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Number of pages in this manual including the title page: 38

These instructions are valid for the product
2480.00.32.71
Nitrogen Compact Booster

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The instructions are intended only for the operator of the described machine only and must therefore not be made available to uninvolved third parties - in particular to competitors.
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1 INTRODUCTION

1.1 Definition

The Nitrogen Compact Booster product is a machine in terms of 2006/42/EC, section 1a and 2a. In the following text of these instructions, the product is referred to as machine.

1.2 Intended use

This machine is intended to compress the nitrogen flowing into a nitrogen bottle in order to fill gas springs. The machine may only be used to compress nitrogen. The machine may only be used to fill gas springs.

The intended use also includes

• reading of these instructions and
• the adherence of safety information
• the adherence of all applicable documents
• adherence to the maintenance regulation

The machine may only be used as intended. Only processes and handling may be used as described in these instructions.

1.3 Incorrect application

Any use which goes beyond the intended use of the machine and therefore classed as misuse and not allowed.

The machine may not be stressed beyond its limits.

The machine is not suitable for

• the compression of other gases
• filling of other components
• the operation with impermissible changes or alterations (see chapter 6.4 "Operating the machine" on page 22).

For all damage to persons or property which has been caused by improper use, the liability lies with the operator of the machine described in this document.
1.4 EC declaration of conformity

All machines have a EU declaration of conformity when supplied as per the directive 2006/42/EG (machine directive). The excerpt of the text in this EU declaration says:

EU declaration of conformity as per directive 2006/42/EG, annex II A (machinedirective)

Manufacturer

FIBRO GmbH
August-Läpple-Weg
DE 74855 Hassmersheim

decares herewith that the machine

Nitrogen Compact Booster

that the models introduced to the market correspond to all relevant regulations of directive 2006/42/EG.

The machine also corresponds to all relevant regulations of further directives applied to the machine.

Applied harmonised standards:


Authorised for the compilation of the Technical Documentation is:

FIBRO GMBH August-Läpple-Weg DE 74855 Hassmersheim

1.5 Further applicable documents

In addition to these instructions for the safe handling of the machine further, with applicable documents are necessary.

The information in these documents have to be adhered to.

• EU declaration of conformity as per directive 2006/42/EG
• Pneumatic plan
1.6 Set-up

The illustration shows a schematic diagram of the principal set-up of the machine.

The machine consists of:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Compressor</td>
</tr>
<tr>
<td>2</td>
<td>Start-up valve</td>
</tr>
<tr>
<td>3</td>
<td>Filter- and control valve compressed air</td>
</tr>
<tr>
<td>4</td>
<td>Nitrogen outlet (labelled with B)</td>
</tr>
<tr>
<td>5</td>
<td>Pressure relief valve</td>
</tr>
<tr>
<td>6</td>
<td>Nitrogen inlet via bottle hose (labelled with A)</td>
</tr>
</tbody>
</table>

To fill a gas spring a filling hose, a filling adapter and a filling and control fitting is required.

The parts can be ordered from FIBRO GMBH using the indicated order number.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Filling and control fitting</td>
<td>Order number</td>
</tr>
<tr>
<td>b</td>
<td>Filling adapter M6</td>
<td>Order number</td>
</tr>
<tr>
<td></td>
<td>Filling adapter G1/8&quot;</td>
<td>Order number</td>
</tr>
<tr>
<td>c</td>
<td>Filling hose</td>
<td>Order number</td>
</tr>
</tbody>
</table>
Introduction

To fill a gas spring safely we recommend the use of optionally available optional additional equipment.

The parts can be ordered from FIBRO GMBH using the indicated order number.

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>d</td>
<td>Connection adapter</td>
<td>2480.00.32.07.04</td>
</tr>
<tr>
<td>e</td>
<td>Bottle pressure regulator</td>
<td>2480.00.32.07.01</td>
</tr>
<tr>
<td>f</td>
<td>Gas bottle connection</td>
<td>2480.00.32.07.02</td>
</tr>
</tbody>
</table>

The filling and control fitting (a) is connected via the filling adapter (b) to the filling inlet of the gas spring.

