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New

Operating instructions MULTI.PRESS 150-10

ORIGINAL INSTRUCTION MANUAL
READ CAREFULLY BEFORE USE
KEEP FOR FUTURE REFERENCE

 iwTools

Operating instructions MULTI.PRESS 150-10

Imprint



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1. Introduction

The instructions have been created as examples. Since the variants of this version have the same handling, the scope of this manual has been extended. This instruction manual is an integral part of the product and must always be read before use.

1.1 Application of these operating instructions

The operating instructions provide essential information for the safe and efficient handling of the system. It is an integral part of the plant and must be kept in its immediate vicinity at all times accessible to the personnel employed on it. A prerequisite for safe work on the system is compliance with all specified safety instructions and instructions. The staff must therefore have read and understood these operating instructions carefully before starting any work. In addition, the local accident prevention regulations and general safety regulations applicable at the place of use of the system must be observed. Illustrations in this manual are for general understanding purposes and may differ from the actual design of the system. No claims can be derived from this.

Please keep this instruction manual carefully for future reference.

1.2 Subject to change

We reserve the right to make changes to the information contained in this document at any time as a result of our continuous efforts to improve our products.

1.3 Presentation of information

To ensure that you can work quickly and safely with your product with this documentation, uniform safety instructions, symbols, terms and abbreviations are used. For a better understanding, these are explained in the following sections.





1.3.1 Symbols

Warnings and safety instructions in the instructions are marked by pictograms and highlighted in a gray block. Warnings and safety warnings that draw attention to fundamental dangers are also introduced with signal words that express the extent of the damage. These are structured as follows:

- Be sure to comply with all warnings and safety instructions!
- Always act prudently when working to avoid accidents, personal injury and property damage!

Special safety precautions

In order to draw attention to special hazards, the following pictograms are used in conjunction with safety instructions:
Table 1: Overview Warning Signs

Warning sign	Meaning
	DANGER indicates an imminently dangerous situation that will result in death or significant injury if not avoided.
	WARNING indicates a potentially dangerous situation that could result in death or significant injury if not avoided.
	CAUTION indicates a potentially dangerous situation that may result in minor or minor injuries if not avoided.
	ATTENTION points out a situation that may lead to property damage if not avoided

In the operating instructions, the following terms and symbols are used for hazards or indications:

Table 2: Overview of special safety instructions










<p>This symbol signifies an imminent danger. for the life and health of individuals. Failure to follow these instructions can result in serious adverse health effects, including life-threatening injuries.</p>	 Ecd f p
<p>This symbol signifies an imminent danger from electrical energy. Failure to follow these instructions can result in serious adverse health effects, including life-threatening injuries.</p>	 Gefahr !
<p>Danger from retraction, trapping</p>	
<p>Hand injury warning! e.g.: squeezing, cutting, shearing or shearing off</p>	
<p>Use hand protection!</p>	
<p>Use hearing protection!</p>	
<p>This symbol provides information on how to handle the machine properly. Failure to follow these instructions may result in malfunctions on the machine or in the surrounding area.</p>	 Wichtig
<p>Under this icon, you will receive application tips and particularly useful information. They help you to make the most of all the functions on your machine.</p>	

Table 3: Structure of a safety notice

Misuse	Nature and source of danger
Warning sign	Warning signs as shown in the table below.
Reasons for misuse	Describes possible reasons for misuse.
Possible consequences of misuse	Describes the consequences of non-compliance.
Hazard prevention measures	Specifies how to avoid the danger.

Table 4: Structure of a clue

Sign	Meaning
	NOTE refers to essential information or features and application tips of the product used.

1.3.2 Brands

The products, names and logos mentioned are for informational purposes only and may be trademarks of their respective owners, without any special identification.

1.3.3 Typography

Italics or bold spelling represent the title of a document or are used for emphasis.

1.3.4 Pressure

This manual was created using MS-WORD for Windows on a personal computer.

The text was printed in Arial.

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1.5 Liability

The liability is based on the iwis terms and conditions of sale and delivery, which are available under www.iwis.de.

Liability is excluded insofar as it is attributable to one or more of the following causes, except in the case of intent or gross negligence on the part of iwis.

- Improper use
- Improperly performed work on the product
- Operation of the visualization interface in the event of technical defects
- Mechanical or electrical modifications to the product made on your own initiative, Changed configuration
- Unauthorized repairs
- Use by unqualified personnel
- Use of non-approved spare parts
- Incorrect assembly and/or improper handling
- Failure to comply with these operating instructions

2 Use, Operator Obligations, Basic Safety Instructions

This section provides an overview of important safety aspects to protect the operator and operators from possible hazards and to ensure the safe and trouble-free operation of operations. Failure to comply with the listed instructions, warnings and safety instructions can result in considerable dangers.

2.1 Intended use

The MultiPress is intended exclusively for the following industrial uses:



The MultiPress is designed exclusively for cutting roller chains of the sizes specified in the technical data.

Under other conditions, the MultiPress is not usable.

WARNING!

Danger due to improper use!

- Any use of the machine other than its intended purpose may lead to dangerous situations.
- As a matter of principle, use the machine only as intended in accordance with the instructions in this document, in particular in compliance with the limits of use specified in the technical data.
- Do not use the machine in any other way beyond or in any other way.
- refrain from modifying, converting or altering the design or individual pieces of equipment with the aim of changing the area of application or the usability of the machine.

Claims of any kind due to damage resulting from improper use are excluded.

The operator is solely liable for all damages caused by improper use.

2.2 Improper use



WARNING!

Risk of injury due to misuse

Misuse of the machine can lead to dangerous situations for people and cause serious property damage.

- Refrain from any misuse of the machine

Uses other than those listed above are not permitted, as improper use may result in hazards that may injure persons working on the machine or in the surrounding area, or cause damage to the machine.

Such improper uses may include:

- Plastic deformation of components in the sense of a bending bench, for example
- as a punching device for e.g. enlarging holes in metal parts
- for the assembly of components such as bearings and other pressed composites

2.3 General instructions for use

2.3.1 Responsibility of the operator

Operator: Operator is any natural or legal person who uses the MultiPress or makes it available to third parties for use and is responsible for the safety of the user, personnel or third parties during use.

Obligations of the Operator:

1. find out about the applicable occupational health and safety regulations
2. by means of a risk assessment, identify possible additional hazards that arise from the specific areas of application at the place of use of the machine.
3. implement the necessary behaviors requirements for the operation of the machine at the point of use in operating instructions.
4. regularly check during the entire period of operation of the machine whether the operating instructions prepared by him correspond to the current state of the regulations
5. adapt the operating instructions, if necessary, to new regulations, standards and operating conditions.
6. clearly and unambiguously define responsibilities for the installation, operation, maintenance and cleaning of the machine.
7. ensure that all employees working on the machine have read and understood the operating instructions.
8. In addition, he must train the personnel at regular intervals in the use of the machine and inform them about the possible dangers.
9. Provide the personnel in charge of working on the machine with the prescribed and recommended protective equipment.
10. Only people who are cognitively, mentally and physically fit for use work on the device.

