

*Fig. 1 – Render model.*

The **S1 MODEL** Building Maintenance Unit is a system for maintenance with one jib to access on facade buildings. Their main features are:

- One jib.
- 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 or steel wheels on rails or in a fixed position.
- Luffing on jib to allow positioning the cradle (optional).
- 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".



## 1. DESCRIPTION OF THE EQUIPMENT:

### MAIN COMPONENTS:

1. Cable sheaves.
2. Head.
3. End stop.
4. Counterweight.
5. Turret.
6. Housing.
7. Guide wheels.
8. Rail tracks.
9. Traversing motor.
10. Base frame.
11. Turning jib.
12. Electrical control box.
13. Jib.
14. Turning head.
15. Restrain control.
16. Wire ropes.
17. Cradle.
18. Anti-collision bar.
19. Rollers.

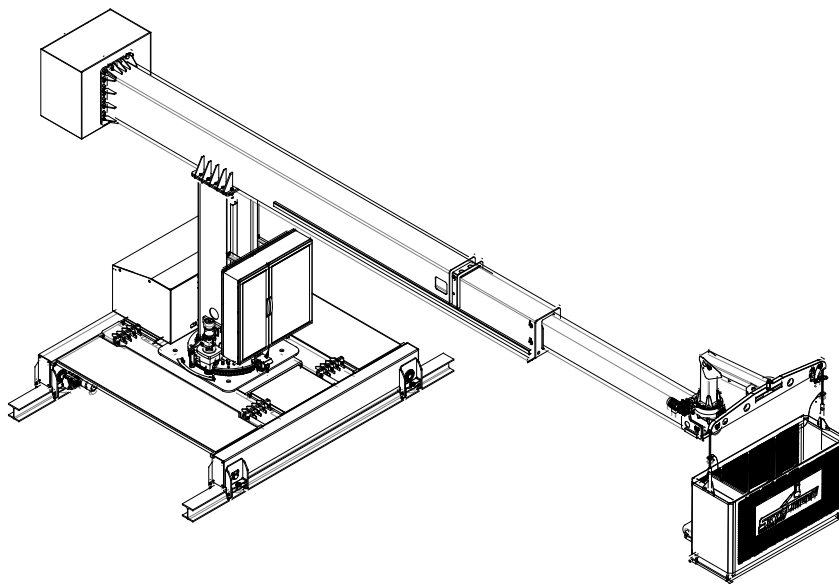


Fig. 2 – Standar model.

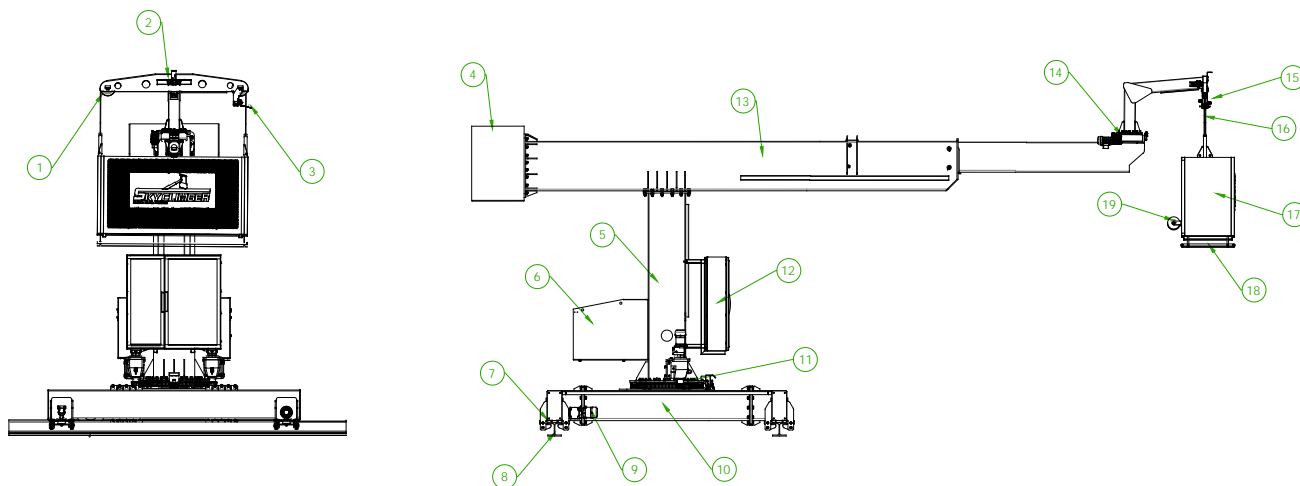


Fig. 3 - references

## 2. 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>	Inside wire ropes or trough suspension wire.
<b>Power supply:</b>	III + PE 400V (According country requirements)
<b>Drum system</b>	Multilayer (+40 m.)
<b>Maximum reach:</b>	4.000 mm. – 20.000 mm
<b>Minimum reach:</b>	0 mm.

### ELEVATION/TRAVERSING:

<b>Motorized elevation:</b>	Yes, 10 m/min. – 14 m/min.
<b>Motorized traversing:</b>	Yes (or fixed: no translation)
<b>Traversing through:</b>	Steel wheels or heavy duty polyurethane 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>	Mono jib.
<b>Lenght of jib:</b>	Depending of the design.
<b>Luffing:</b>	Optional: fixed 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>Harness 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.

