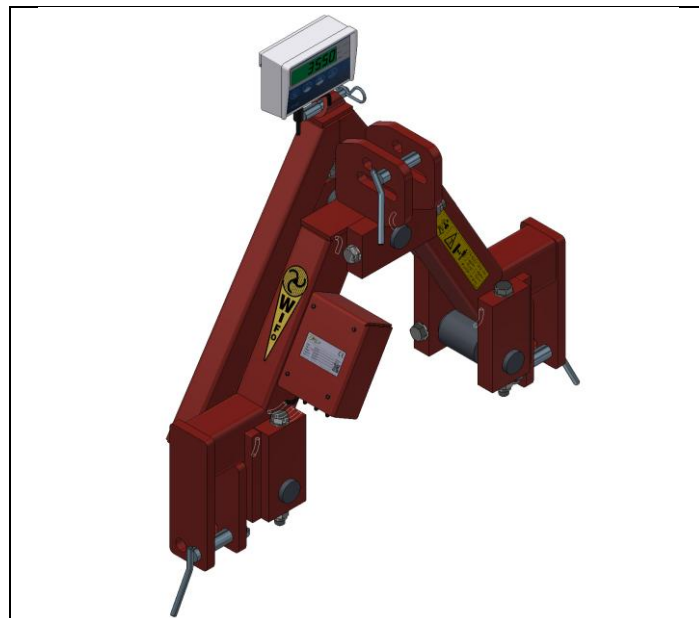


# Weighing equipment

## WI-5000T



WI-5000T

*Appendix WI-5000-T: Operating Manual "Digi-star EZ 400"*





# English

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## 1. To the user

### 1.1 Introduction

The purpose of this manual is to inform you about the commissioning, use and maintenance of your new WIFO weighing equipment. In addition, this manual contains safety instructions to ensure safe operation.

WIFO-Anema B.V. is constantly striving to improve its products. WIFO-Anema B.V. reserves the right to make any changes and improvements it deems necessary.

Before commissioning, please read the manual and safety instructions thoroughly and observe them. If you still have any questions after reading the manual, please contact your dealer.

We hope you enjoy using your WIFO weighing equipment.



**PLEASE NOTE:**

*Please read this manual carefully before putting the machine into operation and follow all instructions. This is to ensure safe, trouble-free operation.*

Keep this manual in a safe place for future reference!

WIFO-Anema B.V.


**Dealer:**


### 1.2 Language and translations

This manual is a translation of the original Dutch version. In case of discrepancies between translations and the Dutch version, the Dutch text prevails.

### 1.3 Safety regulations and warnings

Please read this manual before using the machine for the first time and ensure you follow the safety instructions. Particularly important sections are marked with a pictogram.

|   |  |
|---|--|
|  | <p><i>You will find this symbol next to all important safety instructions in this manual. Follow the instructions carefully and exercise particular caution in these situations.</i></p> |
|---|--|

|   |  |
|---|--|
|  | <p><i>You will find this symbol next to all important safety instructions in this manual. Follow the instructions carefully and exercise particular caution in these situations.</i></p> |
|---|--|

All persons responsible for the commissioning, operation and maintenance of the machine must read the following instructions carefully and observe them.

#### 1.3.1 Safety regulations

The following safety regulations apply to every type of WIFO weighing equipment. No distinction is made here regarding the lifting vehicle used.




***Do not allow anyone to ride on the weighing equipment.***




***Never stand underneath the weighing equipment and stay out of the working area of the attached equipment. Be aware of falling loads.***



***Transport the load as low as possible to keep the lifting equipment as stable as possible.***

|  |   |
|--|---|
|  | <p><b><i>Load the weighing equipment in such a way that the load cannot fall off unexpectedly. Distribute the load as evenly as possible. Keep the load's centre of gravity as close as possible to the mounting frame and always between the measuring pins to ensure an accurate measurement. Ensure that the weighing equipment is vertical during weighing to minimise deviations (+/- 1%).</i></b></p> |
|  | <p><b><i>Operate the weighing equipment with attached equipment exclusively from the driver's seat. Ensure that there is always a clear view of the work from this position.</i></b></p>  |
|  | <p><b><i>Only park the transport implement with the weighing equipment in its lowest position. Ensure that the combination cannot make any unexpected movements when not in use. Place the weighing equipment with the front on a flat, firm surface when it is disconnected and parked.</i></b></p>  |
|  | <p><b><i>Ensure that the weighing computer used to operate the weighing equipment cannot be confused with other control equipment to prevent accidental operation.</i></b></p>  |
|  | <p><b><i>Ensure that the power cables cannot become trapped during operation.</i></b></p>   |

