

# ***ROAD RAIL ACCESS BASKET SKYRAILER 16 XR/R***



Basket payload	310 kg
Lateral working range	7.20 m
Maximum floor height	14.3 m



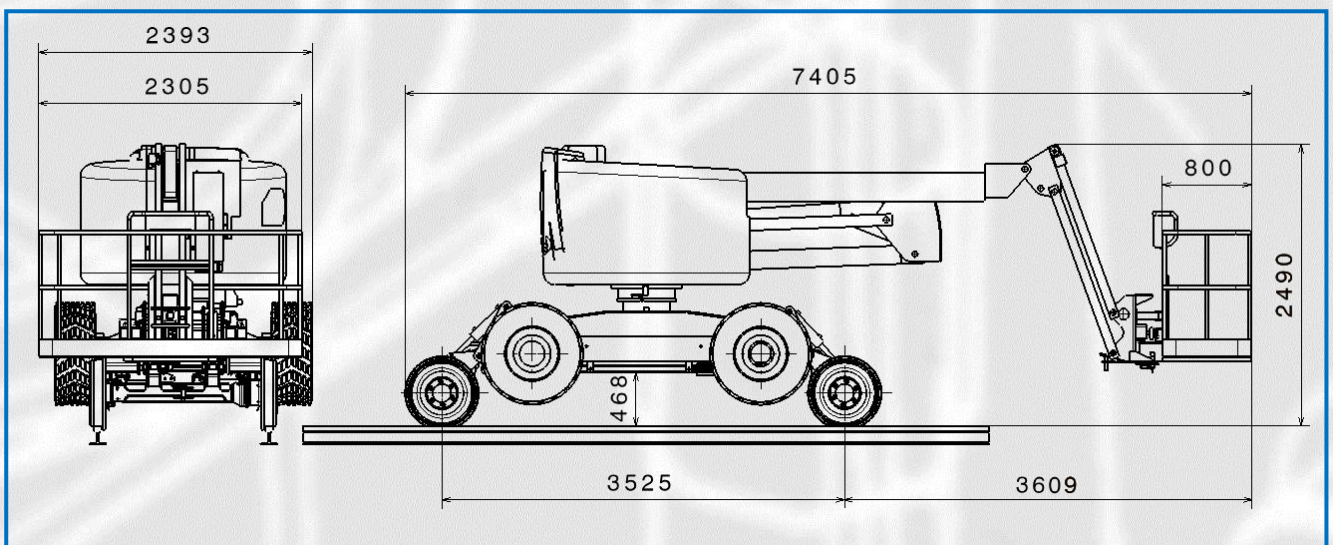
# 1 – Technical description of the SKYRAILER 16 XR/R

The SKYRAILER 16 XR/R has been developed by NEOTEC from the *HAULOTTE* HA16 standard access platform. The railway adaptation has been done in close co-operation with the *HAULOTTE* technical department.

This concept benefits from 8 years experience gained by NEOTEC with the similar adaptation based on the *HAULOTTE* 12 series.

The NEOTEC *HI-RAIL* EPV 10.25 axles ensure safe operation under all railhead conditions and for on-tracking and travelling. This hydraulic transmission provides the operator with superb feel and accurate control while moving the machine in working or travelling mode.

Considering the working envelope and the weight, the concept of the SKYRAILER 16 XR/R provides an extremely compact access solution.



This machine is designed to be compliant with the following standards:

- EN280
- NFF58.002
- RIS 1530 PLT (issue 02)
- EC DIRECTIVE 2006/42

## 1.1 – Data and performances of the chassis

The chassis strictly conforms to the original *HAULOTTE* unit so the manufacturer's warranty is maintained and available throughout Europe allowing the customer to use the services provided by the manufacturer's maintenance network.

