OPERATION AND MAINTENANCE MANUAL

This Operation and Maintenance Manual is valid for the following machine:



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We reserve the rights to make changes, due to technical advancement and further development, of the machine as described in this manual.

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To the customer,

This is the operation and maintenance user guide for the DICR - classic. This guide includes instructions for safe and successful operation of this DICR - classic. Attention to the specific guidelines in this manual will help extend the life expectancy of this machine, eliminate the need for unnecessary repairs and reduce the risk of potential on site hazards.

The general safety and accident prevention regulations from all local and professional associations must be abided by at all times. It is essential to comply with all safety requirements before bringing the machine into operation. This machine may only be used in accordance to the regulations specified in this document. To ensure proper handling, only qualified personnel may operate this DICR - classic.

When DICR - classic requires maintenance, only original manufacturer parts will uphold the warranty guarantee. Foodlogistik reserves the right to cancel the warranty policy when negligent and or improperly executed repairs are made. Foodlogistik assumes no liability for damages and or operational errors due to failure to comply with all stated guidelines set forth in this Instruction Manual.

Any and all technical and safety work place regulations must be in compliance prior to operation along with:

-accident prevention regulations expressed in this manual,

-operating regulations valid in the country of operation.

Should you need further assistance regarding this machine, please contact our customer service department at: info@foodlogistik.de





TABLE OF CONTENTS

Page

1	SAFETY1
1.1	SYMBOLS AND MEANINGS
1.2	SAFETY REGULATIONS
1.2.1	General safety regulations
1.2.2	Safety regulations for maintenance and repairs
1.2.3	Safety regulations for operation of DICR - classic
2	TECHNICAL DATA
2.1	GENERAL PARAMETERS
2.2	ELECTRICAL PARAMETERS
3	MACHINE DESCRIPTION9
3.1	RANGE OF APPLICATIONS
3.2	MACHINE ASSEMBLY
3.2.1	Machine overview
3.2.2	Four-dimensional pre-compression
3.2.3	Cutting tools and accessories
3.2.3.1	Grid set
3.2.3.2 3.2.3.3	Slicing disk (1-dimensional)
3.2.3.4	Striping disk (2-dimensional)
3.2.3.5	Grating disk14
3.2.3.6	Non moving knife grid set
3.2.3.7 3.2.3.8	Wiring grid set
3.2.4	Construction of electrical components
3.2.5	Construction of hydraulic components
4	DELIVERY, INSTALLATION AND SET UP
4.1	TRANSPORT
4.2	INSTALLATION
4.3	Set-up19
5	OPERATIONS
5.1	OPERATING THE MACHINE
5.1.1	Overview of the control knobs
5.1.2	Daily safety checks
5.1.2.1	Preparations
5.1.2.2	Functions tests
5.1.3	Avoidance of operating-errors for machine protection



5.1.4	General operational sequence	24
5.1.5	Operating modes	28
5.1.5.1 5.1.5.2 5.1.5.3 5.1.5.4	Operating mode stepwise feed without pre-compression Operating mode stepwise feed with pre-compression Operating mode continuous feed with pre-compression Operating mode continuous feed without pre-compression	28 29
5.1.5.5 5.1.5.6 5.1.5.7 5.1.5.8	Operating mode for cutting disks Operating mode for cutting disks with the automatic tool scan Operating mode residual emptying Cleaning mode	30 30 30
5.1.6	Usage of the stabilizers	31
5.2	DEACTIVATING	32
5.2.1	Switching Off the machine	32
5.2.2	Emergency shut off	32
5.2.3	Taking out of operation	33
6	CLEANING AND SANITIZING	35
6.1	GENERAL RULES	35
6.2	DAILY CLEANING	35
6.2.1	Removal of functioning parts	35
6.2.1.1 6.2.1.2 6.2.1.3 6.2.1.4	Removal of the grid set Removal of slice cut knife and actuating lever Removal of wiring or non-moving knife grid set Removal of cutting or grating disk	36 37 38
6.2.1.5 6.2.2	Removal of carving board, closure slider and piston plate	
6.2.3	Assembly of the functioning parts after cleaning	
6.2.3.1 6.2.3.2 6.2.3.3	Assembly of basin, carving board, closure slider and piston plate Assembly of the grid set Activities be performed after cleaning	42 42
7	MAINTENANCE AND INSPECTIONS	43
7.1	GENERAL GUIDELINES	43
7.2	INSPECTION AND MAINTENANCE PLAN	43
7.3	LUBRICATION	45
7.4	SHARPENING OF GRID BLADES, AND SLICE CUT KNIFE BLADE	47
7.4.1	Sharpening the grid blades	47
7.4.2	Sharpening the slice cut knife	48
7.5 BLADE	ASSEMBLY AND DISASSEMBLY OF GRID BLADES, AND SLICE CUT KNIFE / KNIFE 48 $\!$	
7.5.1	Assembly and disassembly of the grid blades	48
7.5.2	Assembly and disassembly of the slice cut knife / knife blade	
7.5.2.1 7.5.2.2	Adjusting the cutting distance on slice cut knife Adjusting the cutting distance on cutting disk	



8	KEYWORD INDEX	.59
7.8.2	Troubleshooting	. 56
7.8.1	General Guidelines	. 56
7.8	SYSTEM MALFUNCTIONS	56
7.7.1	Oil Level Checks and Oil Changes	. 54
7.7	MAINTENANCE OF THE HYDRAULIC EQUIPMENT	53
7.6	MAINTENANCE OF THE ELECTRICAL EQUIPMENT	52

REGISTER OF ILLUSTRATIONS

F	Page
Illustration 1: Machine dimensions	6
Illustration 2: Space requirement of the machine	6
Illustration 3: Machine overview (1)	10
Illustration 4: Machine overview (2)	10
Illustration 5: Operation principle of four-dimensional pre-compression	11
Illustration 6: Standard grid set 15x15 mm	12
Illustration 7: slicing disk (1-dimensional)	13
Illustration 8: 4-bladed slicing disk	13
Illustration 9: Striping disk (2-dimensional)	13
Illustration 10: grating disk	14
Illustration 11: Non moving knife grid set	14
Illustration 12: Wiring grid set	14
Illustration 13: Machine safety switches	16
Illustration 14: Hydraulic system of the machine	17
Illustration 15: Machine transportation	18
Illustration 16: Control knobs	21
Illustration 17: DICR – classic with Euro2-box and tre (a) closed E2-box cover, (b) open E2-box cover	
Illustration 18: DICR - classic with E2-box and trolley, cut-area door open	25
Illustration 19: Operating principle of machine filling	26
Illustration 20: Operating principle of pre-fill and working chamber	27
Illustration 21: Usage of the stabilizers	32
Illustration 22: Removal of grid set	36
Illustration 23: Removal of slice cut knife and actuating lever	36
Illustration 24: Removal of wiring grid set	37
Illustration 25: Removal of non-moving knife grid set	37
Illustration 26: Removal of cutting or grating disk	38
Illustration 27: Removal and assembly of carving board, closure slider and pi plate	
Illustration 28: Lubrication of DICR - classic	46
Illustration 29: Sharpening the grid blades	47
Illustration 30: Sharpening the slice cut knife	48



Illustration 31: Assembly and disassembly of the grid blades	.49
Illustration 32: Assembly and disassembly of the slice cut knife	.50
Illustration 33: Adjusting the cutting distance on slice cut knife	.51
Illustration 34: Adjusting the cutting distance on cutting disk	.52
Illustration 35: Oil Checks and Changes	.55



REGISTER OF TABLES

Page

Table 1: General parameters	5
Table 2: Electrical parameters	7
Table 3: Grid Sizes	12
Table 4: Accessories	15
Table 5: Control knobs	22
Table 6: Functions test	23
Table 7: Cleaning mode	31
Table 8: Cleaning plan	40
Table 9: Inspections and maintenance plan	44
Table 10: Lubrication Regulations	45
Table 11: Troubleshooting	57



1 SAFETY

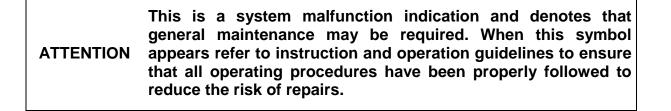
1.1 Symbols and meanings

a) Work place safety symbol:



This symbol indicates a warning to personal safety, and or risk to bodily injury. When this symbol appears follow all instructions and inform others of any safety guidelines given.

b) Attention:



c) Information:



This symbol denotes information relating to the economic use of the DICR - classic or technical requirements that the user must take into special account. SAFETY



1.2 Safety regulations

1.2.1 General safety regulations

The DICR - classic is operationally compliant and in accordance with the requirements set forth in the guidelines of the Council of the European Community for Machinery (2006/42/EG), along with the current German accident prevention regulations (UVV/VBG).

Incorrect usage of the DICR - classic causes dangers. All users of the DICR - classic must strictly adhere to all technical safety instructions and regulations established in this manual when installing, and operating this machine.

The following German legislation regulations relating to employee and general work place safety and or their national equivalents, need to be taken into consideration:

- EN 13871:2005 Food processing machinery, Cubes cutting machinery, Safety and hygiene requirements
- EN 60204-1: June 2007 Safety of Machinery Electrical Equipment of Machines Part 1: General Requirements
- EN 50110-1 Operation of electrical installations
- 89/391/EEC Safety and health of workers Employer-s duty to ensure the safety and health of workers in all aspects related to work Employer-s liability
- 89/655/EEC Occupational health and safety requirements for use of work equipment established employee work place safety equipment for handling
- 2006/95/EC relating to electrical equipment designed for use within certain voltage limits (Low Voltage Directive)
- guidelines of the respective countries of usage

The safety guidelines set forth in this user manual are universally compliant and should be followed in order to maintain employee safety, eliminate work place injuries and be in compliance with the environmental protection agency regulations. All authorized employees must pass regular inspections and attend monthly training to maintain compliance to operate this machine.

Only authorized employees may operate the DICR - classic and must wear all required safety gear when operating, maintaining or cleaning this machine.



