

OPERATING MANUAL

OPTICAM 4S

OPTICAM 4S DP



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THIS USER MANUAL MUST BE KEPT AT THE PLACE OF WORK OF THIS DEVICE AT ALL TIMES AND IN A LEGIBLE STATE!

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1. MANUFACTURER IDENTIFICATION AND PRODUCT IDENTIFICATION

Manufacturer	Gates Tube Fittings
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Geschäftsführer	Semih Kelle

2. USER INSTRUCTIONS

2.1 PURPOSE OF THIS DOCUMENT

This user manual is designed to facilitate the process of becoming acquainted with the device and to make use of its intended application possibilities. The user manual contains important information on how to operate the device safely, properly and economically. Observing this information will help to prevent dangers and accidents, lower repair costs and downtime, and increase the reliability and lifespan of the device.

2.2 INSTRUCTIONS ON PRECAUTIONARY MEASURES OF THE USER

This cutting ring assembly device may only be operated by someone who possesses the necessary qualifications for the respective work and who is in the full possession of his or her physical and mental capabilities.

The national legislation on work and environmental protection applicable at the site of operation (e.g. labour organisation) must be observed.

The device must be kept in a technically sound state at all times and may only be operated in such a state.

In addition to the manual, the applicable, binding regulations on accident prevention in the country of use and at the deployment site must be observed. The generally recognised technical rules on safe and proper working must furthermore also be adhered to.

3. LIABILITY AND WARRANTY

The cutting ring assembly devices of Gates Tube Fittings GmbH are manufactured without error in material and processing, the quality has been tested. The performance, quality and safety of the device are up to date with the latest technology.

The condition for warranty services by Gates Tube Fittings GmbH is that the device is deployed solely for its intended use. Gates Tube Fittings GmbH shall not be liable for any other cases of warranty, in particular tacit warranties regarding non-impairment and marketability.

Under no circumstances can Gates Tube Fittings GmbH be made liable for indirect, coincidental, special or consequential damages such as the loss of expected profits or services.

The maximum sum of liability for Gates Tube Fittings GmbH towards the buyer is limited to the purchase price paid by the buyer. The warranty period is 12 months with the exclusion of wear parts. Other manufacturers' subsystems that are integrated into the cutting ring assembly device shall continue to possess their respective original manufacturer warranty. In the event of a valid claim for defects made against Gates Tube Fittings GmbH, the claims of the buyer shall be limited to repair services or replacement.

A warranty claim must have arisen within the warranty period. Gates Tube Fittings GmbH must be informed immediately in writing of any error or defect that occurs with the device. In order to inform the manufacturer of a defect or an error in a valid and effective manner the letter of notification must contain the following information:

- Name, address and possibilities of contacting the claimant
- Device designation
- Product and serial number
- Time of the occurrence of the error
- Precise informative description of the device defect
- A copy of the purchase receipt must be attached

In the event of a justified warranty claim Gates Tube Fittings GmbH will repair the device and if necessary replace it with a new device.

Before the device is returned the buyer must contact Gates Tube Fittings GmbH and wait

for written permission and/or instructions from Gates Tube Fittings GmbH on the handling of the case.

Shipping and transport costs shall be borne by the buyer and in the event of a valid and accepted warranty claim these costs will be reimbursed to the buyer and/or borne by Gates Tube Fittings GmbH.



INFO

In the event of an invalid warranty claim all fees and costs shall be borne by the buyer.

All information and instructions in this user manual are provided to the best of our knowledge under consideration of our past experiences and findings.

The original version of this user manual was provided in German and subject to objective examination by us.

The translation into the respective country's language / contract language was carried out by an accredited translation agency.

This user manual was compiled with the greatest care. If you should however still find examples of inaccuracies and/or errors please inform us of this in writing.

Your suggestions for improvement will help us create a user-friendly and danger-averting user manual.

3.1 REORDER AND COPYRIGHT

Additional copies of this user manual can be ordered at the address provided in Chapter 1 "Identification". Please consider that a reorder will be subject to a charge. All rights are expressly reserved. Duplication or notification to third parties, no matter in what form, is prohibited without our written permission.

