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Modular Wieghbridges

SBP/M

SBP/C

S2C



USE AND MAINTENANCE MANUAL

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CHAPTER **1**

GENERAL INFORMATION



**IMPORTANT:**

BEFORE CARRYING OUT ANY OPERATIONS ON THE MACHINES, THE TRAINED OPERATORS AND TECHNICIANS MUST CAREFULLY READ THE INSTRUCTIONS CONTAINED IN THIS MANUAL (AND ATTACHED DOCUMENTS) AND FOLLOW THEM WHILE CARRYING OUT THE VARIOUS OPERATIONS.

IF ANY DOUBTS SHOULD ARISE ON THE CORRECT INTERPRETATION OF THE INSTRUCTIONS, PLEASE CONTACT THE NEAREST SERVICE CENTRE

GENERAL MATTERS

This instruction manual describes:

SERIES AND TYPE: WEIGHBRIDGES SBP/C - SBP/M
YEAR OF MANUFACTURE: (see cover)

This manual is an integral part of the machine and must be kept throughout the entire service life of the same for future consultation.

The purpose of this manual is to inform the operator, by means of texts and figures, of the basic rules and criteria which must be observed to correctly install, use and maintain the instrument.

Safe operation of the system is entrusted firstly to the operator who must possess sufficient knowledge of the former.

The user is responsible for making sure that the installation complies with the relative standards in force.

The equipment must be installed by qualified personnel after reading and understanding the contents of this manual.

Keep the manual within easy reach!

Always follow the instructions it provides!

Weighbridges of types
 SBP/C and SBP/M comply with
 the provisions of directive
 90/384 EEC.

If your copy of the manual becomes unreadable, ask the maker for a new copy at the following address:

SOC. COOP. BILANCI AI CAMPOGALLIANO A.r.l
 41011 Campogalliano (MO) via Ferrari,16
 tel. +39 (0)59 893 611 - fax +39 (0)59 527 079
 home page: <http://www.coopbilanciai.it>
 e-mail: cb@coopbilanciai.it

specifying the machine type and the serial or order number printed on the machine's nameplate.

THE OFFICIAL LANGUAGE OF THE MAKER IS ITALIAN

No responsibility is assumed for translations in other languages, which do not correspond to the original meaning.

This manual reflects the state-of-the-art the moment the machine was supplied and cannot be considered inadequate if there have been subsequent modifications according to further experience.

SOC. COOP. BILANCI AI A.r.l reserves the right to update its products and manuals without being obliged to inform the users of machinery previously supplied of these modifications. The provision of information concerning updates of the machine and manual is to be considered as a form of courtesy.





SOC. COOP. BILANCIAI A.r.l. is at your disposal to provide all the information concerning upgrades that have been applied to machines.

SOC. COOP. BILANCIAI A.r.l. shall be relieved from any liability in the following cases:

- a) improper use of the machine by untrained (or unauthorised) personnel;
- b) use contrary to the specific provisions in force;
- c) incorrect installation;
- d) incorrect energy supply;
- e) badly conducted maintenance;
- f) unauthorised modifications;
- g) use of spurious spare parts or spare parts not designed for the machine;
- h) total or partial failure to comply with instructions;
- i) unexpected events.

GENERAL INFORMATION CONCERNING MACHINE USE

This manual has been written to allow the user to become familiar with the machine and provides instructions for the maintenance operations that are considered fundamental for correct machine performance.

Before installing the machine or carrying out maintenance and repair operations, please read this manual carefully as it contains all the information required to use the machine correctly and prevent accidents.

The frequency of the inspection and maintenance procedures prescribed by the manual is always intended as the minimum necessary for ensuring the efficiency, safety and long life of the machine under normal operating conditions; supervision must in any case be constant in order to take immediate action in the event of faults.

All routine maintenance, controls and lubrication must be carried out with the machine stopped and the supplies (electrical and others) disconnected and by qualified personnel.

Important: by “**qualified personnel**” one means persons that has received sufficient training and have acquired enough professional experience to be authorised by the “Person in charge of safety” to perform the installation, use and maintenance work involving the instrument

Warning: for no reason may the user tamper with the system.
Should any faults arise, contact the nearest service centre.
Any attempt of the user or of unauthorised personnel to disassemble or modify the machine will invalidate the guarantee and relieve the maker from any responsibility for damage or injuries.
The information and illustrations contained in this document are updated as at the date of issue.

Coop Bilanciai is committed to constantly improving its products, therefore some components may be modified

All technical information provided in this manual is property of **SOC. COOP. BILANCIAI A.r.l.** and must be considered confidential.

It is therefore prohibited to reproduce or disclose the information, either wholly or partially, without the prior written consent of the maker.

It is also forbidden to use this manual for any purpose that is not strictly related to the installation, use and maintenance of the weighing platform.





SYMBOLS

Here below are the symbols used in the manual to draw the operators' attention to the various danger levels of the "Use and Maintenance" operations involving the instrument.



DANGER!!

Information on a procedure which could cause the death or injury of persons if it is not strictly adhered to.



ATTENTION!!

Information on a procedure which will cause the death or injury of persons if it is not strictly adhered to.



CAUTION!

Information on a procedure which could cause minor injuries or damage if it is not strictly adhered to.

WARNING



Information or procedure that the operator must follow to ensure correct use of the system, extend its service life, prevent damage or loss of programming or optimise operation in compliance with metric standards.

NOTE

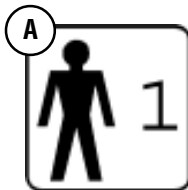


Important information or procedure.

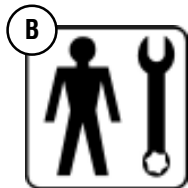




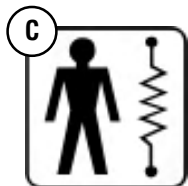
PICTOGRAPHS CONCERNING THE “OPERATOR QUALIFICATION LEVEL”



A - Worker: operator with no specific knowledge, capable of accomplishing simple tasks on the basis of instructions given by qualified technicians.



B - Maintenance mechanic: qualified mechanic capable of running the machine under normal conditions, as well as carrying out adjustments, maintenance and repair work on mechanical parts. Not normally authorised to carry out work on live electric systems.



C - Maintenance electrician: qualified mechanic capable of running the machine under normal conditions; also required to carry out all electrical adjustments, maintenance and repair work. This person is capable of working on live switchboards and junction boxes.



D - Maker's technician: qualified technician provided by the maker to carry out complicated operations in particular situations, as established with the user. Specialised mechanical and/or electric and/or software technicians are available according to need.



E - Driver of lifting and handling gear: operator trained for driving material and machine lifting and transport gear (the instructions of the maker of these must be scrupulously followed) in accordance to the laws in force in the machine user's country. carry out complicated operations in particular situations, as established with the user.





EXPECTED USES

Modular weighbridges of types SBP/M (metal) or SBP/C (iron-concrete) are suitable for weighing vehicles for road transport of any type, provided that they are type approved for free circulation on roads or motorways.

The load weighing system is composed of a set of load cells (from 4 to 10) the number of which depend on the length of the weighbridge.

Weight display and other additional functions (tare, sum of several weights, etc.) are entrusted to electronic terminals that can be associated to the platform.

FORBIDDEN USES

The loads to examine are based on the values established by the Highway Code in art. 62 (art. 10 for exceptional transport).

The maximum load that can be applied to each pair of load cells (heads) must never exceed 35 tons.