1.2.2 Safety regulations for maintenance and repairs

Changes should never be made to any of the protective equipment/installations when cleaning or carrying out maintenance. During maintenance and repairs of the DICR - classic the power supply and machine must be in the off position. At all times authorized workers making repairs or maintaining this machine must wear the proper safety gear (gloves, goggles, rubber soled shoes). There may be no alterations to the machines pre-installed safety features. Any pieces removed from the machine need to be re-installed and tested to ensure proper working order before the machine may be re-instated to normal working conditions.

This machine should be in proper working order at all times. Any malfunctions need to be noted and reported to the appropriate managers. Only trained and authorized mechanics and technicians (electricians and hydraulic specialists) may service and or repair any part of this machine. Before making repairs ensure that the dicer is in the off position, meaning the main switch is off and in the locked position. While making repairs, at no time may any alterations to the machines pre-installed safety features be made unless otherwise consented by the machine manufacturer.

After any and all servicing and or repairs, trial runs and safety tests must be made to ensure proper working order of all machine systems and safety features, before it may return to the work floor (see 5.1.2).

1.2.3 Safety regulations for operation of DICR - classic

Before the work day begins, the DICR - classic must pass inspection of its safety systems.

At no times are employees allowed to climb into or on the machine by any means.

While the machine is in operation do not stand in the vicinity or under the loading arm.

Do not place hands, fingers or arms inside the hopper or under the machine door into the cutting area, while the machine is running.

While the machine is operating it needs to remain under constant supervision to ensure that any malfunctions that arise are immediately reported and fixed.

In case of an emergency, shut the machine off by pressing the emergency stop button on the control panel.



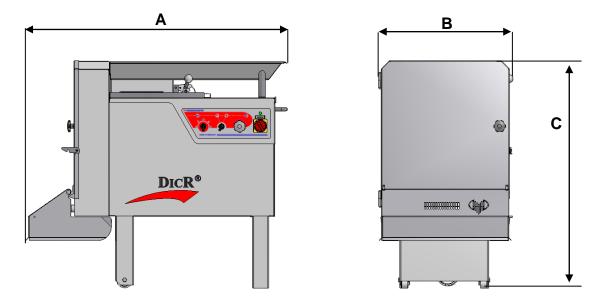
2 TECHNICAL DATA

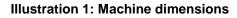
2.1 General parameters

Table 1: General parameters

Parameter	classic 90	classic 90 ⁺	classic 96	classic 96 ⁺
Performance Rate (contingent upon application, feed, grid size, usage of single or double knife, chamber fullness grade and operating staff)	1100 kg/h	1400 kg/h	1100 kg/h	1400 kg/h
Dimension A (Illustration 1)	1300	1700	1300	1700
Dimension B (Illustration 1)	660	660	660	660
Dimension C (Illustration 1)	1115	1115	1115	1115
Space Requirement [m ²] (Illustration 2)	1,6	2,2	1,6	2,2
Weight [kg]	260	300	260	300
Cross section grid set [mm]	90 x 90	90 x 90	90 x 90	90 x 90
Cross section chamber [mm]	90 x 90	90 x 90	96 x 96	96 x 96
four-side pre compression (see point 3.2.2)	without	without	with	with
Chamber Length [mm]	310	530	310	530
Equivalent sound pressure level	74,0 dB (A)			
Employees Needed	1 Person			
Construction Method	corrosion resistant stainless steel construction			
Goods to be processed	Meat products regardless if meat is cooked, raw or chilled, beef, poultry, fish, cheese, vegetables, fruits (- 3° C to + 60° C, 27° F to + 140° F)			
Cut Length	0 bis 45 mm (smooth adjustable)			
Power Sources	electric and hydraulic			
Storehouse: Relative Humidity	max. 93 % at 25° C, 77° F			
Operating Conditions: Temperature	+5° C to +25° C , 41° F to 77° F			







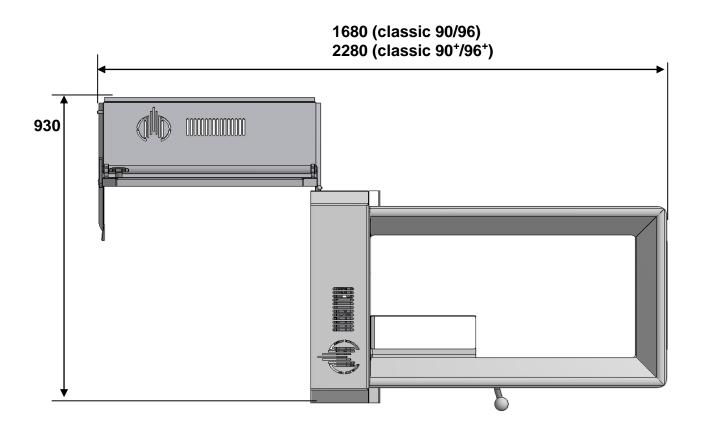


Illustration 2: Space requirement of the machine



2.2 Electrical parameters

Table 2: Electrical parameters

Electrical parameters	3~PE/ 400 V/ 50 Hz	3~PE/ 230 V/ 50 Hz	3~PE/ 380 V/ 60 Hz	3~PE/ 220 V/ 60 Hz
Connected load	3,1 kW	3,1 kW	3,4 kW	3,4 kW
Rated current	6,5 A	6,5 A	10,8 A	10,8 A
Fuse current	10 A	10 A	16 A	16 A
Type of current	3~PE	3~PE	3~PE	3~PE
Operating frequency	50 Hz	50 Hz	60 Hz	60 Hz
Operating voltage	400 V	230 V	380 V	220 V
Control voltage	24 V DC	24 V DC	24 V DC	24 V DC
Simultaneousness factor	0,9	0,9	0,9	0,9
Operating mode	Permanent operation	Permanent operation	Permanent operation	Permanent operation
Protective system	IPX 5	IPX 5	IPX 5	IPX 5
Ambient temperature	+5 °C to +25 °C	+5 °C to +25 °C	+5 °C to +25 °C	+5 °C to +25 °C



3 MACHINE DESCRIPTION

3.1 Range of applications

The featured application of this dicer is its ability to cut food in a variety of states ranging from raw, to cooked, to deeply chilled. The DICR - classic has the ability to cut cubes, stripes or slices from meat, fish, cheese, fruit or vegetable products.



Use of this machine in ways other than intended is restricted and at the risk of the user. The manufacturer is not liable for any damages incurred due to improper use and or neglect.

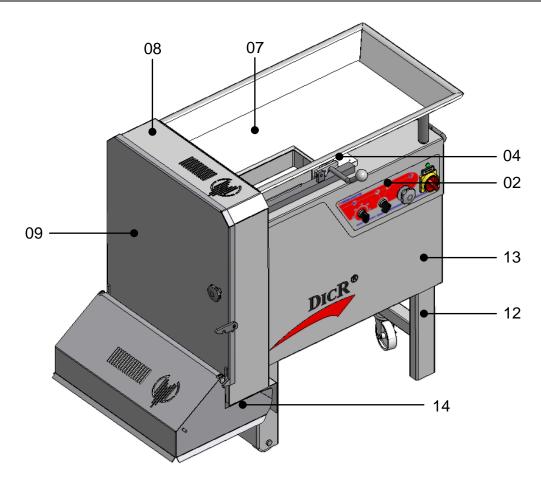
3.2 Machine assembly

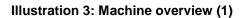
3.2.1 Machine overview

The machine overview is pictorially displayed through illustrations and diagrams. The DICR - classic consists of (view Illustration 3 and Illustration 4):

- 01 Frame,
- 02 Control panel,
- 03 Intermediate flange,
- 04 Closure slider,
- 05 Hydraulic unit,
- 06 Electric box,
- 07 Carving board
- 08 Cutting area with Grid set and Slice cut knife,
- 09 Cut-area door,
- 10 Processing chamber with feed piston,
- 11 Slice cut knife drive / Grid drive,
- 12 Feet,
- 13 Machine Covers,
- 14 Euro2-box cover.







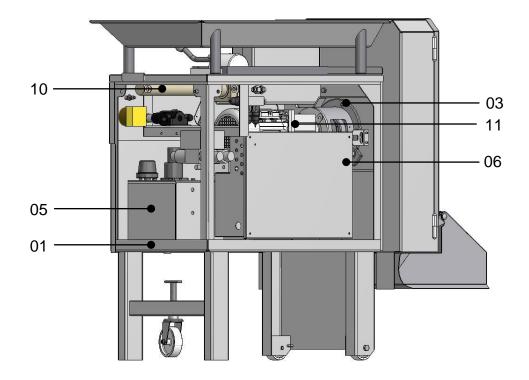


Illustration 4: Machine overview (2)



3.2.2 Four-dimensional pre-compression

The DICR - classic 96 and 96+ are equipped with the unique four-dimensional precompression which means the processing chamber (96x96 mm) taper to 90x90 mm in front (view Illustration 5). Especially at fresh meat dicing, this four-dimensional precompression guarantee for best cutting results.

