the hexagon head screw on the scraper unit. Rotate counterclockwise out of the bayonet lock and pull it off the drive shaft from below.



NOTE!

- For storage and cleaning, the loading unit must be blocked with the hook.

Insertion of the plastic plate: ensure that the plate is inserted correctly. The side with the angled corner must be placed on the hinge side of the hood.



Fig. 28: Inserting the plate

Generated:	Reviewed:	Revised:	Status: 300 released	Page 20 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

8 Troubleshooting

8.1 Delivered fruit too big - fruit not completely declumped.

The scraper distance might be too big. Reduce the distance. Ensure that the outer scrapers push the fruit towards the center.

8.2 Delivered fruit too small - fruit crushed or cut.

The scraper distance might be too small. Increase the distance. Ensure that the perforated plate is inserted with the angled perforated edges up.



Fig. 29: Perforated plate edges



NOTE!

- Ensure that all screws on the scrapers sit tight and that the scrapers do not rub against the wall!

8.3 Obstruction - nothing goes in, nothing goes out.

Switch off the machine. Open the declumper hood, empty the machine. Ensure that all declumper components are installed as required. Close the hood, switch the machine back on and continue fruit singulation.

Generated:	Reviewed:	Revised:	Status: 300 released	Page 21 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA



NOTE!

- The rear door must not be opened when the chute is open!

If these measures do not help or in case of malfunctions not described in this manual, please contact the Brunner-Anliker Service Line.

8.4 Service line

Please contact our Service Line for all problems and questions that are not described or cannot be solved.

Address: Brunner-Anliker AG
Flughofstrasse 55
8152 Opfikon-Glattbrugg
Switzerland

T: +41 44 804 21 00
F: +41 44 804 21 90

Internet: brunner-anliker.com/

Mail: mail@brunner-anliker.com

9 Spare parts

9.1 Disposal

10 Transfer to third parties

All liabilities by Brunner-Anliker AG cease if the FAM16 is sold and transferred to a third party.

Generated:	Reviewed:	Revised:	Status: 300 released	Page 22 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

11 Technical specifications

Table 3 Technical specifications

Electrical connection	3 x 400V 50Hz
Electric motor	2.2 kW
Weight	332 kg
Protection category	IP 26
Dimensions min. L x W x H	1800 x 920 x 1430
Dimensions max. L x W x H	2110 x 1230 x 1800