In all cases, never exceed the maximum capacity indicated on the weighing instrument.

When weighing loads that are not on wheels (for instance containers), pay attention when placing the load on the platform. Do not drop the load onto the weighbridge.

Other uses are **not permitted**, unless explicitly authorised by Cooperativa Bilanciai.



Usage conditions of weighing instruments are established by the standards in force in the user's country.

Use in conditions not complying with these standards is prohibited.





CHAPTER **2**

IDENTIFICATION DATA



MODULAR WEIGHBRIDGES

SBP/M and SBP/C weighbridges are available in different versions: both with a metal platform or a reinforced concrete one

They have an extremely limited height and can be installed:

- in a pit;
- on a surface;
- on a metal frame (above ground);
- inside existing foundations.

Metal platforms (SBP/M) or metal components of concrete platforms (SBP/C) can be provided in two versions:

- 1) painted;
- 2) hot galvanised.

The weight transduction system consists of compression load cells made of stainless steel with IP67 protection rating.

Weighbridges of the SBP/M and SBP/C series can be connected to any of the electronic weight display terminals manufactured by Coop Bilanciai, both in the “single-scale”, and “multirange” versions.

Weighing systems thus configured feature a CE certificate as established by the 90/384 EEC directive.

POSITION AND EXPLANATION OF THE NAMEPLATES

Identification data is provided on the nameplate on the electronic terminal (see the electronic terminal instruction manual).

For no reason may the information, seals and legalization stamps of the weighbridge and terminal, which are printed on the nameplate, be altered.



If the above are tampered with or removed, the guarantee will be immediately forfeited and the maker will accept no responsibility for damage to material or losses.



MAIN PARTS OF THE SBP/M (pit version)

To facilitate comprehension of this manual, here below is a list of the main components of the weighbridge.

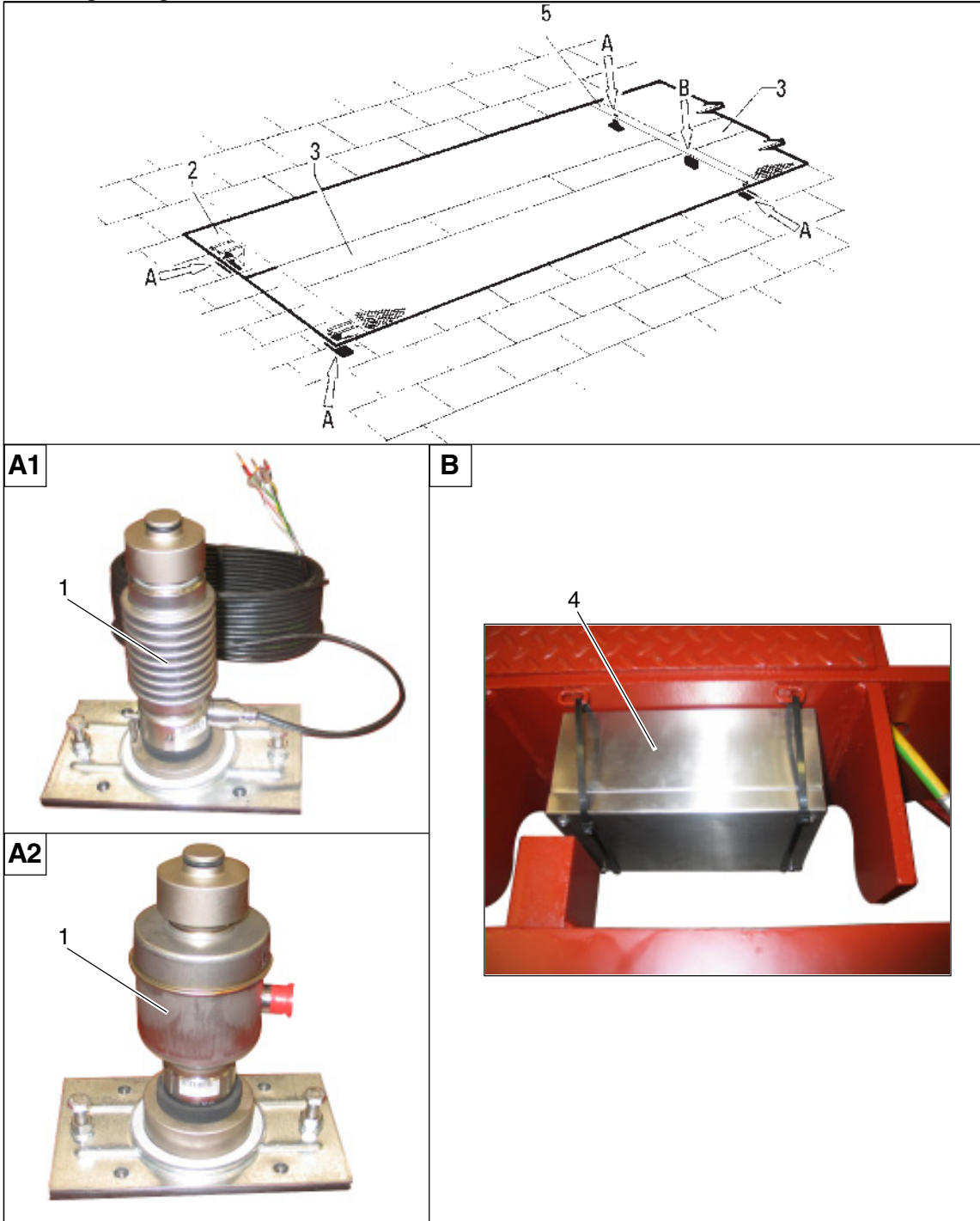


Fig. 2.1 Metal weighbridge, pit version

- 1 - Load cell, analogue (**A1**) / digital (**A2**)
- 2 - External hatches for load cell inspection
- 3 - Longitudinal hatches (optional)
- 4 - Junction box (located inside the pit or inside the weighbridge)
- 5 - Centre hatch for load cell inspection



MAIN PARTS OF THE SBP/M (surface version)

