



Fig. 1 – Render model.

## 1. DESCRIPTION:

The S2 MODEL Building Maintenance unit is double jib BMU for maintenance access on buildings. Their main features are:

- The cradle is designed to take one, two or more people together with their tools and cleaning materials.
- Traversing movement through polyurethane wheels on concrete tracks, steel wheels on rails or even on parapet.
- Luffing on jib to allow positioning the cradle.
- Double jib.
- Designed in conformity with the following standard Directive: European Directive of Machinery 2006/42/CE and under harmonized standards UNE-EN 1808 "Safety requirements for suspended platforms. Design calculations, stability criteria, construction. Essays".



## 2. DESCRIPTION OF THE EQUIPMENT:

### MAIN COMPONENTS:

1. Polyurethane wheels.
2. Traversing motor.
3. Guide wheels.
4. Base frame.
5. Housing.
6. Luffing (Screw).
7. Electrical control box.
8. Jib.
9. Cable sheaves.
10. End stop.
11. Wire ropes.
12. Pendant control.
13. Cradle.
14. Rollers.
15. Anti-collision bar.

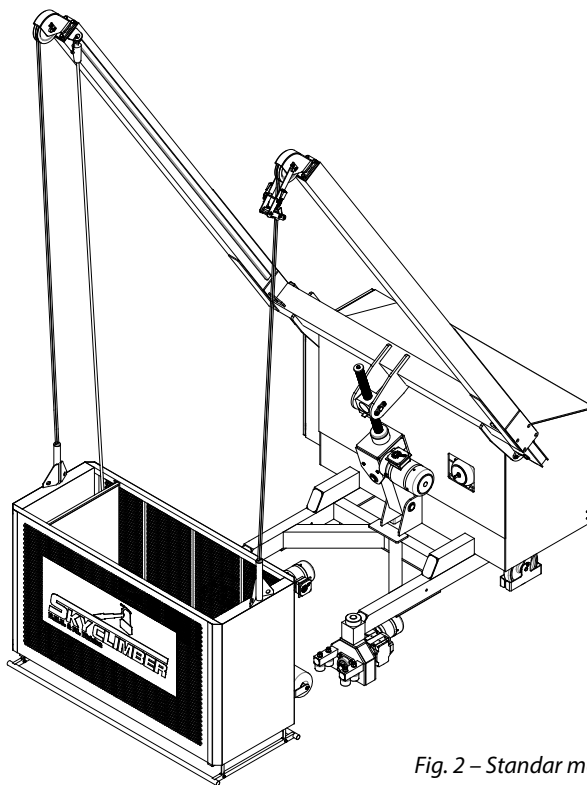


Fig. 2 – Standar model.