4. PRODUCT SAFETY

A basic requirement for safe handling and trouble-free operation of this equipment is knowledge of the safety listed below.

4.1 BASIC SAFETY INFORMATION

The basic condition for the safety-conscious handling and trouble-free operation of this device is the knowledge that in the following basic safety information.



DANGER!

Only one person may work at the cutting ring assembly device. Other persons must be kept away from the work area.

Only someone who possesses the necessary qualifications for the work at hand and who possesses the physical and mental capabilities is permitted to work at the cutting ring assembly device.

The user manual must be read in full before commissioning.

Before commencing any activity at the machine the relevant guidelines of the suppliers, enclosed in the user manual, must be read and observed.



DANGER!

The correct function of the cutting ring assembly device must be examined prior to commissioning.



INFO

The electrical main switch carries out the function of the emergency stop button.

4.2 ORGANISATIONAL MEASURES

This manual must be kept at the place of work of the cutting ring assembly device at all times and in a legible state!

The operator of the cutting ring assembly device must constantly check all parts of the device as well as all electrical and hydraulic lines for correct function and perfect condition.

Any errors and damages that are ascertained must be repaired immediately.

The device must be kept in a technically sound state at all times and may only be operated in such a state.

All safety and danger information about/at the machine must be kept in a legible state! No changes, additions or modifications may be carried out on the device without consultation/coordination with Gates Tube Fittings GmbH.

This also applies to the installation and adjustment of safety devices.

INFO

Unauthorised changes to the machine will lead to the EEC Declaration of Confor mity becoming void as well as to the loss of all warranty, guarantee and compen sation claims!

4.3 SAFETY INFORMATION SIGNS AND SYMBOLS AT THE DEVICE

The following signs are used in the user manual for safety information

DANGER!

Information and/or requirements and prohibitions for the prevention preventing of personal injuries

DANGER!

Special information and/or requirements and prohibitions for the avoidance of damages to property

INFO

Special information and/or requirements and prohibitions on the proper and eco nomic use of the machine

Symbols at the equipment



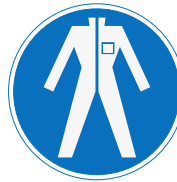
Warning of hand injury

4.4 PERSONAL PROTECTIVE EQUIPMENT

Operating personnel are required to use personal protection equipment (PPE) as described in the following when handling the machine.



Wear protective gloves.



Wear closely fitting work clothes.

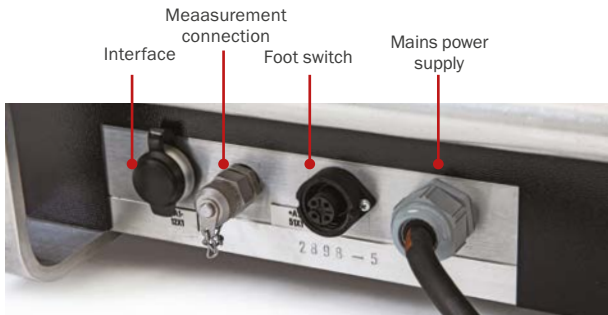


Wear protective shoes.

4.5 MAIN COMPONENTS OF THE CUTTING RING ASSEMBLY DEVICE OPTICAM 4S AND INTENDED USE



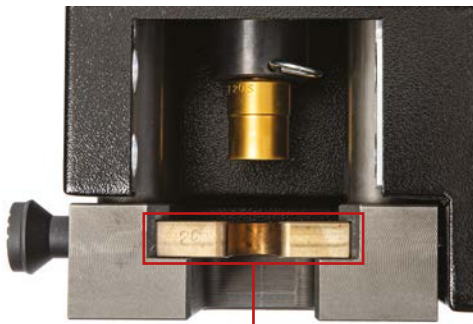
Control unit



Terminal strip



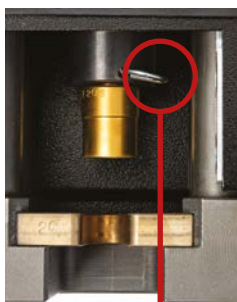
Backing plate



Backing plate reception



Foot switch



Mounted proximity switch

The machine can furthermore be equipped with a foot switch to activate the assembly process.