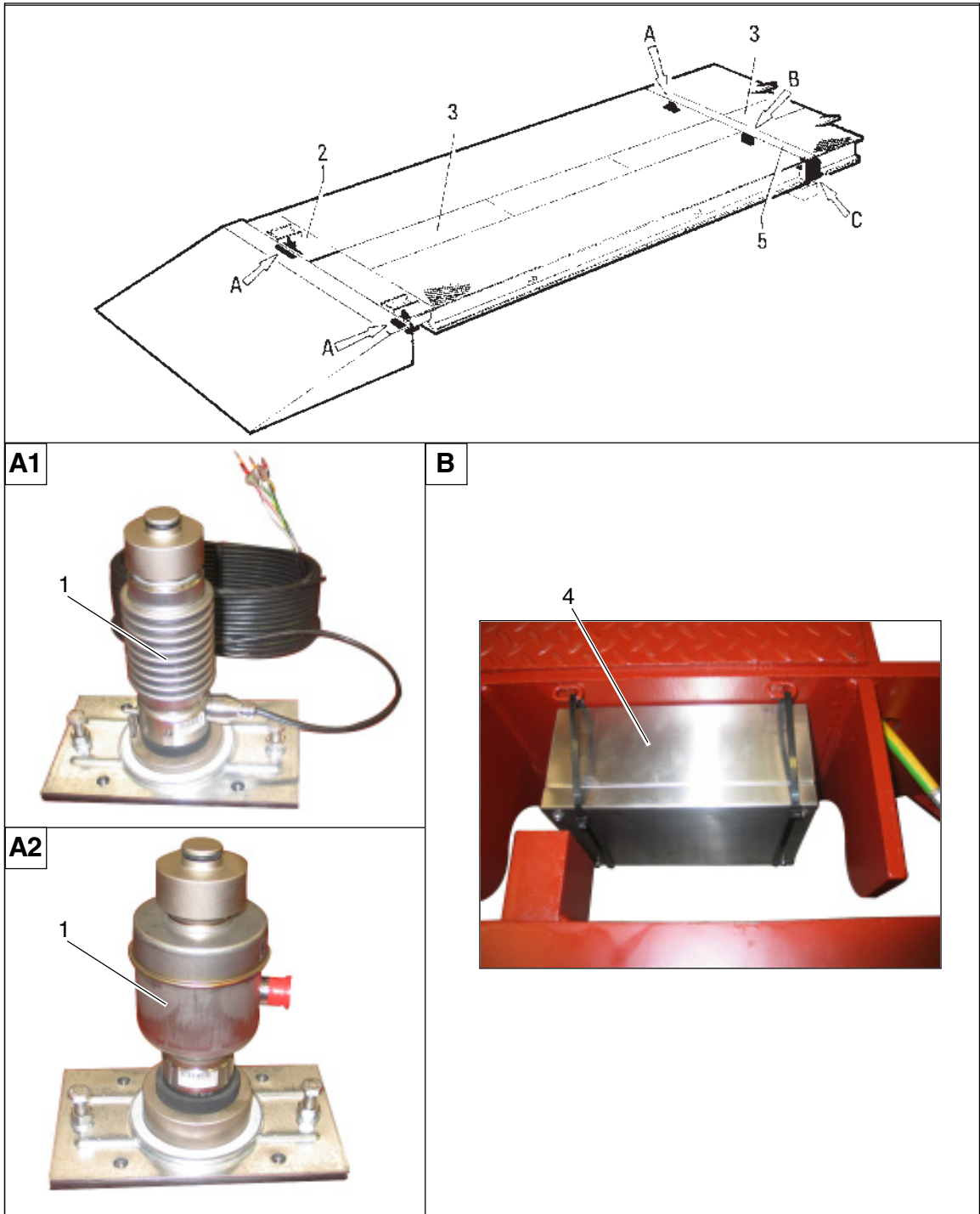
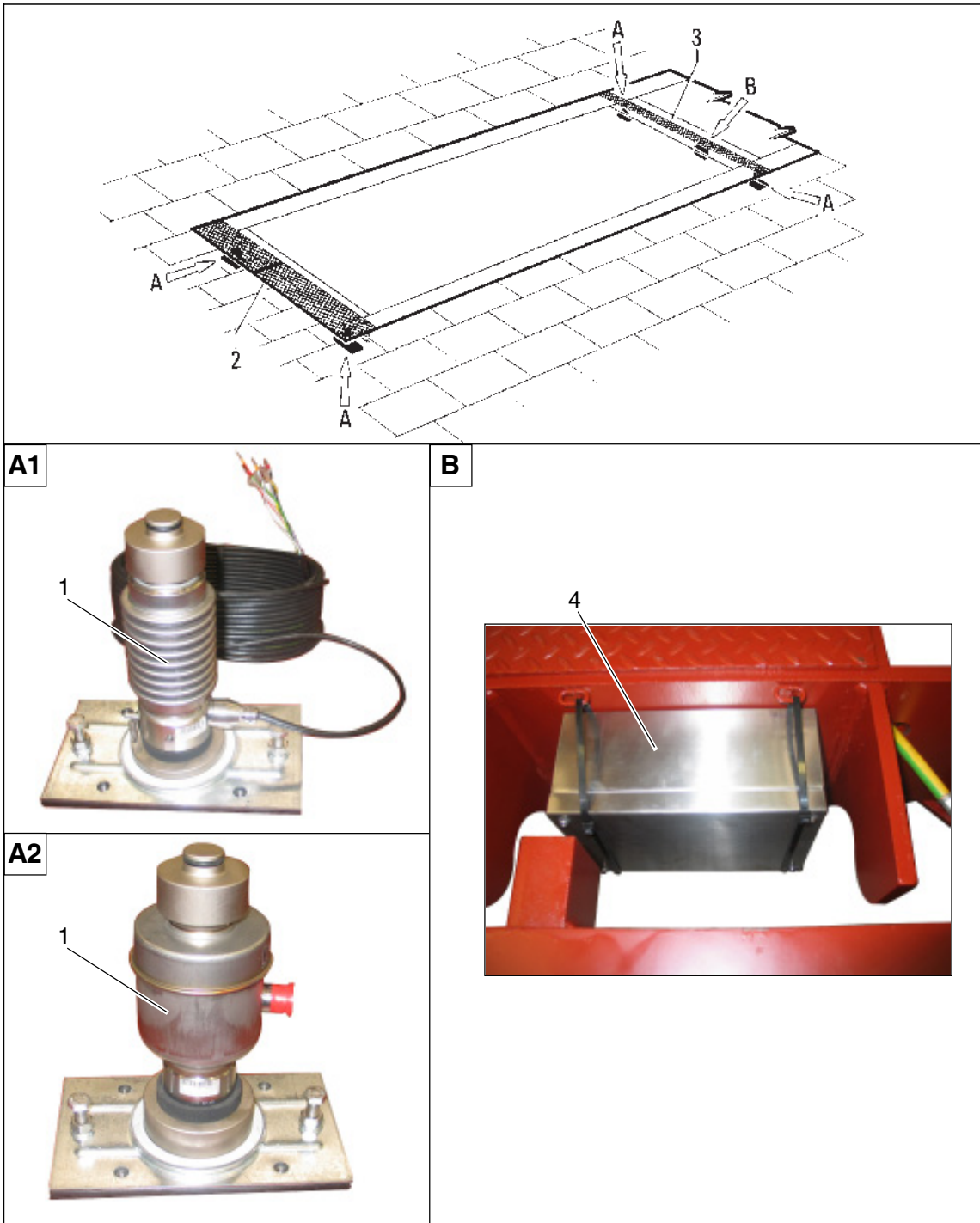


Fig. 2.2 Metal weighbridge, surface version

- 1 - Load cell, analogue (A1) / digital (A2)
- 2 - External hatches for load cell inspection
- 3 - Longitudinal hatches (optional)
- 4 - Junction box (this can be located inside "B" of the weighbridge)
- 5 - Centre hatch for load cell inspection



MAIN PARTS OF THE SBP/C (pit version)**Fig. 2.5 Concrete weighbridge, pit version**

- 1 - Load cell, analogue (**A1**) / digital (**A2**)
- 2 - External hatches for load cell inspection
- 3 - Centre hatch for load cell inspection
- 4 - Junction box (located inside the pit or inside the weighbridge)



MAIN PARTS OF SBP/C (surface version)