### 1.3.2 Safety stickers and warning symbols

|   |   |
|---|---|
|  | <p><b>Working safely also means that you are fully informed about the various safety stickers on the machine. You must be fully aware of what they are warning you about.</b></p> <p><b>Stickers that are loose, illegible or have come off the machine must be replaced.</b></p> |
|---|---|

There are a number of safety stickers on the machine. The stickers used on this machine have the following meanings:


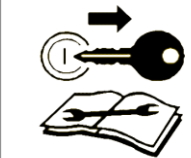

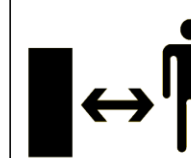
|   |   |   |   |   |   |
|---|---|---|---|---|---|
|  |  |  |  | <p><b>NL</b> Het totaal van de massa van de machine en de lading mag de hefcapaciteit niet overschrijden.</p> <p><b>D</b> Gewicht Anbaugerät und Last zusammen, darf Tragfähigkeit nicht überschreiten.</p> <p><b>F</b> La capacité de levage doit être supérieure au total de la masse de la machine et du chargement.</p> <p><b>GB</b> The weight of the attachment together with the load may not exceed the lifting capacity.</p> | <p><b>NL</b> Zet de machine in de laagste stand indien deze niet gebruikt wordt.</p> <p><b>D</b> Die Maschine muß sich in der untersten Position befinden bei Nichtgebrauch.</p> <p><b>F</b> La machine soit sur la position la plus basse lorsque la machine n'est pas utilisée.</p> <p><b>GB</b> The machine should be in the lowest position when the machine is not used.</p> <p style="text-align: right;"><small>MDSTCE11</small></p> |
|---|---|---|---|---|---|

Figure1 .3.1. WIFO safety sticker

### 1.3.3 Location of safety stickers on the machine

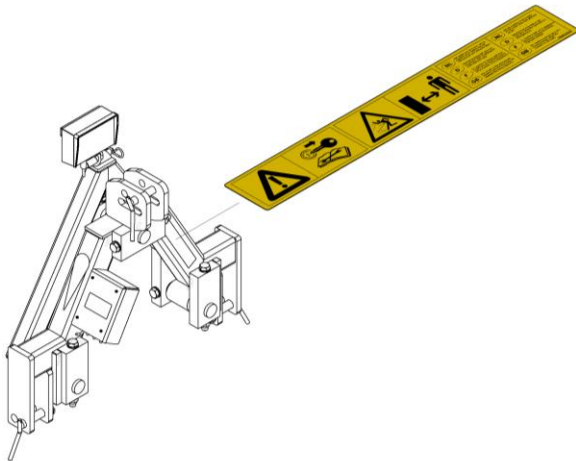


Figure 1.3.2 – Location of safety stickers for WI-5000T

## 1.4 Intended use

WIFO weighing equipments are exclusively suitable for weighing loads with a maximum total weight of 5000 kg. Forces of up to a maximum of 1000 kg may be exerted on the weighing equipment in the horizontal plane!

WIFO weighing equipments are only suitable for use on a tractor with a standard Category II three-point linkage.



**PLEASE NOTE:**

*The lifting capacity of the tractor/telehandler/front loader must exceed the combined weight of the weighing equipment and the load. The lifting capacity of the weighing equipment must not exceed 5000 kg.*



**PLEASE NOTE:**


*The weighing equipment must not be used in combination with, for example, tillage or mowing implements due to the lateral and/or pulling forces involved. In such situations, remove the weighing equipment.*

**WIFO weighing equipments must under no circumstances be used for transporting people!**

## 1.5 Liability

This manual must be read by all persons working on and with this machine. Furthermore, they must use the machine exclusively for its intended purpose. This includes the following points:

1. Work must be carried out exclusively in accordance with the instructions and within the functional limits (e.g. maximum hydraulic working pressure) as specified in the regulations. Only sound and suitable tools must be used.
2. Electrical/electronic equipment, including accessories (e.g. cables), must be handled in accordance with the general rules of use for non-waterproof portable electrical and electronic devices, which means, among other things:
  - a) Store and keep in a clean, dry environment and out of reach of rodents, etc.
  - b) Protect the equipment from hard, uncushioned impacts and from getting wet (rain).
3. Only original or equivalent replacement parts may be used, which must be fitted in accordance with the instructions (e.g. the specified tightening torques). A part (or lubricant) is considered equivalent if it has been expressly approved by WIFO or if it can be demonstrated that it possesses the properties required for the relevant function(s).
4. Always use lubricants that meet the specifications as described in the manual.
5. The regulations in force at the site regarding accident prevention, safety, traffic and transport must be followed at all times.
6. Only persons who are familiar with the machine and aware of potential hazards may work on or with the machine.
7. Modifications to the machine that have not been expressly approved by WIFO exclude any liability on the part of WIFO-Anema B.V. for any resulting damage.