4.5.1 Components of machine

The cutting ring assembly device Opticam 4S consists of the following components:

- Hydraulic unit
- Press tool
- Control and operation

4.5.2 Intended use

The cutting ring assembly device Opticam 4S may only be used for the following purposes: final assembly of Gates – cutting rings on hydraulic steel tubes acc. DIN EN 10305-4 (E235, St 37.4) and stainless steel tube acc. DIN EN 10216-5 / ISO 1127, dimensional tolerance class D4/T3 (316TI, 1.4571). Any other use is considered an unintended use and will lead to the loss of to all warranty, guarantee and damage claims.



Assembly socket

4.5.3 Improper use

The cutting ring assembly device Opticam 4S may not be used for pressing in other round materials or other materials and work pieces that are not designated for this machine.



Unauthorised changes to the machine shall lead to the EEC declaration of conformity becoming void as well as to the loss of all warranty, guarantee and damage claims!

4.6 TECHNICAL SPECIFICATIONS

TUBE OUTSIDE DIAMETER X WALL THICKNESS	OPTICAM 4S	OPTICAM 4S DP
Height	635 mm	635 mm
Width	660 mm	670 mm
Depth	310 mm	310 mm
Weight	92 kg	99 kg
Electrical connection	400 V, 16 A, 5-pole	400 V, 16A, 5-pole
Noise level of the machine in operation	< 70 dB(A)	< 70 dB(A)
Hydraulic oil	HLP 32	HLP 32
Volume of the hydraulic system	5 litres	5 litres
Max. pressure in the hydraulic unit	400 bar	400 bar

4.7 DANGER AREA



Only one person may be in the work area of the cutting ring assembly device. Other persons must be kept away from the work area.

The danger area exists in the lifting range of the horizontal running piston rod at the work area of the cutting ring assembly device:

4.8 ELECTRICITY

The cutting ring assembly device may only be operated with a three-phase alternating current 400 V, 16 A, 5-pole.

If there are any disturbances in the electrical power supply the device must be switched off immediately!

After the loss of the electrical connection the cutting ring assembly device Opticam 4S stops functioning and the piston rod with the inserted assembly tool remains in its current position.

The piston rod is set in motion by pressing the green button next to the control panel and stopped by releasing the button.

With an installed proximity switch, the pressing procedure is initiated by pressing the work piece against the switch. Taking the work piece off the switch halts the forward movement.

The control system registers an assembly abort in both cases of shutdown, after pressing the F3 button on the control panel the press tool drives back into the basic position and re-enables the work piece insert.



The electrical main switch next to the control panel carries out the function of the emergency stop switch.

4.9 DISRUPTIVE INFLUENCES

All disruptive influences must be avoided in the surroundings of the cutting ring assembly devices.



Welding, burning and grinding works may not be carried out in the work area of the cutting ring assembly device.

The device may not come into contact with water because this may result in hidden damage to the device, which will later lead to incalculable risks for the physical soundness of the operating personnel.

5. SAFETY EQUIPMENT

5.1 EMERGENCY OFF BUTTON

The electrical main switch next to the control panel activates the function of the emergency stop switch.

The piston rod is set in motion by pressing the green operating button next to the control panel and stopped by releasing it.

DANGER!

All safety and protective equipment must be kept in perfect condition and may not be removed or altered

5.2 STOPPING IN AN EMERGENCY



The piston rod is set in motion by pressing the green operating button next to the control panel.

The assembly tool comes to a halt when the green operating button is released.

The control unit registers an assembly abort, after pressing the F3 button on the control panel the press tool drives back into basic position and re-enables the work piece insert.

An installed tool contact switch now sets the piston rod in motion when the pipe to be processed is pressed against the tool contact switch.

A light barrier is installed in front of the assembly shaft. If a body part of the operator or an object should get into this assembly shaft during the assembly process the light barrier will trigger an emergency stop immediately.