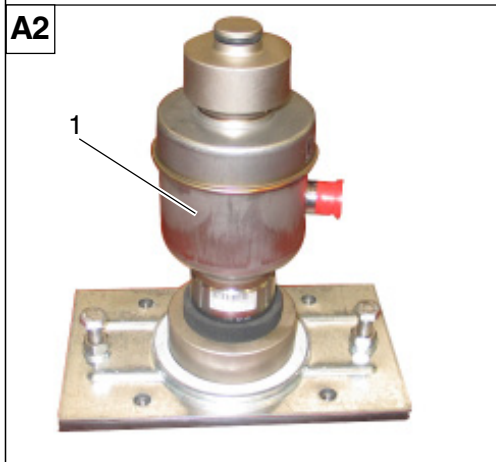
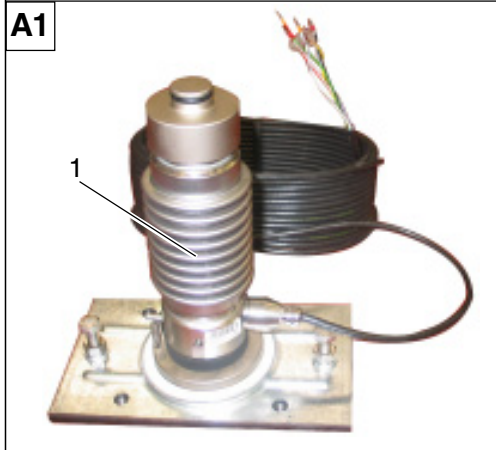
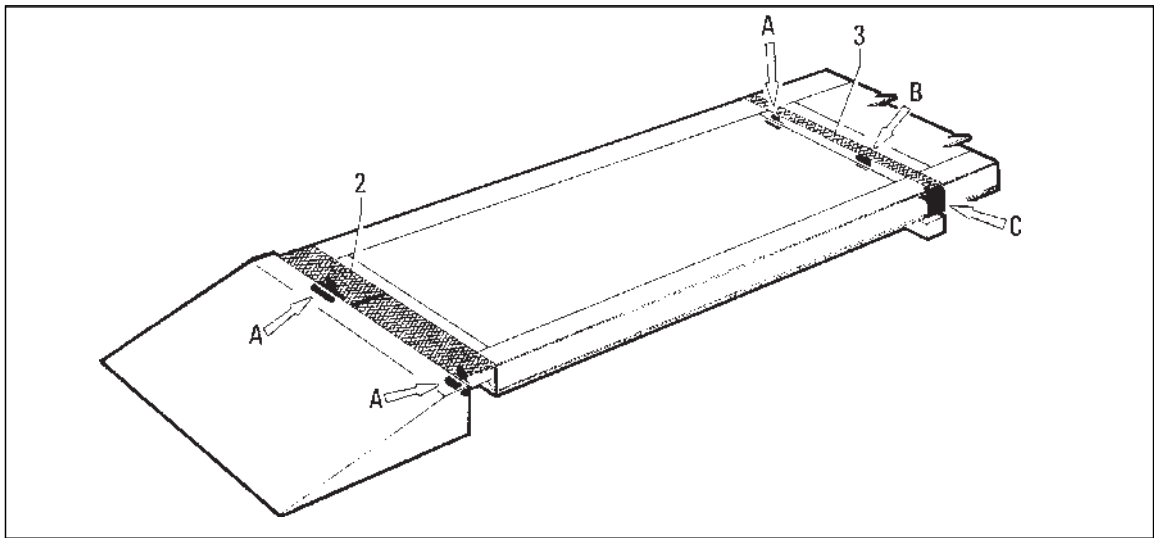


Fig. 2.6 Concrete weighbridge, surface version

- 1 - Load cell, analogue (A1) / digital (A2)
- 2 - External hatches for load cell inspection
- 3 - Centre hatch for load cell inspection
- 4 - Junction box (this can be located inside "B")





CHAPTER

3

SAFETY RULES





DANGER AND WARNING SIGNS

Strictly adhere to the maximum capacity thresholds shown on the nameplate of the weight display terminal.

GENERAL SAFETY RULES

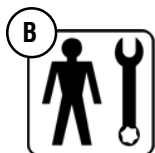
Do not allow unauthorised personnel to work on the instrument.

Do not use the platform to weigh loads exceeding the maximum capacity.

Prevent corrosive substances leaking on the platform.

In the event that the platform is surface-mounted with ramps, provide the signs and protections envisaged by current standards for safety at work.

Never remove the metal structure's grounding connections for any reason whatsoever.



SAFETY RULES FOR MAINTENANCE STAFF

Maintenance and repair work must be entrusted only to qualified personnel. Before working on the platform, disconnect the electronic terminal from the power supply line.

Do not perform welding work on the platform.

ENVIRONMENTS WITH EXPLOSION RISKS

If the system will be working in an environment where there is a risk of explosion, this must be clearly specified in the order.

Standard systems are not designed for work in potentially explosive environments.



Never use the system in environments where there is a risk of explosion.

If the conditions of usage (temperature, humidity, etc.,) are different from those mentioned, contact the retailer or nearest service centre.





CHAPTER **4**

TESTING, DELIVERY AND INSTALLATION





TESTING

All instruments manufactured by **SOC. COOP. BILANCIAl A.r.l** are checked and tested in order to guarantee reliable operation of all components fitted.

DELIVERY

Strictly follow the instructions printed on the package.

Transport and storage must be performed with particular care to avoid collision and accidental overloading.

All material is checked by Coop Bilanciali before shipment.

When you receive the instrument, check for any damage that may have occurred during transport. Waste packaging materials, such as cardboard, nylon and wood, must be collected, placed in special containers and disposed of correctly; do not dispose of them freely in the environment as they may cause pollution and danger. Plastic is a polluting material, which must be neither burnt nor disposed of in the environment.

For disposal of machine components made of lead, strictly observe the rules in force in Italian Legislative Decree 151/2005 (as published on the Official Gazette n°175 of July 29, 2005) for the implementation of CE Directives 2002/95, 2002/96, 2003/108.

Weight and dimensions for transport and handling

Model	Gross weight (kg)	Volume (m ³)	Max. unit weight (kg)	Max. unit dimensions (m)	
SBP/M 8x3/40-50	3970 (4080)	8.5	935 (885)	4.1	SBP/M
SBP/M 9.56x3/40-50	4550 (4700)	10	1070 (1020)	4.8	
SBP/M 10.9x3/40-50	5270 (5430)	11.5	1430 (1325)	6.1	
SBP/M 12.2X3/40-50	950 (6150)	12.7	1430 (1325)	6.1	
SBP/M 14x3/60-80	6700 (6845)	15	1070 (1000)	4.8	
SBP/M 15.9x3/60	7760 (8050)	17	1430 (1325)	6.1	
SBP/M 15.9x3/80	8250 (8500)	19	1555 (1435)	6.1	
SBP/M 18x3/60	8850 (9080)	19	1430 (1325)	6.1	
SBP/M 18X3/80	9570 (9800)	19	1555 (1435)	6.1	SBP/C
SBP/C 8x3/40-50	2460	4	405	3.4	
SBP/C 9.56x3/40-50	2600	5	405	4.2	
SBP/C 14x3/60-80	3680	6	405	4.2	
SBP/C 15.9x3/60-80	3880	8	405	5.5	
SBP/C 18x3/60-80	4085	8	405	5.5	

Values between brackets refer to the SBP/M version with hatches.

The weights refer to weighbridges of the surface version, complete with electronic terminal and printer. As far as the SBP/C versions are concerned, the weights do not include the metal reinforcements.





STORAGE CONDITIONS

After checking for any damage that may have occurred during transport, store the weighbridge as follows:

- Store the metal structures, cells and accessories in a place that is sheltered from bad weather conditions and abrupt temperature changes, and out of the reach of unauthorised personnel.
- Avoid stacking material exceeding the maximum capacity of the platform on the latter.
- Respect the storage conditions envisaged for the electronic terminal combined with the platform.