### 3. CONTROLS:

The S1 model has 2 control panel:

- Electrical control box panel.
- Control panel on cradle.

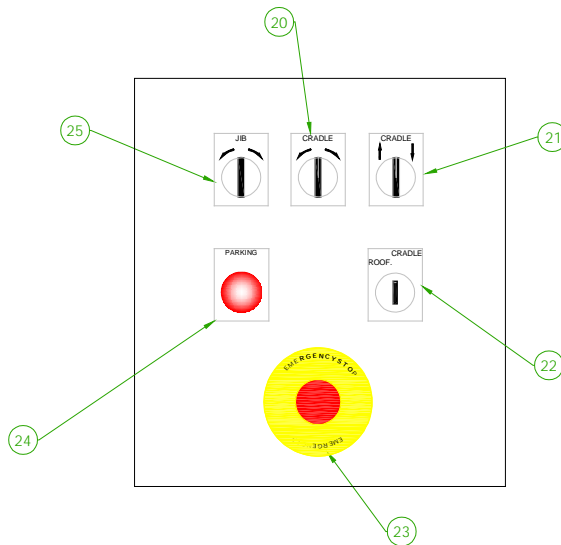


Fig. 5 – Control panel on cradle.

#### **CONTROL BOX ON CRADLE:**

- 20. Switch RIGHT / LEFT cradle.
- 21. Switch lift / lower cradle.
- 22. Switch for roof control or cradle control.
- 23. Emergency stop.
- 24. Parking.
- 25. Switch RIGHT / LEFT jib.

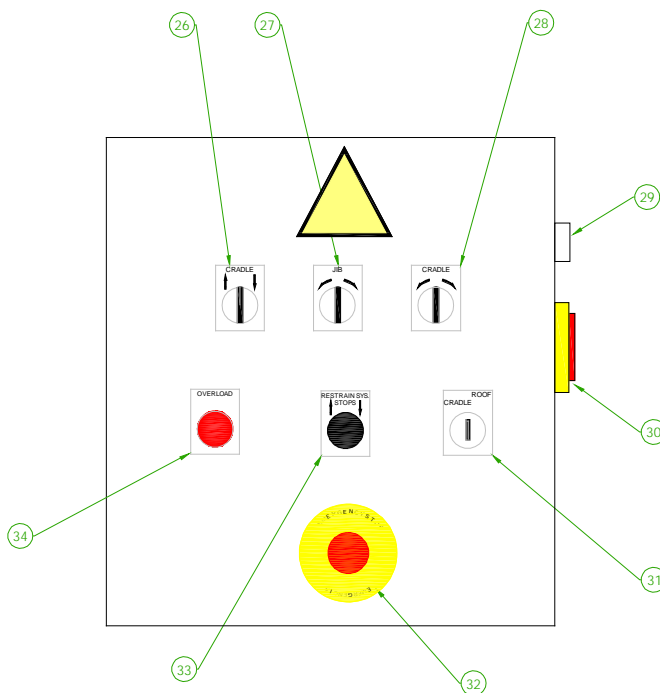



Fig. 6 – Electrical control box panel.

#### **ELECTRICAL CONTROL BOX:**

- 26. Switch lift / lower cradle.
- 27. Switch RIGHT / LEFT jib.
- 28. Switch RIGHT / LEFT cradle.
- 29. Led power on.
- 30. Main switch.
- 31. Switch for roof control or cradle control.
- 32. Emergency push button.
- 33. Restrain pin system control.
- 34. Overload indicator (led).

#### 4. 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 SAFETY DEVICES	MECHANICAL SAFETY DEVICE
<ul style="list-style-type: none"> <li>• Emergency push button.</li> <li>• Emergency switches for movements.</li> <li>• Emergency switch for transmission chain.</li> <li>• Protection to earth.</li> <li>• Overload protection.</li> <li>• Power supply Phases control.</li> <li>• Emergency relay category C.</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> </ul>	<ul style="list-style-type: none"> <li>• Safety switch for loose (slack) ropes around the drum.</li> <li>• Safety bar (ascent /descent)</li> <li>• Limit switches.</li> <li>• First meters protection.</li> <li>• Warning sounds.</li> <li>• Thermal magnetic protection for all motors.</li> </ul>	<ul style="list-style-type: none"> <li>• Guides rollers for wheels.</li> <li>• Protectors on wheels.</li> <li>• Mechanical end stops</li> <li>• Wire rope guides.</li> <li>• Mechanical anchored.</li> <li>• Rollers</li> </ul> <div style="text-align: center;">  <p>Fig. 7 – Secondary brake</p> </div>

#### 5. AVAILABLE OPTIONS:

- ✓ Cable reel.
- ✓ Auxiliary hoist.
- ✓ Telescopic mast.
- ✓ Approach system.
- ✓ Vulkolan wheels.



Fig. 8– Cable reel.



Fig. 9 – Vulkolan wheels.



Fig. 10 – Approach system.



Fig. 11 – Telescopic mast.

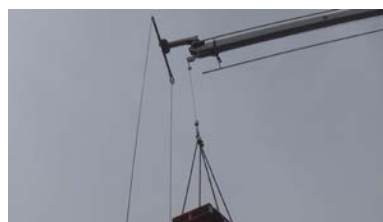


Fig. 12 – Auxiliary hoist.

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