6. LIFE PHASES OF THE EQUIPMENT

6.1 TRANSPORT

6.1.1 Special safety information for transport

The Opticam 4S cutting ring assembly device may only be picked up and transported to the installation site while standing on a pallet using a properly functioning hoist.

DANGER!

The cutting ring assembly device Opticam 4S may only be taken up and transported to the installation site standing on a pallet with perfectly functioning lifting gear.

Never move the cutting ring assembly device Opticam 4S with clamped in material!

The device may only be taken out of the lifting gear by two persons and set down on the work surface because of its weight.

During transport it must be ensured that no obstacles obstruct the work and transportation procedures and that no persons or materials are located in the transportation route and danger area.

The device is fastened on a pallet, brought to a proven shipping company for shipping and dispatched.

INFO

Upon delivery of the 4S Opticam cutting ring assembly device check it for visible, external damages. Record this damage in writing and have this damage report confirmed by the carrier. Lodge a complaint regarding these damages immediately in writing with the carrier and inform Gates Tube Fittings GmbH in writing.

At the place of delivery, the device is to be removed from the pallet with approved lifting gear, transported to the operation site and set down there.

6.2 ASSEMBLY, SETTING UP AND START-UP

DANGER!

During transport it must be ensured that on obstacles impede the work and transport processes and that no persons or materials are located in the transport route and danger area.

Work on the cutting ring assembly device Opticam 4S may only be carried out by a person who possesses the necessary physical and mental capabilities.

Unauthorised persons are to be kept away from the danger area during all life phases of the machine.

6.2.1 Connect device to power supply

Before start up remove blanking plug of tank and mount the separately delivered venting plug.

The installed power cable is to be connected to the power supply with a suitable plug socket.

On the terminal strip attached on the right side the user is provided with the following additional connection options:

- LAN interface
- Measurement connection
- Foot switch
- Two reserve connections.

DANGER!

All components of the cutting ring assembly device are optimally coordinated to form a compatible set.

The use of any other accessories may lead to damages and result in the loss all warranty, guarantee and claims for damages.

The user must provide for sufficient lighting at the setup and operating location of the cutting ring assembly device in order to rule out possible dangers.

6.2.2 Requirements of the installation site

The installation site for the cutting ring assembly device is to be prepared in such a manner that:

- a permanently stable underground
- at a work height of 0.80 to 1.10 m
- is available for the entire cutting ring assembly device as a supporting surface.

The conditions and the spatial requirement at the installation site are to be selected in such a manner so as to ensure the cutting ring assembly device is well accessible at all times in order to ensure the simple and safe handling of the device.

7. OPERATION

Never move the cutting ring assembly device Opticam 4S with clamped in material!

DANGER!

The operator must convince himself of the soundness of the device prior to each work shift.

Operators and operators must arrange and maintain the hall and operating floor in such a way so as to rule out the danger of slipping.

The cutting ring assembly device Opticam 4S may only be operated by a person who possesses the necessary physical and mental capabilities.

Unauthorised persons must be kept away from the danger area during all life phases of the machine.

The work times of the operating personnel are to be calculated under consideration of the local conditions in such a way as to rule out the consequences of a fatigue and being underchallenged.

DANGER!

All operating and display elements are to be lit up glare-free in all life phases of the cutting ring assembly device Opticam 4S.

The markings attached to the machine are to be kept constantly in a legible state.

The operator of the machine must ensure that the surrounding conditions on:

- Temperature, - Draft, - Breathing air cause do not cause any impairment to the operating personnel.

DANGER!

An increase in humidity in the machine's surroundings must be avoided, since it can lead to substantial wear of the machine and hazards for personnel.

Corrosion can impair the function of the cutting ring assembly device Opticam 4S.

DANGER!

If any disturbance should occur the operator must immediately implement repair works.

If unusual noises and vibrations are detected at the machine, troubleshooting, repair and if necessary partial replacement must be carried out.