- |                              |   |
|------------------------------|---|
| – Engine                     | DEUTZ D2011 L03                                       |
| – Power                      | 30.9 kW.  |
| – Hydraulic transmission     | Variable displacement : 45 cm <sup>3</sup> / 275 Bars |
| – Fuel tank                  | 55 L  |
| – Hydraulic tank             | 100 L   |
| – Electrical circuit voltage | 12 V  |
| – Gross weight               | 9 500 Kg  |



▪ Emergency activation mode	Electric pump
▪ Hydrostatic railway axles	One driven – Two with brakes
▪ Wheel diameter	580 mm – with rubber sweeps
▪ Twisted track control	One oscillating axle – hydraulic locks
▪ Maximum gradient capability	35‰
▪ Maximum speed on road	6 km/h
▪ Maximum speed on rails in travelling mode	10 mph
▪ Maximum speed on rails in working mode	5 km/h
▪ Free rotation of the boom while machine is travelling on rail (*)	+/- 30°
▪ Maximum rail track cant	up to 200 mm
▪ Minimum rail track curve radius	80 m
▪ Maximum wind speed authorized for operation	45 km/h
▪ Braking distance at maximum speed on flat track and dry rails	20 m

## 1.2 – Performances of the access basket on rail track

Boom movement is controlled through proportional valves which allow any combination between arms, jib actuations and/or turret slewing.

DANFOSS valves ensure easy and accurate actuation providing safe operation.

– Standard basket dimensions	1.80 x 0.80 m
– Basket lifting capacity	310 kg / 2 persons
– Turret slewing angle of rotation	350°
– Basket slewing angle	180°
– Telescopic arm lifting travel	From 0° to + 75°
– Articulated jib travel	From – 70° to + 70°
– Maximum floor lifting height on tyres	14.1 m
– Maximum floor lifting height on rails	14.3 m
– Maximum static Payload managed by ELC (**)	310 kg      cant up to 150 mm
	280 kg      cant up to 180 mm
	250 kg      cant up to 200 mm

The command post installed in the basket controls all road and rail modes.

- In railway mode all the events are recorded in a data logger actuated by key
- Travelling speed is automatically engaged when the boom is folded in the resting position
- Working speed is engaged as soon as any boom function commences
- Dead man pedal inhibits all functions when released

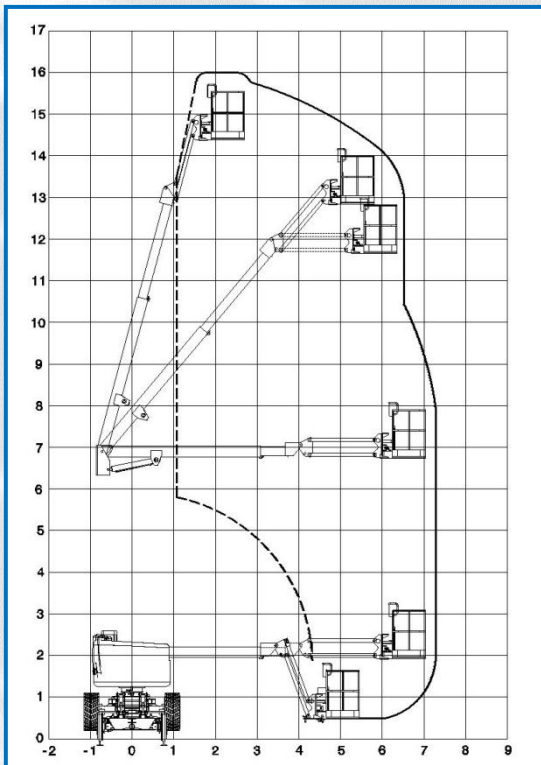
(\*) The angle of rotation will be confirmed after final VAB tests