LOADING/UNLOADING

Half-panels must be loaded and unloaded from the vehicle with great care.

Coop Bilanciai will accept no liability for damage arising out of improper handling.

To load and unload the instrument, use suitable means such as forklift elevators or cranes; use hooks, chains or cables that are in good repair and suitable for the purpose.

For loading and unloading hitch the instrument to the four eyebolts (see HANDLING).



If half-panels are secured to the vehicle in a vertical position, for loading/unloading operations hitch the instrument to the two top eyebolts only (see figure below).

This type of hitching method does not guarantee perfect stability of the half-panels; it is therefore recommended to adopt it only for the time necessary to complete the loading/unloading manoeuvres.

Keep the load as low as possible in order to maintain the maximum visibility and stability.



Lifting cable configuration

$P_f = P/2 \cos \alpha$
 the recommended configuration is:
 $H = B/2$
 therefore:
 $2 \alpha = 90^\circ$

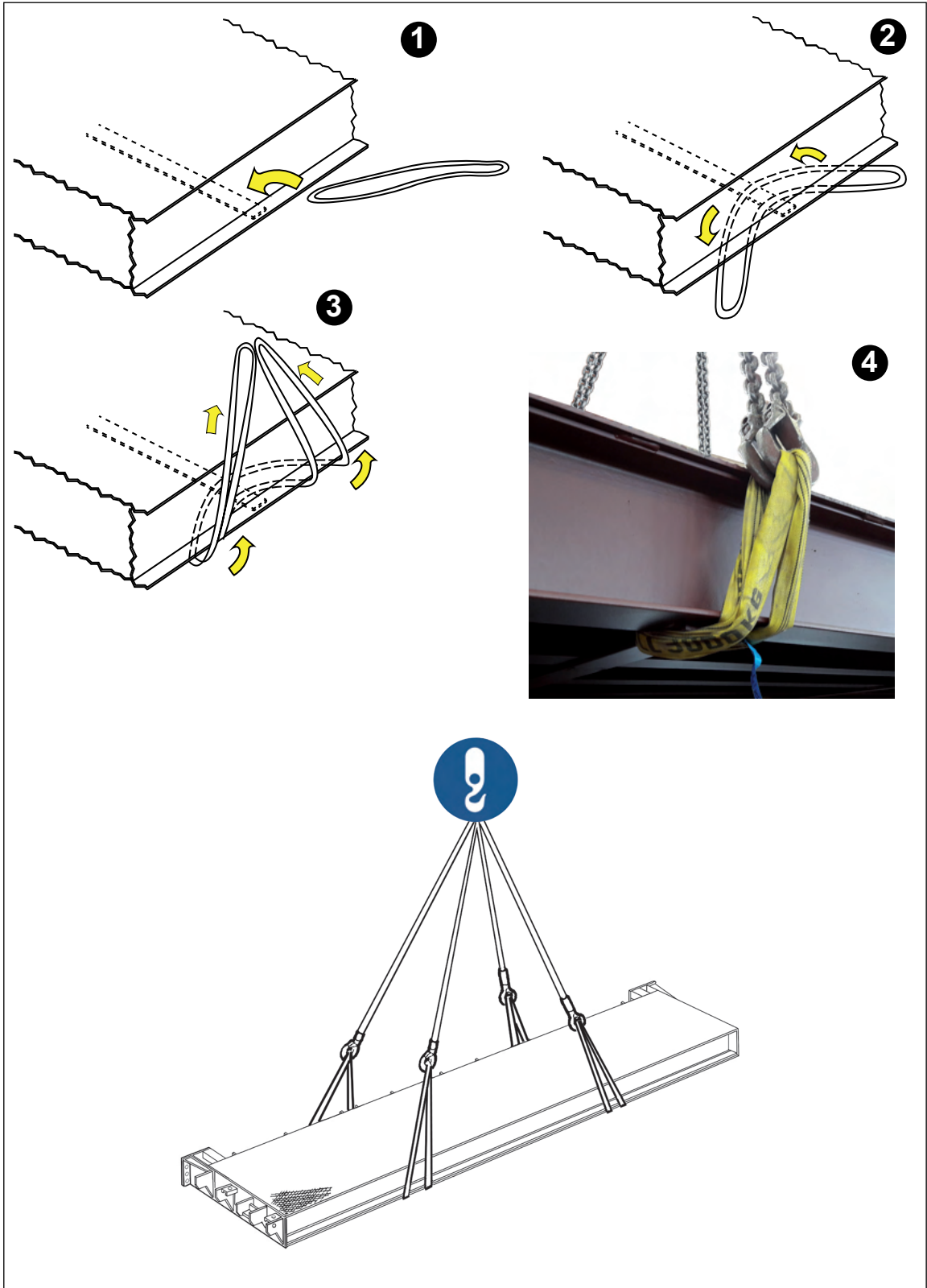
Fig. 4.1 Lifting





Unloading from a lorry:

to handle the machine, insert the 4 slings supplied through the 2 crossbeams under the weighbridge (see figure). Hitch the four slings and slowly lift whilst keeping the lifting position at the centre of the weighbridge. Since total stability is not guaranteed during transport, perform these manoeuvres only for the time strictly necessary to complete loading or unloading onto/from the lorry.





HANDLING

The machine's parts must be handled with great care.

Coop Bilanciai will accept no liability for damage arising out of improper handling.

To handle the instrument, use suitable means such as elevator trucks or cranes; use hooks, chains or cables that are in good repair and suitable for the purpose.



When handling, always hitch the instrument to the four eyebolts (see figure below).

During transport, keep the load as low as possible in order to maintain the maximum visibility and stability.