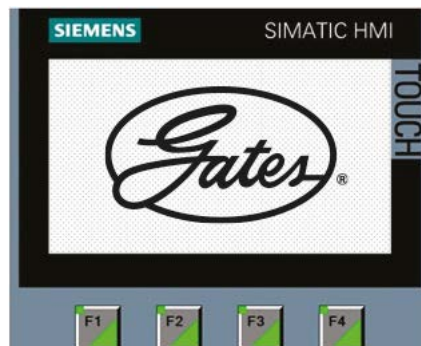
No poisonous cooling substances or lubricants may be used on the machine.

7.1 THE WORK AREA

The work area of the operator is next to the cutting ring assembly device, where the control panel is mounted and where all function components of the device can be easily accessed.

7.2 DESCRIPTION OF THE USER INTERFACE

7.2.1. Start screen



The following screen is displayed automatically or after touching the control panel (screen).

7.2.2 Main menu



The program indication: can be red or green

Red: No program has been selected

Green: A program is selected and the program named is displayed

The program name appears also in the screen “program selection“

The administrator can change the programs and their names.

7.2.2.1 Factory-installed programs

The following programs have been installed as standard:

- 1 DS-Stahl/ Steel/ Acier
- 2 Programm 2
- 3 DSW
- 4 DS-1.4571/ 316TI

7.2.2.2 „Tool“ indication

Red: No tool is mounted

Green: A tool is mounted and its name is given here.

(A tool consists of the backing plate and the press tool mounted at the piston rod; they are designed as a pair and are solely to be used as such)

7.2.2.3 Tool list

The machine is set up as standard for the use of the following tools:

VALUE	TEXT	VALUE	TEXT	VALUE	TEXT
1	Special plate 1	13	10-L	25	16-S
2	Special plate 2	14	8-L	26	15-L
3	Special plate 3	15	6-S	27	14-S
4	Special plate 4	16	42-L	28	12-S
5	4-LL	17	38-S	29	10-S
6	5-LL	18	35-L	30	8-S
7	6-LL	19	30-S	31	Not occupied
8	8-LL	20	28-L		
9	10-LL	21	25-S		
10	12-LL	22	22-L		
11	6-L	23	20-S		
12	12-L	24	18-L		

7.2.2.4 Error messages

The current error message is displayed in the yellow field where applicable:

ID	MESSAGE TEXT
1	Interference in the light grid
10	Motor protection switch pump triggered
20	Position detection > target
21	Position detection < target
22	Final pressure < target
23	Final pressure > target
24	Assembly abort
25	Position sensor no change in route
26	Watchdog timing position detection/cutting commencement/basic program
27	Watchdog timing start program
28	Watchdog timing reference drive
29	Reference not available
30	No work piece inserted
31	Maintenance due!
40	Program selection was not transferred

7.2.2.5 Corrective measures for disturbances

ID	DISTURBANCE	REMEDY
1	Interference in the light grid	Eliminate and acknowledge disturbance, piston rod goes back automatically. Restart possible.
2	Motor protection switch of an engine pump triggered	Check the pump for freedom of movement and pump motor.
3	Position detection > target	Path value for position detection of the work piece is too large.
4	Position detection > target	Path value for position detection of the work piece is too small.
5	Final pressure < target	Pressure at the end of cutting in was too small.
6	Final pressure < target	Pressure at the end of the cutting was too great.
7	Assembly abort	Appears after releasing the green start button when driving forwards. Acknowledge disturbance and start again.
8	Watchdog timing position detection/cutting commencement/basic program	The time cycle was exceeded in one of these programs. Check machine.
9	Watchdog timing starting program	Check machine and work procedure.
10	Watchdog timing reference drive	Check machine and work procedure.
11	No reference available	Reference drive was not carried out. Insert backing plate and carry out reference drive.
12	No work piece is inserted	Cycle was started without an inserted work piece. Acknowledge, insert work piece and start work procedure again.
13	Maintenance due	See information in the circuit diagram of maintenance counter.
14	Program selection was not transferred	Administrator must check the entire program for correctness.
15	Programmanwahl wurde nicht übertragen	Administrator muss das Gesamtprogramm auf Richtigkeit überprüfen.