|   |   |
|---|---|
|  | <p><b><i>Failure to comply with the rules and instructions in this manual constitutes gross negligence, thereby excluding any liability on the part of WIFO-Anema B.V. for all resulting consequences. The risk then lies entirely and exclusively with the user.</i></b></p> |
|   | <p><b><i>WIFO-Anema B.V. is constantly engaged in improving its products. It therefore reserves the right to make any changes and improvements it deems necessary. This does not entail any obligation to apply such changes to machines supplied previously.</i></b></p>     |

## 1.6 Warranty

WIFO-Anema B.V. guarantees the soundness of the items it supplies with regard to material and/or construction defects. However, this guarantee is limited in all cases to the replacement or repair, free of charge, of the defective item or part thereof. WIFO-Anema B.V. cannot be held liable for any damage or costs arising from a defective delivery and/or items supplied by us becoming defective within the warranty period. **The warranty period is one year.**

## 2. Technical data

### 2.1 General technical specifications

| Type                            | WI-5000T                      |
|---------------------------------|-------------------------------|
| Measuring range                 | Up to 5000 kg                 |
| Measurement error               | ±1%                           |
| Readout                         | 10 g – 100 kg (standard 1 kg) |
| Connection                      | 12 volts                      |
| Weight                          | 90 kg                         |
| Mounting clearance <sup>1</sup> | 80 mm/120 mm                  |

Table 2.1.1 – WIFO weighing equipment models

<sup>1</sup> For Category II three-point linkage/For Category III three-point linkage.

#### Mounting specifications:

The tractor must be equipped with a standard Category II three-point linkage.

#### Optional extras:

- Mounting bracket.