Furthermore, the operator is responsible for ensuring that the MultiPress

1. is always in a technically perfect condition.
2. is maintained according to the specified maintenance intervals.
3. All safety devices of the machine are regularly checked for completeness and functionality.

2.3.2 Responsibility of the staff

The MultiPress is in industrial use. The staff is therefore subject to the legal obligations for occupational safety. In addition to the warnings and safety instructions in this manual, the safety, accident prevention and environmental protection regulations applicable to the area of application must be complied with.

In particular, the staff

1. is informed about the applicable occupational health and safety regulations.
2. the behavioural requirements set out in the operating instructions for the operation of the machine at the place of use.
3. properly carries out the assigned responsibilities for the operation, maintenance and cleaning of the machine.
4. must have read and understood the operating instructions in full before starting work.
5. uses the prescribed and recommended protective equipment.

Furthermore, each employee at MultiPress is responsible for ensuring that the MultiPress

1. is always in perfect technical condition.
2. is maintained according to specified maintenance intervals.
3. all safety devices are regularly checked for completeness and functionality.

2.3.3 Skill



WARNING!

Risk of injury in case of insufficient qualification!

- Improper work can lead to considerable personal injury and property damage.
- Any activity may only be carried out by persons who have the necessary training, knowledge and experience.

Operators

The MultiPress may only be transported, operated, equipped and maintained by instructed persons who have been informed in detail and verifiably by the operator about the tasks assigned to them and possible hazards.

2.3.4 User

A user is any person who performs activities on the machine. Each user must meet the following quality requirements, depending on their activity.

Qualification of users according to life stages and task categories

Activity	Staff
Transport	Transport staff
Installation and commissioning	Operators
Service	Operators
Cleaning, maintenance, retrofitting	Operators
Maintenance	Professionals
Emergency maintenance	Professionals
Dismantling	Professionals
Disposal	Trained staff

2.3.5 Staffing Requirements

Basic

Any activities on the plant may only be carried out by persons who can carry out their work properly and reliably and who meet the specified requirements.

1. Persons whose ability to react is affected, e.g. by drugs, alcohol or medication, are not allowed to carry out work.
2. When deploying personnel, always observe the age- and occupation-specific regulations applicable at the place of work.

Qualification



WARNING!

Risk of injury in case of insufficient qualification!

Improper work can lead to considerable personal injury and property damage.

- Any activity may only be carried out by persons who have the necessary training, knowledge and experience.

Trained staff

Trained personnel are persons who have been informed in detail and demonstrably by the operator about the tasks assigned to them and possible hazards.

Professionals

Qualified personnel are those who, on the basis of their professional training, knowledge and experience as well as knowledge of the relevant regulations, are able to carry out the entrusted work properly, to recognize possible dangers to self-employed persons and to avoid personal injury or damage to property.

Meddler



WARNING!

Risk of injury for unauthorized persons!

- Persons who have not been instructed are not aware of the dangers in the work area and are considered unauthorized.
- Keep unauthorized persons away from the work area, address the person concerned in case of doubt and expel them from the work area.
- Interrupt work as long as unauthorized persons are in the work area.

An unauthorized person is any person who:

1. has not read these operating instructions or has not read them in full or has not clearly understood them
2. does not meet the qualification requirements required for activities on the installation
3. has not received any instruction from the operator or his authorized representative for their work on the installation and/or has not been commissioned.

2.3.6 General Accident Prevention Regulations

The basic prerequisite for safe working is compliance with all specified safety instructions!

In addition to the information in this guide, local accident prevention and environmental regulations as well as national occupational health and safety regulations apply.






2.3.7 Personal Protective Equipment

At work, it is necessary to wear personal protective equipment to minimize health hazards. Therefore:

1. Before starting any work, properly put on the designated protective equipment and wear it during work.
2. In addition, be sure to pay attention to the signs with pictograms for personal protective equipment in the work area.

Basically to wear

In all work, as a matter of principle,

<p>Protective workwear Tight-fitting workwear with low tear resistance, with tight sleeves and no protruding parts, mainly to protect against being caught by moving machine parts. Do not wear rings, necklaces or other jewelry</p>	
<p>Sturdy protective gloves Tight-fitting workwear with low tear resistance, with tight sleeves and no protruding parts, mainly to protect against being caught by moving machine parts. Do not wear rings, necklaces or other jewelry</p>	
<p>Safety shoes to protect the feet from injuries caused by falling parts and against slipping and falling on slippery surfaces.</p>	
<p>Hearing protectors to protect against hearing damage</p>	
<p>Goggles to protect against injuries to the eyes caused by flying parts, particles, liquid splashes or escaping compressed air.</p>	

2.4 Dangers

The MultiPress has undergone a risk assessment. The hazards identified in this process were eliminated as far as possible and identified risks were reduced. Nevertheless, there are residual risks associated with the MultiPress, which are described in the following section.

Be sure to follow the warnings and safety instructions listed here and in the action chapters of this guide in order to avoid possible damage to health and dangerous situations.

2.5 Risks due to mechanical hazards

Moving parts



WARNING!

Risk of injury due to moving components!

- Moving assemblies or parts can cause serious injuries!
- Do not allow persons to stay in the danger zone or in the immediate vicinity.
- Do not disable, disable, or circumvent any safety devices and/or functions.
- Never interfere with running machines.
- Before starting work at hazardous locations, always wait for the downstream components to come to a standstill and for residual energy to be automatically dissipated.

Crush points on moving components



WARNING!

Risk of crushing!

- During operation, the moving parts can crush body parts!
- Do not enter the hazardous area during operation.
- Always carry out set-up and maintenance work as well as troubleshooting with special care and attention to the pinch points.
- When working in hazardous areas, wear protective equipment to protect against crushing.

2.6 Risks from noise



WARNING!

Hearing damage caused by noise!

- The noise that occurs in the work area can lead to severe hearing damage or even deafness.
- Always wear hearing protection when working.
- Stay in the danger zone only if necessary.

2.7 Risks from materials and substances



WARNING!

Risk of poisoning when handling hydraulic oil!

- Hydraulic oils can cause poisoning or skin irritation.
- Observe the safety instructions of the lubricant dealers.
- Avoid spillage or spraying.
- Do not eat, drink, smoke at work.
- Avoid skin and eye contact
- Apply skin protection cream before handling lubricant.
- Wear protective plastic gloves when working, put on safety goggles with side protection when working with oils.
- Wash after work and use skin care cream.

2.8 Safety



WARNING!

Danger to life due to defective or bypassed safety devices!

- Non-functioning, bypassed, or overridden Safety devices do not protect against the dangers and can lead to significant injury or death.
- Before starting work, always check that all safety devices are correctly installed and functional.
- Never override safety devices.
- Ensure that safety devices are always freely accessible.

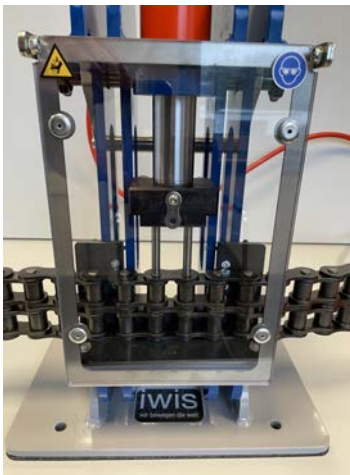


Illustration 1: Protective screen

Protective Shield – Separating Guard

The MultiPress has a protective screen that must be used for all pressing operations.