7.2.2.6 Operating states

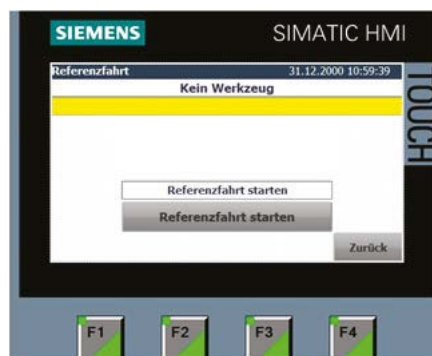
The currently running operating state is displayed in the grey field.

VALUE	OPERATING STATE
0	Not ready for use
1	Insert pipe and start
2	Assembly is being carried out
3	Assembly possibly not correct
4	Start-up program is being carried out
5	Basic position with F3

7.2.3 Reference run

After inserting a backing plate the “reference run” screen is automatically displayed.

The operator thus has to carry out a reference run first before any further adjustment can be carried out.



The “start reference run” button can appear in either red or green,

Red: Reference run cannot be started, a disturbance is given.

Green: Reference run can be started.

7.2.3.1 Text list reference run

Start reference run

Reference run is being carried out

Reference available

If the reference drive were implemented, the announcement jumps automatically again into the main menu.

7.2.4 Program selection



Here you can see the programs activated by the machine setter. Select a program by pressing the program key. The facility jumps back to the main menu.

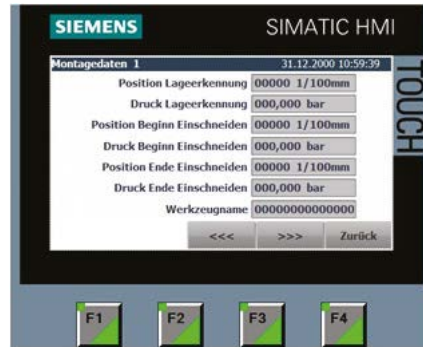
7.2.4.1 Programs

The following programs are installed as standard:

- 1 DS-Stahl/Steel/Acier
- 2 Programm 2
- 3 DSW
- 4 DS-1.4571/316TI

7.2.5 Assembly data

After pressing the button the following appears



The information from the last 10 cutting ring assemblies can be seen one at a time. By pressing the buttons the buttons you can call up the next and previous page of assembly data.

7.2.6 Setup

After pressing the grey “setup” button the following screen appears

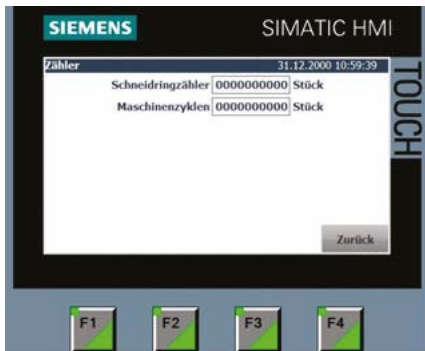


In this screen the operator can call up the following information pages

- Counter
- Language selection
- Software information

The menus not described are locked for the operator.

7.2.6.1 Counter



Cutting ring counter: Counts the number of complete assemblies

Machine cycles: Counts the number of starts

7.2.6.2 Language selection



By pressing the button the operator selects the language of the user interface.

7.2.6.3 Software information



This screen displays the conditions of the programming software and program version to the operator.

7.2.6.4 Messages



After selecting messages button this screen appears and all currently pending error messages according to the list are displayed, and the messages can be confirmed using by pressing the “Acknowledge” button and deleted.

Messages can also be acknowledged by pressing the F3 button.

7.2.6.5 Back

The operator can return to the start screen by pressing the “back” button.

7.2.7 The function button F1 to F4

- F1 Same function as the green start button
- F2 “Home“. After pressing this “home” button the operator directly returns to the main menu from any submenu
- F3 Acknowledgment button for error messages (acknowledge disturbance and reset)
- F4 “Back” always brings the operator back one screen.

7.3 PROCEDURAL INSTRUCTIONS FOR MAINTENANCE SETTINGS

Persons who have password-protected access authorisation to the maintenance setting can access the following additional settings after logging in.