Lifting cable configuration

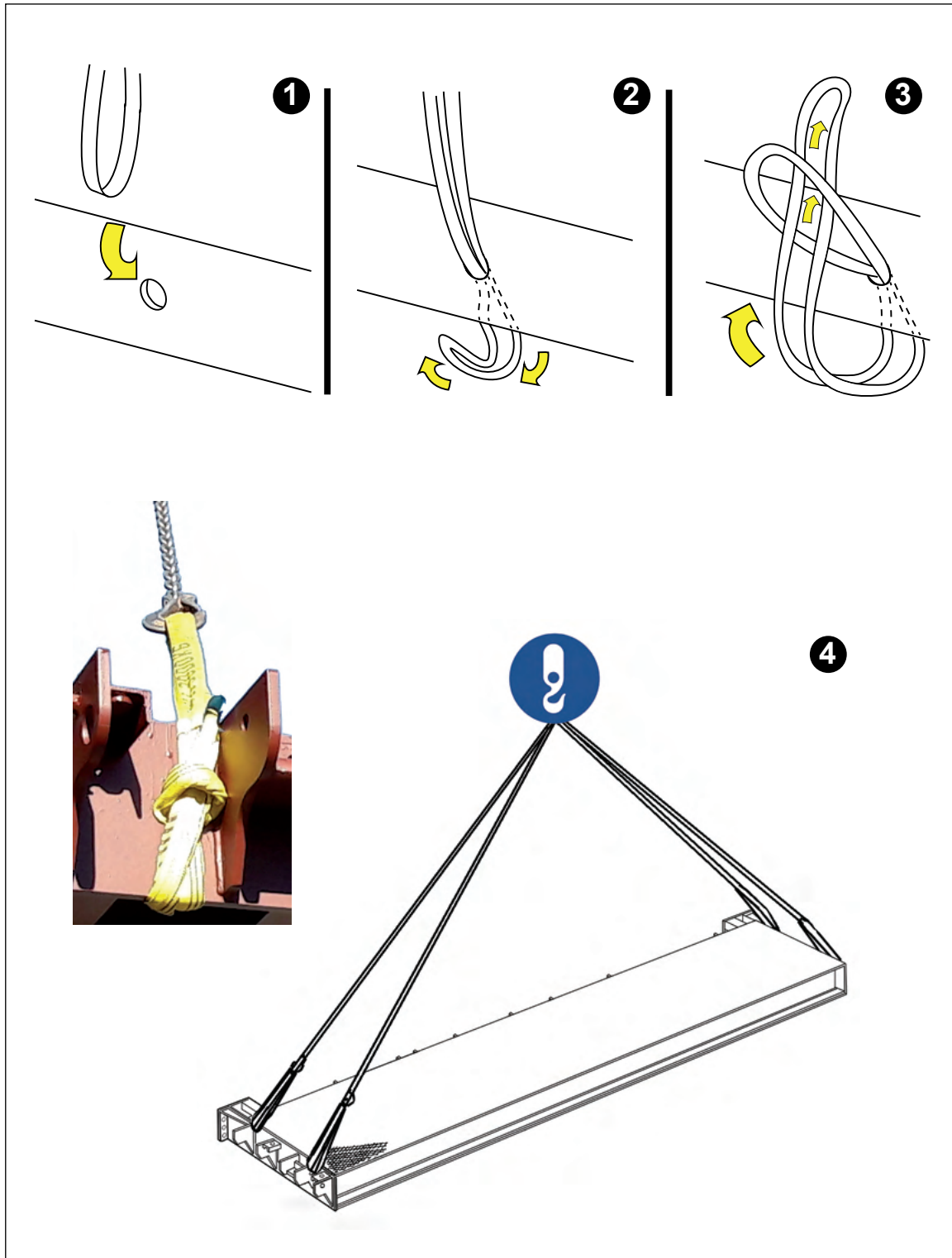
$P_f = P/2 \cos \alpha$
 the recommended configuration is:
 $H = B/2$
 therefore:
 $2 \alpha = 90^\circ$

Fig. 4.2 Lifting



Handling with slings:

to handle the machine, insert the 4 slings through the 2 holes on the 2 ends (see figure). Hitch the four slings and slowly lift whilst keeping the lifting position at the centre of the weighbridge.





INSTALLATION

Weighbridges must be installed by personnel authorised by Coop Bilanciai. The masonry work must be done following the instructions on the foundations diagram supplied by Coop Bilanciai.



Maintain enough room around the platform for checking and maintenance. The electronic terminal must be positioned in such a manner as to allow the operator to see the weight value displayed and the weighing platform at the same time. If this is not possible, use accessories such as mirrors or cameras.

For no reason may the cables of the load cells or terminals be cut or extended.



INSTALLING THE SURFACE-MOUNTED VERSION



To protect people, as far as the surface-mounted version is concerned (whenever necessary), install protections such as for instance: gangways, steps for the lorry driver and guard rails. Any protections (not included in the supply) must be fastened to the masonry work so as not to interfere with the weighbridge structure.

INSTALLING THE PIT-MOUNTED VERSION



The area within which the platform is installed must be such as to make weighing operations as comfortable as possible, but away from areas of transit and manoeuvre of cars, trucks or other means exceeding the maximum capacity of the instrument.

Before using the weighbridge, read the instructions provided in this manual with care.

In particular do not use the platform for:

- loads exceeding the maximum capacity of the instrument.
- average unit load on wheels not exceeding 10 daN/cm².

When weighing loads without wheels (e.g. containers), avoid dropping these onto the platform.

Do not perform welding work on the platform or load cells.

Prevent the platform coming into contact with aggressive substances that are not compatible with the materials composing the platform.

For information about weighing, refer to the manual of the electronic terminal delivered with the instrument.





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CHAPTER **5**

CONTROLS





CONTROLS



All controls are incorporated within the electronic terminal connected to the instrument. Read the relative “use and maintenance manual”.





CHAPTER **6**

OPTIONS



OPTIONS

SBP/M and SBP/C weighbridges can be supplied with the following optional equipment:

- multirange version;
- hot galvanised metal structure;
- bridge with a width of 3.20 m (only for the version with hatches);
- metal reinforcement (only for the SBP/C);
- guard rail on the weighbridge;
- guard rail on ground;
- frame (only for the SBP/M);
- metal ramps for the version with frame (only for the SBP/M)





