

## OPERATING A SINGLE DRUM WINDER AC/DC

When lowering a load on a single drum winder fitted with grid resistance, it is not advisable to use reverse current to control the speed of the winder. It is preferable to make use of synchronous speed braking.

The driver must: -

Apply one notch reverse current.

Ease off the brake to control the speed, control the winder to exit the danger area and keep the brake on the brake race

Move the control lever to the maximum forward position to obtain the benefit of synchronous speed, move the brake lever to the off position

Check amp meter, coiling and rope speed indicator.

When approaching the signal destination apply the brake slightly to prevent the winder speeding up.

Move the control lever from forward to the reverse position, to retard the winder

Release the brake.

Increases reverse power until the winder has slowed down.

Stop the winder on the correct mark.

Apply the main brake lever, make sure that the brake is fully applied by means of the brake indicator and,

Move the control lever to neutral.

## **OPERATING A SINGLE DRUM DC WINDER**

Lowering

The driver must: -

Apply reverse power just out of neutral to strengthen the hoist motor field to obtain maximum back Electro motive force. (40 to 60 Amps).

Ease off the brake and see that the drum revolves in the correct direction.

Move the control lever back to neutral when the drums start to revolve.

Move the control lever to drive the conveyance down until the required speed is reached (forward direction).

Check the amp meter, coiling and rope speed indicator.

Move the control lever slowly towards neutral when approaching the signal destination. (to increase B.E.M.F.)

Move the control lever to neutral.

Apply the brakes when on the correct mark make sure that the brake is fully applied by means of the brake indicator.

(b) Raising

The driver must: -

Apply sufficient power to lift the bottom conveyance.

Ease off the brakes and see that the drum revolves in the correct direction.

Check the drum, amp meter and rope speed indicator.

Increase power to gain speed.

Check the ammeter, coiling and rope speed indicator.

Move the control lever towards neutral when approaching the signal destination.

Apply the brake when on the correct mark, make sure that the brake is fully applied by means of the brake indicator.

Move the control lever to neutral.

## **1. OPERATING A WINDER WITH ONE DRUM UNCLUTCHED (SINGLE DRUM)**

(a) AC winder

(i) Lowering with an AC winder fitted with Dynamic braking

The driver must: -

Apply full dynamic power (Wait a view seconds if fitted with a liquid controller)

Ease off the brake.

Ease dynamic power by moving the control lever towards neutral.

Check coiling and rope speed indicator. (2.5 m/sec. Drum bushes).

To increase dynamic braking when approaching the signal destination move the control lever away from the neutral position.

Apply full dynamic when near the signal destination.

Apply the brake lever when on the correct mark and make sure that the brake is fully applied by means of the brake indicator.

Move the control lever to the neutral position.

(ii) Lowering the conveyance with an AC winder using reverse power.  
(Single drum)

The driver must: -

Apply reverse power to control the movement of the winder.

Ease off the brake.

Control the speed of the winder by increasing or decreasing reverse power.

Check the ammeter, coiling and rope speed indicator (2.5 m/sec. drum bushes).

Reduce the winder's speed by increasing reverse power when near the signal destination.

Apply the brake when on the mark.

Make sure the brake is fully applied by means of the brake indicator.

Move the control lever to neutral.