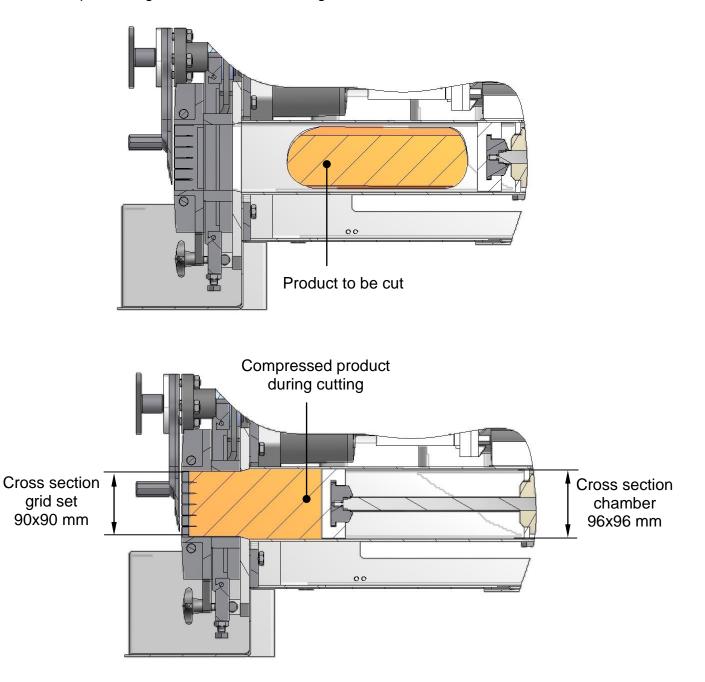


Illustration 5: Operation principle of four-dimensional pre-compression



3.2.3 Cutting tools and accessories

3.2.3.1 Grid set

The DICR - classic can be equipped with optional grid set. The grid set diagram is depicted in Illustration 6. FOODLOGISTIK GmbH offers grid sets in the following sizes:

Table 3: Grid Sizes

Sizes [mm]	Grid type	Number of knives	
Sizes [mm]	Grid type	Front grid	Rear grid
4 x 4	Step grid set	20	20
5 x 5	Standard grid set, Step grid set	17	17
6 x 6	Standard grid set, Step grid set	14	14
7 x 7	Standard grid set, Step grid set	11	11
8 x 8	Standard grid set, Step grid set	10	10
10 x10	Standard grid set, Step grid set	8	8
13 x 13	Standard grid set	6	6
15 x 15	Standard grid set	5	5
18 x 18	Standard grid set	4	4
22 x 22	Standard grid set	3	3
30 x 30	Standard grid set	2	2
45 x 45	Standard grid set	1	1

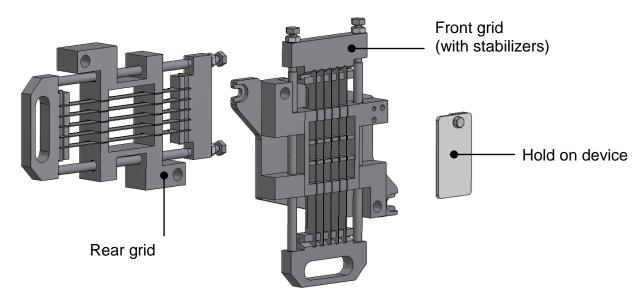


Illustration 6: Standard grid set 15x15 mm

3.2.3.2 Slicing disk (1-dimensional)

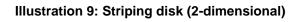
The DICR - classic can be equipped with a slicing disk (1-dimensional). The slicing disk (1-dimensional) is used for cutting slices of several kinds of food like vegetables and fruits. The slicing thickness is available from 1 to 5 mm.

3.2.3.3 4-bladed slicing disk

The DICR - classic can be equipped with a 4-bladed slicing disk, which is used for cutting slices of several kinds of food like semi frozen or dried meat and vegetables or fruits. The slicing thickness is available from 1 to 5 mm.

3.2.3.4 Striping disk (2-dimensional)

The DICR - classic can be equipped with a striping disk (2-dimensional), which is used for square-cut stripes of several kinds of food like vegetables (carrots, cucumbers) or semi frozen products (meat or sea food). The following sizes are available: 2x2 or 4x4 or 6x6 or 8x8 mm. The length of the stripes is equivalent to the product diameter.



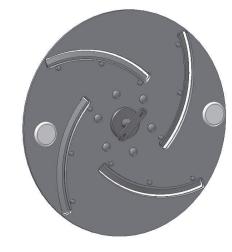
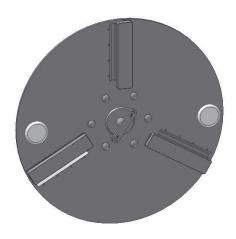


Illustration 8: 4-bladed slicing disk







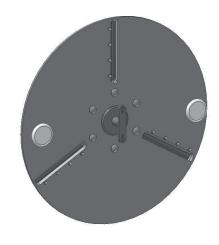


Illustration 7: slicing disk (1-dimensional)





3.2.3.5 Grating disk

The DICR - classic can be equipped with a grating disk, which is used for round-shaped stripes of several kinds of food like cheese or vegetables. The following diameters are available: 1,5 or 3,0 or 5,0 mm.



Illustration 10: grating disk

3.2.3.6 Non moving knife grid set

The DICR - classic can be equipped with a non moving knife grid set, which is used for dicing cheese or vegetables. The available sizes correspond with the grid sizes at Table 3.

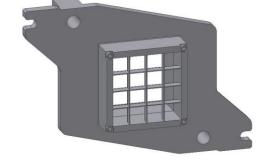


Illustration 11: Non moving knife grid set

3.2.3.7 Wiring grid set

The DICR - classic can be equipped with a wiring grid set, which is used for dicing cheese or eggs. The available sizes correspond with the grid sizes at Table 3.

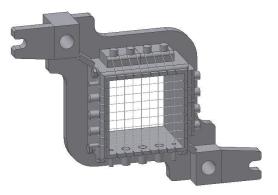


Illustration 12: Wiring grid set



3.2.3.8 Additional accessories

The machine is equipped with the following additional accessories (Table 4). Beside this various tools are available for the DICR - classic.

Table 4: Accessories

Description	Function
Protective Knife Cover	Cover for Slice cut knife
FLC 367 Food Spray	Lubrication

3.2.4 Construction of electrical components

The electrical equipment of the machine consists of electric box, control panel and electrical parts inside of the machine frame.

a) Electric box

The electric box is the information processing centre for all machine functions. The electric box houses all the required control elements for this dicer. All safety and control switches, transformers, fuses, motor protection switches as well as the terminal strip can be found in this area.

b) Control panel

The control panel is the main operating station for machine functions. Here the operator is able to control and observe all machine functions. The control panel has lighted indicators as well as a digital display to alert the operator of any malfunctions or other important machine processes.

c) Machine

Inside the machine frame itself is the main driving unit for the grid unit and the slice cut knife, hydraulic equipment, safety switches and the magnetic switches. The arrangement of the safety switches can be viewed in Illustration 13.



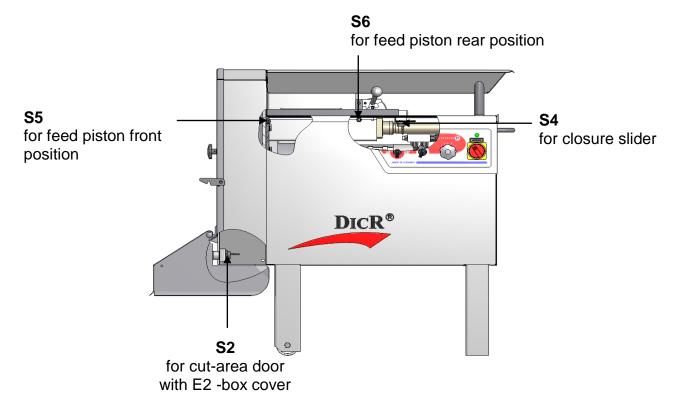


Illustration 13: Machine safety switches

3.2.5 Construction of hydraulic components

The hydraulic equipment of the machine is assembled as follows (view Illustration 14):

- 01 Pressure switches
- 02 Pressure limiting valve
- 03 3-Way flow-limiting valve
- 04 Hydraulic cylinder
- 05 Hydraulic aggregate with drive assembly
- 06 Way valve combination
- 07 Return line filter / filter cartridge

The pressure limiting value is only allowed to be set and ATTENTION adjusted by authorized Foodlogistik engineers and or approved personnel.



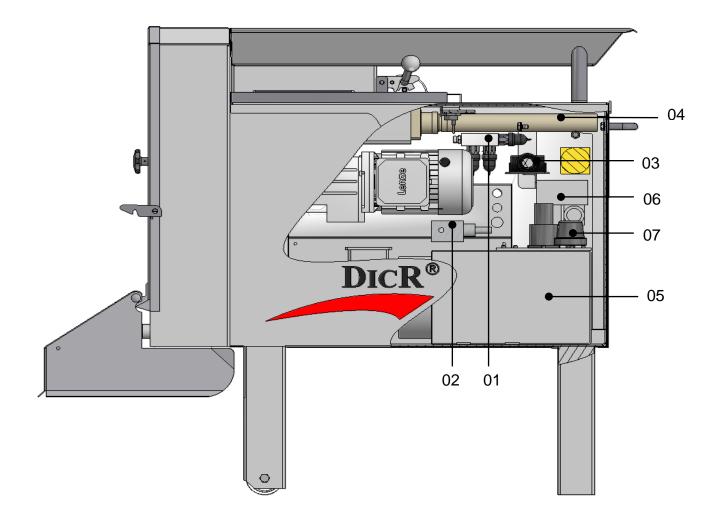


Illustration 14: Hydraulic system of the machine



4 DELIVERY, INSTALLATION AND SET UP

Delivery, installation and set up of this machine is to be completed by an authorized Foodlogistik technician or other authorized specialized personnel / Foodlogistik associate. Foodlogistik is not liable for damages when delivery, installation and set up of this machine has been completed by someone other than an authorized Foodlogistik technician.

4.1 Transport

This machine is pre-assembled prior to delivery, no assembly required. Use a hand forklift when unloading this machine and while transporting to work place station. The machine is to be transported in the upright position, so that no hydraulic oil will leak out from the machines hydraulic equipment.



While transporting on hand forklift, ensure the machine is firmly situated in the centre of the forks, so that the machine does not fall (Illustration 15). Take care about the electric power cable of the machine.

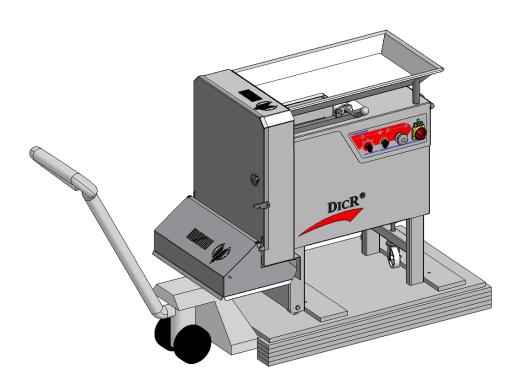


Illustration 15: Machine transportation



4.2 Installation



This dicer is only to be used in upright position, in respect to the load carrying capacities and horizontal level of the facility (see point 2.1).

Test the machine stability and whether every foot is situated firmly on the work floor, before putting machine into use. Ensure there is sufficient space for the machine operator (see point 2.1).



This machine under no circumstance be operated on any type of height adjusting equipment; by installing supports of any sort, or by installing upon a platform.

4.3 Set-up

The DICR - classic comes included with a 5 m long power cord. The owner of the machine needs to ensure that correct voltage and power supply is provided (see point 2.2).