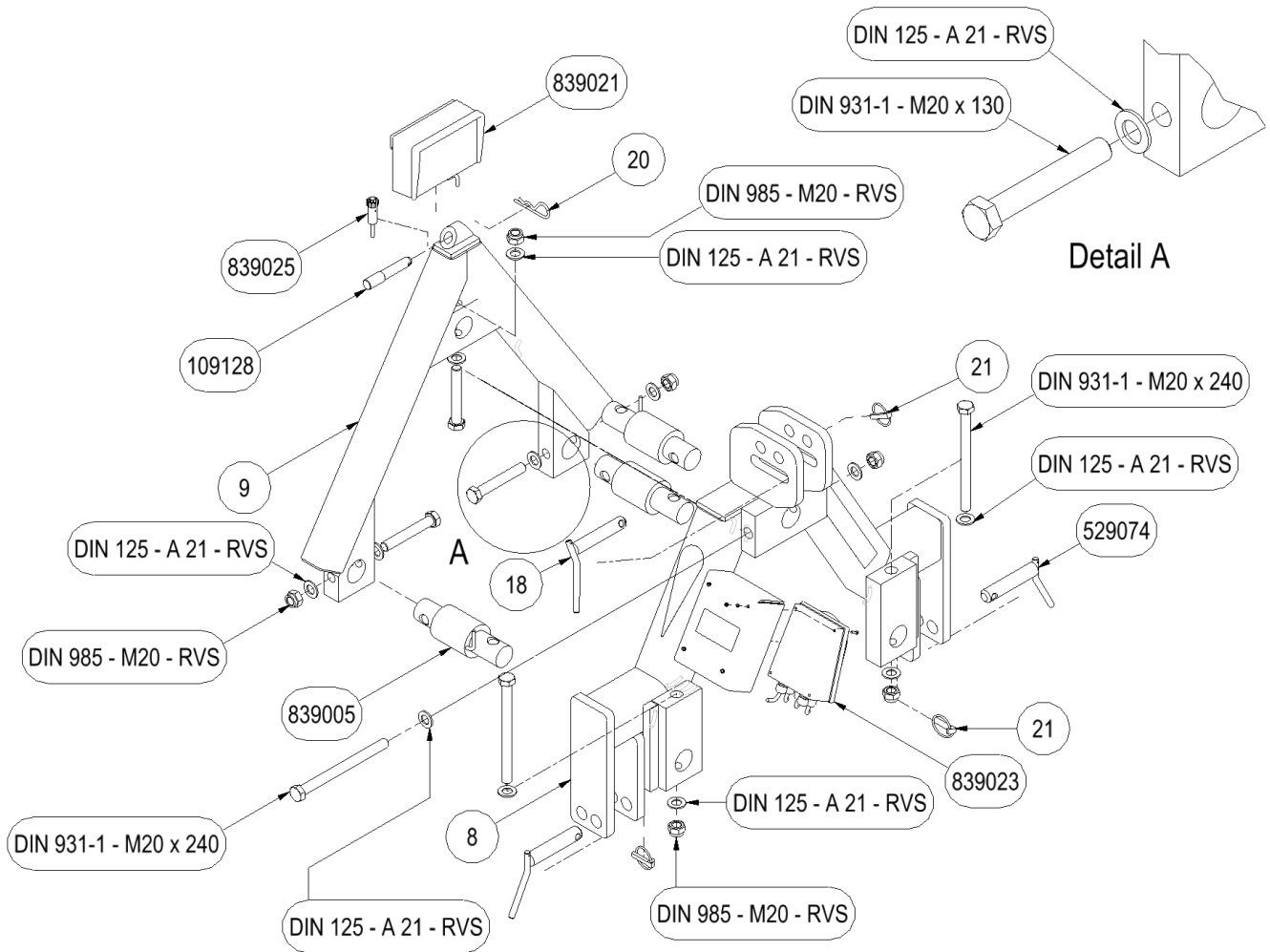


**ATTENTION:**

*Zero adjustment-setting and calibration have been realised by the manufacturer.*

## 2.2 WI-5000T

### 2.2.1 Parts list



| Description                     | Spare part number |
|---------------------------------|-------------------|
| Weighing pin                    | 839005            |
| Power cable Fancom L3000        | 839025            |
| Cable box, complete with cables | 839023            |
| Digistar EZ-400 weighing unit   | 839021            |
| Three-point frame WI-5000T      | 8                 |
| Weighing frame WI-5000T         | 9                 |
| M20 stainless steel washer      | 11                |
| Nyloc nut M20 stainless steel   | 13                |
| Stainless steel bolt M20x240    | 15                |
| Stainless steel bolt M20x130    | 16                |
| Pivot pin (I) - R19 - L120      | 109128            |
| End caps (II) - 25 - L123       | 529084            |
| Support pin (II) - 28 - L123    | 529074            |
| Retaining spring 5 mm single EV | 20                |
| Retaining clip 9x11x45 mm EV    | 21                |

## 2.2.2 Commissioning of the WI-5000T

The following description applies to attachment to a tractor with a three-point linkage:

1. Check that the drawbars of the tractor's lifting mechanism are at the same height.
2. Attach the three-point weighing equipment to the tractor's Category II three-point linkage. Use the spacer sleeves to secure the drawbars properly. Use suitable locking clips.
3. Adjust the top link so that the weighing equipment is perfectly vertical during weighing.
4. The lateral play of the weighing equipment in the lifting mechanism must be minimal. Adjust this using the stabilisers on the lifting mechanism.
5. Attach the implement to the weighing equipment using the mounting bracket and secure it with the pin and retaining spring.

*The weighing computer can be installed after the weighing equipment:*

1. Mount the weighing computer using the mounting plate in such a position that the tractor driver can clearly see and operate the weighing computer from their driving position and cannot confuse it with other controls.
2. Connect the 2-core cable as follows: the red wire (+) must be connected to a fused DC power supply. The black wire (-) must be connected to earth. When connecting, ensure that the terminals are clean and dry.

Ensure the correct voltage for the tractor and the weighing computer. The weighing computer operates at 12 volts.



***Keep the sensor wire, from the weighing equipment to the weighing computer, at a fair distance from live wires and the like, in order to prevent any incorrect readings. The operation of the electronically controlled power lift could also end up deranged. Even a mobile phone call may have an effect on the measuring data of the weighing computer.***

The WIFO weighing equipment is now ready for use.

## 2.3 Accessories/options

### 2.3.1 Extension triangle for WI-5000T

#### Intended use:

An implement such as a fertiliser spreader must be fitted with an extension triangle in order to be attached to the weighing equipment.