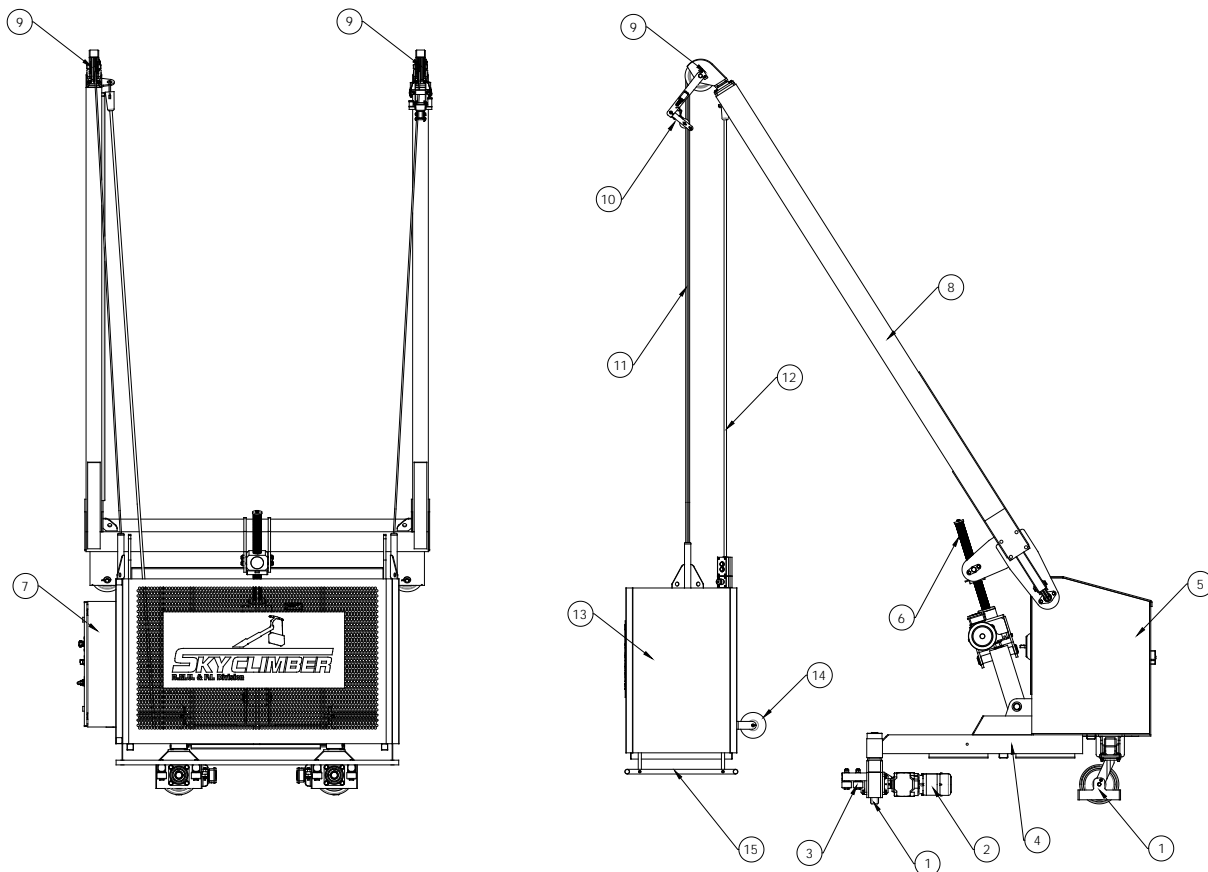


Fig. 3 - references

### 3. TECHNICAL SPECIFICATIONS:

#### **GENERAL:**

<b>Maximum height:</b>	0 - 400 m.
<b>Dead weight:</b>	Depending of the design.
<b>Finished and painted:</b>	1º. <b>Hot Deep galvanized.</b> 2º. <b>Abrasive blasting:</b> Silica sand. 3º. <b>Zinc epoxy primer:</b> zinc phosphate with dry thickness of 120 µ. 4º. <b>Painted:</b> aliphatic polyurethane with dry thickness of 60 µ.
<b>Color RAL:</b>	To be define.
<b>Control panel:</b>	In machine and cradle.
<b>Control system:</b>	By suspended cable or inside suspensión wire rope.
<b>Power supply:</b>	III + PE 400V (According country requirements)
<b>Drum system</b>	Multilayer (+40 m.)
<b>Maximum reach:</b>	0 mm - 6.000 mm.
<b>Minimum reach:</b>	-200 mm.

#### **ELEVATION/TRAVERSING:**

<b>Motorized elevation:</b>	Yes, 10 m/min. – 14 m/min.
<b>Motorized traversing:</b>	Yes.
<b>Traversing through:</b>	Heavy duty polyurethane wheels / steel wheels.
<b>Wheels distance:</b>	Depending of the design.
<b>Traversing speed:</b>	7,5 m/min. – 12m./min.
<b>Traversing detector:</b>	Yes, acoustic.
<b>Nº wire ropes:</b>	4
<b>Diameter wire ropes:</b>	7 mm. or 8 mm.

#### **JIB:**

<b>Type of jib:</b>	Double jib.
<b>Lenght of jib:</b>	Depending of the design.
<b>Luffing:</b>	Yes, screw or hydraulic.

#### **CRADLE:**

<b>Lenght cradle:</b>	From 1,6 m. to 4 m. or more.
<b>Cradle rated load:</b>	240 Kg. / 300 Kg.
<b>Max. allowed persons:</b>	2 (or more, optional)
<b>Finished cradle:</b>	Galvanized steel structure with aluminium cover / fully aluminium.
<b>Support on facade:</b>	By rollers
<b>Nº rollers:</b>	2 uts. or more.
<b>Bottom Safety bar:</b>	Yes.
<b>Protections:</b>	Anti-slipping floor.
<b>Anchored points:</b>	Yes.

#### **REGULATION:**

<b>Regulation:</b>	Design and manufacturer under UNE EN 1808:2015. European 2006/42 CE
<b>Certificate:</b>	ISO 9001:2015
<b>Certificate:</b>	CE certificate.

#### 4. CONTROLS:

The MS model has 3 control panel:

- Electrical control box panel (point 7 figure 3.)
- Pendant control (point 15 figure 3.)
- Control panel on cradle (point 16 figure 3.)

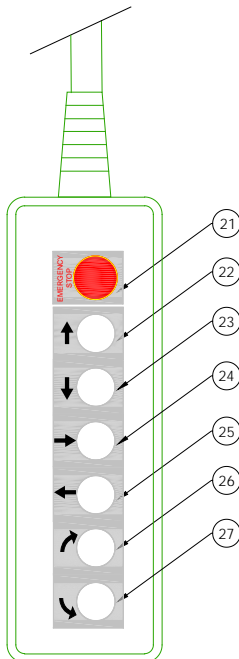


Fig. 4 – Pendant control.