7.3.1 Logging in

After pressing the respective button the following screen appears:

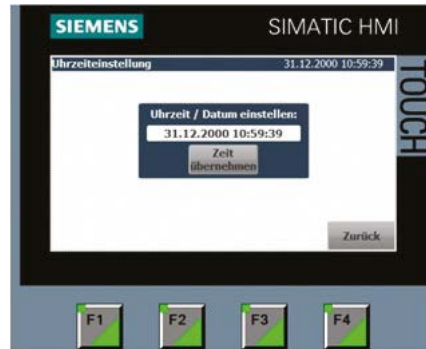


As soon as one of the two input windows is clicked on, a keyboard appears that can be used to enter both the username and the password. The entries are finalised by pressing the “ok” button.



The following buttons in the setup screen are available to the authorised person in order to carry out maintenance settings.

7.3.2 Set time

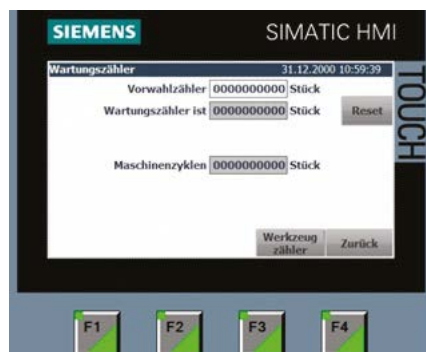


Select time frame.



Here, as after the selection of each of the two following windows, the keyboard appears to enable you to enter the date and time. The entries are finalised by pressing the “ok” key and the clock starts to run.

7.3.3 Maintenance



The authorised person can enter in the “preset counter” field a number of work cycles, after the achievement of which the next maintenance measure must be carried out. After reaching the work cycle number, the error message “maintenance due!” appears.

After the protective measure has taken place, the authorised person can reset the actual maintenance counter number by pressing the “reset” button and enter a new work cycle number until the next maintenance measure.

The counter “machine cycles” counts all commenced work cycles and cannot be reset.

7.3.4 Tool counter

After clicking this button the following appears:



Tool counter 1 to 6

Here all work cycles are counted with the respective tools (according to the above stated tool list).

The authorised person can reset this number of work cycles.

By pressing the button, the next page of the tool counter is displayed.

7.3.5 Message buffer

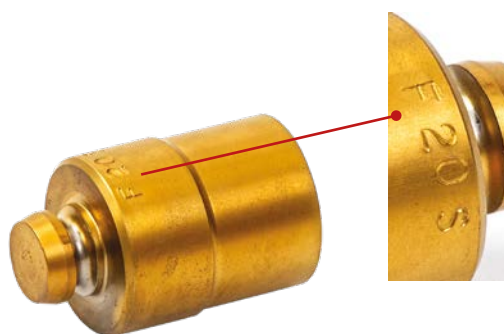


All error messages that have been displayed and deleted in the message window are listed here. The authorised person can also delete this message buffer if necessary.

7.4 ASSEMBLY IN CHRONOLOGICAL ORDER

7.4.1 Setup of tools

After switching on the machine main menu appears acc. chapter 7.2.2. For each tube size there is a separate pair of tools. Each pair consists of one assembly socket and one counter plate.



Assembly socket



Counter plate with coding on right side



Counterplate into reception



Assembly socket into reception



And secure with pin

The assembly socket is mounted into the reception and locked by a pin.

The corresponding counter plate is put into its reception. The 5-whole code must be on the right side.

7.4.2 Carry out reference run

see chapter 7.2.3

7.4.3 Select program

see chapter 7.2.4 + 7.2.4.1

7.4.4. Assembly

Slide nut and cutting ring onto tube. The has to be cut rectangular and slightly deburred. It is essential to ensure that the shoulder of the cutting ring (the thicker part) shows towards the nut.



Nut an cutting ring onto tube



Positioning of cutting ring

Put in the tube. Nut and cutting ring is located between assembly socket and counter plate. Push tube firmly into assembly socket.



Put in tube



Final assembled cutting ring

Press the green start button during the whole process. If you release the button the machine interrupts the process. Take out the assembly and check the result like described in the box below.