#### Commissioning:



**ATTENTION:**

*Welding an extension triangle to a piece of equipment must be carried out by a professional welder/mechanic.*

#### Instructions for use:


Ensure that the support frame fits over the mounting bracket so that the pin fitting passes through the hole in the mounting bracket and can be secured with the locking pin and spring.

### 3. Maintenance and faults

This manual contains the necessary safety instructions for maintenance work on the machine. Compliance with these instructions is mandatory to ensure the safety of personnel and to keep the machine in optimum condition.

#### 3.1 General safety regulations

It is mandatory to wear personal protective equipment (PPE) when carrying out maintenance work on the machine. This is to protect against potential hazards such as mechanical risks, sharp edges, hot surfaces and harmful substances.

|   |   |
|---|---|
|  | <p><b><u>Warning:</u></b><br/><i>Read the instructions in the manual carefully before carrying out maintenance on the machine!</i><br/><i>Switch off the engine and remove the key from the ignition whilst work is being carried out on the machine!</i></p> |
|---|---|

#### 3.2 Required Personal Protective Equipment (PPE)

Maintenance personnel must wear at least the following PPE:

- **Safety goggles** – To protect against dust, sparks or flying particles.
- **Gloves** – Suitable for the specific tasks (cut-resistant, heat-resistant or chemical-resistant gloves, depending on the task).
- **Safety footwear** – With steel or composite toe caps and slip-resistant soles.
- **Hearing protection** - If work is carried out in a noisy environment (>80 dB(A)).

#### 3.3 Specific Safety Measures

- Ensure that the weighing equipment is always in the lowest position when maintenance or repairs are being carried out on the weighing equipment.
- Prevent accidental movement of the weighing equipment during maintenance work by switching off the hoist's engine and removing the key from the ignition. Also ensure that the weighing equipment is properly supported.
- Prevent unauthorised persons from entering the work area.
- Use the correct tools and follow the manufacturer's instructions.
- After maintenance, the machine must be checked to ensure it is functioning correctly before it is put back into service.

### 3.4 Compliance and responsibility

- Failure to comply with these PPE regulations may result in serious injury.
- Employers and employees are jointly responsible for the correct use of PPE.
- Check regularly that the PPE is in good condition and replace it if necessary.

### 3.5 Preventive maintenance and lubrication

After the first 8 hours of operation:

- Tighten all bolts.


### 3.6 Faults

For WI-5000-T: See the “Digi-star EZ 400” operating manual.




*If any other problems arise, please contact your dealer. They will be happy to assist you.*

### 3.7 Tasks to be carried out by the user

|   |  |
|---|--|
|  | <p><b>ATTENTION:</b></p> <p><u>Zero adjustment-setting and calibration have been realised by the manufacturer.</u></p> |
|---|--|

#### 3.7.1 Calibration of the WI-5000T weighing equipment

|   |  |
|---|--|
|  | <p><i>Do not try and calibrate the weighing computer until the weight readings are stable. The calibration procedure is not used for correcting instability, inconsistencies or flashing "RANGE" messages.</i></p> |
|---|--|

1. Set the weighing stand to zero using **the net, gross and zero buttons**.
2. Then hold down **'net gross'** and **'on'** simultaneously.
3. Press **'net gross'** until **'calib'** appears on the display.
4. Then press **'on'** three times.
5. Now load the weighing platform with a heavy weight (min. 1000 kg) of a known value. For best results, you should use a calibration weight of at least the heaviest load to be weighed.
6. Now press **'on'**; the value will start to flash.
7. Enter the correct weight (the calibration weight) using **'net gross'** and **'tare'**.
8. Now press **'on'**.
9. The screen will now display **'good'**.
10. Then press **'on'** until **'end'** appears on the screen.
11. Then press **'on'** once more.