The filling hose (c) creates the connection between nitrogen outlet of the machine and the filling and control fitting.

The bottle pressure regulator (e) can be connected between filling hose and nitrogen outlet. For the assembly a connection adapter (d) for the filling hose and a gas bottle adaptor (f) to connect the nitrogen outlet.

At the bottle pressure regulator a maximum permissible filling pressure gas spring can be adjusted. Permanent monitoring of the filling process is not required. A gas spring is protected against overfilling.

With the retaining plate the machine can be adjusted securely to the nitrogen bottle.
1.7 **Function**

The filling of a gas spring directly from a nitrogen bottle only works if the pressure in the bottle is higher than the required filling pressure of the gas spring.

The filling of a gas spring with 150 bar is not possible with a bottle pressure of 120 bar. The remaining nitrogen in the bottle remains unused or has to be used for other applications.

By using the nitrogen compact booster the entire volume of a nitrogen bottle can be used up the residual pressure of approx. 30 bar.

The machine works according to the principle of a pressure intensifier. The low inlet pressure of a nitrogen bottle is increased by continuous and constant piston motion. A high pressure is available at the outlet of the gas spring.

If using a bottle pressure regulator between nitrogen outlet and filling hose a maximum permissible filling pressure can be set.

The machine is powered with pressurised air. The operating pressure is adjustable.

1.8 **Warranty**

The guarantee is regulated contractually (see Terms and Conditions or contract)
1.9 Manual

These instructions describe the handling of the machine and contain important information about its intended use.

A copy of these instructions must be stored and made continuously available at the operating site of the machine, and everyone assigned to work on or with the machine must read, understand and apply them.

The safety information in the individual chapters must be observed.

These instructions and the other applicable documents are not subject to any modification service.

We reserve the right to update data and drawings in these instructions based on continuing technical development.

The respectively current version can be requested from FIBRO GMBH.

1.9.1 Legend

Certain marks, symbols and abbreviations with the following meaning are used in these instructions for clear organisation of its contents:

1) indicates an enumeration.
   a) indicates the second level of an enumeration.

• indicates a listing.
   – indicates the second level of a listing.

The book icon in front of the text is a reference to an applicable document or another chapter in these instructions. The content of this document or chapter must be observed.

The information symbol before the text indicates an additional instruction or an important application tip.

1.9.2 Figures

The figures in these instructions are examples. Deviations between a figure and the actual conditions on the machine are possible.

The drawings of FIBRO GMBH and the information on third-party products are decisive.
1.9.3 Safety instructions

This manual contains safety informations, which are intended to draw your attention to possible hazards and which should be heeded in order to avoid injury.

The associated text describes

• the type of hazard
• the source of the hazard
• the options for avoiding injury
• the possible consequences if the warning notice is not heeded

Safety informations are highlighted using a colored signal bar with a warning triangle and signal word.

The signal bars have the following meaning:

DANGER!
A safety notice on a red signal bar with the signal word DANGER designates a hazard with a high risk level which, if not avoided, will result in death or severe injury.

WARNING!
A safety notice on an orange signal bar with the signal word WARNING designates a hazard with a medium risk level which, if not avoided, might result in death or severe injury.

CAUTION!
A safety notice on a yellow signal bar with the signal word CAUTION designates a hazard with a low risk level which, if not avoided, could result in minor or moderate injury.

1.9.4 General instructions

In addition to the safety notices, these instructions contain information that must be observed to prevent property damage.

The pertinent text describes

• the possible reason for property damage
• the possibilities for preventing property damage

Notices of possible property damage are emphasised by a blue signal bar and the signal word ATTENTION.

NOTICE
Notices for the prevention of property damage are not related to possible injuries.

Furthermore, these instructions contain general information on use.

General information on use and tips for certain applications are emphasised with a blue information symbol.
2 SAFETY

2.1 Basic safety instructions

Die meisten Unfälle beim Umgang mit technischen Einrichtungen sind auf die Missachtung der grundlegenden Sicherheitsregeln zurückzuführen.

Erkennen einer möglichen Gefährdung kann einen Unfall vermeiden, bevor dieser eintritt. Sind Gefährdungen vorhanden, warnen Sicherheitsinformationen an der machine und in diesem Dokument vor diesen Gefährdungen. Wenn die Warnungen nicht beachtet werden, kann es zu Körperverletzungen oder Tod kommen.