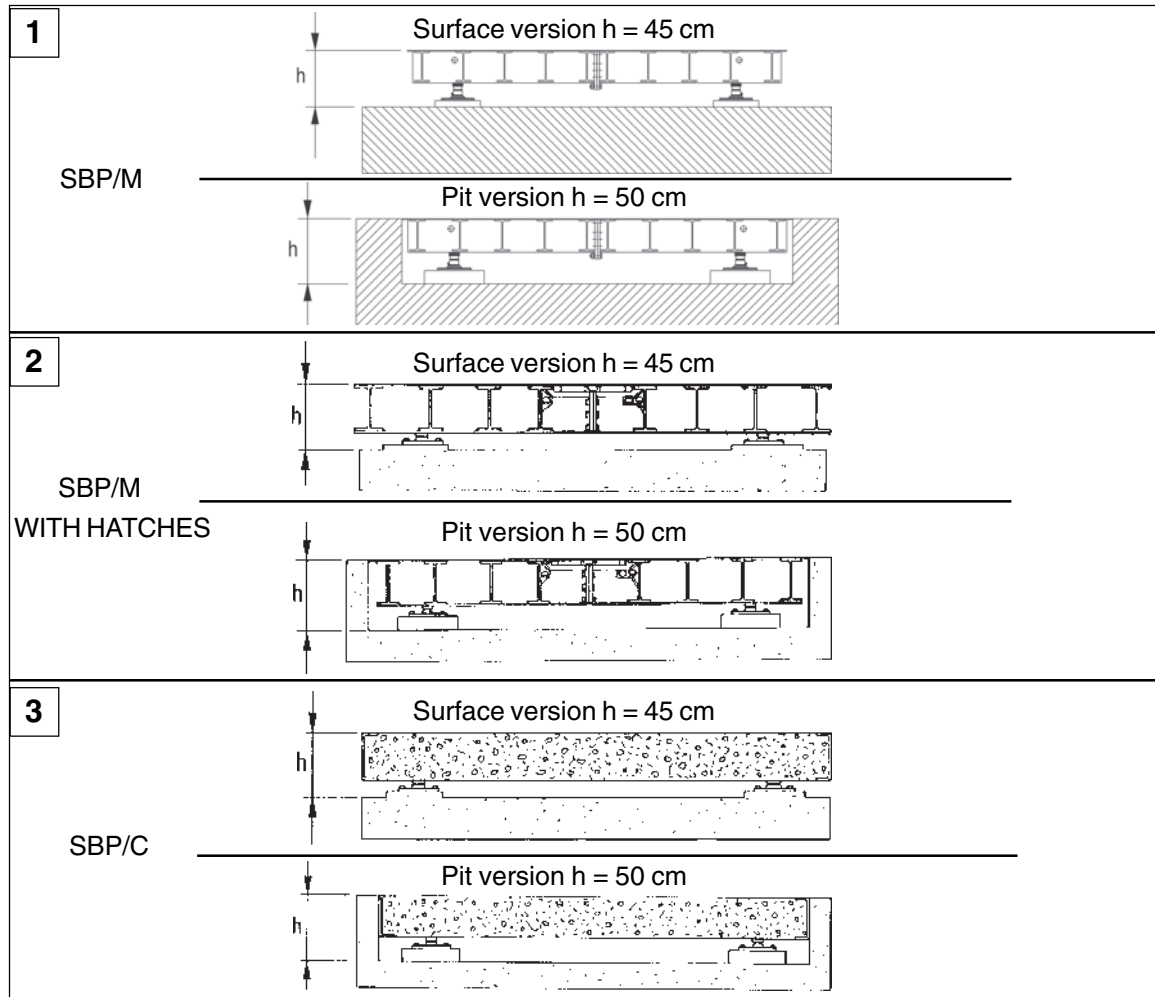
CHAPTER **7**

TECHNICAL DATA



DIMENSIONS AND CAPACITY

This page provides information about the various versions of weighing platform that can be supplied.



capacities (t)	Dimensions (m)							Resistance of structure(t)
	8x3	9,56x3	10,9x3	12,2x3	14x3	15,9x3	18x3	
		(*)	(*)					
40	X	X	X	X				50
50	X	X	X	X				60
60					X	X	X	80
80					X	X	X	100

TECHNICAL DATA SUMMARY

(*) SBP/M ONLY

Capacity: from 40 to 80 tons

- load cells entirely made of stainless steel

Operating mode

- operating temperature -10 ÷ +40 °C
- storage temperature -30 ÷ +70 °C
- relative humidity <85% UR



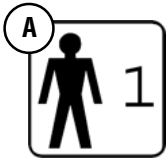


CHAPTER

8

MAINTENANCE



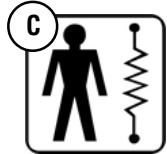


GENERAL WARNINGS

Concerning safety, refer to the information given in chapter 1 **General information**.



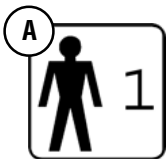
Qualification of the maintenance personnel:
operators in charge of mechanical and electrical maintenance must attend classroom and practical training as described in detail below:



- classroom and functional training concerning all machine equipment;
- supervision of the maker's technicians during the starting operations;
- training concerning operations and adjustments needed for size changeovers.



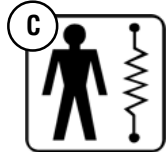
SAFETY CONDITIONS DURING MAINTENANCE



Before repairing or otherwise servicing the machine, hang a "Maintenance underway" sign on the switchboard.



1 Maintenance of the machine must be carried out by qualified and explicitly authorised personnel only.



2 Before carrying out repairs or any other work on the machine, always warn the other operators involved of your intentions.

4 All interventions must be made with the machine halted and stable on its supporting bases.

7 Before starting the machine, make sure that: all spare parts are correctly fitted and secured in place;
- all foreign objects (cloths, tools, etc.) have been removed from the machine.

8 Make sure there is nobody standing in the machine's danger zone.

9 Do not wear rings, wrist-watches, jewellery, loose-fitting or hanging clothing such as ties, torn garments, scarves, unbuttoned jackets or unzipped overalls, that could get caught up in the moving parts of the machine or during cleaning.
Instead wear approved accident-prevention gear.

10 The employer must inform workers concerning the safety rules and risks related to working activities.

11 Avoid working in damp environments.

THE AREA WHERE THE MAINTENANCE OPERATIONS ARE EXECUTED MUST ALWAYS BE KEPT CLEAN AND DRY.

12 Never carry out any of the following operations on the frame: drilling, cutting, etc.





.Should these rules not be followed, the guarantee will be forfeited and the maker will accept no responsibility for any resulting damage or losses.

Before cleaning or servicing the machine, disconnect the terminal from the power supply line.

For no reason may the information, seals and legalization stamps, which are printed on the nameplate, be altered.

If the above are tampered with or removed, the guarantee will be immediately forfeited and the maker will accept no responsibility for damage to material or losses.



To guarantee constant and regular operation of the platform and prevent invalidation of the guarantee, use only original spare parts. Entrust any maintenance operation to technicians authorised by **SOC. COOP. BILANCI AI A.r.l**

CHECKS PERFORMED AT THE COOP BILANCI AI FACTORY

The weighing system you have purchased has been tested and checked at our factory to ensure that the entire assembly (platform, electronic terminal) has been correctly set up in accordance to the metric standards.

PERIODIC CHECKS

Perform the checks at the frequency indicated.

Before every work shift

- Check the appearance of the platform.
- Make sure the weighbridge can oscillate freely.



Note

To correctly perform the first weighing operation, drive a vehicle over the platform (so that it oscillates) for the purpose of draining any water (condensation) above or below the platform.

At the end of a work shift

remove:

- any substances that may damage the materials composing the weighbridge;
- any substances that harden and prevent correct oscillation of the weighbridge (e.g. concrete).





periodically

- make sure the weighbridge can oscillate freely.
- Check and, if necessary, clean the foundations.
- Check longitudinal and transverse play.
- In SBP/M versions, check for oxidation on the metal structure.
- In SBP/C versions, check the condition of the concrete surface.

CLEANING FOUNDATIONS OF THE SBP/M AND SBP/C (SURFACE VERSION)

Clean the foundations (surface version) with a jet of water on the sides.



Note

It is not necessary to remove any components of the weighbridge.

CLEANING FOUNDATIONS OF THE SBP/M AND SBP/C (PIT VERSION)

As far as pit versions are concerned, remove inspection hatches “1” and hatches “2” (in the metal version with hatches) by loosening the relative fixing screws “3”.

Clean by directing the jet of water through the hatches; direct the jet also to the lateral zones that cannot be directly accessed so that the water may clear away any material that has deposited (avoid directing the jet of water to the load cells).

After cleaning, refit the hatches and secure them to the platform with their screws.