The protective screen covers the area in front of the press, at an angle of about 90 degrees. See Figure 3

2.9 Work, protection and danger area

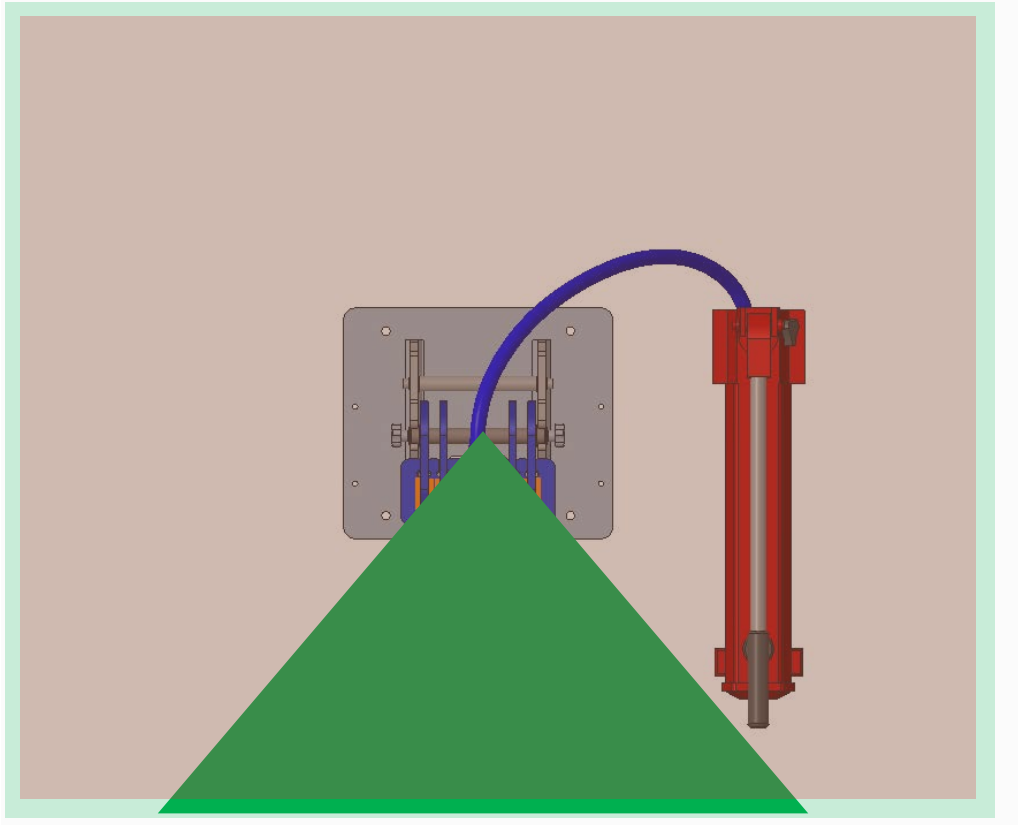


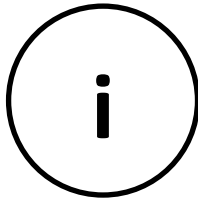
Illustration 2: Working, Protective and Hazardous Areas

The **working area** is the area in which persons work on or operate the equipment in normal operation, excluding inspection, maintenance, cleaning, repair. The work area (green area) may only be entered by authorized operators for the purpose of using the system.

A **hazardous area** is the area in which a person is directly exposed to the risk of injury or damage to health. The danger zone (red area) is clearly marked and must not be entered by persons during the operation of the system.

The **protected area** is the area in which a person is protected from injuries caused by splinters, chips or the like when operating the press through the protective device.

2.10 Environmental protection



Attention!

Environmental damage caused by incorrect treatment of hazardous substances

- Incorrect or negligent use of hazardous substances can lead to serious environmental pollution.
- Carefully remove leaking, used or excess hydraulic oil
- Collect replaced oil in suitable containers
- Treat paint residues, solvents and cleaning agents according to the manufacturer's safety data sheet.
- Dispose of all hazardous substances in accordance with local regulations, if necessary, commission a specialist company

2.11 Site Requirements

Surface

The substrate for installation must:

1. have sufficient load bearing capacity
2. have a non-slip surface
3. Installation on a flat surface
4. when used upright, it must be aligned horizontally

Conditions of installation

1. Select installation location according to the required space requirement according to the system layout
2. When setting up, observe the requirements of the regional regulations at the place of operation with regard to the space to be kept free and escape routes.

2.12 Storage requirements

Storage

As a matter of principle, the components of the MultiPress are only stored under the following conditions:

1. Do not store outdoors
2. Store in a dry and dust-free place
3. Spray bare parts with corrosion protection
4. Do not expose yourself to aggressive media
5. Protect from strong sunlight
6. Avoid mechanical shocks
7. Storage temperature 5 to 45 °C
8. Relative humidity max. 60%


If stored for more than 3 months, regularly check the general condition of all parts and, if necessary, the packaging. If necessary, refresh or renew the preservation.

2.13 Transport Inspection

If the packaging is damaged, the product must be checked to ensure that it is working properly. The check must be carried out by qualified personnel (see chapter "Personnel selection...").

2.14 Packaging / Outer packaging

When repackaging the product, care must be taken to ensure that no damage is caused to the device. If damage to the product occurs during this "outer packaging" operation, the product must be checked for functionality by appropriate specialists.

Sign	Meaning
	NOTE Handling of packaging material The original packaging is made of reusable/recyclable material and can be recycled.

Nameplate



Typ: Multipress 150 - 10

Seriennummer: W - 001

Baujahr: 2022

Hub: 150mm

Hubkraft: 10t

iwis antriebssysteme GmbH
Essener Str. 23
57234 Wilnsdorf

Illustration 3:Nameplate

The nameplate is located on the base frame.