FIBRO GMBH kann nicht alle möglichen Umstände voraussehen, die potentielle Gefährdungen enthalten können. Die Warnungen in diesem Dokument und an der machine sind folglich nicht alles umfassend.

Personal muss die erforderliche Schulung und Erfahrung sowie erforderliche Werkzeuge haben, um Arbeiten an der machine richtig ausführen zu können.

Unsachgemässe Bedienung, Wartung oder Instandsetzung kann gefährlich sein und schwere oder tödliche Verletzungen verursachen.

Keine Arbeiten zu Transport, Montage, Wartung oder Instandsetzung ausführen, wenn die Informationen zu Transport, Montage, Wartung oder Instandsetzung nicht gelesen und verstanden wurden.

Die machine darf in keiner Weise abweichend von den Betrachtungen in dieser Anleitung benutzt werden. Alle für die Benutzung anwendbaren Sicherheitsregeln und Schutzmassnahmen am Einsatzort müssen beachtet werden, einschliesslich Standort bezogene Regelungen und Schutzmaßnahmen am Arbeitsplatz.

Wird ein Arbeitsmittel, eine Handlung, eine Arbeitsmethode oder eine Arbeitstechnik angewendet, die nicht ausdrücklich von FIBRO GMBH vorgeschlagen ist, muss der Anwender selbst die Sicherheit für sich und andere Personen sicherstellen.

Es muss auch gewährleistet werden, dass die machine durch die beabsichtigten Arbeiten zu Bedienung, Wartung und Instandsetzung nicht beschädigt oder unsicher wird.

Die Informationen, Beschreibungen und Abbildungen in diesem Dokument basieren auf der Grundlage von Informationen, die zum Zeitpunkt der Erstellung dieses Dokuments verfügbar waren.

Diese und andere Punkte können sich jederzeit ändern. Die Änderungen können die Eigenschaften der Maschine beeinträchtigen. Vor der Ausführung jeglicher Arbeiten die derzeit verfügbaren Informationen einholen.
2.1.1 Due diligence of the operator

This machine is designed and constructed according to state-of-the-art. The requirements for maintaining the safety and health protection were met.

This safety can in the operational practice only be achieved if all measures required for this purpose are put into place. The operator of the machine has to plan these measures and check their execution.

The operator has to ensure that

- the machine is only used as intended.
- the machine is only be operated in impeccable, functional state.
- a copy of these instructions and all applicable documents are available in a legible condition and complete at the installation location of the machine. It has to be ensured that all persons who have to carry out work on this machine can check these instructions at any time.
- only specifically trained and authorised staff can operate, maintain and repair the machine.
- staff knows the instructions and the containing safety instructions.
- the responsibility of staff during operation and maintenance has to be clearly determined and adhered to.
- the staff is regularly instructed in all applicable topics of work safety and environmental protection.
- Operating instructions for work safety have to be issued.
- national accident prevention and in-house regulations are observed.
- if required personal safety clothing is available.
2.1.2 Personnel requirements

The following safety instructions must be observed in all operations on the machine. Disregarding the safety instructions can lead to serious injuries or even death.

Personnel must have the necessary training and experience and possess the necessary tools in order to be able to perform the work on the machine correctly. Improperly performed work can be dangerous and cause serious or fatal injuries.

Do not perform any work if you have not read and understood the information in these instructions and in the applicable documentation.

If work equipment, operation, work methods or work techniques that have not been explicitly proposed by FIBRO GMBH are used, the operator must himself ensure the safety for himself and for other persons.

It must be ensured that the machine is also not damaged or does not become unsafe over the course of the intended work.

All persons working on and with the machine must

• have read and understood these instructions
• observe the safety information and guidelines in the operating instructions and the instructions contained therein
• observe the danger signs attached to the machine and the instructions on them
• observe the warning information about possible residual risks
• make sure that there are no unauthorised persons in the vicinity of the machine.
• in addition to the operating instructions, observe also the operating instructions for occupational health and safety and accident prevention issued by the operator
• inform the operator or the supervisory personnel about any malfunctions
• inform the respective managers immediately about any changes to the machine which can affect its safety

2.2 Residual hazards

**WARNING!**

High pressure

The machine is designed for an inlet pressure up to 200 bar.

