



# Electrically Insulated Platforms – (EIP)



# What are EIP's / Electrically Insulated Platforms?

- ◆ Manlift specifically adapted to be used in the potrooms of aluminium smelters.
- ◆ Eliminate electrical hazards by preventing the circulation of an electric current between the platform and the ground.
- ◆ Two different types are available :
  - ✓ Articulating Manlift Type
  - ✓ Scissor Lift Type



# EIP / Electrically Insulated Platform

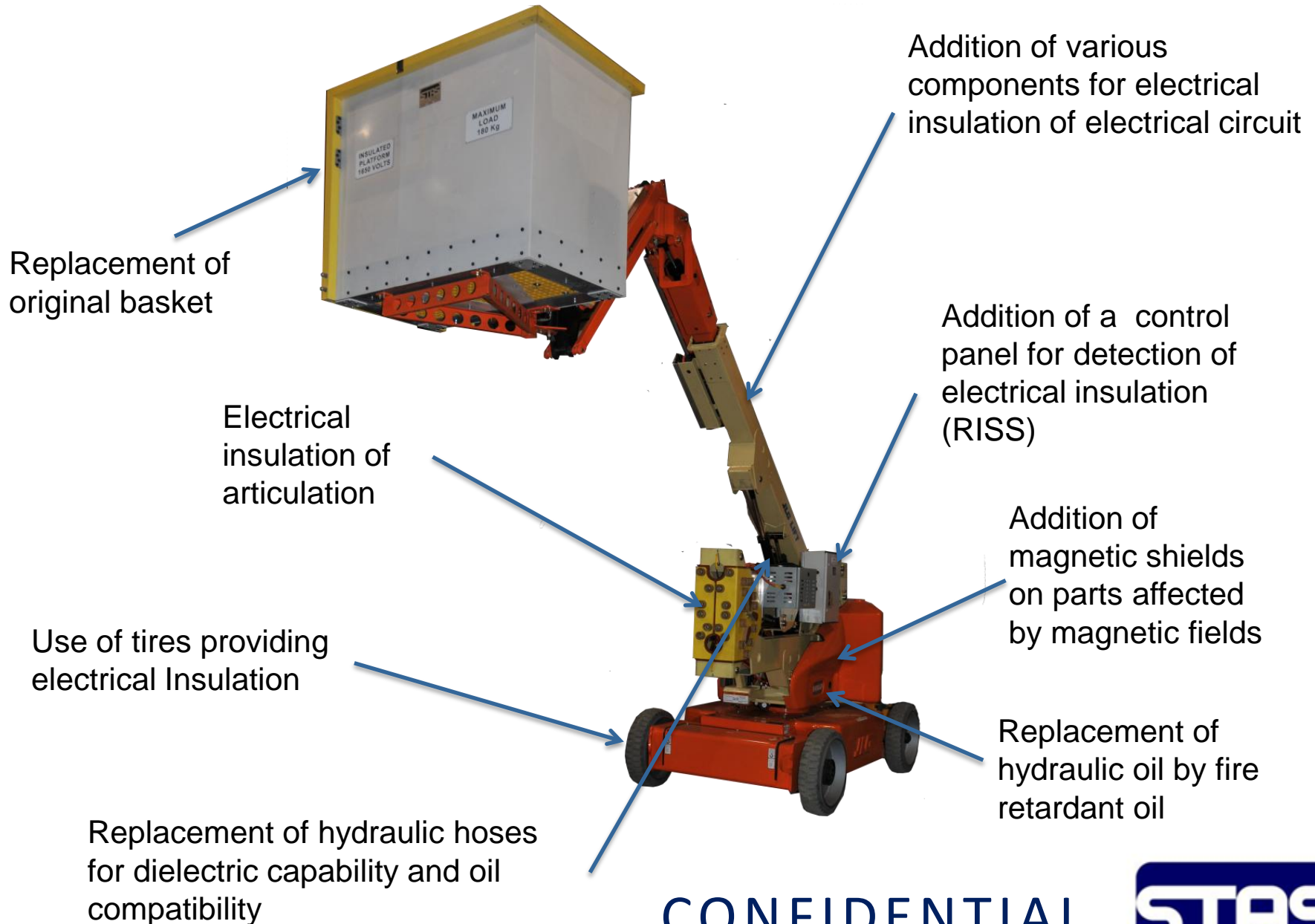
**Compare to commercial manlift, STAS EIP's includes the following:**

- ◆ Complete Electrical Insulation of control circuits.
- ◆ Insulation of the hydraulic components.
- ◆ Three levels of electrical-mechanical insulation.
  - ✓ the platform,
  - ✓ the main boom or the scissor lift,
  - ✓ the wheels.
- ◆ Magnetic shielding for operation in the high magnetic field in potrooms.



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# Modifications to articulated lifts



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# Modifications to scissor lifts

Addition of a control panel for detection of electrical insulation

Addition of dielectric padding around the platform



Addition of electrical insulating material between platform and cart

Replacement of hydraulic hoses for dielectric capability and oil compatibility

Use of tires providing electrical insulation

Addition of magnetic shields around parts affected by magnetic fields

- hydraulic pump
- solenoid valves

Replacement of hydraulic oil by fire retardant oil

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# EIP - STAS exclusive feature – RISS System

- ◆ STAS' RISS system (Realtime Insulation Supervisory System) is offered as an option and provides specific alarm to the operator.
- ◆ With the RISS : electrical insulation is validated in real time
  - ✓ If an insulation fault occurs on one level,
    - ◇ The platform operator is still protected against electrical shocks.
    - ◇ The operator is immediately informed by an alarm.
    - ◇ The operator will be able to return to a safe position with the platform.
    - ◇ The platform will need inspection / repair.



# Reasons to use STAS' EIP

- ◆ Equipment specifically adapted to the potroom conditions.
- ◆ Best operator protection for potroom utilisation.
- ◆ Exclusive STAS Realtime Insulation Supervision System (not available from other supplier)
- ◆ Proven Technology



EIP / Electrically Insulated Platform

Questions ?