(\*\*) ELC: Electronic Load Controller

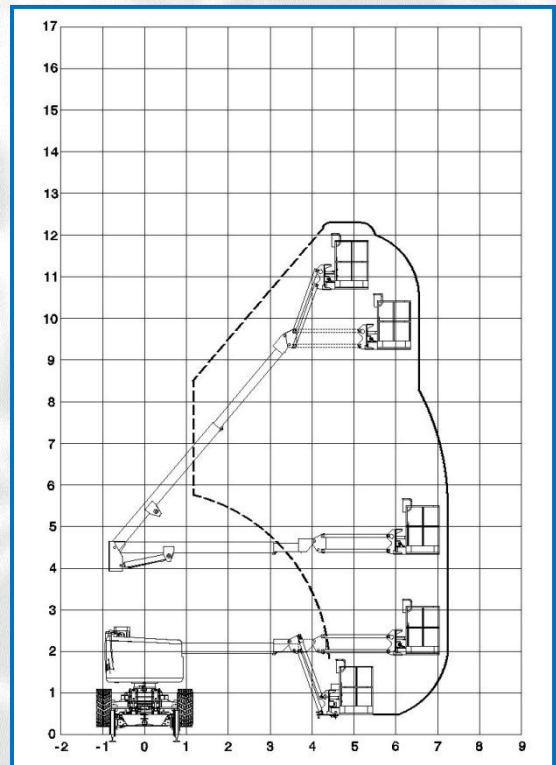




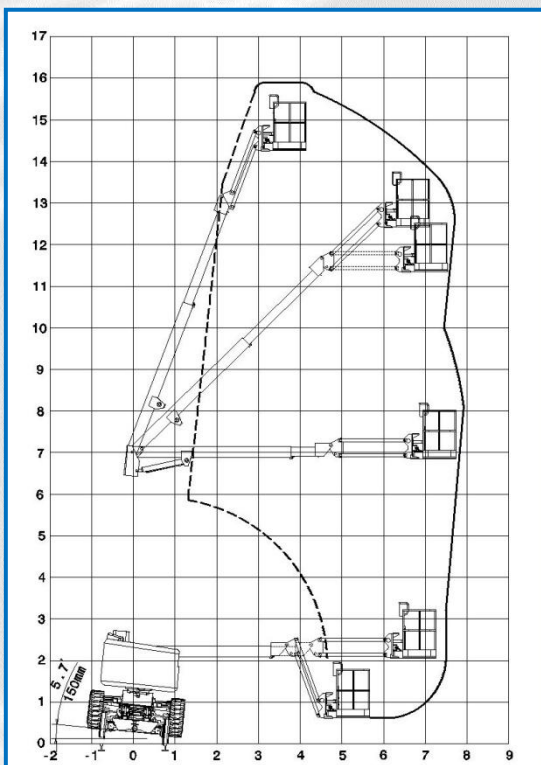
## 2 – SKYRAILER 16 XR/R Working diagrams



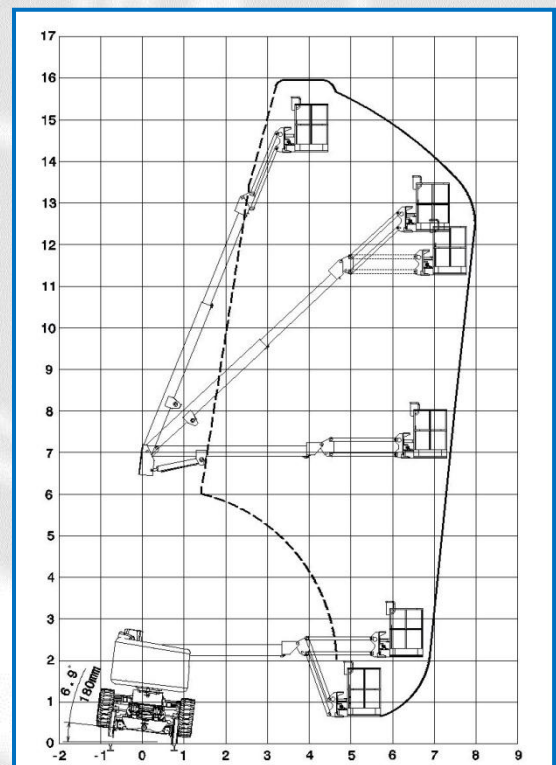
2.1 – Level rail, no OLE



2.2 – Level rail under existing OLE



2.3 – Cant < 150 mm



2.4 – Cant > 150 mm

**Note:** Travelling at working speed is possible while the kinematic is limited by ELC in configuration 2.2 and only when the turret angle is inside  $\pm 30^\circ$  from the track line (*this value will be confirmed after the final VAB test*)