3 Function and structure

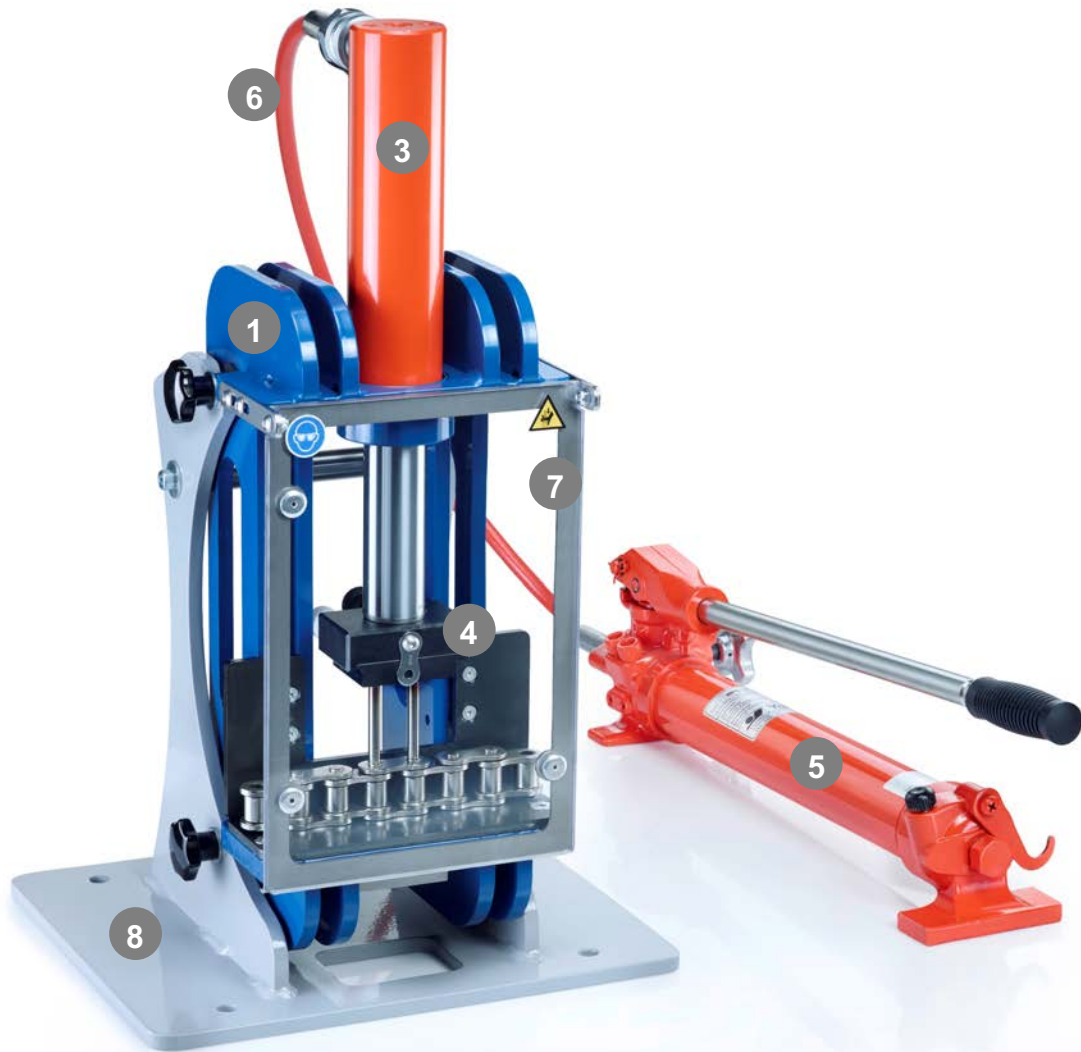


Illustration 4: Function and structure

- 1 press rack
- 2 chain support
- 3 hydraulic cylinders
- 4 Tool holder

- 5 Hydraulic Hand Pump
- 6 Hydraulic hose
- 7 Protective screen
- 8 Table frame

3.1 Structure and function

3.1.1 Short description of the MultiPress

The MultiPress consists of a press frame that accommodates the hydraulic cylinder at the upper end and the chain support at the lower end. The tool holder is mounted on the hydraulic cylinder, which holds the corresponding tool depending on the work step.

The hydraulic supply is realized by means of a hydraulic hand pump and passed on to the hydraulic cylinder via a hydraulic hose with quick coupling.

The MultiPress also has a protective screen that is clamped to the front of the press frame.

The press frame is mounted in a table frame that can be permanently installed in a workstation.

3.1.2 Hydraulics

The MultiPress 150-10 is equipped with a Yale hydraulic system and comes ready to use. For transport reasons, the hydraulic hose is disassembled from the cylinder by means of a quick coupling.

The entire manual of the hydraulic system can be found in Part 2.

4 Scope of delivery

The scope of delivery of the system depends on the respective configuration, i.e. the selected components. These depend on the types of chains that are to be processed. The system consists of the following components:

Quantity	Description
1x	Press frame with guard, tool holder and chain table
1x	Table frame
1x	Hydraulic Hand Pump
1x	Hydraulic hose with quick coupling
1x	Hydraulic cylinder
Xx	Tool sets depending on configuration

5 Installation and commissioning

5.1 General safety instructions for installation



WARNING!

Risk of injury due to improper installation!

- Improper execution of work and errors during installation can lead to serious injuries at work and life-threatening situations during commissioning and operation.
- Any installation work may only be carried out by trained personnel authorized by the operator.
- Before starting work, ensure sufficient freedom of assembly.
- Always pay attention to order and cleanliness in the work area!

5.2 Table frame

5.2.1 Vertical operation

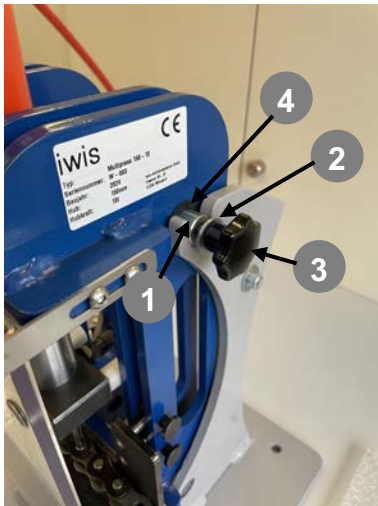


Illustration 5: Installation of press frame

In vertical operation, the press frame is mounted in the table frame.

To do this, the upper rod (1) is first fed into the upper guide (4) of the press frame and pre-assembled on both sides with the U-washers (2) and the star handle screws (3).

In the next step, the press frame is inserted into the table frame.



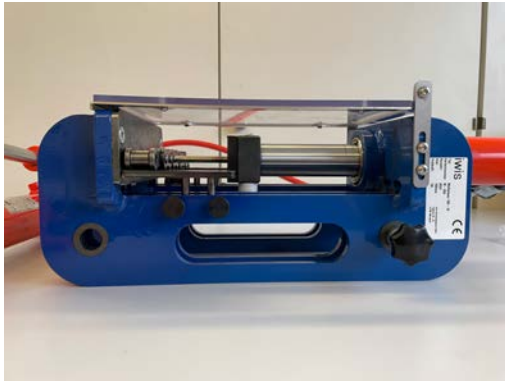
Illustration 6: Hook-in press rack

Finally, the lower rod is mounted identically to the upper one and all four star handle screws are screwed in by hand.

The table frame must be placed on a non-slip surface or, alternatively, screwed to the table via the holes (5) provided for this purpose. The installation surface must be leveled and horizontal.

5.3 Press rack

5.3.1 Horizontal operation



The base frame of the press must be placed on a flat and horizontal surface when operating horizontally.

The danger zone, see chapter 2.9, changes according to the orientation in the horizontal area and must therefore be reassessed.

Illustration 7: Horizontal operation

5.4 Hydraulics

The hydraulic system is delivered filled.