► Connection only to N₂-nitrogen bottle up to 200 bar.

**WARNING!**

Unauthorised changes

Any unauthorised changes or any mounting of additional equipment not approved by FIBRO GMBH compromise the function of the machine and may result in dangerous situations.

► Modifications or unauthorised changes to the machine are prohibited.

► The mounting of additional equipment must be discussed with FIBRO GMBH.

► Unauthorised changes endanger the safe operation of the machine and may lead to serious or fatal injuries.
### Technical Data

#### 3.1 General technical data

<table>
<thead>
<tr>
<th>Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inlet pressure</td>
<td>30 - 200 bar</td>
</tr>
<tr>
<td>Compressed driving air</td>
<td>minimum 1 bar to 6 bar maximum</td>
</tr>
<tr>
<td>Pressurised air purified and oiled</td>
<td></td>
</tr>
<tr>
<td>Pressure relief</td>
<td>400 bar</td>
</tr>
<tr>
<td>Transmission</td>
<td>1 : 32</td>
</tr>
<tr>
<td>Piston displacement</td>
<td>11.6 cm³</td>
</tr>
<tr>
<td>Medium supply performance*</td>
<td>280 NL/min</td>
</tr>
<tr>
<td>Calculated operating pressure (at 6 bar air drive pressure)</td>
<td>192 bar (+ Residual bottle pressure)</td>
</tr>
<tr>
<td>Max. operating temperature</td>
<td>60 °C</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 7.2 kg</td>
</tr>
<tr>
<td>Dimensions (WxDxH)</td>
<td>160x380x345 mm</td>
</tr>
<tr>
<td>Noise emission</td>
<td>&lt; legally permissible peaks</td>
</tr>
<tr>
<td>Connections</td>
<td></td>
</tr>
<tr>
<td>Pressurized air</td>
<td>G 1/4&quot;</td>
</tr>
<tr>
<td>Nitrogen inlet</td>
<td>Hose line DN4, length 1 m for N2-bottles 200 bar</td>
</tr>
<tr>
<td>Nitrogen outlet</td>
<td>Bottle connection W 24,32 x 1 1/4&quot; for N2-bottles 200 bar</td>
</tr>
</tbody>
</table>
3.1.1 Type plate

A type plate is fitted on the machine. Please state the information on the type plate for all questions or on all orders.

Fig. 3-1 Type plate
4 TRANSPORT

4.1 Packaging and weight

The machine is packaged into a box for shipping. The weight of the entire packaging unit is 6 kg.

4.2 Transport damage

On delivery, the consignment must be checked immediately to ensure that it is complete and has not been damaged in transit. If damage is found on the packaging that indicates possible damage to the contents, the contents must also be inspected for damage. If damage is found, the transport company must be informed immediately and the transport company must verify the damage.

4.3 Interim storage

- Only store the machine when dry, in its original packaging and in enclosed rooms
- Storage temperature +5 - +40 °C
- Maximum humidity 60% (at 25 °C)
- No aggressive substances may be stored in the storage room (acids, bases, solvents etc.).

4.4 Return shipping

For the returns the parts which have to be sent back to the manufacturer for repair have to be packaged securely.

4.5 Disposing of the packaging material

The packaging materials must be either reused or properly disposed of in accordance with the country-specific regulations.
5 ASSEMBLY

5.1 Important safety instructions

WARNING!

Faulty assembly
Connection to not authorised nitrogen bottle or false connection of additional equipment is dangerous.

Only qualified staff may carry out assembly work. Please adhere to the operating or assembly instruction of additional equipment.

For the assembly of the machine or of the additional equipment, please ensure that only

- authorised persons stay in the work area and that no other persons are endangered by the assembly work.

5.2 Installation requirements

In order to use the machine properly at least the following parts have to be fitted:

- customer specific pressurised air adapter
- Filling hose
- Filling and control fitting

To securely fill a gas spring, we recommend additionally the use of the following optionally available additional equipment:

- Bottle pressure regulator

Prior to assembly those parts and suitable tools have to be available to tighten the connections.
5.3 Installing the machine

⚠️ WARNING!