Before putting machine into operation, test the rotation of the hydraulic motor. When checking the hydraulic motor ensure the feed with knob 03 is set to 10mm (view Illustration 16) and feeding cylinder is working properly and moving forward. If not than change the phase of the electric power.

Lastly, the required level of hydraulic oil is filled in the factory. Nevertheless it is recommended to check the hydraulic aggregate oil level before putting machine into operation, look at the oil container line level. If the oil has dropped below the line, refill as needed (see point 7.7.1).

With every start and restart of this machine, there needs to be systems checks to ensure proper working order of all machine functions. Check the distance between the slice knife and grid set. If the slice knife is grinding against the grid set, then readjust the distance between the slice knife and grid set (see point 7.5.2.1). After every adjustment made, there needs to be systems safety checks to ensure proper working order of machine functions (see point 5.1.2).



5 OPERATIONS

The DICR - classic must be fully operational with all systems functioning while on the work floor. Before the work day begins, all machine systems need to be tested to ensure proper working order. Only after a positive result may the machine begin full operation. Non-compliance will result in possible machine failure and may endanger the safety of employees.

When this machine is malfunctioning it must immediately be shut down and secured until all repairs are made; and given clearance to return normal working conditions.

5.1 Operating the machine

5.1.1 Overview of the control knobs

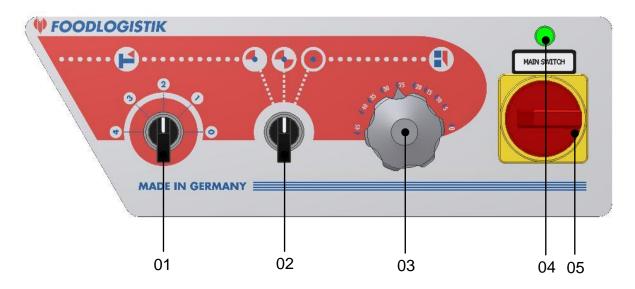


Illustration 16: Control knobs

Table 5: Control knobs

01	Selector switch for adjusting the longitudinal pre- compression (S 6.1)	C
02	Selector switch for operation modes (S 11): - Stepwise feed (for single knife)	
	 Continuous feed (for double or four-blade knife) 	
	 Operation mode for cutting disks * 	
03	Control knob for adjusting the cut length (1 - 45 mm) The scale refers to the operation mode "Stepwise	Θ
	feed".	
04	Visual signal for loading readiness and machine safety	
05	Main and emergency shut off switch	

5.1.2 Daily safety checks

5.1.2.1 Preparations

In preparation for the commencement of safety checks the following prerequirements must be met:

- Piston plate assembled
- Cut-area door closed
- Main and emergency shut off switch on (signal light is on indicating that Machine is operational (view Illustration 16 and Table 5)
- Close the closure slider machine "on", signal light "off"

* optional equipment



5.1.2.2 Functions tests

The following functions tests are to be done daily, inspecting for systems errors.

Table 6: Functions test

Procedure	Machine function
1. open E2-box cover	machine "OFF"
2. close E2-box cover	machine "ON"
3. open cut-area door	machine "OFF"
4. close cut-area door	machine "ON"
7. open closure slider	machine "OFF"
8. close closure slider	machine "ON"

These tests help ensure that all machine systems are functioning properly.



Should the above systems checks and balances fail to resolve system errors, turn the machine off and place out of service. Contact an authorized electrician to further examine and resolve the system errors. Only after repairs are made, and systems are running correctly may the machine resume normal working operations.

5.1.3 Avoidance of operating-errors for machine protection

Before the Production Process begins, ensure the following requirements have been met:

- Does the temperature of the goods to be diced fall below the critical limit of 3 °C?
- Are there bones or similar material in the goods to be diced?
- Are there foreign substances in the product to be cut?





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If and when a grid blade breaks, immediately turn off the machine, and replace.

ATTENTION	The placement of wood, bones, ice or other hard objects into the machine, will damage the cutting system. Remember to inspect product temperature and check for bones or other hard objects before placing product into the machine.
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5.1.4 General operational sequence

ATTENTION	Daily inspections of all machine systems must occur to ensure	
	proper working order of machine functions.	

The machine must be thoroughly cleaned, daily, before it may be placed into normal working conditions (see point 6).

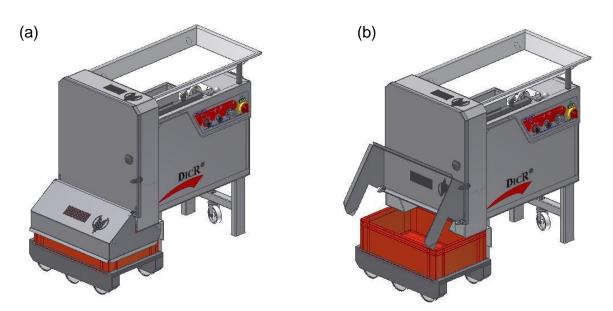


Illustration 17: DICR – classic with Euro2-box and trolley (a) closed E2-box cover, (b) open E2-box cover



The machine is equipped with a cut-area door and E2-box cover for hygiene and safety. Before running the machine with cutting product, flap up the E2-box cover, and drive the E2-box with trolley under the machine (view Illustration 17). Close the E2-box cover. The E2-box cover is equipped with viewing slots for following up the filling grade of the E2-box. If the E2-box is well filled with cutting product, open the E2-box cover, pull out the filled E2-box, drive the empty E2-box under the machine and close the E2-box cover. The machine is now ready to start the cutting process again.

On the E2-box cover is installed the safety switch (view Illustration 13). The machine is running with closed cutting area door and closed E2-box cover only.

If the E2-box with trolley is located underneath the machine open the E2-box cover before opening the cut-area door.

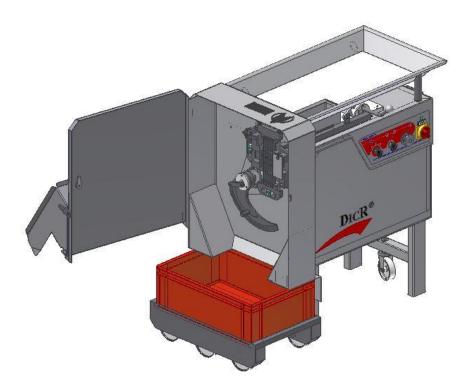


Illustration 18: DICR – classic with E2-box and trolley, cut-area door open

Before starting the cutting procedure make all necessary adjustments according to section 5.1.1:



Procedure	Machine function		
turning switch 01 into desired position (see Table 5)	- sets the pre-compression pressure		
turning switch 03 into desired position (see Table 5)	- set the feed length		
turning switch 02 into desired position (see Table 5)	 according to mode of operation with single slicing knife or double or four blade slicing knife or cutting disks 		
switch on the main switch and danger switch 05 (see Table 5)			
feeding the pre-fill chamber	 feed piston in rear position closure slider closed machine turned on 		
opening the closure slider	 product falls into the working chamber machine is turned off 		
closing the closure slider	 machine turned on compression increase to required level slicing knife automatically activated and begins to dice the product until piston reaches end position slicing knife turns off in defined position piston returns to rear position signal light is on (view Illustration 16 and Table 5) 		
filling the pre-fill chamber during the prepossible	e-compression, cutting or piston return is		

Work cycle repeated by once again opening and closing the closure slider

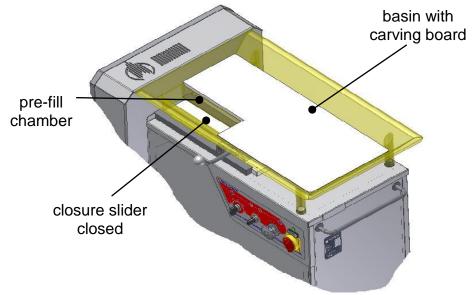


Illustration 19: Operating principle of machine filling



The goods to be cut can be prepared on the carving board and have to feed manually from the machine table or filling basin into the pre-fill chamber (view Illustration 19). The closure slider have to be opened and closed manually. The pre-fill chamber lies on top of the working chamber and is separated by the closure slider. When the closure slider is opened, the product falls from its own weight out of the pre-fill chamber and enters into the working chamber. The cutting process begins after re-closing the closure slider.

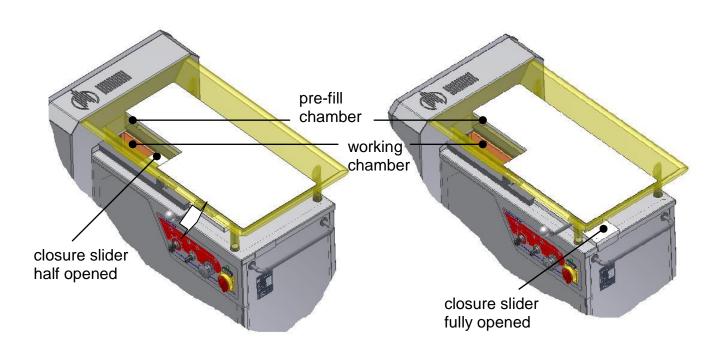


Illustration 20: Operating principle of pre-fill and working chamber

IMPORTANT The closure slider must be closed speedy and completely in order to start the cutting process!

Once the pre-compression pressure has been reached (adjustable with switch 01 Table 5), the feed piston begins to push the product through the grid blades. After being cut from the grid blades, the product are diced additionally from the slicing knife which stops ever in defined position. The piston returns to its start position after reaching the end of its stroke. In the meantime, the pre-fill chamber can be filled again while the product is being pre-pressed and / or cut. The whole procedure then starts once again from the beginning.

When the procedure is to be ended, replace the piston plate with the residual piston plate (optionally part). The closure slider must then be re-closed. Only in this way it is ensured that all remaining goods become processed.



The pre-compression process and the movement of the piston are regulated by the hydraulic drive system. The pre-compression pressure is further controlled by an electro-hydraulic pressure switch. The slicing knife is driven by an electric motor over a gear system and electronically controlled. The grid set is driven by an actuating lever which is in connection with the drive shaft of the slicing knife.