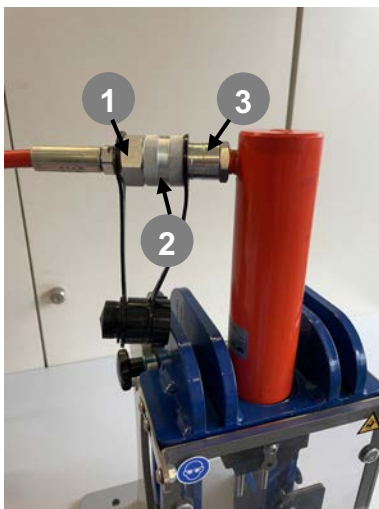


Illustration 8: Hydraulic coupling connection

For commissioning, the dust caps are first unscrewed from the quick couplings on the hydraulic hose and cylinder. The quick couplers (1+3) are then inserted into each other and secured with the union nut (2). The screw connection is tightened by hand.



Illustration 9: Fixation Hand Pump

The hydraulic pump must be placed on a solid surface and fixed. Screw clamps, for example, are suitable for this purpose. When setting up a workstation permanently, the hydraulic pump can also be screwed accordingly.

5.1 Tools

5.1.1 Cutting Tool Set

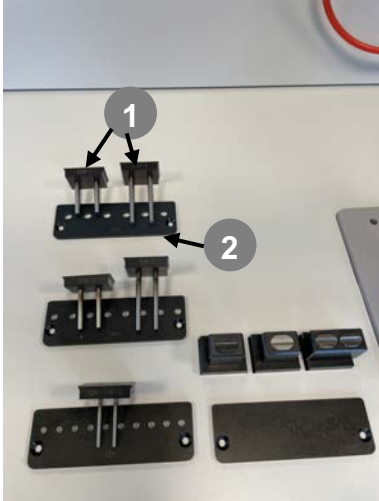


Illustration 10: Tool Kits

The respective tools are only to be used for the intended chain types.

A cutting tool set consists of the cutting tool (1) and the chain support (2). Depending on the chain size, there are 1-3 cutting tools per tool set.

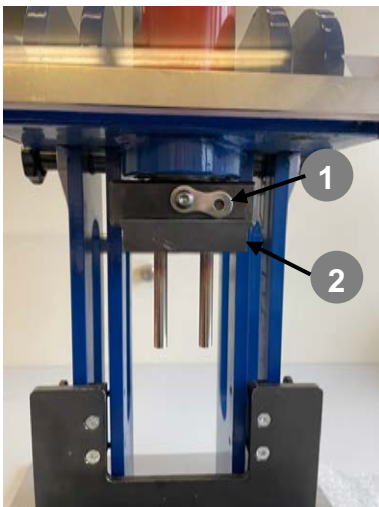
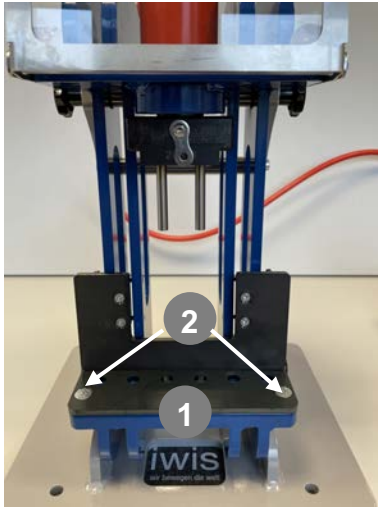


Illustration 11: Assembly of cutting tool

To mount the cutting tool, the locking tab (1) on the tool holder must be held upwards. Subsequently, the cutting tool (2) is mounted in the dovetail guide by inserting it. It is important to make sure that it turns the locking tab back in front of the cutting tool.

5.1.2 Chain support



The chain support (1) is screwed to the press frame with two countersunk screws (2).

To do this, select the chain support according to the chain size and screw it into the frame with the screws supplied.

Illustration 12: Mounting chain support

5.1.3 Chain table

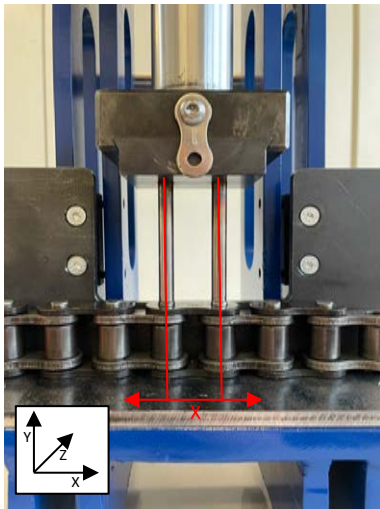


Illustration 13: X-axis alignment

The chain table serves as an aid to simplify the chain alignment and to guide the chain additionally.

To adjust the chain table to match the chain, first adjust the position of the chain in the direction of the X-axis.

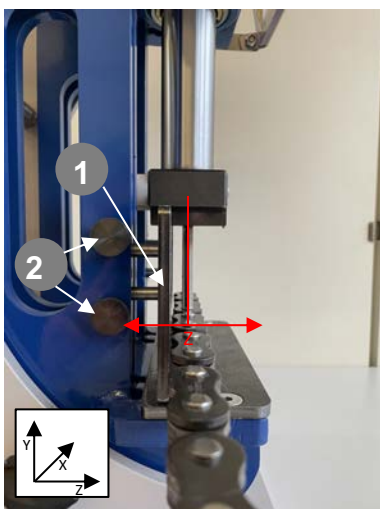


Illustration 14: Z-axis alignment

This is followed by adjusting in the direction of the Z-axis. Once the chain is adjusted in both directions, the knurled screws (2) on both sides of the press are loosened and the chain table is pressed up to the chain. The knurled screws are then tightened again by hand.

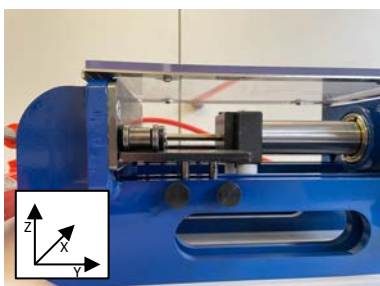


Illustration 15: Horizontal orientation

The alignment when used horizontally is analogous to the alignment when used is stationary.

5.1.4 Protector

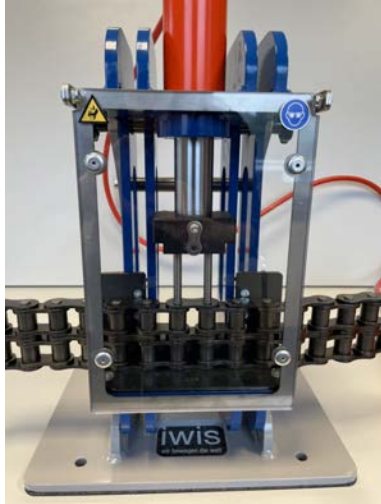


Illustration 16: Protective screen closed

Before the press can be operated, the protective screen must be closed.

During operation, it must also be ensured that there are no persons in the area to the left and right of the press or in the entire area behind the press.

There is a risk of splintering during each cutting process due to metal splinters of the pressed rivet.

6 Operation

6.1 General safety instructions for operation



WARNING!

Risk of injury due to moving components!

Moving parts can cause serious injuries during operation!

- Do not stay in or near hazardous areas.
- Do not disable safety devices.
- Never reach into running fixtures.
- Wait for downtime of lagging components and dissipation of residual energy before working at the danger point.

