Taal: Engels



# **Handleiding**

# CM BSR Spider Rolling Lift

# **MSH** equipment

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#### 1. GENERAL SPECIFICATIONS

Spider Rolling Lift 3000 is a double-acting hydraulic lift, transformable in a trolley, projected and constructed to offer guarantee of stability on the seal of the load during the ascent and descent operations and during the manoeuvring of it. It is used to lift cars and characterized by the fact that its legs can be retracted inside the platform structure.

Clasping the lateral support arms of the wheels supplied together with the rolling lift 3000, the structure became a nimble trolley that permits to move the cars around the areas. For the different working phases.

The ascent/descent movements are given by double-acting hydraulic stand-alone cylinders, on which operates a safety valve controlled by the oil flux.

The rams are controlled by an hydraulic system feed by a air pump 300 bar with an overpressure valve.

A valve controlled by the oil flux and two descend control valves fit at the end of the system avoid the risk of accidental descending of the lift. These interblock systems on the hydraulic circuit allow to work in safety conditions around the vehicle lifted and assure the ascending and descending manoeuvres.

The lifting has two legs that stay fixed at the ground thanks to the mechanical friction, and a platform equipped with two wheels that are the scissors sliding support.

The upper side of the structure supports the load platform that has loading arms with which is supported the load during the moving.

Is it possible to put four rotating wheels in the loading arms to transfer the lifted load pushing it. This manoeuvre can be done putting back the wheels under the load platform thanks to the double-acting hydraulic system.

The structure of the lift and the material used (Fe 430B and Fe 510B) are suitable to offer guarantee of stability on the seal of the load during the ascent and descent operations and the manoeuvring of it.

The lift has compact dimensions and the work operations are carried out at man's height. The lift has not been designed to work under it.

The machine is endowed with the following Handbook which must be kept with it also in case the machine is handed over, the handbook must be kept near the place of installation and of use of the lift.



# 2. <u>DESTINATION USE</u>

Spider Rolling Lift 3000 is made for MACHINE-REPAIR activities. It has not been designed and it cannot be used for lifting people.

The lift must be used inside the places of work, protected from atmospheric agents (rain, humidity, wind, etc.). The temperature of the places were the lift will be installed has never got to be lower then 10°C and upper to 40°C. The weight of the structure and the limit of maximum carrying capacity is stated in this handbook (see chapter N°12-Technical Specifications). Spider Rolling Lift 3000 hasn't been projected to allow people to make operations of any kind under the structure of the lift or under its support stand. A failure in the consideration of this destination use can cause great risks for the workers, entirely under their responsibility. The user is bound to use the lift in conformity to its destination use, to all the instructions of the maker, and in conformity to the existing regulations regarding security and preventions of working accidents.

## **READ CAREFULLY:**

The maker will not consider himself responsible in any case for possible damages to persons or things, due to an improper use, incautious and different from the uses for

which the lift is designated. The use of the lift determines the users' acceptance, of all the use conditions stated by the Constructor

#### 3. IDENTIFICATION DATA

The identification specifications of the trolley-lift regarding the Maker, the year of construction, the nr of series, the carrying capacities and the feeding specifications, are transcribed on a data plate positioned on the controls or in this handbook. The user is obliged not to remove, to damage or to modify the data plates or the handbook. The guarantee automatically ends in case the data plates or the handbook is tampered

#### 4. PACKAGING

ROLLING LIFT 3000 is already assembled, the user has only to remove the packaging and connect the pump to the hoses which are already connected t the lifting rams. The lift packaging contains the ROLLING LIFT with the 3000 m flexible hose already connected to the rams, the use and maintenance handbook and the Conformity certificate. The control packaging contains:

- the air pump 300 bar with switch for oil flux
- Nr 04 wheels with pins
- Nr 04 pad with supports
- Use and maintenance handbook for air pump.

It is recommended, when the packaging will be opened, to control the correspondence of the sent items with their actual contents and the integrity of the material. These exams must be done at the presence of the carrier because the materials, with the exception of modifications subscribed before in the contact, travel under the Customer's own risk. Any complaint for damages due to transport, loading, unloading or a not correct unpackaging, cannot be charged on the Constructive Company.