High pressure

Unsuitable tools may fail. This means that nitrogen can escape under high pressure.

- Only use additional equipment such as filling and control fitting, filling hose and bottle pressure regulator. Risk of injury

The following description considers the assembly of all required parts and all possible additional equipment.

1. Hang the machine over the connection of the nitrogen bottle.
2. Bottle hose to be connected.
   a) Remove yellow protective cap.
   b) Connect the connection screws of the bottle hose to the nitrogen bottle. ATTENTION left-handed thread
   c) Tighten the nut with a spanner.
3. Pressurised air adapter to be screwed into the pressurised air inlet.
   a) pressurised air inlet at the filter and control valve, thread G 1/4”.
   b) Remove yellow protective cap.
   c) Screw company specific pressurised air adapter with seal into the pressurised air inlet.
4. Bottle pressure regulator to be assembled.
   a) Remove green protective cap.
   b) Bottle pressure regulator to be screwed at the nitrogen outlet thread.
   c) Tighten the nut with a spanner.

5. Filling hose to be assembled.
   a) Filling hose to be screwed on to the bottle pressure regulator.
   b) Tighten the nut with a spanner.

6. Filling and control fitting to be assembled.
   a) Insert the bayonet plug of the Filling and control fitting into the bayonet coupling of the filling hose.

7. Provide pressurised air supply.
   a) Pressurised air hose of the customer-side pressurized air supply on the pressurised air adapter.
6 OPERATION

6.1 Important safety instructions

**WARNING!**

Impermissible values and setting.
The permissible maximum values for the operation of the machine which may not be exceeded.

- Operation only on nitrogen bottle with maximum 200 bar internal pressure.
- Compressed driving air maximum 6 bar.
- Check values and settings prior to commissioning.
- Nitrogen exits at the over pressure valve. Risk of injury.

Please ensure when operating the machine that the

- machine is ready assembled. (see chapter 5.3 "Installing the machine" on page 19).
- operating staff has been informed about the proper conduct in the event of a machine failure.
- machine is only operated by staff that has been trained, instructed and authorised to do so. These persons have to know the instructions and act accordingly.
- machine is only operated according to its intended use (see chapter 1.2 "Intended use" on page 5).
- operating instructions of the operator are adhered to.

6.2 Workstations for operating personnel

The workplace to operate is directly at the machine. Operational parts are the startup valve at the control bottle pressure regulator and the control at the filter and control valve.

6.3 Prior to commissioning

A visual inspection has to be carried out prior to commissioning the machine. The following has to be checked and ensured:

- there is no damage to the machine.
- that the pressurised air supply is connected and operational.
- that the machine is connected to a nitrogen bottle.
- the valve of the nitrogen bottle is connected.
- that the start-up valve of the machine is connected.
6.4  Operating the machine

**NOTICE**

**Damage to the machine**

If the controls are set incorrectly, parts of the machine may be damaged.

- Prior to opening of the nitrogen bottle the drive air pressure has to be adjusted and the valve at the bottle pressure regulator has to be closed.
- Over pressure can occur in the machine if the drive air pressure is too high.
- If the valve is open then a pin in the bottle pressure regulator can be damaged.

The following description is applicable to the operation with all required parts and all possible additional equipment.

6.4.1  Settings prior to the operation

1. Drive air pressure has to be set.
   a) Turning knob (a) at the filter and control valve has to be pulled up.
   b) By turning the knob, set the air pressure to a maximum of 6 bar (right = pressure increase, left = pressure reduction)
   c) Turning knob (a) at the filter and control valve has to be pushed down.

2. Close the valve of the bottle pressure regulator.
   a) Turn turning knob (b) at the bottle pressure regulator until it arrests.

*Fig. 6-1 Settings prior to the operation*
6.4.2  Fill gas spring

1. Filling and control fitting to be prepared.
   a) Small turn knob (a) to be turned left until it arrests. This moves the tripping pin (b) into the retracted position.
   b) Outlet valve (c) to be connected.