Pay attention to the following operation references when working with double or fourblade slicing knife:

- most favourable cutting surface with a with a product length of 2-4 mm
- the cutting surface won't get an even face with greater feeding length (due to continuous feed)

5.1.5 Operating modes

5.1.5.1 Operating mode stepwise feed without pre-compression

- Turn the selector switch for operation mode to "Stepwise feed"
- Turn the selector switch for pre-compression to "0"

While cutting, the feed piston is running forward stepwise. The last cube / cut, will have the same length as all those that proceeded it. Work with a single slice cut knife in this operating mode only.

5.1.5.2 Operating mode stepwise feed with pre-compression

- Turn the selector switch for operation mode to "Stepwise feed"
- Turn the selector switch for pre-compression to "1", "2", "3" or "4"

The feed piston works at full capacity against the product until the selected precompression is reached. This assures the optimal pre-compression of all products. In stepwise operating mode work with a single slice cut knife only.

The pre-compression is adjusted to the following:

- Step 1: low pre-compression
- Step 2: middle pre-compression
- Step 3: high pre-compression
- Step 4: superior pre-compression

ATTENTION Selecting pre-compression subject to the product and the grid size. A too high pre-compression causes an elevated wear of the grid sets, as well as deformation or obstruction of the slice cut knife.



5.1.5.3 Operating mode continuous feed with pre-compression

- Turn selector switch to continuous feed mode
- Turn the selector switch for pre-compression to "1", "2", "3" or "4"

While cutting, the feed piston is running forward continuously. The last cube / cut, will have the same length as all those that proceeded it.

The continuous feed mode with pre-compression is used for double or four blade cutting knife and installed grid set. The use of the hold on device is not allowed.

5.1.5.4 Operating mode continuous feed without pre-compression

- Turn selector switch to continuous feed mode
- Turn the selector switch for pre-compression to "0"

While cutting, the feed piston is running forward continuously. The last cube / cut, will have the same length as all those that proceeded it.

The continuous feed mode without pre-compression is used for cutting or grating disk.

When using cutting or grating disk the machine is to set to lowest feed and without pre compression (position 0) in order to protect the DICR classic and its equipment from damage or destruction!

During operation the cut length should be regulated carefully by turning control button slowly.

ATTENTION



5.1.5.5 Operating mode for cutting disks

For working with cutting or shredding discs, the DicR classic can optionally be equipped with the operating mode for cutting discs. This ensures correct machine settings to achieve high cutting quality and avoid tool or machine damages.

By switching the operating mode for cutting discs the following settings are made by the machine:

- The green control lamp flashes and the machine cannot be started. To start the machine, adjust the "control knob for adjusting the cutting length" to "0". The green control lamp then lights up and the required cutting length can be adjusted to the desired value by slow turning.
- 2.) The electronic soft start is activated.
- 3.) The longitudinal pre-compression is switched off.
- 4.) The knife stop is switched off.
- 5.) Continuous feed is switched on.

ATTENTION

When cutting or shredding discs are used, the length of the cut must first be set to "0". During the cutting operation, the cutting length is slowly readjusted by carefully turning the "control knob for adjusting the cutting length" until the cutting product has the corresponding cutting thickness. After this, it is not allowed to increase the cutting length any further in order to protect the DICR classic from damage or destruction.

5.1.5.6 Operating mode for cutting disks with the automatic tool scan

The automatic tool detection is an additional option for the operating mode with cutting discs. There is a magnet in the basic frame provided for this purpose. A magnetic switch is installed in the machine. After the basic frame is installed, the magnetic switch is actuated and the machine "recognizes" the basic frame for working with cutting or shredding discs. This will switch on the operating mode for cutting discs and the machine automatically adjust the settings described in section 5.1.5.5.

5.1.5.7 Operating mode residual emptying

- switch off the main- and emergency shut off switch
- exchange piston plate with residual piston plate (optionally part)
- switch on the main- and emergency shut off switch
- close the closure slide
- feed piston moves to front position and pushes the remnant product through the grid blades

5.1.5.8 Cleaning mode

The machine must be set in cleaning position before beginning the cleaning procedure(please view also section 6.2:

Table 7: Cleaning mode

Procedure	Machine function
	initial position: feed piston at rear and closure slider closed
open closure slider and close again	machine switch on and feed piston moves to front
open closure slider after 3 seconds	machine switch off and feed piston stops in the center of the working chamber
switch off the main- and emergency shut off switch	



Always turn the machine off by the main switch and ensure all other switches are turned off and placed in the locked position before cleaning the machine.

5.1.6 Usage of the stabilizers

The stabilizers will effectively confine the product and constrict unwanted movement of the product up and down. The stabilizers will be pushed into the slots of the front grid (view Illustration 21). Through installation of the grid set, the stabilizers are positioned correctly.

ATTENTION Under each stabilizer have to be installed a knife into the rear grid, especially when using different grid combinations in rear and front grid. When working with product that is firm, hard or frozen the stabilizer must be removed.



After every grid change the distance between the slice knife and grid needs to be visually inspected to ensure the slice knife is not grinding against the grid itself. Make adjustments as needed (see point 7.5.2.1).

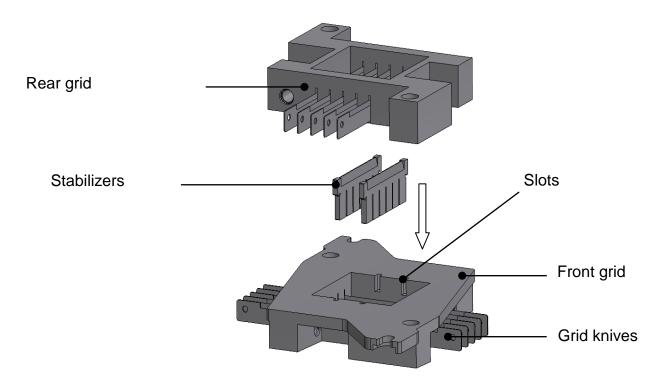


Illustration 21: Usage of the stabilizers

5.2 Deactivating

5.2.1 Switching Off the machine

For deactivating the machine switch off the main and emergency shut off button and place it in locked position.

5.2.2 Emergency shut off

In an emergency situation, the machine must immediately be turned off and placed in the locked position. Turn the machine off by means of the main and emergency shut off switch. Once the machine has been turned off and the area secured, begin searching for the cause of the emergency (see point 7.8.2).



5.2.3 Taking out of operation

ATTENTION	Foodlogistik is not responsible for damages incurred when
	customers activate and or deactivate this machine.



The activation and deactivation of this DICR - classic for local transfer should be done by Foodlogistik or by an other authorized specialized personnel / Foodlogistik associate.

Should this DICR - classic need to be deactivated and placed into storage for an extended amount of time, please follow the instructions listed below:

- Turn off Main switch and place into locked position
- Clean and sanitize the machine according to point 6
- Lubricate all small parts in oil and then wrap in foil
- Lubricate the entire machine with oil and wrap in foil
- In regular intervals check the status of the machine and its parts while in storage, lubricate as needed

If the deactivation of this DICR - classic has been scheduled, the storage facility should meet the following requirements:

- air tight and dust-free facility
- Protection from outside elements such as frost, moisture, direct sun light etc.
- Climate controlled environment, free of acids or aggressive steams (see point 2.1)

Remember to perform a test run of the machine to ensure proper working order and to clean and sanitize the machine before reactivating (see points 6 and 4.3).





6 CLEANING AND SANITIZING

6.1 General rules

Before cleaning the machine, place the machine in cleaning mode, ensure the main and emergency switch have been turned off and placed in the locked position; and all power sources to the machine are turned off. Due to high risk of bodily injury maintain a focused working environment, and wear all protective gear (cut resistant gloves, apron and rubber soled shoes).

ATTENTION Do not use high pressure washers or hard brushes to clean any part of this machine. Exercise caution while cleaning the control console.

The DICR - classic is to be cleaned daily. The machine design is so that cleaning may be done easily on a daily basis.

6.2 Daily cleaning

For daily cleaning, set the feed piston in the cleaning position and take out remaining food-products.

6.2.1 Removal of functioning parts

Prior to cleaning all functioning parts must be removed, in order to thoroughly clean this machine.



Place all removed working parts in a safe place so they do not endanger the safety of others or become a work place hazard.

6.2.1.1 Removal of the grid set

Removal of the double and or four blade knife must be done prior to removal of the grid set and blades (see point 7.5.2).

Follow the below listed procedures to disassemble the grid set (see Illustration 22).

- Both grid-fastenings (02) can be loosened by unscrewing the grid handles and turning them to left or right
- Remove Front grid (05)
- Remove Rear grid (03)

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For a better accessibility, the slice cut knife (06) can be turned. For cleaning the slice-cut knife should be disassembled too.

- Turn off and secure the main and safety switch

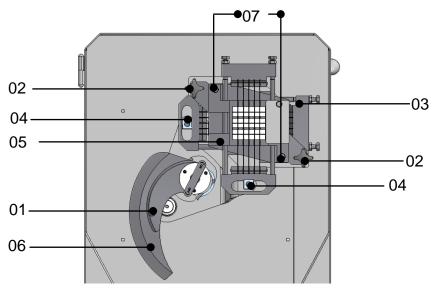


Illustration 22: Removal of grid set

6.2.1.2 Removal of slice cut knife and actuating lever

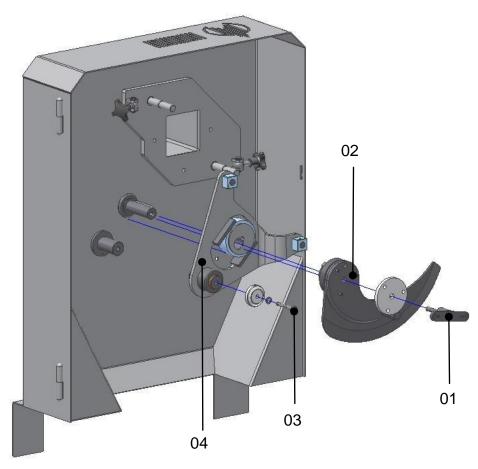
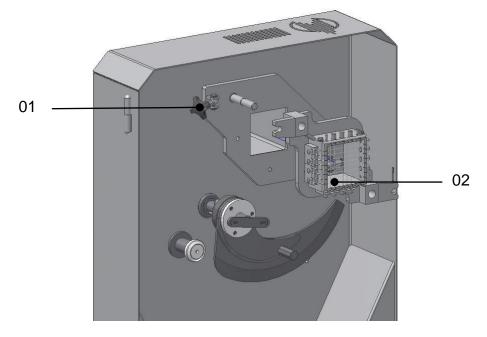


Illustration 23: Removal of slice cut knife and actuating lever



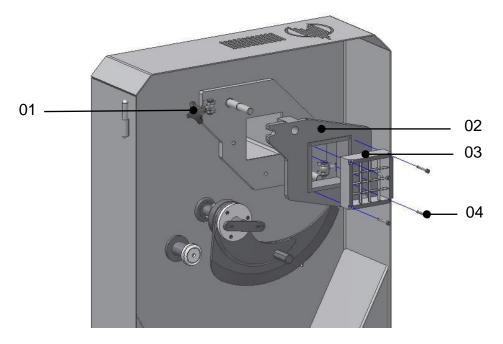
For the removal of the slice knife and or the double / four blade knife loosen the clamping bolt 01 (left-hand thread) by turning to the right, by slightly tapping with a rubber mallet if need. The slice cut knife 02 can then be removed (view Illustration 23).