## 5. SUPPORT LEVEL

The floor on which the lift stands must be flat, without disconnections and with proper features to sustain the load. The lift can be used also on a iron grid floor if this has features to sustain the load.

# ATTENTION!!!!

The failure in the observance of this peremptory instruction can cause the turning over of the load with serious risks for people and things.

#### 6. MOTION

The motion of the packaging must be done following the security regulations and with staff experienced in the mechanical movement of loads; the staff must be endowed with proper and personal protective clothes. It is strictly forbidden the motion by hand of the packaging containing the lift.

#### 7. CLEAR SICURITY AREA

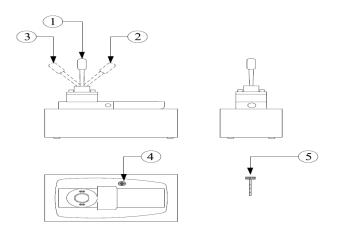
For reasons of safety, the lift must be used respecting the minimum space of pertinence and with the appropriate separation from other equipments or from the boundary walls of the surrounding area. The area cannot be lower than mt 2 (two meters) for all the lift perimeter that has to be calculated with the load lowered.

We advise to signal this area with stripes on the ground, or otherwise with little columns provided of linking chains if the area is moved. The limitation has the purpose not to consent the transit to people not involved in the works in the pertinent and safety area, when the load is in the ascent or descent phase or positioned at the wished height. All the ascent, descent and standing manoeuvres must be carried out under supervision and with maximum attention of the operator. Nobody must stand in the manoeuvre area. To grant the safety of the operator, the controls must be positioned in the rear side and the right distance (the length of the flexible linking pipe, which has bee supplied with the equipment, is of 3000 mm), being sure to leave an escape space behind the operator.

#### 8. ENERGY CONTROL

**8.3 AIR PUMP:** the air pump supplied with the lift is manufactured by CMO di Sodini Dino & C. and it's supplied with the use and maintenance handbook and fill with oil. The user has to substitute the hermetic cap used for the delivery, with the cap with its oil level gauge and vent.

#### FIG. 1



#### **LEGEND**

N°	FUNCTION
1	NEUTRAL POSITION
2	ASCENDING FLUX ACTIVATION
3	DESCENDING FLUX ACTIVATION
4	HERMETIC CAP
5	CAP WITH ITS OIL LEVEL GAUGE AND VENT

#### 8.4 OPERATION MANOUVRE

#### ASCENDING

For ascending move the orientation flux lever forward (pos.2)

#### DESCENDING

For descending move the orientation flux backward (pos. 3)

#### STATIONING

For stationing move the orientation flux lever to the centre (pos. 1)

**PLEASE NOTE: put** the orientation flux lever in the centre at the end of each manoeuvring and during the stationing of the vehicle lifted for the working operations

# 9. STARTING AND RUNNING

Once all the linking have been performed and having understood preliminarily how the controls work, proceed to the phase of air draining from the circuit, lifting and lowering with no-load the lift a couple of times. We advise to follow this operation at least once a month in order to keep the hydraulic circuit always void of air. When the lift has returned at the maximum closure position it's ready to use.

## 9.1 ASCENDING - STATIONING - DESCENDING

- a) Position the vehicle on the lift and adjust the supporting and its pads
- b) To start the ascending move the orientation flux lever to the right (pos.2) and start the pump using its treadle
- c) Once the lift is at the requested height move the orientation flux lever to the centre in the neutral position (pos. 1)
- d) To start the descending move the orientation flux lever to the left (pos.3) and start the pump using its treadle.

# 9.2 TROLLEY FUNCTION STARTING UP

To use the trolley function, with the load lifted, insert in each support ARM the wheels supplied: two of them have the brake.

**PLEASE NOTE:** provided that the maker regulation to use the Rolling Lift 3000 on flat ground we recommend the users to put the wheels with brakes one in a rear and the other in a front position (dx sx or sx dx never on the same side) in order to avoid the lift rolling on irregular grounds.

Once the wheels have been inserted, low the lift until the wheel touch the ground. Put back the lift legs under the structure using the pump with the flux switch on descending position.