2. Remove the blanking plug above the filling opening of the gas spring with an Allen key (M6 - 3 mm; G1/8" - 5 mm).

3. Unscrew and remove set screw.

4. Filling adapter to be screwed into the filling opening of the gas spring. Tighten hand-tight.

5. Filling and control fitting to be put on the filling adapter. Screw on the large turn knob by turning it.
6. Shut-off valve has to be closed at the filling hose.
7. Nitrogen bottle has to be opened at the turn knob of the bottle valve.
8. Switch on machine (switch on lever has to be turned left by 90°).
9. Adjust at the bottle pressure regulator the maximum filling pressure (right = pressure increase, left = pressure reduction).

**NOTICE**

**Damage to the valve in the gas pressure spring**

- Slowly open the shut-off valve on the filling hose.
- Carefully allow nitrogen to flow in.

10. Shut-off valve has to be opened slowly at the filling hose.

   a) The right manometer at the bottle pressure regulator and the manometer at the filling and control fitting show the actual pressure in the gas spring.

The permissible filling pressure (a) is imprinted on the gas spring.
11. After filling the nitrogen bottle has to be closed at the turn knob of the bottle valve.
12. Switch off machine (switch on lever has to be turned right by 90°).
13. Discharge valve has to be opened at the filling and control fitting.
   a) Pressure and remaining nitrogen escape from the filling and control fitting and filling hose.
14. Unscrew filling and control fitting by turning the large turning knob from the filling adapter.
15. Filling adapter to be unscrewed.

**WARNING!**

**Nitrogen escaping**

Never bend over the valve of the gas pressure spring.

▶ Wear safety goggles.

16. Check if nitrogen escape from the valve of the gas spring.
17. Set screw to be inserted into filling opening of the gas spring. Tighten with a torque of 15-18 Nm.

The set screw has a sealing function and has always to be assembled.
7  FAULTS

7.1  Important safety instructions

⚠️ WARNING!

Non-authorised staff
Staff which hasn’t been trained accordingly has not the necessary authorities, to find faults or to remove faults.

> Faults may only be removed by FIBRO customer service or by staff of the operator which has been trained and authorised to carry out these activities.

> Before removing the faults, the machine has to be separated from the nitrogen bottle and the pressurised air supply.

> If using non-authorised staff, wrong action may cause injuries.

7.2  Customer services

If you should require the assistance of our customer service we would ask you to provide the following information:

- Serial number from type plate FIBRO GMBH (see chapter 3.1.1 "Type plate" on page 16)
- Description of the current fault
- Time and circumstances of fault
- Suspected cause

You can reach our customer service Monday to Friday from (times are UTC + 1) 7 am to 5 pm on service number +49 (0) 62 66 73 0

Outside of the stated time, there is an automatic message with further information.

Customer service address:
FIBRO GMBH
August-Läpple-Weg
DE 74855 Hassmersheim

info@fibro.de

On www.fibro.de you can find all FIBRO subsidiaries worldwide.
8 SERVICING

8.1 Important safety instructions

⚠️ WARNING!

Non-authorised staff

Only the work described in these instructions with regards to the maintenance may be carried out by the staff of the operator.

► This staff has to be trained and authorised for the intended tasks.
► All further work and repairs may as a rule only be carried out by FIBRO staff.
► If using non-authorised staff, wrong action may cause injuries.

8.2 Maintenance work

The following tasks are considered maintenance work:

• Inspection
• Maintenance / cleaning
• Repair

8.3 Inspection

8.3.1 Prior to each use

• Control of the essential functional units.
• Control the filter bowl at the filter and control valve for accumulated condensate.
  – Release the condensate if necessary.
• Control the cleanliness.
  – Clean machine if necessary.
8.4 Maintenance

WARNING!
Switch machine off safely
Working while the machine is switched on is dangerous.
► Before maintenance, the machine has to be separated from the nitrogen bottle and the pressurised air supply.
► Maintenance work may only be carried out when the machine is switched off and unpressurised.
► Injuries if the machine is switched on.

8.4.1 If necessary
8.4.1.1 Filter in filter and control valve has to be exchanged
If the filter in the filter and control valve is of a dark colour it has to be exchanged.