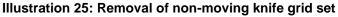
For the removal of the actuating lever 04 with attached parts unscrew the hexagonal bolt 03.



6.2.1.3 Removal of wiring or non-moving knife grid set

Illustration 24: Removal of wiring grid set







Follow the below listed procedures to dismantle the wiring or non-moving knife grid set (see Illustration 24 and Illustration 25).

- Both grid-fastenings (01) can be loosened by unscrewing the grid handles and turning them to left or right
- Remove wiring or non-moving knife grid set (02)

For the disassembling of the non-moving knife grid set unscrew the four hexagon socket head cap screw 04 and remove the exchange knife frame 03 (see Illustration 25).

6.2.1.4 Removal of cutting or grating disk

For the removal of the cutting or grating disk 02 loosen the clamping bolt 01 (lefthand thread) by turning to the right, by slightly tapping with a rubber mallet if need. The cutting or grating disk 02 can then be removed (view Illustration 26). To remove the basic frame 04 loosen both grid-fastenings (01) by unscrewing the grid handles and turning them to left or right.

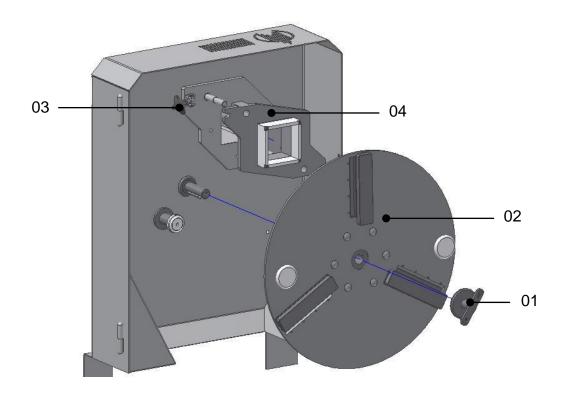


Illustration 26: Removal of cutting or grating disk



6.2.1.5 Removal of carving board, closure slider and piston plate

Remove the carving board 01 and the basin 02 (view Illustration 27). Remove the closure slider 03. For this, slide the closure slider in rear position lift it and slide out to the rear. Remove the piston plate 05.

Before removing the piston plate move the piston to mid chamber position (see point 5.1.5.8).

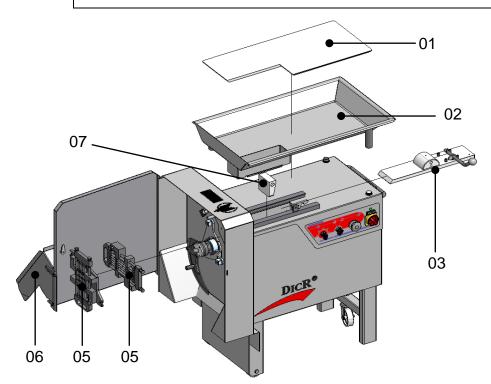


Illustration 27: Removal and assembly of carving board, closure slider and piston plate

6.2.2 Cleaning and sanitizing

Before cleaning the machine be certain to combine the correct amount of cleaning solution with the proper amount and temperature of water. Follow all manufacturer instructions.

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Calcium Chloride is a main component of the cleaning solution and must be thoroughly rinsed and removed from the machine because it will corrode the machine and its parts.

Maintain all required cleaning items, such as brushes, are dry and properly stored. Make sure all the waste water is removed in compliance with the environmental and waste removal agencies.



The cleaning and sanitizing of the machine, is to be done to the cleaning plan accordingly. The information at the cleaning plan is valid for a one shift work.

Table 8: Cleaning plan

Work Procedures	Additives	Instructions	Tools	Information
Preparations for cleaning the machine		Place the machine in cleaning mode. Ensure that main and emergency switch is off and locked		Wear all protective gear: cut resistant gloves, apron and shoes (non slip), goggles
Mechanical cleaning		Manually removing residual product and leftovers	Scraper or spatula	Immediate start after work shift
Removal of functioning parts		Disassemble the grid set, basin, carving board, closure slider, slice-cut knife, piston plate, (see point 6.2.1)		Clean all functioning parts and place in secure location
Rinsing	Tap water	Temperature max. 50 °C / 122 °F	Water hose	Thoroughly spray the machine and all moving parts
Cleaning of the functioning parts	Dissolve 1-3% cleaning solution to water per manufacturers instruction	Manually cleaning, spray the functioning parts, cleaning solution to be influenced about 15-25 min	Brush, bucket, hand sprayer	grid set, slice-cut knife, basin, carving board, closure slider, piston plate
Alkaline cleaning of the machine	Dissolve 2-5 %, Solution according to manufacturers instructions	Spray the machine, solution to be influenced about 15 min, water temperature of 4050° C, 104122 °F	Low Pressure sprayer with nozzle	Daily



Work Procedures	Additives	Instructions	Tools	Information
Acid Cleaning of Machine	Dissolve 2-5 %, Solution according to manufacturers instructions	Spray the machine, solution to be influenced about 15 min, manual, mechanical	Low Pressure sprayer with nozzle brush	Usage acc. to demand instead of alkaline cleaner to remove calcium / lime deposits
Rinsing	Tap water	Low pressure washer < 30 bar, Temperature 5060 °C, 122140 °F	Low pressure sprayer, water hose	Machine and functioning parts
Supervising	-	visual	-	Pay special attention to bolted connections and welds, corners, angles, and slotted grooves
Sanitizing	Sanitizing solution 0,5-1 % parts to water per manufacturers instructions	Spray the machine and functioning parts, solution to be influenced about 30 min	Low Pressure sprayer with nozzle	after all cleaning done in that room the machine and functioning parts must be sanitized according to the cleaning plan
Rinsing	Tap water	Low Pressure < 30 bar, Temperature 5060 °C, 122140 °F	Low pressure washer, water hose	Machine and functioning parts
Drying	-	-	-	Machine and functioning parts
After care	Oil spray suited for food products	Spray oil	Spray nozzle	Outer surface of machine, grid set, basin, grid blades, slice cut knife

ATTENTION Once the machine has been thoroughly cleaned and inspected, ensure all warning signs have been properly replaced in the correct positions



6.2.3 Assembly of the functioning parts after cleaning

The machine is in cleaning position (view point 5.1.5.8). The machine is switched off by means of the main and emergency shut off switch.

6.2.3.1 Assembly of basin, carving board, closure slider and piston plate

Assemble piston plate 07, closure slider 03, basin 02 and carving board 01 in reverse order to point 0 (view Illustration 27).

6.2.3.2 Assembly of the grid set



Use extreme caution when handling the grid assembly. Bodily Injury Risk! Wear all protective gear such as cut resistant gloves, apron, and shoes. Put the protection cover onto the slice-cut knife.

ATTENTION

Before mounting the grid assembly ensure the installation surface and grid itself are free of any product residue or the like. Tighten the grid-latches so that they do not become loosed while the machine is in motion.

The grid set is to be set up as depicted below (view Illustration 22).

- Place the rear grid 03 onto the two grid bolts 07, and by doing so the sliding piece 04 is to slide into driving yoke
- Place the front grid 05 in the same manner upon the grid bolts
- Push grid fastenings 02 over the frame of the front grid and fastening with the grid handles
- Install the slice cut knife
- Remove the knife protection cover
- Turn the slice cut knife backwards, and after that in work direction, several cycles
- The slice cut knife should not rub or scrape against the grids, be listening for any unusual noises
- If the slice cut knife is scraping against the grid adjust the distance between the slice cut knife and the grid (see point 7.5.2.1)

6.2.3.3 Activities be performed after cleaning

ATTENTION After cleaning bring the piston and closure slider in initial position. Remove the residual piston plate and assemble the standard piston plate (if available).



7 MAINTENANCE AND INSPECTIONS

7.1 General guidelines

It necessary to follow all safety regulations when inspecting and maintaining this machine.

Before inspecting and general maintenance is done power down the machine by placing the main and emergency switch in the off position and locking. This is to prevent the machine from accidentally being restarted while being serviced.



When working on the Hydraulic System, ensure that this system has been depressurized prior to beginning any repairs or inspections. Always wear protective gloves and goggles. Direct contact with the hydraulic oil should be avoided at all times.

Always perform safety inspections to ensure proper working order of all machine functions after all repairs and or maintenance prior to releasing the machine back to the work floor (see point 5.1.2).



Compliance with all environmental and waste disposal agencies and safeguards must be met when disposing of oils and or lubricants.

Before startup procedure and after the initial first week of operations, all of the bolt connections need to be inspected and tightened when needed. The main tension screws needs to be inspected monthly and must be tightened when needed.

7.2 Inspection and maintenance plan

The following inspection and maintenance plan is intended to be implemented for the DICR – classic (see Table 9).