**The weighing computer is now calibrated.**

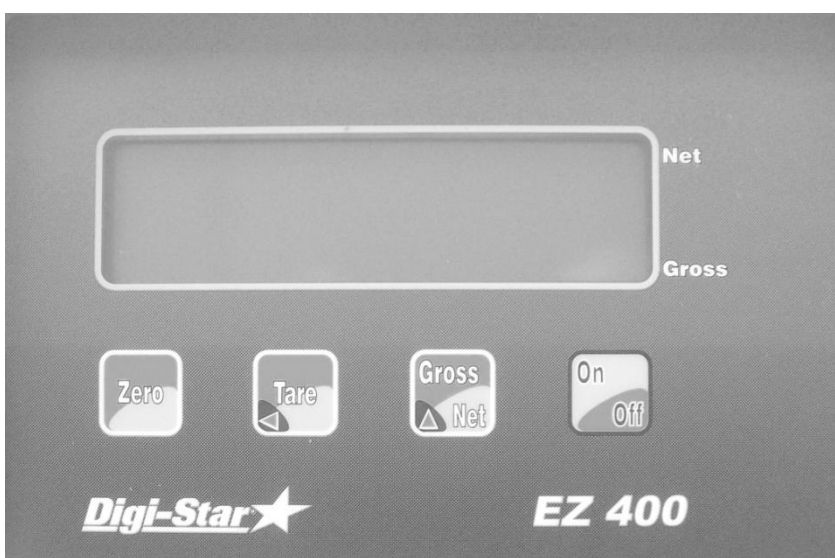


Figure 3.7.1 – Weighing computer control panel

### 3.7.2 Testing the WI-5000T weighing pins

#### Using a multimeter

If you do not have a working weighing computer or connection box, you can test the weighing pins using a multimeter. This method is not entirely reliable. A weighing pin may pass this test but still have a fault. For a reliable result, we recommend testing the weighing pins using a functioning weighing computer.

For WIFO weighing equipments, only Regular DB + DA weighing pins are used. Use Table 3.2.2 to measure the resistance between the various wires of the weighing pin. Replace the weighing pin if the measured value deviates by more than 20% from the value in Table 3.2.2.

If you are using a multimeter, faulty weighing pins will usually give no reading or more than double the value in Table 3.2.2.

| Wire colour                               | Weighing rod Type | Regular DB + DA |
|---|-------------------|-----------------|
| Red & Black                               |                   | 350Ω - 400 Ω    |
| White & Green                             |                   | 350 Ω           |
| Red & Green                               |                   | 262 Ω           |
| Green & Black                             |                   | 262 Ω – 312 Ω   |
| Black & White                             |                   | 262 Ω – 312 Ω   |
| White & Red                               |                   | 262 Ω           |
| Shielding relative to any other conductor |                   | Infinite (open) |

Table 3.7.2 – Resistance values of weighing pins



**Shortened, extended or soldered weighing pin cables may result in inaccurate readings. Contact your supplier for more information and assistance.**

### 3.8 Work to be carried out by a qualified welder/mechanic

#### 3.8.1 Instructions for welding an extension triangle to a tool

Take adequate safety precautions for grinding and welding work (fire hazard, personal protection, etc.)

1. Weld the extension triangle in such a manner to the machine for weighing that the extension triangle can still be easily attached and secured to the coupling triangle.
2. The machine for weighing must be put in the correct position before the weighing procedure. The extension triangle must be in a perfect vertical position for the weighing procedure.

#### 3.8.2 Instructions for replacing a weighing pin

*Ensure that the machine parts are properly supported.*

1. Disconnect the four wires from the load cell to be replaced in the terminal box and feed the load cell's connection cable through the three-point frame so that the load cell and its connection cable can be removed without damage.
2. Remove the bolts from the support frame. Ensure that the mounting hole is clean and free from damage.
3. Fit the lower load cells with the "arrow" marking pointing downwards and the upper load cell with the "arrow" marking pointing upwards.
4. Feed the connection cable from the load cell through the frame without damaging it and in the correct manner. The cable must not be shortened or pinched under any circumstances.
5. Connect the four wires correctly in the terminal box.
6. Reattach the support frame to the weighing pins using the bolts.



***Always use original WIFO parts for replacement in order to comply with the warranty terms and conditions.***

## **EC DECLARATION OF CONFORMITY**

(In accordance with the Machinery Directive 2006/42/EC, Annex II, A)

Name: **WIFO-Anema BV**

Address: **Hegebeintumerdyk 37, 9172GP, Ferwert, Netherlands**

Telephone: **+31 (0)518411318**

Email: **info@wifo.nl**

**Declares that the following machine complies with the relevant directives:**

*Typeplaatje WIFO*

### **Description of the machine:**

The **WIFO WI-5000T** weighing equipment is an interchangeable attachment that can be mounted on a tractor's Category 2 three-point hitch. The weighing equipment has been developed for the accurate weighing of, for example, fertiliser, roughage, pallets, etc.

### **Applicable European directives:**

- Machinery Directive 2006/42/EC

### **Applicable harmonised standards:**

- EN ISO 12100:2010 – General safety principles

Name: **Wytze Anema**

Position: **Director**

A handwritten signature in black ink, appearing to be 'Wytze Anema', written over a horizontal line.

Location: **Ferwert**

Date: **01-01-2025**