11.1 Dimensional drawing

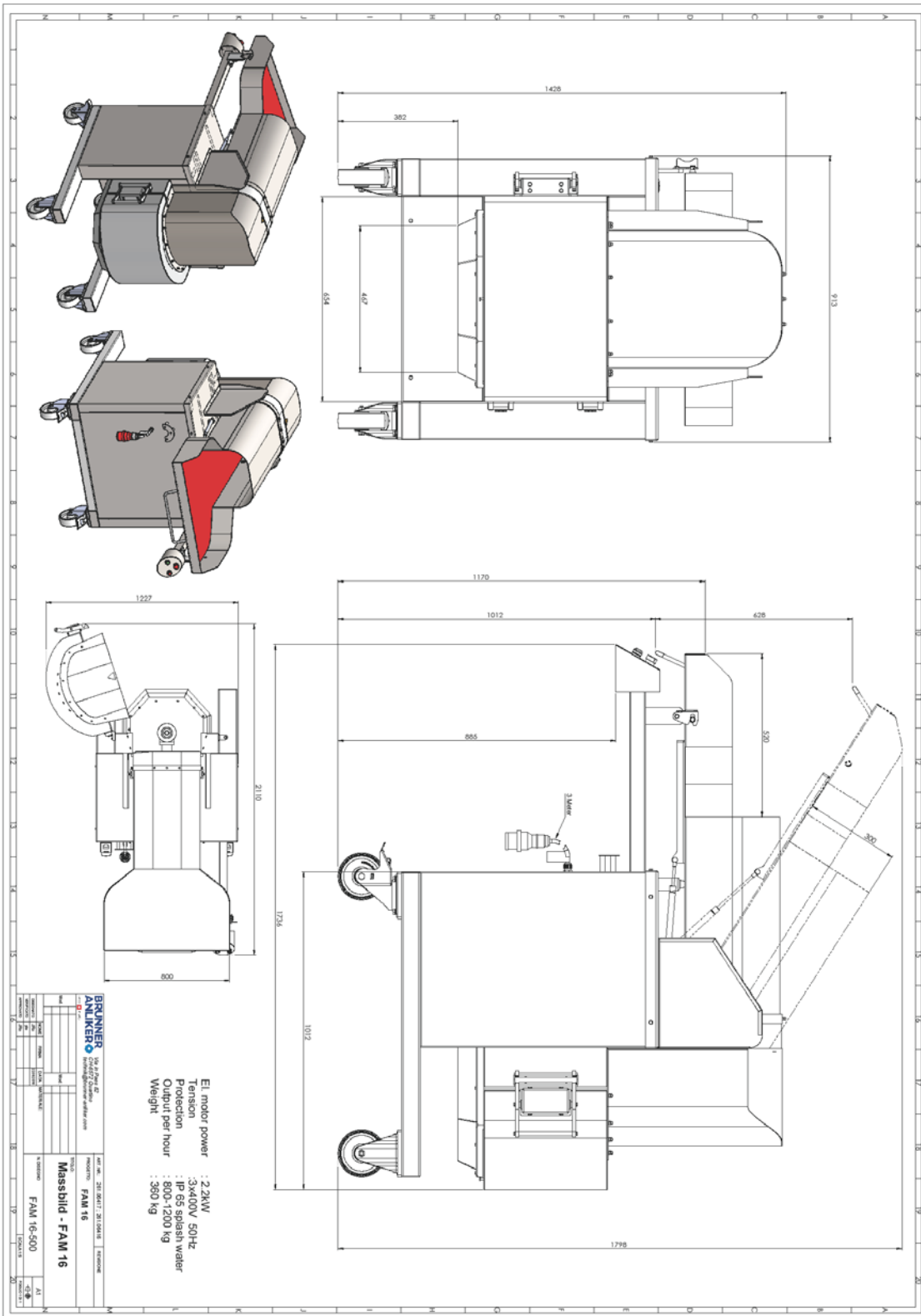


Fig. 30: Dimensional drawing



Generated: Ralph Moretti 12 Feb 2018	Reviewed: Michel Benkovics	Revised: Ralph Moretti 24.01.2023	Status: 300 released Document number:	Page 24 of 27 Index CA
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12 CE Conformity Declaration



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EG-Konformitätserklärung
CE Déclaration de conformité
Dichiarazione di conformità CE
EC Declaration of conformity

<p>Wir / Nous / Noi / We,</p> <p>Brunner-Anliker AG Flughofstrasse 55 8152 Opfikon-Glattbrugg Schweiz</p>	
<p>erklären in alleiniger Verantwortung, dass das Produkt déclarons de notre seule responsabilité que le produit dichiariamo sotto la nostra esclusiva responsabilità che il prodotto bearing sole responsibility, hereby declare that the product</p> <p>Beschreibung des Produkts Description du produit Descrizione del prodotto Description of product Früchteauflockerungs – Maschine Typenreihe / Série type / Serie del modello / Type series FAM 16</p>	
<p>auf das sich diese Erklärung bezieht, mit der/den folgenden Norm(en) oder normativen Dokumenten übereinstimmt: auquel se rapporte la présente déclaration est conforme aux normes ou aux documents normatifs suivants. al quale si riferisce la presente dichiarazione è conforme alla seguente norma/alle seguenti norme o documenti normativi: referred to by this declaration is in conformity with the following standards or normative documents.</p>	
<p>Bestimmungen der Richtlinie Désignation de la directive Disposizioni della direttiva provisions of the directive</p> <p>2006/42/EG: Maschinenrichtlinie 2006/42/CE: directive Machines 2006/42/CE: Direttiva macchine 2006/42/EC: Machinery Directive</p>	<p>Titel und/oder Nummer sowie Ausgabedatum der Norm(en): titre et/ou numéro ainsi que date d'émission de la/des norme(s): Titolo e/o numero e data di pubblicazione della norma/delle norme title and/or number and date of issue of the standard(s):</p> <p>DIN EN ISO 12100:2011-03 DIN EN ISO 14119:2014-03 DIN EN 60204:2014-10</p>
<p>Mitteilung über Anerkennung der Qualitätssicherung: Communication sur la reconnaissance de l'assurance de la qualité: Comunicazione sul riconoscimento della garanzia di qualità: Report on the acknowledgment of the quality assurance:</p>	<p>Ergänzung zu FAM 16 In aggiunta per FAM 16</p>
<p>Ausstellung: Brunner-Anliker SA Ralph Moretti / PCO Via in Paes 82 6572 Quartino, Schweiz</p> 	<p>Quartino, 2023</p> <p>M. Benkovics  Technischer Direktor / Technical Director</p>

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Ralph Moretti	Michel Benkovics	Ralph Moretti	Unterlagennummer:	Index
05.02.2018	14.02.2018	24.01.2023		CA

Fig. 31: CE conformity declaration

Generated:	Reviewed:	Revised:	Status: 300 released	Page 25 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

Declaration of Conformity

as set forth in EC directive 1935/2004



for objects that come into contact with food

We hereby declare that all system components which are part of machine FAM 16 and come into contact with the products, including those which are incorporated or replaced at a later point in time, fully comply with the requirements set forth in EC directive 1935/2004 (in its applicable version).

Under normal and foreseeable conditions, the components that come into contact with the products are transferred to food in such a way that they do not imperil human health.

Neither do they cause an unacceptable change to the food composition, nor do they affect or hinder its investigation by the human senses without the use of technical or other auxiliary means.

This declaration is not valid if changes have been carried out without the consent of the manufacturer.

<p>Published by Brunner-Anliker SA Ralph Moretti / PCO Via in Paes 82 6372 Quartino, Schweiz</p> 	<p>Quartino, 2023</p> <hr/> <p>M. Benkovic </p> <p>Technischer Direktor / Technical Director</p>
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Generated:	Reviewed:	Revised:	Status: 300 released	Page: 1
Ralph Moretti	Michel Benkovic	Ralph Moretti	Document number:	Index
09 Jan 2019	09 Jan 2019	24.01.2023		AA

Generated:	Reviewed:	Revised:	Status: 300 released	Page 26 of 27
Ralph Moretti	Michel Benkovic	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA

13 Warranty

During the warranty period, the machine may only be repaired and maintained by the manufacturer. Upon request, the manufacturer may authorize certain exceptions in writing. The warranty exclusively relates to the part to be replaced and its replacement at the manufacturer's factory, but not to a service in connection with a warranty repair not conducted by the specialist staff at our service center (refer to page xx) or by the manufacturer plant itself.

Generated:	Reviewed:	Revised:	Status: 300 released	Page 27 of 27
Ralph Moretti	Michel Benkovics	Ralph Moretti	Document number:	Index
12 Feb 2018		24.01.2023		CA