Table 9: Inspections and maintenance plan

Parts	Frequency	What to check	Information
Switches (adjusting levers, buttons)	Daily	Visual and function inspections and inspections for leaks	 If malfunctions, repair and or replace parts (seals are to be replaced)
Lubricating point on guide rods)	Daily	Grease film check	- Add more when needed
Hydraulic Equipment threaded connections, piston rod	Daily	Visual inspections	 Inspect for damages of the piston rod Replace hydraulic cylinder immediately, when piston rod damaged
	Daily	Inspect piston rod seals	 Inspect for oil leaks at the flange on the work chamber Replace piston rod seals immediately, when leaks
	Every 6 months	Inspect oil level and oil filter (see Illustration 35)	 When the ball contact feeler is in the red zone, there is a blockage in the oil filter Replace oil filter, when blockage
	After 10,000 hours	Oil change see point 7.7.1	 Lubrication regulations (see Table 10)
Gear motor for slice cut knife and	Every 6 months	Check oil level	- Refill when needed
grid drive	After 5000 hours	Oil change	 Lubrication regulations (see Table 10)
Blade clearance between the slice cut knife and grid	After every grid and blade change	Alignment check	 Re-adjust if needed (see point 7.5.2.1)

7.3 Lubrication



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Machine Lubrication should only be done when the machine has been turned off. The main and emergency switch need to be turned off and placed in the locked position.

ATTENTION Only used the recommended oil and oil filters. Replace oil filter with every oil change.

The gears are already filled with oil when leaving the factory.

The DICR - classic requires minimal lubrication expenditure. The lubrication recommendations for this machine are found in Table 10. Lubrication oil for this machine can be purchased at most oil distribution centres.

Table 10: Lubrication Regulations

No	Areas of Lubrication	Quantity	Type of Lubrication	Amount	Lubrication intervals
1	Guide rods (see Illustration 28)	4	Spray DBA 10 Food Grade	As Needed	Daily
2	bearing surface of the actuating lever (see Illustration 28)	2	Spray DBA 10 Food Grade	As Needed	Daily
3	bearing surface of driving yokes of rear and front grid (see Illustration 28)	2	Spray DBA 10 Food Grade	As Needed	Daily
3	Gear motor for slice cut knife and grid drive	1	Mineral Oil ISO VG 220 80W ISO VG 100 80W ISO VG 15 80W Synthetic Oil ISO VG 220 80W ISO VG 460 80W	0,43 I	After 5000 hours
4	Hydraulic	-	Hydraulic Oil HLP 46	11,31	After 10000 hours

MAINTENANCE AND INSPECTIONS



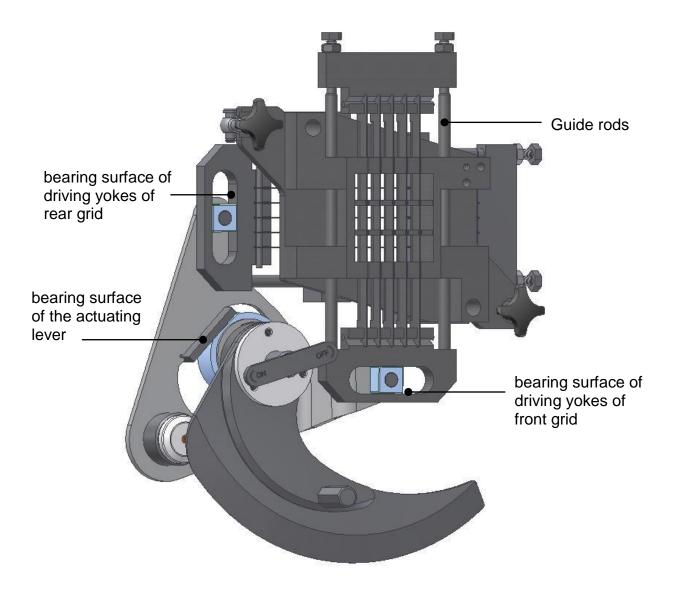


Illustration 28: Lubrication of DICR - classic



7.4 Sharpening of grid blades, and slice cut knife blade



Handle knife blades with extreme caution. Bodily injury risk! Wear protective cut resistant gloves.

7.4.1 Sharpening the grid blades

Remove the grid set from the machine before sharpening the grid blades (see point 6.2.1.1). The blades can be sharpened while still fastened in the grid frame, use a whetstone or stripping steel to sharpen the knives, pulling sideways to the cutting direction (see Illustration 29). The grid blades can also be sharpened with a wet belt grinder. The grid blades must be removed from the grid frame when using this method (see point 7.5.1).

Dull and broken grid blades must be replaced immediately.

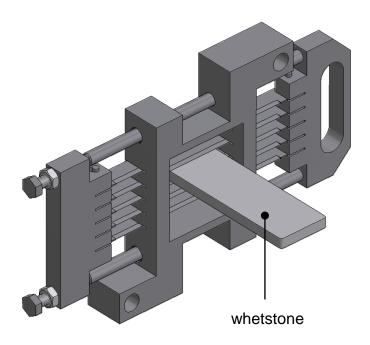


Illustration 29: Sharpening the grid blades



7.4.2 Sharpening the slice cut knife

The normal weared slice cut knife can be sharpened after being installed using a whetstone (Illustration 30). When the blade has visible damages, the blade must be removed and sharpened by a specialist (see point 7.5.2).

Frequently re-sharpening causes a too short dimension on point of the knife. This is an indication that the blade needs to be replaced (see 7.5.2).

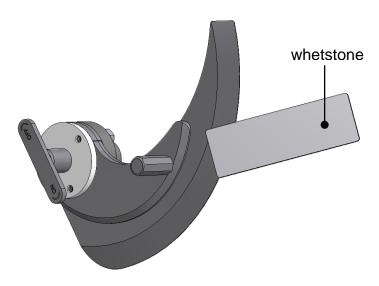


Illustration 30: Sharpening the slice cut knife

7.5 Assembly and disassembly of grid blades, and slice cut knife / knife blade



Bodily injury warning! Use extreme caution when handling knives and or blades. Wear protective cut resistant gloves when handling blades and knives.

7.5.1 Assembly and disassembly of the grid blades

Grid knife tension functions on this basic principle (view Illustration 31). Tightening of the clamping screws 01, presses the clamping yoke 02 and the driving yoke 03 apart. The inlying grid bolts 04 strain the grid blades 05. The locking nuts 06 prevent the loosen of the clamping screws 01.



Remove the grid set from the machine before disassembling the grid blades (see point 6.2.1.1).

To disassemble the grid knives 05 from the grid frame loosen the locking nuts 06 and screw out the clamping screws 01 on the clamping yoke 02. Press the clamping yoke 02 in the direction of the drive yoke 03 to release the grid blades 05. With the loosening of the grid blades 05 the grid bolts 04 can be taken out.

To assemble the grid blades put the grid blades 05 into the slots of the grid frame 07 and insert the grid bolts 04 into the holes of the grid blades 05. Take care, that all edges of the grid blades are installed in the same direction, with the edge to the back of the grid frame / to the working chamber side. By tightening the clamping screws 01 the grid blades 05 are clamped.

ATTENTION ATTENTION During assembling the grid blades, fasten the clamping screws equally, be careful not to over tighten screws. Once the blades are assembled inspect the smooth-running of the guide-rods 08 into the grid frame; if needed loosen the clamping screws.

Secure the clamping screws 01 with locking nuts 06 to prevent future movement after doing all the adjustment described.

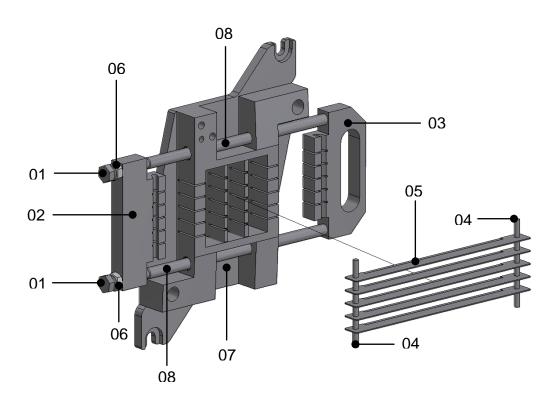


Illustration 31: Assembly and disassembly of the grid blades



7.5.2 Assembly and disassembly of the slice cut knife / knife blade

To disassemble the slice knife and or the double / four blade knife loosen the clamping bolt 01 (left-hand thread) by turning to the right (view Illustration 32). The slice cut knife can then be removed (by slightly tapping with a rubber mallet if need).

To disassemble the knife blades 02 follow the below listed instructions:

- Loosen the flat-head screw 03 and remove the knife handle 04
- At this point the components of the slice knife are loosened and can be separated

Assembly of the knife blades is as follows:

- Screw the single knife reinforcement 07, the new blade 02, and the knife handle 04 together by using the flat-head screw 03

Assembly of the slice cut knife is as follows:

- Attach the slice cut knife, pay attention to the right direction of the notch of the knife reinforcement
- Screw in the clamping bolt 01 by turning to the left and tighten firmly (if needed lightly tap with rubber mallet)

After exchanging the knife blade, the distance between the slice cut knife and the grid set needs to be checked, and adjusted if necessary (see point 7.5.2.1).

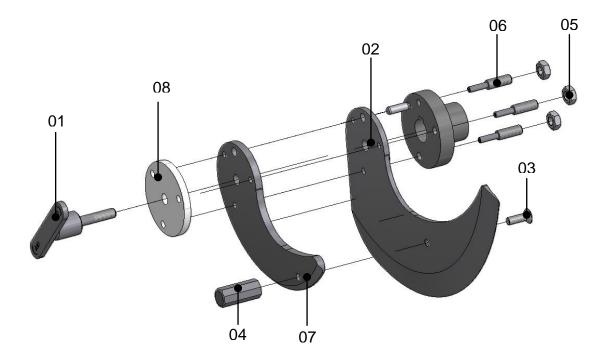


Illustration 32: Assembly and disassembly of the slice cut knife

50



7.5.2.1 Adjusting the cutting distance on slice cut knife

After every new installation of the grid set and or slice cut knife the distance between the two needs to be checked and readjusted if needed. The distance should be 0.3 mm. To make adjustments loosen the hexagonal nuts 01 (see Illustration 33). The adjustment of the cutting distance is to be done by turning the adjusting bolts 02. After the correct distance has been adjusted fasten the hexagonal nuts 01. Lock the hexagonal nuts 01, while holding firm the adjusting bolts 02, to avoid the readjusting of the cutting distance.