Spider Rolling Lift 3000 is ready to be moved. We recommend putting the air pump in the car boot to avoid any possible obstacle due to the flexible hose length. The pump can be moved using its wheels. Once the lift has been moved in the required area or in case of stop the moving manoeuvre, put on the brakes.

FIG. 2
FIG. 3

#### ATTENTION!!!

At the end of the work phases, or if there are prolonged stops, the lift must be lowered to the ground. The load must never be left lifted in a high position without the operator except when the lift is used in the "trolley" function that is with the wheels on and the lift legs retracted. In this case the user must block the wheels using the brake. The maker aware to use all the breaks.

# 10. ADEVERTISMENTS AND PRECAUTIONS TO ADOPT

Spider Rolling Lift 3000 must be used by staff of at least 18 years old, well trained and authorized, who has been endowed with this handbook. The instructions, use and maintenance handbook must be read carefully before using the lift and every mark must be applied correctly. It's forbidden to use the machine to lift persons.

Before the ascent and descent manoeuvres, be always make sure that the links and the structure are clear from tools, cloths and any kind of objects.

In case of accidental halt during the descent phase, stop the manoeuvre releasing the treadle let the lift come up again and position it safety to get rid of the impediment and start the descent manoeuvre again. In case of electric cables (of lamps, portable tools, etc.) present in the lift manoeuvre area, make always sure not to produce crossings or supports on the structure, to avoid the risks of cutting them and the risk of putting under tension the metallic structure of the lift. This operation is compulsory before every functioning of the lift.

Keep always eyes on the load, especially during ascent, being certain that there aren't any inappropriate or anomalous inclinations. In this case lower the lift to the ground and position the vehicle in the correct way in the middle of the platform. Clean always well the support surface of the machines every time it gets dirty since this could cause the slipping of the load.

Never handle the overpressure valve which is located inside the air pump. Make sure that the air pressure at the entrance of the pneumatic circuit is set between 8-10 bar and that the circuit has an air dehumidification system Bring the load back to the ground at the end of the turn of work, avoiding to pause the lift for a long period when full loaded. The maximum carrying capacity of the lift is 3000 Kg.

#### 11. SECURITY DISPOSALS

The security systems are simple and easy to use and to find.

Te ascent and descent manoeuvres must be carried out whatever the case with the absolute respect of the pertinent area of the Spider Rolling Lift 3000 and with the operator at the due distance, that is to say with the air pump located at the complete extension of the flexible pipe.

The security systems are the following:

- Maximum pressure valve positioned inside the air pump; to regulate the pressure flow in the circuit.
- Descent control valve positioned on air pump; to regulate in a continuous way the oil flow in the circuit.
- Non-return valve to stop the flux in case of breaking of the hydraulic system.
- High pressure pipe, to avoid its bursting

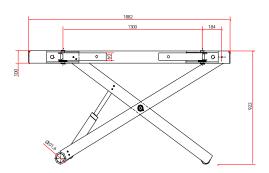
#### ATTENTION!!!

With the lift in the ascent position the working area must be clear from obstructions.

## 12. TECHNICAL DATA

Capacity	3000 Kg
Minimum height	120 mm
Maximum hieght	922 mm
Width	762 mm
Leg Wheelbase	1300 mm
Structure weight	350 Kg
Oil gearbox quantity	3 Lt
Oil capacity pressure	300 Bar
Air entrance pressure	8-10 Bar
Ascent time	90 sec.
Descent time	60 sec

# FIG. 4





#### 13. INDIVIDUAL PROTECTIONS

The operator must always wear the protective working clothes fixed by the law regulation for the situation and must adopt all the safety devices which are compulsory in working area. During the work operations the operator must act for his-own and, people and things safeguard following all the instruction present in this Handbook, as well as all the precautionary and safety rules which come from law orders or from good practice