#### PENDANT CONTROL (in case):

- 21. Emergency stop.
- 22. Lift jib.
- 23. Lower jib.
- 24. Traverse right.
- 25. Traverse left.
- 26. Turn right jib.
- 27. Turn left jib.

#### CONTROL BOX ON CRADLE:

- 28. Switch lift / lower cradle.
- 29. Parking.
- 30. Emergency stop.

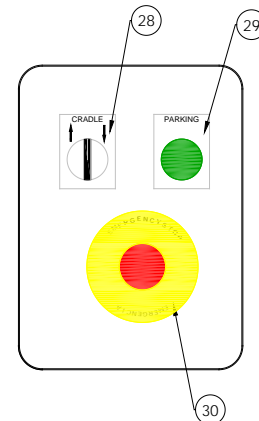


Fig. 5 – Control panel on cradle.

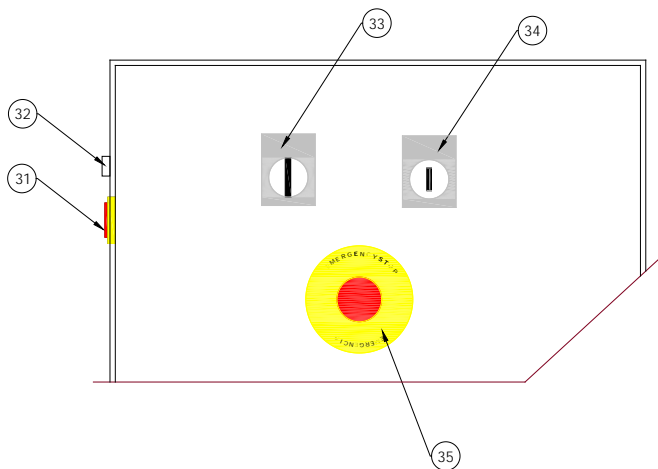


Fig. 6 – Electrical control box panel.

#### ELECTRICAL CONTROL BOX:

- 31. Main switch.
- 32. Led power on.
- 33. Switch lift / lower cradle.
- 34. Switch for roof control or cradle control.
- 35. Emergency stop.

## 5. SAFETY DEVICES:

To ensure safe operation without danger to personnel, the machine is fitted with a number of safety devices which monitor the correct operation of the various components and operate in the event of a breakdown or fault.

ELECTRICAL EMERGENCY DEVICES	ELECTRICAL & MECHANICAL SAFETY DEVICES
<ul style="list-style-type: none"> <li>• Emergency push button.</li> <li>• Emergency switches for movements.</li> <li>• Emergency switch for secondary brake.</li> <li>• Emergency switch for transmission chain.</li> <li>• Emergency switch of overcoil in ropes around the drum.</li> <li>• Emergency switch to detect absence of wire ropes around the drum.</li> <li>• Emergency switch to detect excessive wear of the working nut</li> <li>• Protection to earth.</li> <li>• Overload protection.</li> <li>• Power supply Phases control.</li> <li>• Emergency relay category C.</li> </ul>	<ul style="list-style-type: none"> <li>• Limit switches.</li> <li>• First meters protection</li> <li>• Warning sounds.</li> <li>• Thermal magnetic protection for all motors.</li> <li>• Safety switch for loose ropes around the drum.</li> <li>• Safety for restrain system: If the gondola provides pin system.</li> <li>• Safety bar for descent.</li> <li>• Safety switches for overload.</li> <li>• Secondary Safety current relay for overload.</li> <li>• Guides rollers for wheels.</li> <li>• Protectors on wheels.</li> <li>• Mechanical end stops.</li> <li>• Emergency brake.</li> </ul>

## 6. AVAILABLE OPTIONS:

- ✓ Cable reel.
- ✓ Steel wheels: traversing on rails.
- ✓ Turn on head.
- ✓ Auxiliary hoist.

- ✓ Turn on body.
- ✓ Approaching system.
- ✓ Control through wire ropes: total control on box cradle.



Fig. 7 – Cable reel.

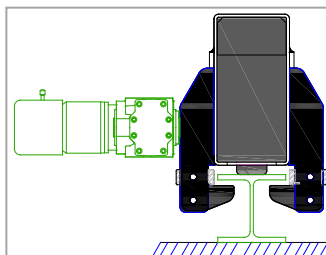


Fig. 8 – Steel wheels on rails.

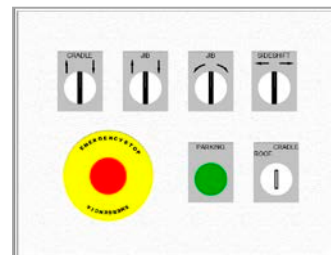


Fig. 9 – Full controls on cradle.



Fig. 10 – Turn on head.



Fig. 11 – Auxiliary hoist.



Fig. 12 – Approach system.

Note: The machine and all components described in this technical sheet can be modified any time by the manufacturer without prior warning.