

AC 75 / AC 25



1.4.1 Organisational Measures

In addition to the operating instructions, applicable national regulations and any other binding regulations on the prevention of accidents and protection of the environment must be followed and passed on. These should be added to the operating instructions.



Such stipulations may involve, for example, handling hazardous substances, making available / wearing personal protective equipment or road traffic regulations.

In addition to the operating instructions and the accident prevention regulations valid in the country and on the operating site where the crane is in use, the recognised technical regulations pertaining to safe and correct working procedures must also be observed.

The operating instructions should be supplemented by any other instructions that are necessary, including supervisory and reporting duties for any special operating occurrences, for example with regard to work organisation, operating procedures, allocated personnel etc.

(Z 50 310, similar depiction)

Keep a complete and legible set of all safety and hazard instructions on the crane at all times.

Safety guards on the crane must not be opened or removed during crane operation.

Provide instructions on the location and use of fire extinguishing equipment.



The fire extinguisher supplied is situated in the storing box of the crane chassis. The lid of the storing box is marked by a stick-on label: 'Fire extinguisher'.

The first aid kit (and any other accessories according to national motor vehicle safety standards) must be taken from the range supplied by the crane operator and kept in the crane operator's cab.

In case of poor visibility or darkness, the immediate area in front of the crane operator's cab, the outriggers and the winches must be illuminated by the spot lights, which are fitted on the crane (rear outside lighting, front outside lighting, side outside lighting). The side outside lighting can be switched from the crane operator's cab or from the driver's cab.

The extended area (load, load path, slewing range, driving route etc.) is to be illuminated using suitable equipment, separate from the crane. The responsibility for this belongs to the crane operator.

The weight of the load must be known.



It is difficult to calculate the load weight during dismantling work. If a load that is attached to the crane is released from its previous connection to other parts and is too heavy, the crane will be unavoidably destroyed or will tip over, regardless of the load limit switch.

When dismantling hollow components (pipelines, cement silos etc.) allowance must be made for the weight of possible residues inside these components.



When determining the size of the components that are to be dismantled, never utilise the full values allowed in the load capacity tables of the crane, but allow for a safety buffer.

Select the correct boom length and reeve the hoist rope in accordance with the individual load case.

Select the lifting tackle in accordance with the weight of the load, the type of attachment and the angle of inclination.

Only hook blocks supplied by the crane manufacturer may be used.

The use of other hook blocks is only allowed following permission from the crane manufacturer.

Pay attention to the rules and regulations for working with load handling equipment (attachment ropes etc.). Never use lifting tackle if there is any doubt as to its lifting capacity. Check to make sure that the lifting tackle is in perfect condition.

Set the steering wheel to the steepest position so that you have sufficient space during crane operation.

The outriggers should be operated and adjusted using the controls in the crane chassis (see section 11).

The outriggers may only be retracted and extended from the crane operator's cab if the crane is set to superstructure operation and should only be applied in exceptional cases.

Take note that the outriggers may only be operated when the crane operator has a clear view, either directly or via a mirror.

5.4.3 Driving the Crane with Load (Travel Operation)

When driving the crane with a load, the following points must be observed along with the conditions stipulated in Sect. 5.4:

- The load is taken up. Then slew the superstructure into the direction of travel with the main boom facing towards the front or rear.

- Apply the slew gear parking brake (3, S14), (Z 75 157).



Slewing the superstructure out of this position is prohibited!

- The outrigger beams can now be fully retracted.



If space allows, the outriggers should be either fully extended (5.9 m) or partially extended (4.0 m).

- Set the load limit device to "mobile 0°/180°" mode, (see Sect. 15).

- The outrigger cylinders can now be retracted such that the outrigger plates are just above the road. Take up the load again and hold briefly over the ground.

- The crane must remain switched to "crane operation" during driving so that the CTC display is retained.

- Pay attention to the ground clearance of the outrigger plates and the load while driving.

- The steering is operational as soon as a gear is engaged.



The load capacities specified in the load table under "freestanding" (note the corresponding symbol) must not be exceeded.

- The load must not start to oscillate as the vehicle is driven. If necessary, lash the load.

7.3 Engine Brake (Sustained-Action Brake) (Z 75 019)

The engine brake is of particular use when driving on long downhill sections. The engine brake is engaged by depressing foot switch (8) with the left foot.

As long as a gear is engaged, the crane will then be braked by the engine.

machinecatalogic.com

Programming start of heating

3 switch-on times within the following 24 hours or one switch-on time in 7 days can be programmed.

Only one switch-on time can be activated at a time.

1. Selecting and activating memory:

(starting from neutral status with display visible)

First memory - press **[P]** once.

Memory display: 1 (default setting 12:00)

Second memory - press **[P]** twice.

Memory display: 2 (default setting 12:00)

Third memory - press **[P]** once.

Memory display: 3 (default setting 12:00)

Neutral status - no memory activated.

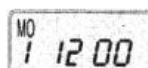
Press **[P]** repeatedly until the memory display disappears.

2. Start of heating within 24 hours

Set the program day:

The correct program day is automatically displayed - no adjustment necessary.

Set the program time:



Press **[P]** repeatedly until the desired memory display (1, 2, 3) begins to flash.

Briefly press and then release **[<]** or **[>]**.