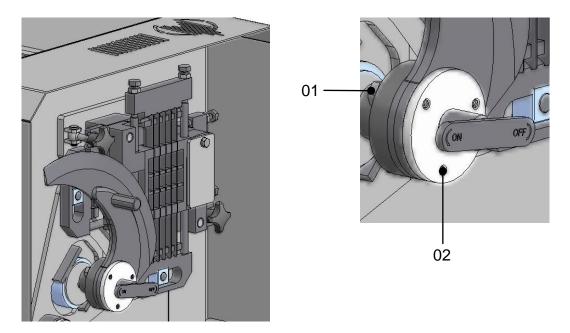


Illustration 33: Adjusting the cutting distance on slice cut knife

7.5.2.2 Adjusting the cutting distance on cutting disk

After every new installation of cutting disk the distance between cutting disk 04 and basic frame 05 needs to be checked and readjusted if needed. The distance should be 0.3 mm.

To make the adjustment loosen the clamping bolt 01. Unfasten the grub screw 02 on the threaded ring 03. Adjust the cutting distance by turning the threaded ring 03. After adjustment fasten the grub screw 02 and the clamping bolt 01.



MAINTENANCE AND INSPECTIONS

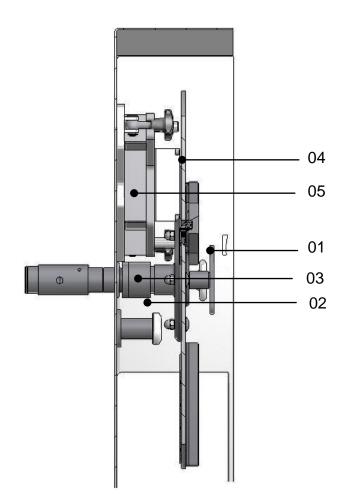
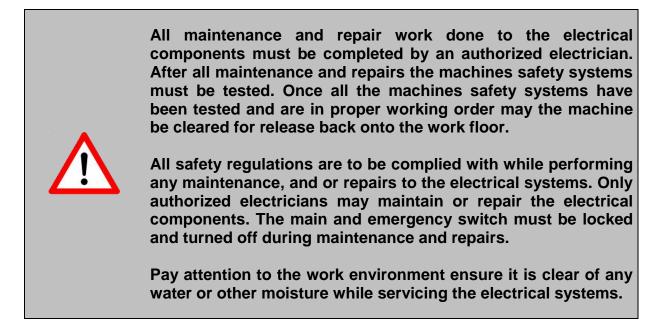


Illustration 34: Adjusting the cutting distance on cutting disk

7.6 Maintenance of the electrical equipment





All existing safety systems must remain in working order. Tampering and or disabling the machines safety systems is not ATTENTION allowed. The electric box must remain in proper working order and remain closed. Cleaning the electric box with high pressure washers is not allowed.

Every control device is subjected to mechanical and electrical influences. Wear on the moving devices of the control system is depending on switching frequency, operating time, degree of contamination and protection grade of the machine. Routine maintenance is important and all maintenance schedules should be in accordance with normal working conditions in order to keep the machine in proper working order. The maintenance sequence depends on the specific operation conditions, regulary monthly check is recommended.

The following systems need to be tested:

- Insulation conditions and the safety systems of the machine must be monitored and remain in compliance
- The safety circuits must remain in working order and must be tested yearly by an authorized electrician to ensure proper working order.

7.7 Maintenance of the hydraulic equipment

All work on the hydraulic equipment must be completed by an authorized hydraulic specialist. During any test runs of this equipment all safety circuits must be in full working order. Tampering or disabling of any safety circuits is not allowed. During maintenance and repairs of this equipment the main and emergency switch must be in the off position and locked.

After any repairs and or maintenance of the hydraulic equipment the pressure switches and pressure valves must be adjusted. The adjustment works are to be done by the FOODLOGISTIK Service and/or approved and authorized ATTENTION FOODLOGISTIK representative. After repair or exchanging of the hydraulic cylinder, the position of the piston rod must be checked. Make sure that the distance between the piston rod and the processing chamber bottom and the side walls of the chamber is equal in rear and front position.



All maintenance and repairs to the hydraulic equipment while under warranty must be completed by an authorized Foodlogistik hydraulic specialist and or authorized representative. Any maintenance and or repairs to the hydraulic system while under warranty outside of Foodlogistik and or authorized representative will invalidate the warranty.

The maintenance works of the hydraulic equipment should be done are the check of the hydraulic oil level and of the hydraulic oil filter, and the change of the hydraulic oil if needed.

7.7.1 Oil Level Checks and Oil Changes

In order to perform an oil level check and or oil change, the machine cover must be removed.

Oil level checks should be done as follows (Illustration 35). The hydraulic oil level can be checked by reading the hydraulic oil level indicator. If the level is at least in the upper third between in black and red mark of oil level indicator then there is a sufficient amount of oil. If the level falls below this add the appropriate amount of oil as needed.

Oil changes should be done as follows (view Illustration 35)

- Main and emergency switched turned off and in the locked position.
- Remove the oil filter, if needed.
- Unscrew the oil drain screw and discharge the hydraulic oil
- Remove the servicing cover and clean the oil container
- Exchange the oil filter.
- Close up the servicing cover.
- Fill container with new oil.



The hydraulic oil level must be in the upper third between in black and red mark of the combined oil level / oil temperature indicator. Absorb overflowing oil!

ATTENTION The hydraulic oil must be filtered through a fine filter while refilling. The hydraulic oil must always be refilled from an over head hose.

- Let the machine run through several work cycles and then recheck the oil levels to ensure the proper amount of oil has been added.





While the machine cover is open, do not work inside of the machine.

- Replace the machine cover and tighten with the screws.

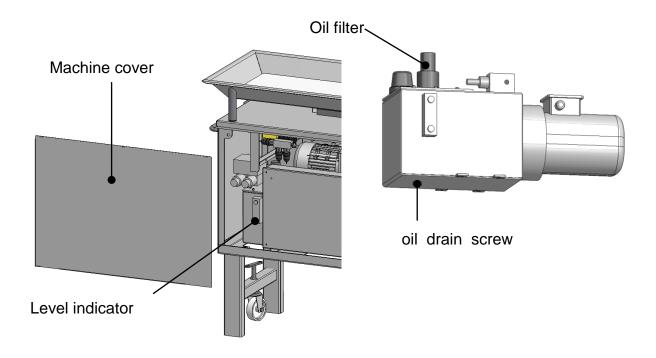


Illustration 35: Oil Checks and Changes



7.8 System Malfunctions

7.8.1 General Guidelines

All scheduled service and or maintenance should be done at the appropriate times to remain in compliance and to remain the machine in top operating condition. Should a problem arise immediately contact our service department and or one of our authorized representative.

Service Department Contact Information:

FOODLOGISTIK Fleischereimaschinen GmbH Service department Adolph-Kolping-Str. 15 17034 Neubrandenburg

Phone number:	0049 (0) 395 77 99 0
Fax:	0049 (0) 395 77 99 220
Internet:	www.foodlogistik.de

Please provide the service department with the following information when reporting a problem:

- Specific Problem Encountered,
- Machine Name/ Model
- Machine Number,
- Defective Part Name and Number
- Special Edition Information

The above information will help to identify the problem and expedite the time frame required for any and or all repairs that may incur.

7.8.2 Troubleshooting



All electrical systems work may only be completed by an authorized electrician. When a problem arises immediately turn off the machine by the main and emergency switch and place in the locked position. Then using the troubleshooting table try to determine and eliminate the source of the problem.



Turn off the machine by the main and emergency switch and place in the locked position before extracting cutting products.



Use Table 11 to guide and or reference possible troubleshooting ideas.

Table 11: Troubleshooting	
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ltem	Disturbance Indicator	Possible causes	Ways to resolve the problem
01	breakdown of grid drive / slice cut knife motor	motor overload	 remove slice cut knife and grid set for further processing, choose other cutting products, with different temperature or larger grid sizes.
02	machine does not	Cut-area door open	- Close cut-area door
	start	Closure slider cannot be closed	- remove cutting products
03	deficient cutting	grid blades dull	- sharpen blades
	quality	Slice cut knife dull	- sharpen knife
		Slice cut knife tip to short (due to re- sharpening)	- exchange slice cut knife
		incorrect distance between Slice cut knife and grid blades	 Readjust cutting distance
		wrong cutting product temperature	 correct cutting product temperature according to instructions
		set wrong pre compression pressure	 set pre compression pressure correctly
04	feed piston moves to front, cutting system do not start	set wrong pre compression pressure	 set pre compression pressure correctly
05	feed piston doesn't move to front	front position switch S5 might be broken	- contact your customer service
06	feed piston in front, doesn´t move to rear	front position switch S5 or S17 might be broken	- contact your customer service



07			- open Slider to start next cycle
	hydraulic continous	might be broken	 if machine works next cycle
	to work		contact your customer service to
			exchange the S6

ATTENTION	Errors, which can not be eliminated by the operator, have to be repaired through the authorized specialist. Repair and maintenance work on the safety switches are to be accomplished by a specialist of FOODLOGISTIK-Service or authorized representative.
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8 KEYWORD INDEX

3	
3-Way flow-limiting valve	16
A	
Accessories12,	15
C	
Carving board	40 57 28 29 22 15 22 57
E	
E-box cover	53
F	
Feed piston	9 16 5 42
G	
Gear motor 44, Grid 12, 15, 31, 32, 42, Grid blades 27, 30, 41, 47, 48, 49, Grid bolts 42, 48, Grid drive 9, 44, 45, Grid frame 47, Grid set 5, 9, 12, 13, 19, 28, 31, 35, 36, 37, 38, 40, 41, 42, 47, 49, 50, 51, Guide rods 44, 44,	44 57 49 57 49 48 57
H	
Hydraulic	19



KEYWORD INDEX

	1			
I				
Intermediate flange				9
L				
Μ				
	switch			
0				
•				
Р				
Piston plate Piston rod Pre-compression Pressure limiting valve Pressure switch		22, 26	, 27, 2 16, 2	22, 39 44, 53 28, 29 16 28, 53
R				
Residual emptying				30
S				
Signal light Slice cut knife Slice cut knife drive Stabilizers Stepwise feed	1. 9, 15, 28, 36, 37, 38, 41, 42, 44, 45, 4	17, 48	, 50, 5 	22, 26 51, 57 9 31, 32 28, 29
W				
Way valve				16