1. Unscrew sight glass.
2. Take off old filter.
3. Insert new filter.
4. Screw in sight glass.

8.5 Repair
The operator should not carry out repair work on the machine.
If repair measures are necessary, then FIBRO GMBH's customer service has to be notified.
9 DECOMMISSIONING

9.1 Important safety instructions

**WARNING!**

High pressure
Exiting pressure at the inlets can cause unexpected start-up if the machine is accidentally switched on.

- Before decommissioning, the machine has to be separated from the nitrogen bottle and the pressurised air supply.
- The energy supply recovery can lead to injuries.

**WARNING!**

Non-authorised staff
Staff which hasn't been trained accordingly has not the necessary authorities, to carry out decommissioning.

- Decommissioning may only be carried out by trained staff, which has been authorised for to carry out the tasks.
- If using non-authorised staff, wrong action may cause injuries.

9.2 Temporary decommissioning

For decommissioning over a longer period:

- Switch of machine properly
- Bottle hose to be disconnected from the nitrogen bottle.
- Pressurised air hose to be taken off.
- Machine is fitted with information which states clearly that it is decommissioned temporarily.

9.3 Final decommissioning

For final decommissioning and shut down:

- Switch of machine properly
- Bottle hose to be disconnected from the nitrogen bottle.
- Pressurised air hose to be taken off.
- Remove the machine from the nitrogen bottle.
- Machine is fitted with information which states clearly that it is decommissioned for good.
10 DISASSEMBLY AND DISPOSAL

10.1 Important safety instructions

WARNING!
High pressure
Exiting pressure at the inlets can cause unexpected start-up if the machine is accidentally switched on.

► Before decommissioning, the machine has to be separated from the nitrogen bottle and the pressurised air supply.
► The energy supply recovery can lead to injuries.

10.2 Disassembly

• Decommission and shut down machine for good before disassembly (see chapter 9.3 "Final decommissioning" on page 29).
• Filter and control valve, bottle hose and pipes have to be unscrewed.

10.3 Disposal

10.3.1 Disposal of components

NOTICE
Dispose of assemblies correctly!
Incorrect disposal of assemblies can cause environmental damage and lead to prosecution. In any case, the assemblies must be disposed of in accordance with the relevant national and regional laws and guidelines. Care must be taken to ensure the environmentally-friendly disposal of the process materials.

► Local regulations for the correct recycling and disposal of waste must be adhered to.

Information about waste disposal sites and collecting point can be obtained from the local administration.

The machine consists of:

• Iron / steel
• Aluminium
• Brass
• Plastic
11 SERVICE AND SPARE PARTS

11.1 Service

You can reach our customer service Monday to Friday from (times are UTC + 1) 7 am to 5 pm on
service number +49 (0) 62 66 73 0
Outside of the stated time, there is an automatic message with further information.
Written enquiries to:

FIBRO GMBH
August-Läpple-Weg
DE 74855 Hassmersheim

info@fibro.de

On www.fibro.de you can find all FIBRO subsidiaries worldwide.

11.2 Spare parts

Spare parts must meet the technical requirements specified by FIBRO GMBH.
By ordering original spare parts from FIBRO GMBH, you are assured that these requirements
will be met.

FIBRO GMBH can assume no liability for any damage caused as a result of using non-original
spare parts.
11.3  **Spare parts ordering**

Bei der Bestellung von Ersatzteilen bitten wir um folgende Angaben:

- Name, address, mailing address
- Exact name of the machine Serial number from type plate (see chapter 3.1.1 "Type plate" on page 16)
- Exact name of the spare part
  - If necessary, provide samples, photos or sketches
- Number of required spare parts

Please send your spare parts order to
FIBRO GMBH
August-Läpple-Weg
DE 74855 Hassmersheim

info@fibro.de

On www.fibro.de you can find all FIBRO subsidiaries worldwide.

On receipt of the spare parts delivery:

- Number, correctness and condition of the supplied parts
- Please feedback any errors immediately

Claims for compensation due to transport damage have to be made immediately.
12 INDEXES

12.1 Third-party products

The product contains no components from third-party companies.

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