The chains to be machined must always be machined with the appropriate tool sets.

The cutting tool should always be loaded in the middle to avoid kinking.



WARNING!

Risk of injury from hazardous substances!

Hazardous substances contain components that are harmful to health and can lead to poisoning, chemical burns or skin irritation.

- Observe the manufacturer's safety data sheet.
- Avoid spillage and fog.
- Do not eat, drink, smoke at work.
- Avoid skin and eye contact.

Staff

- Trained staff

Personal Protective Equipment

- Protective workwear
- Sturdy protective gloves
- Non-slip safety shoes
- Goggles

6.2 Cutting chains



WARNING!

Dangers of crushing!

There is a risk of crushing at the separation point during operation.

- Never reach behind the protective screen during operation

General operating instructions for disconnecting

Once the MultiPress 150-10 is ready for operation, the bleed valve on the hydraulic pump must be opened approx. 1/2 turn before starting work. See point 3 in Part 2 (Hydraulic System Operating Instructions)

The drain valve (handwheel) is then opened to release any pressure in the hydraulic hose.

Furthermore, the appropriate tools must be mounted, see chapter 5.5.1".

Finally, it is necessary to ensure that the inlet and outlet on the chain is free.

Then the protective screen is closed, the rivet is broken, and the chain pins are pressed out with the help of the hydraulic pump.

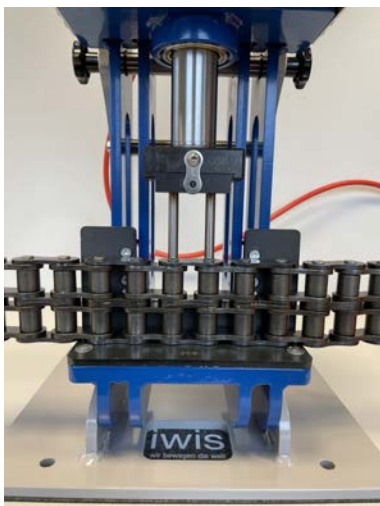


Illustration 17: Start-up cutting tool

In the first step of the cutting process, the riveting of the pin on the upper outer plate must first be broken. To do this, it is important to first use the tool of the respective simplex chain (B-1). After mounting the tools, the chain is inserted, and the chain guide is adjusted appropriately. This is followed by moving the cutting tool, applying only a slight pressure to the bolt to fix the chain. **From this moment on, the protective screen must be closed.**

Subsequently, the cutting process begins by using the hydraulic pump. Always pay attention to the correct alignment of the chain. If it slips or twists, the alignment must be corrected.

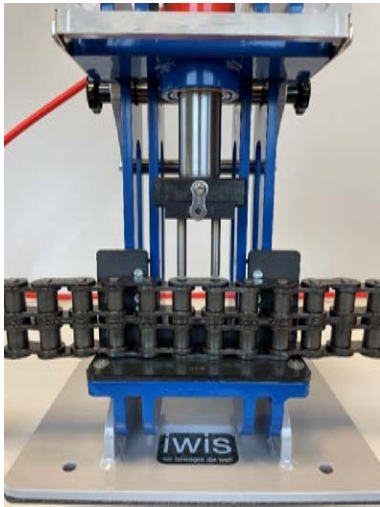


Illustration 18: Riveting broken

The rivet is successfully broken as soon as the chain pin is below the upper outer plates. The bolts should be pressed out at least 1cm further so that the cutting pins of the following cutting tool have sufficient guidance.

If the chain to be cut is a single chain (simplex), the bolt can be completely pressed out of the chain at this point and the cutting process is completed. For multiple chains (duplex or triplex), the following step must be observed.

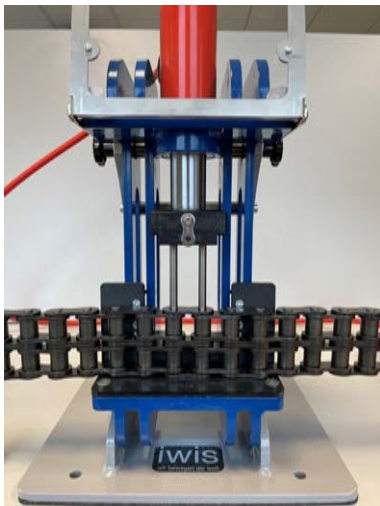


Illustration 19: Cutting Tool Duplex / Triplex

After the chain pin is pressed out with the separating tool of the simplex chain (simple) already about 1cm, the cutting tool is returned up and exchanged for the longer cutting tool for the respective chain type.

Then, with the help of the hydraulic pump, the chain pin is now pressed out of the chain.

This completes the separation process.

6.3 Riveting chain

The riveting tools of the MP150-10 are suitable for mounting type A connecting links. These are riveted on one side.

The assembly of the tools is carried out in the same way as in chapter 5.5.1

The chain lower support for riveting can be used universally for all chain sizes.

Before the riveting process, the outer plate must first be pre-assembled on the chain. The plate must not be pushed too far onto the chain, otherwise the chain may jam. Once the outer plate is pre-assembled, riveting in the press can begin.

To do this, the riveting tool that matches the type of chain is mounted and the chain is aligned accordingly. Here, too, it is important to ensure that the chain is aligned vertically and centrally.

After the protective screen has been closed, the riveting may be applied by means of the hydraulic pump. Depending on the size of the chain and the desired riveting, the necessary pressure or force must be dosed and tested.



Illustration 20: Riveting tools



Illustration 21: Alignment riveting

7 Specifications

7.1 Dimensions

Data	
Height	570 mm
Width	350 mm
Depth	300 mm
Pressure	700 bars
Power stroke	150 mm
Weight (without tools)	approx. 35 kg
Operation	manual