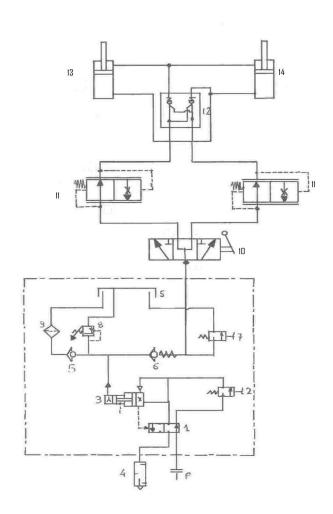
# 14. OVERHAUL AND MANTEINANCE

The inspections must always be done with lift unloaded. The lift inspection takes place by sight for the mechanical parts, but for the air pump check periodically the integrity of the connections. It is sufficient to check periodically the integrity of the hydraulic circuit. Tighten the connections in case they loosen and substitute the pipes when possible wearing and tearing marks appear. See to grease the joints periodically and control the level of the oil in the pump. These simple operations will prevent possible inconveniences and defects in the future.

#### 15. CLEANING

Clean, at least once a week, ROLLING LIFT 3000 with care taking off dirt, dust, and any smearing substance with self cleaning cloths. Never use water, inflammable or corrosives liquids.

# 16. CIRCUITS



P	Air inlet
S	Oil tank
1	Air feeding pneumatic engin
2	Food control
3	Hydropneumatic pressure multiplier
4	Air silencer
5	Non return valve
6	Calibrated non return valve
7	Treadle discharge valve
8	Maximum pressure valve
9	Oil filter
10	Flux switch
11	Descending control valve
12	Prepayment valve D.E
13	Piston 1
14	Piston 2

#### 17. GUARANTEE

Spider Rolling Lift 3000 is covered by guarantee for all its parts for 12 months, with the precise condition that there hasn't been any tampering or improper intervention and that the identification specifications of the machine transcribed on the data plate or in this handbook haven't been damaged or removed.

After having accepted the cases included by the guarantee, or the items subjected to normal wear, the Maker will accomplish the request with reference to the gravity of the damage and to the possibility of the reinstatement within mechanical and operating safety terms of Spider Rolling Lift 3000.

The assistance covered by guarantee are those which are disposed by the law for these materials

# 18. DISMANTLMENT

In case of dismantlement of the lift or of parts of it we recommend to respect the body of legislation regarding the cleaning of the waste materials, where it is possible the recycling of the iron parts. Every part has to be dismantled anyway according to the type of material

#### 19. MACHINE DIARY

Serial number .....

We advise to use the scheme here following to note down all the Rolling Lift 3000 and the possible interventions made on the lift time after time.

**MACHINE DIARY** 

Manufacturing date .....

This will consent the user to have available every minute the proper information on the machine's activity cycle.

# DATE INCONVENIANCE OR ASSISTANCE SPARE PART USED SIGNATURE SPARE PART USED

# DICHIARAZIONE DI CONFORMITA' CE DECLARATION OF CONFORMITY CE

#### **Fabbricante - Manufacturer**

C.M.O. di Sodini Dino e c. s.n.c. Via Aurelia Ovest, ex Area Fibronit – 54100 Massa (Italia)

#### Fascicolo Tecnico e Dichiarazione di Conformità a cura di:

#### **Technical Documentation and Declaration of conformity by:**

C.M.O. di Sodini Dino e c. s.n.c., Legale Rappresentante Dino Sodini, domiciliato in Via Aurelia Ovest, ex Area Fibronit – 54100 Massa (Italia)

#### Denominazione della macchina e funzione- Name of machinery and function:

SPIDER ROLLING LIFT 3000

SOLLEVATORE IDROPNEUMATICO MOBILE PER AUTOVEICOLI

#### Numero di serie e anno di costruzione - Serial number and year of costrution

Il fabbricante dichiara che la macchina corredata dalla presente Certificazione è conforme a tutte le disposizioni della Direttiva Macchine 2006/42/CE, concernente il ravvicinamento delle legislazioni degli stati membri relative alle macchine, entrata in vigore dal 29.12.2009. Dichiara altresì la conformità alla Uni En 982/2007, requisiti di sicurezza relativi a sistemi e loro componenti per le trasmissioni oleodinamiche e pneumatiche.

Nome, firma e timbro equivalente alla persona autorizzata.

Name, signature and stamp of the authorised person.

L' Amministratore Dino Sodini



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