When using a proximity switch the process is started by pushing the tube against assembly socket. Also releasing leads to interruption of process.



In case of interruption you reset the machine by pressing F3 (Reset).

After returning the piston take the assembled tube.

INFO

If the cutting ring can be turned on the pipe after final assembly it is irrelevant.

What is important is the correct shoulder throw-up in front of the cutting ring. See photo "Fully assembled cutting ring".

In order to increase the lifespan of your tools we recommend oiling the assembly connecting piece before the assembly procedure.

During the assembly of stainless steel it is essential to use lubricant.

8. CLEANING AND MAINTENANCE

DANGER!

Only a specialist may fully separate the cutting ring assembly device Opticam 4S from the power supply.

Before commencing repair and maintenance measures on the machine the plug must be pulled out to interrupt the power supply and be secured against being unintentionally switched back on.

Operators and users must to arrange and maintain the hall and industrial floor in such a manner to rule out any risk of slipping.

The cutting ring assembly device Opticam 4S may only be operated a person who possesses the necessary physical and mental capabilities.

Unauthorised persons must be kept away from the danger area during all life phases of the machine.

DANGER!

No poisonous cooling or lubricating substances may be used on the machine.

Only tested operating and switching elements may be used within the safety relevant area of the control and switchgear facility.

The pneumatic cylinder is in principle maintenance free.

An oil change must be carried out after approximately 2000 operation hours.

The device was pre-filled with BP HP - C 32 hydraulic oil. Please refer to the performance data for the filling volume.

The hydraulics requires an oil change every 3 years or every 1000 hours of operation. The hydraulic oil used must exhibit a viscosity of 32.

When filling up the oil a sieve must be used (mesh width 0.4 mm). The oil level should be checked at regular intervals depending on the hours of operation.

The filler neck is located under the housing (black plastic cover of the device).

The hydraulic hoses must be renewed every 6 years. The date of manufacture is printed on the hose.

DANGER!

The tools must be checked at regular intervals, drawing on lessons learnt, for proper functionality.

The user must constantly check all machine parts and supply lines for correct function and soundness. Damages must be repaired immediately.

9. DISASSEMBLY



Only a specialist may completely separate the cutting ring assembly device Opticam 4S from the power supply.

The equipment must be separated from the power supply before it is deactivated, and the mounted tools must be dismantled.

The device must be lifted up using approved lifting gear and transported away.

10. DISPOSAL

The manufacturer, Gates Tube Fittings GmbH, will take the old device back against reimbursement of costs.

The individual parts of the equipment do not contain dangerous materials and are manufactured in compliance with RoHS. The device may therefore be disposed of completely and/or in part disposed of as commercial

Steel scrap

Electronic waste

And plastic waste

National guidelines on environmental protection and work safety and the information from the lubricant manufacturer shall govern the treatment and use of lubricants. The regulations must be observed.

Oils and other operating liquids must be brought to the appropriate professional disposal companies.

11. EEC DECLARATION OF CONFORMITY

The manufacturer hereby declares that the product: Cutting ring assembly device Opticam 4S/4S DP is in conformity with the applicable requirements of the relevant regulations of the following EEC Directives including any amendments relevant at the time of the declaration:

Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (Machinery Directive)

Directive 2014/68/EC of the European Parliament and the Council of 15 May 2014 on the harmonisation of the laws of Member States relating to the making available on the market of pressure equipment (Pressure Equipment Directive)

Directive 2014/35/EC of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits (Low Voltage Directive)

Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (ROHS Directive) and that the harmonised standards specified below have been applied:

DIN EN 60204-1:2005 + A1:2008 Safety of machinery – Electrical equipment of machines – Part 1: General requirements

DIN EN ISO 13857 Safety distances to prevent hazard zones being reached by upper and lower limbs.

DIN EN ISO 4413:2011 - 04 Hydraulic fluid power- General rules and safety requirements for systems and their components (ISO 4413:2010); German version EN ISO 4413:2010

Information on the signatories:

Managing director: Semih Kelle

Authorised to compile the technical documentation



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