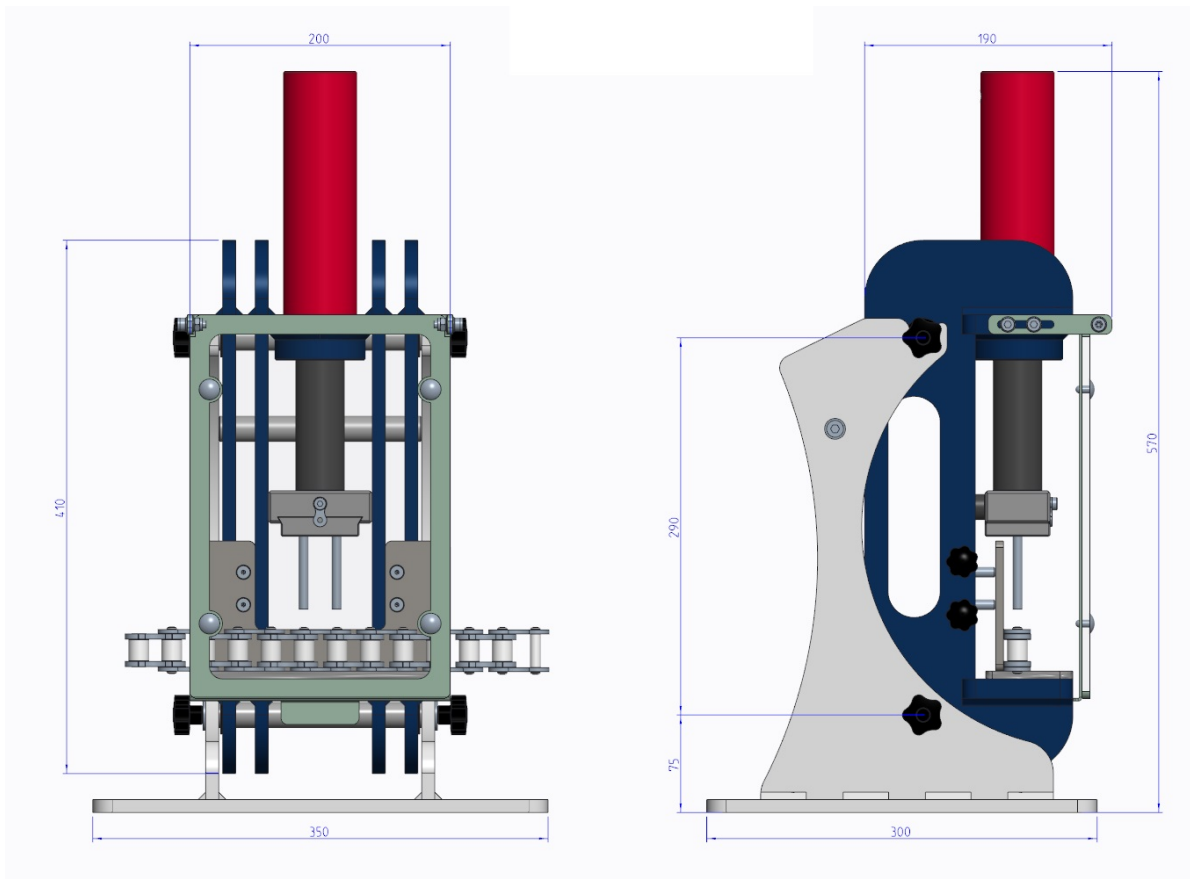


Illustration 22:Dimensions

7.2 Performance

Power Specification	Value	Unit
Lifting speed 1 (approach)	7,5	mm/stroke
Lifting speed 2 (work)	1,4	mm/stroke
Lifting capacity	10.000	Newton

7.3 Chain Types

Data	Designation
Chain Types	Depending on the tool set

8 Declaration

Declaration of Conformity

	Manufacturer Manufacturer
Address	iwis antriebssysteme GmbH & Co. KG Essener-Str. 23, 57234 Wilnsdorf, Germany
Tel.	Phone: +49 2739-860
Product	MultiPress 150-10
Description	Device for cutting chains and connecting chains by means of riveting
Object Classification	Device
Intended purpose	Chain Cutting Tool
Directive	2006/42/EC

The product complies with the essential requirements and regulations of the following standards and methods:

Applied Directives and Standards: EN ISO 12120:2015
EN ISO 4413 2010

This declaration is made submitted by:

9 Care and Maintenance

9.1 Safety instructions for maintenance



WARNING!

Risk of injury due to wrong parts!

Faulty spare parts can severely impair safety and cause damage, malfunctions or even total failure.

- As a matter of principle, only use original spare parts.

WARNING!

Risk of injury due to improper maintenance!

Improper maintenance can lead to significant injury.

- Maintenance work may only be carried out by qualified personnel who have been instructed and authorized by the operator.
- Before starting work, ensure sufficient freedom of assembly.
- Before restarting, ensure that all protective equipment is correctly installed and functional.
- Before restarting, make sure that there are no people in the danger zone.

9.2 Maintenance schedule

The following sections describe the maintenance operations required for optimal and trouble-free operation.



WARNING!

Risk of injury from hazardous substances!

Hazardous substances contain components that are harmful to health and can lead to poisoning, chemical burns or skin irritation.

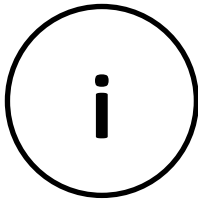
- Observe the manufacturer's safety data sheet.
- Avoid spillage and fog.
- Do not eat, drink, smoke at work.
- Avoid skin and eye contact.
- Before restarting, ensure that all protective equipment is correctly installed and functional.
- Before restarting, make sure that there are no people in the danger zone.

- If increased wear and tear on the components is detected during regular inspections, shorten the maintenance intervals based on the actual signs of wear.
- Make a maintenance log for every maintenance work! The protocol helps with fault analyses, allows the required intervals to be adapted to the actual conditions of use and to make any warranty claims.
- In some cases, the execution of the designated works is dependent on time and/or load. In the case of intervals specified in both time limits and operating hours (Bh), the case that occurs first therefore applies.
- If you have any questions about maintenance work and intervals, please contact the manufacturer.
-

Interval	Maintenance work	Staff
before each start-up	Controls and safety devices on Check perfect technical condition, have defective components replaced if necessary or arrange for repairs	Operator

daily	Cleaning MultiPress	Instructed Staff
weekly	Inspect MultiPress for external damage by means of noise and visual inspection	Professionals
monthly	Visual inspection of the frame construction for damage, eliminating any defects detected	Professionals
	Check that all fasteners are securely fitted, tighten screw connections if necessary (note tightening torques!) or replace fasteners	Professionals
	Check the level of the hydraulic system and check for leaks	Professionals
	The hydraulic system on the MultiPress must be maintained in accordance with Chapter 7 (Part 2) of the Hydraulic Cylinder and Hand Pump Owner's Manual.	Hydraulics-Professionals

9.3 Wear



Attention!

Faults due to wear and tear!

All parts that come into contact with the product must be checked daily for wear and tear and, if necessary, replaced in good time.

10 Errors



WARNING!

Risk of injury due to improper error elimination!

Improper execution of work during troubleshooting can lead to serious injuries.

- Repair work may only be carried out by qualified personnel who have been instructed and authorized by the operator.
- Before starting work, ensure sufficient freedom of assembly.
- Always pay attention to order and cleanliness in the work area! Loose Objects, components, workpieces and tools lying around, as well as cleaning equipment, are sources of accidents.
- If components have been replaced, check that the spare parts are installed correctly. Install all fasteners properly.
- Maintain bolt tightening torques.
- Before restarting, ensure that all protective equipment is correctly installed and functional.
- Before restarting, make sure that there are no people in the danger zone.

10.1 What to do in the event of malfunctions

Basically, the following applies:

1. In the event of disruptions that pose an imminent danger to persons or property, stop work immediately.
2. Inform the responsible person at the scene.
3. Depending on the type of malfunction, the cause can be determined and eliminated by competent and authorized specialists.

11 Dismantling and disposal

The appliance must not be disposed of with municipal waste (household waste). To return your old device, please use the return and collection systems available to you. Careless disposal of the product can lead to environmental contamination. Dispose of the device in accordance with your country's national regulations.

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Part 2 of 2

Instruction manual for Hydraulic cylinders and foot or hand pumps

1. Unpacking:

Inspect all Yale hydraulic equipment for the Unpacking for possible transport damage. These must be reported to the carrier immediately, as they are not covered by the Yale Warranty Terms.