The program time flashes.

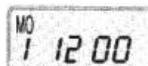
Then set the program time for heating using **[<]** or **[>]**.

Setting is only possible if the program time is flashing.

To select another memory: press **[P]**.

3. Start of heating after 24 hours (max. 7 days)

Set the program time:



Press **[P]** repeatedly until the desired memory display (1, 2, 3) begins to flash.

Briefly press and release **[<]** or **[>]**.

The program time flashes.

Then set the program time for heating using **[<]** or **[>]**.

Set the program day:

The program day begins to flash approx. 5 seconds after the program time has been set.

Then set the program day for heating using **[<]** or **[>]**.

The program time and program day are stored when the time display disappears or when the current time appears.

The memory display indicates the activated memory.

The flashing heating-on symbol (**[III]**) also indicates that a memory has been activated.

4. Checking activated memory:

The program time of the displayed memory is display for approx. 5 seconds. The display then disappears or the current time is displayed (if the time trigger is "ON").

The program time display together with the program day can then be called up by pressing **[P]** once for 5 seconds.

Temperature display

If an ambient temperature sensor is connected (order No. 25 1482 89 41 00) and the time trigger is activated, the temperature can be permanently displayed by pressing **[S]** once. If the time trigger is deactivated, the time temperature is displayed for 15 seconds by pressing **[S]** twice.

Please note!

Voltage dips are bridged by the heating time switch. After voltage failures, all elements of the display flash. Complete resetting is necessary.

If the time trigger is activated, the current time and weekday are displayed permanently. If the time switch is deactivated, the display disappears after 15 seconds.

The remote control can also be operated with the use of an additional unit (receiver module).

If a fault occurs when the heating is switched on and the diagnostic circuit is connected, the operating display shows a flashing **[III]** and the fault code no. is displayed (contact the workshop).

On tanker vehicles, equipped in accordance with TRS 003, the timer is used purely to switch the heating on and off. The time does not have to be reset to start up the system. The heating system can be switched on continuously or for a fixed period as described on Page 1.

Statutory regulations prohibit the following functions from being activated:

1. Programming of heating times with the time switch
2. Operation using the remote control unit
3. Connection of the ambient temperature sensor

If faults occur, we recommend the following:

Switch off and on again (max. twice) / Check the main fuse / Check the air channels for blockages / Consult a workshop.

In this way, the speed of the luffing gear can be varied in a range of 29 - 83 %.

The slew gear can be moved in a speed range of 50 - 100 %.

When the ignition is turned on, the relevant maximum value (83 % or 100 %) is preset.

4. High-range button

The high-range button at the right-hand of the pilot control sensor is only active for the following:

- Hoist up / down
- Luffing gear up

i.e. crane movements dependent on engine speed.

This means that within a given speed range, the control current to the proportional valve is readjusted proportionally to the change in engine speed in the high range.

5. Speed reduction in the pre-warning range of the load limit device

On reaching the pre-warning range of the load limit device (90 % of max. load), the speed of the movement currently being activated is reduced to 50 %.

16.5 Emergency Control

Z 75 165

The crane has the option of emergency control. This is intended to offer the crane driver the possibility of continuing work should the SPC fail. For this, the outputs of the hydraulic card are divided up via switch (61, S 710) on the dashboard.

Using the direction keys in the pilot control transmitters, an electrical current is fed directly onto the proportional valves via a potentiometer.

It is possible to regulate the operating speed with a potentiometer (29, R 710), as the pilot control lever can no longer be used for driving sensitively.

21.5 Hook (15t) for boom point (Option 1)

Loads to a max. of 15t can be lifted without using the hoist or hoist rope. For this purpose, a hook can be fitted to the boom point (Z 75 137)

Procedure is as follows:

- set main boom in transport position
- unreeve hoist rope (2) and wind in completely.



Secure hoist rope to basic boom section; there is otherwise a risk of injury from a falling hoist rope.

- release pin lock (4)
- draw out sheave axle (5) to half-length



Risk of injury from falling parts when extending the sheave axle.

(Z 75 141)

- rope protection bars (14), rope protection plate (6), distance sleeve (16), roller set (7) and idler (15) must be completely removed.
- sheave axle (5) must be completely drawn out with the rope protection plate (13) removed
- drive in sheave axle (5) to approx. half length (Z 75 135)
- push both distance sleeves (8) and clevis holder (9) onto the sheave axle.
- insert the sheave axle (5) fully once more and secure with pin locks (4)



The clevis holder must be mounted in the middle of the sheave axle and protected from displacement by the distance sleeves (8).

The sheave axle (5) must be securely locked with the pin locking (4) (torque MA of bolts M 10= 49 Nm). Otherwise there is a danger of the load falling or boom point being destroyed.

- Fit clevis (11) and lock with cotter pin (10).

Full Version Available

Demag AC 25 All Terrain Crane Operator Manual

Demag AC 25 all terrain crane operator manual, covering controls, safe operation, setup and care. 3-file PDF set for the AC 25 and AC 75.

VIEW THE FULL MANUAL

<https://machinecatalogic.com/demag-ac-25-all-terrain-crane-operator-manual/>

Book No: 89001A · File Pages: 1,045 · File Count: 3 · File Language: English