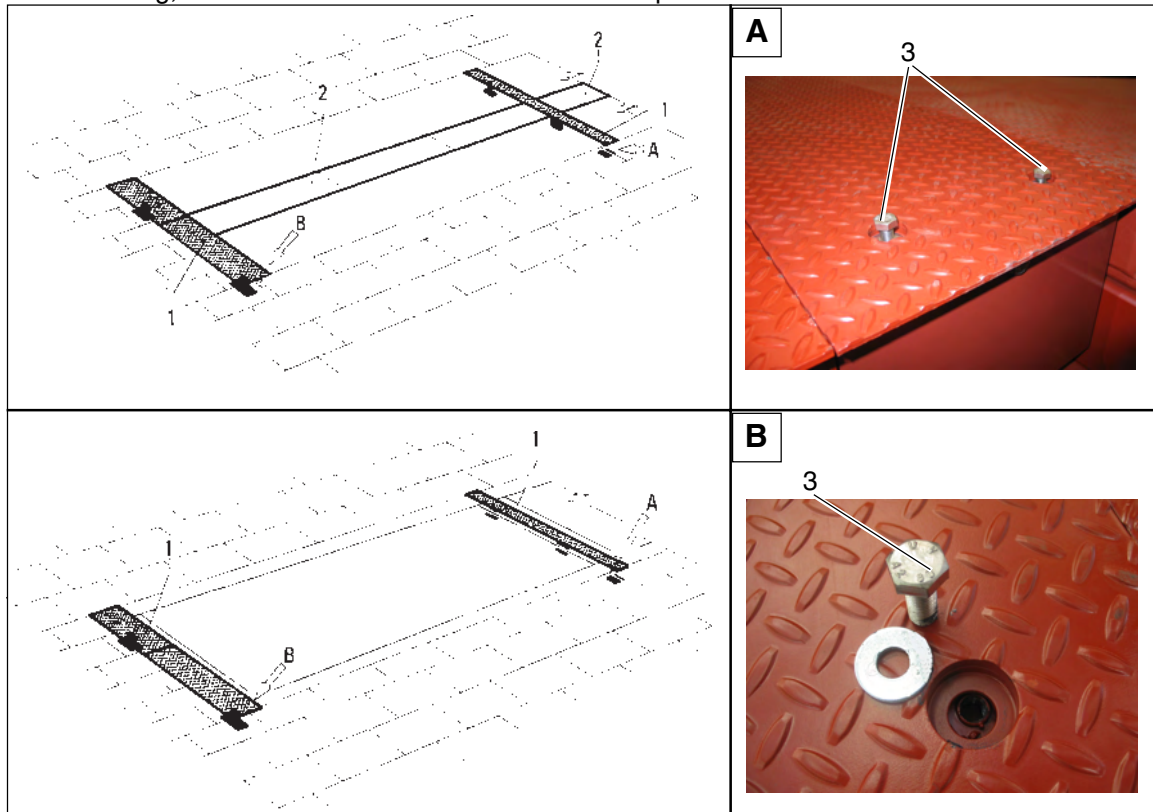


Fig. 8.1 Weighbridge inspection hatches



CHECKING LONGITUDINAL AND TRANSVERSE PLAY

Check transverse play as follows:

- remove the external hatches;
- make sure gap "A" (fig. 8.2) is 4 mm wide; on the contrary, loosen locknuts "1" and "2" and turn screw "3". After adjusting, tighten locknuts "1" and "2" and refit the hatches


Note

Make the same adjustment on all four adjustment points, located at the two ends of the weighbridge.

Check longitudinal play as follows:

- remove the external hatches;
- adjustment of play (*) by adding or removing shims "5" by unscrewing screws "4".

Play depends on the temperature conditions that are current when the adjustment is made and on the length of the weighbridge.

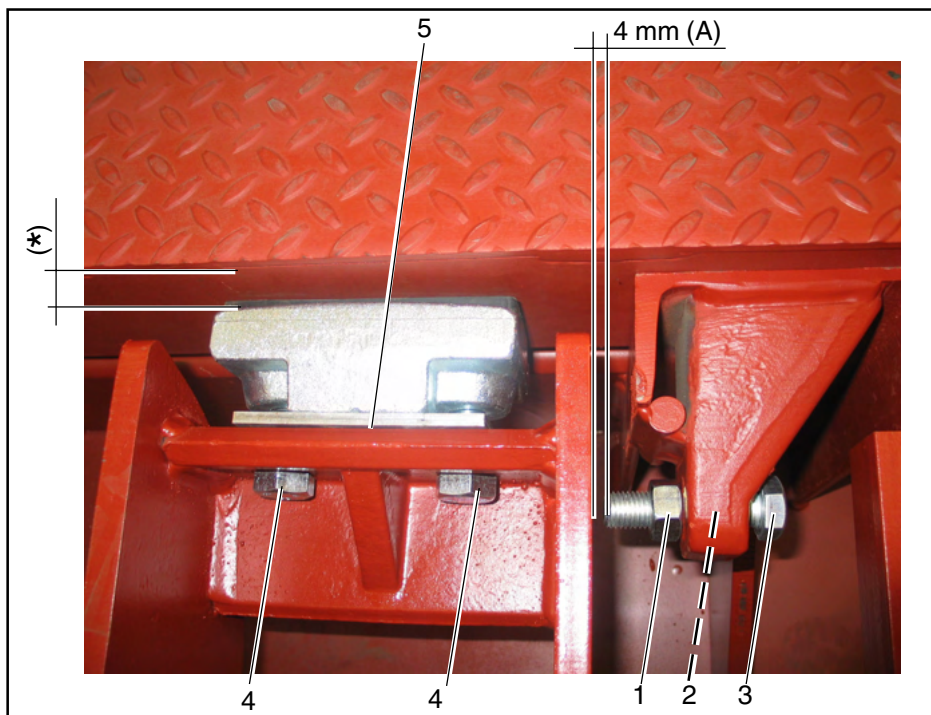


Fig. 8.2 Adjusting oscillation

Temperature (indicative)	PLAY * (mm)	
	14-16-18 metres	8-9-10-12 metres
≤ 10 °C winter	7	4
10 ÷ 25 °C Spring Autumn	5	3
>25 °C Summer	3	2


Note

Make the same adjustment on all four adjustment points, located at the two ends of the weighbridge.



CHECKING FOR OXIDATION (SBP/M)

Check the condition of the weighbridge's metal structure. If considerable oxidation (rust) is noted:

- disassemble the weighbridge;
- sandblast the rusty surfaces and repaint.



Assembly and disassembly of the weighbridge must be entrusted to technicians that are authorised by Coop Bilanciai since:

- disassembly implies removal of the metric binds and separation of the load cells;
- assembly calls for the metric legalisation procedures to be repeated.

CHECKING FOR OXIDATION (SBP/C)

Check condition of the treadable concrete surface.

If it is damaged, repair with high resistance mortar (contact specialised companies).





CHAPTER

9

TROUBLESHOOTING





TROUBLESHOOTING TABLE

<i>Problem</i>	<i>Cause</i>	<i>Remedy</i>
If the same weight is placed in different positions on the platform, the terminal displays different measurements.	The instrument has not been installed correctly.	Contact the technical service centre.
	The instrument has not been set up correctly.	Contact the technical service centre.
	One or more load cells are disabled.	Contact the technical service centre.
	Material has deposited between the platform and longitudinal edge beams.	Accurately clean the areas under the platform.
	Friction caused by longitudinal and/or transverse stops.	Adjust longitudinal and/or transverse play.





CHAPTER **10**

GLOSSARY

**GLOSSARY OF PARTICULAR TECHNICAL TERMS**

CONNECTOR: plug or socket for connecting the terminal to the external equipment.

DIVISION: minimum variation of weight that can be measured.

FULL SCALE: this is the maximum weighing capacity of the instrument, which may not necessarily coincide with the maximum structural capacity of the weighing platform.

IP—: protection rating of cases and enclosures containing electrical or electronic equipment.
The IP rating indicates the protection class of electronic equipment against solid matters (the first number) and liquid (the second number).

OPERATOR: person in charge of running the system. The operator must read the instruction manual and be able to confidently use the controls.

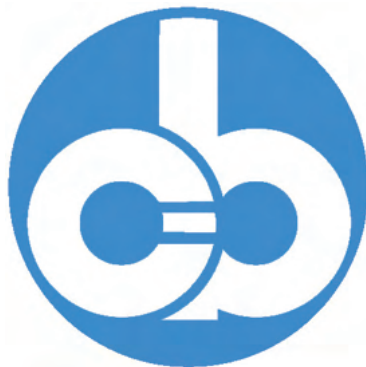
OPTION: the equipment that is not part of the standard supply.

SERIAL NUMBER: the serial number.

INSTRUMENT: Complete measuring system (platform + electronic terminal)







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