2. Commissioning:

Yale hydraulic tools are supplied ready-to-use with coupling sleeves, all Yale hand pumps are filled with hydraulic oil. Check the oil level with the dipstick before starting.

3. Bleeding the system:

When commissioning new hydraulic cylinders, you should first bleed the system. To do this, retract and extend the hydraulic cylinder a few times and hold it up with the clutch connection while retracting. As a result, the air collects in the area of the oil connection and is transported to the tank by the hydraulic oil flowing back. If necessary, the hydraulic oil must be refilled.

4. Extending the hydraulic cylinder:

Open the tank vent and use the handwheel to close the drain valve. Engage the hydraulic cylinder by completely closing the coupling sleeve cover. If the coupling is not fully connected, the flow through the inner locking balls is blocked. The couplings on all Yale hydraulic cylinders are self-sealing and should therefore only be tightened by hand. Now you can extend the cylinder after closing the drain valve.

5. Correct Application:

Yale hydraulic tools are extremely robust and durable. Nevertheless, for your safety and to increase the service life, you should pay attention to the following:

- Never exceed the maximum compressive force (load capacity) of the hydraulic equipment.
- Avoid off-center loads on the pistons.
- The load must always be in the middle and parallel to the piston, avoiding point loads!
- Do not stay under lifted loads if they are not additionally supported.
- Keep heat (e.g. welding) away from the hydraulic equipment.
- Protect the hydraulic hoses from damage and kinking.

Hydraulic hoses should be exposed in a large arc if possible. Avoid tensile stresses.

6. Inclined load for hydraulic cylinders:

To ensure a long service life of the hydraulic cylinders, the devices with the designation "Yale Chromo-Design" are made of high-strength **chrome-molybdenum steel**, the cylinder housings and piston rods are quenched and tempered, and equipped with bronze guides.

7. Maintenance and Care:

All moving parts should be greased from time to time (e.g. hand lever on the pump head).

All parts should be inspected regularly for damage, depending on the conditions of use. Please replace damaged parts immediately. In addition, all hydraulic cylinders and hand pumps are maintenance-free.

8. Oil level / oil change

The oil should be changed as needed, but at least once a year (e.g. hydraulic oil ISO 32).

The perfect condition of the hydraulic oil is crucial for the service life of your hydraulic equipment.

In case of adverse operating conditions (e.g. dust, moisture, etc.), you should carry out an oil change more frequently as necessary. To do this, use only Yale

Hydraulic oil to maintain your warranty claim.

Carry out regular oil level checks.

**Please behave in an environmentally friendly way -
dispose of your used oil in accordance with the regulations!**

9. Repairs:

Have repair and maintenance work carried out only by qualified personnel; use only original spare parts.

10. Cleanliness:

Keep your hydraulic system clean and protect it from dirt and moisture. The coupling connections in particular should always be clean.

11. Hydraulic connections 3/8-NPT:

The oil connection thread with the designation 3/8 NPT has emerged as an international standard in 700 bar hydraulics.

For 3/8-NPT hydraulic fittings, use approx. 2 layers of Teflon tape for easier sealing, which you can tightly wrap around the external thread (hoses, coupling sleeves, pressure gauge adapters), leaving the first two threads free. Then tighten the connection firmly and check these for tightness.

12. Yale Hydraulic Clutches:

As standard, all hydraulic cylinders are equipped with the coupling sleeve type: CFY-1. The corresponding hydraulic hoses type: HHC-... have the matching coupling plug type: CMY-1.

As a general rule, a coupling should always be used between the hydraulic hose and the hydraulic cylinder.

In addition to being able to separate the devices, the coupling also has the task of forming an axial turning point.

Hydraulic couplings must always be fully coupled, otherwise the flow will be blocked.

The clutch halves have locking balls that prevent the hydraulic oil from leaking.

The couplings are self-sealing. Never pressurize clutch halves without disengaging. Hydraulic cylinders should be fully retracted and depressurized when disengaging. Always keep clutch halves clean.

13. Occupational safety:

All parts in the hydraulics program are tuned to an operating pressure of 700 bar.

(Exception: 2000 bar program)

The safety/pressure relief valves are adjusted to the permissible operating pressure and must not be set higher under any circumstances. The maximum operating pressure of 700 bar must not be exceeded. The built-in pressure relief valves spray the overpressure to the tank when the maximum pressure is reached.

External loads must not exceed the maximum load capacity of the connected hydraulic cylinders.

14. Elimination of possible malfunctions:

Slightly leaking oil on the piston of a hydraulic cylinder does not necessarily indicate a defective seal, it can also be "drag oil" that has accumulated over time in the chamber above the piston. This is normal and insignificant for the function of the cylinder.

Pump does not build up pressure:

- Check that the drain valve (handwheel, pedal for foot pumps) is closed.
- Check the oil level.
- Check that the tank's aeration valve is open.
- There may be dirt in the ball seat.
- Disconnect the cylinder and drive with light pressure against the disconnected clutch plug.

Pump builds up pressure, but cylinder does not extend.

First, check the oil level in the pump.

If the pump is working properly and building up pressure, then:

- the hand lever force of the hand pump increases,
- The hydraulic hoses become stiff.

If possible, use a pressure gauge during these checks.

Temporary disconnection of all consumers (cylinders) facilitates inspection.

If the pump builds up pressure but the hydraulic cylinder still does not extend, do the following:

- Check that the couplings are fully closed.
- Check the hydraulic system for leaks (fittings, seals, etc.)
- Check hydraulic cylinders for leaks
- Check that the tank's vent valve is properly opened.
- In the case of double-acting cylinders, you should check whether the oil may flow from one oil chamber to the other if the seal is defective.

To do this, the piston rod is fully extended and the hose on the piston rod side is disconnected, a pressure gauge is attached to the oil connection on the piston rod side and pressure is built up on the extension side of the cylinder.

If the pressure gauge shows pressure, the

Seal of the extension side defective.

Hydraulic cylinder does not retract:

For single-acting hydraulic cylinders:

- Check that the coupling halves are fully closed, otherwise the flow will be blocked.
- Please use the type of cylinder to determine whether the connected cylinder has spring retraction.
- The cylinder series YLG, YFG, YEG, YEL do not have a retraction spring in order to keep the overall height as low as possible.
- The piston rods of hydraulic cylinders **without spring retraction** are pushed back either by the load to be lowered or by the weight of the operator.

For double-acting hydraulic cylinders:

- Check whether the return path of the returning hydraulic oil is blocked (e.g. due to a clutch that is not fully closed).
-

System does not hold the pressure:

The hydraulic pump builds up the pressure, but it drops again quite quickly.

- Check the system for leaks
 - Hydraulic cylinder and pump for leaks check.
 - Have the pump repaired
-

Tank vents:

The tanks of Yale hand pumps have ventilation.

This is also where the hydraulic oil is topped up.

Advantages of tank ventilation:

The amount of hydraulic oil can be fully utilized. The pumps have excellent suction characteristics.

Important:

After use, close the hand pump's tank ventilation screw.

This will prevent any loss of oil if the pump accidentally tips over.

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