



## TECH SPEC

### **ASCENDANT A20-15TJ TRUCK MOUNT**

#### **GENERAL**

This is our multi-purpose 20m maximum working height access platform mounted onto a IVECO DAILY of 3,500kg GVW and 3750mm wheel-base. (or similar)

The telescopic boom plus fly arrangement gives excellent controllability when manoeuvring. The multiple jacking configurations ensure the machine can be set up for working in the most confined spaces.

The design concept includes for oversized structural elements coupled to sensitive, direct hydraulic proportional controls, making the machine feel safer and simpler than its contemporaries when being operated whilst requiring the minimum of maintenance.

The unit is generally as shown on our attached drawings but specifically as described below:

#### **PERFORMANCE**

SWL	230kg(120Kg)
Max working height	20m
Max platform height	18m
Max. working outreach	15m
Cage dimensions	0.73m x 1.4m x 1.1m high
Cage rotate	160 deg.
Closed height	3.1m
Closed width	2.1m
Travelling length	7.9m
Weight of unit	3370kg including vehicle (approx.)

#### **CAGE**

Formed from structural quality aluminium tubes the top rail is set back from the front of the cage providing finger protection and also presenting a flush face for the cage easing the problems associated with carrying large, flat objects e.g. overhead signs.

Having an uninterrupted plan area of 0.73m x 1.4m the assembly is suitable for 2 men and tools for working.

The cage features a 150mm high kickboard and a mesh floor.

160 degrees powered rotation fitted as standard.

## **BOOMS**

A 3-stage telescopic main boom coupled to an independent fly boom forms the general concept of this particular unit.

The main boom is driven in and out via a single telescope cylinder and system of wire ropes. The fly boom is 2.2m long and has an operating arc of 125 deg.

Cage leveling is effected via a closed loop master/slave hydraulic cylinder arrangement complete with a manual trimming valve.

The boom sections are formed from prefabricated folded sections seam welded together to produce a 6-sided box.

## **TURRET**

Two substantial prefabricated box sections form the upright portion of this assembly giving the platform substantial lateral rigidity. An oversized pin sits between the booms and the turret. A large slewing ring, driven by a hydraulic planetary gearbox and pinion connects this unit to the chassis.

## **CHASSIS**

Formed into a box from deep folded channels, this unit features high torsional resistance combined with lightweight. Powered horizontal and vertical jacks are incorporated along with a non-slip deck.

An "A" frame mounted behind the cage provides a stowing point for the booms during transport.

Steps are provided for easy access to the vehicle deck.

Legally proportioned side guards are included between the vehicle's wheels.

## **CONTROLS**

The machine is fitted with H-type jacks that are controlled from the lower floor position. The jacks are fail-safe in principle preventing the platform from operating unless all 4 are in firm contact with the supporting surface.

Cage controls of the direct (live) hydraulic proportional type, duplicated at the base, give very smooth control of the platform throughout its operating range.

The platform will automatically default to the appropriate working envelope as the jacks are deployed. All limiting devices are positively failsafe in operation.

Engine start/stop is provided at each operating location.

## **EMERGENCY CONTROLS**

A manually operated hand pump is included to return the platform to the transport position.

## OUTRIGGERS

Three outrigger configurations are provided on this machine;

- **Full width** – allows maximum working load at full outreach through 300-deg. rotation. Jack spread 4.1 m.
- **One sided** – allows maximum working load at full outreach through 180 deg rotation on fully jacked side. Jack spread 3.15m.
- **Narrow Jacking** - allows maximum working load at max outreach through 45 degrees over the rear of the platform. Jack spread 2.35m.

## INTERLOCKS

- Booms cannot be raised until jacks are correctly deployed.
- Jacks cannot be operated unless booms are in transport position.
- PTO cannot be engaged unless handbrake is on.
- If engine is running starter cannot be engaged from the platform.
- The platform is automatically prevented from lowering or rotating into the cab or jacks.
- The platform will stop working should the cage be overloaded.

In addition to the above, warning lights are provided indicating:

- Booms not stowed.
- Jacks not stowed.
- One sided, narrow or full width jacking selected.

## HYDRAULICS

The hydraulic system is of failsafe design throughout, with direct mounted load control valves fitted to all cylinders as a precaution against hose failure.

The hydraulic power take-off on the vehicle draws from a large capacity hydraulic oil tank. Filters are provided for suction, pressure and return lines. Pressure limiting valves are provided where appropriate.

## SAFETY

The machine is designed in accordance with the requirements of the European machinery directive and will be provided with a "CE" mark.

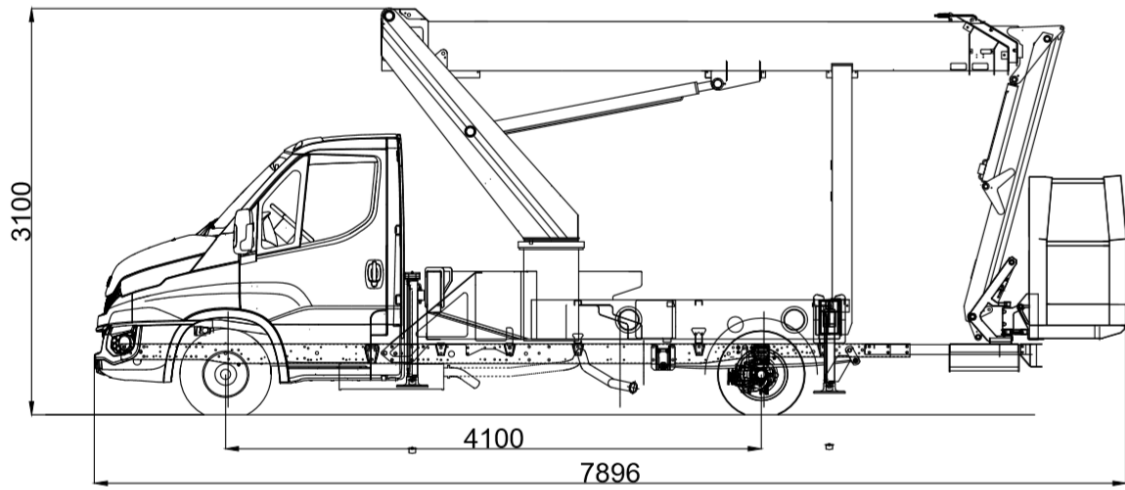
Testing of the unit will include a 125% overload test with the machine set up in its most unfavorable condition and a witness certificate provided.

## STEELWORK PROTECTION

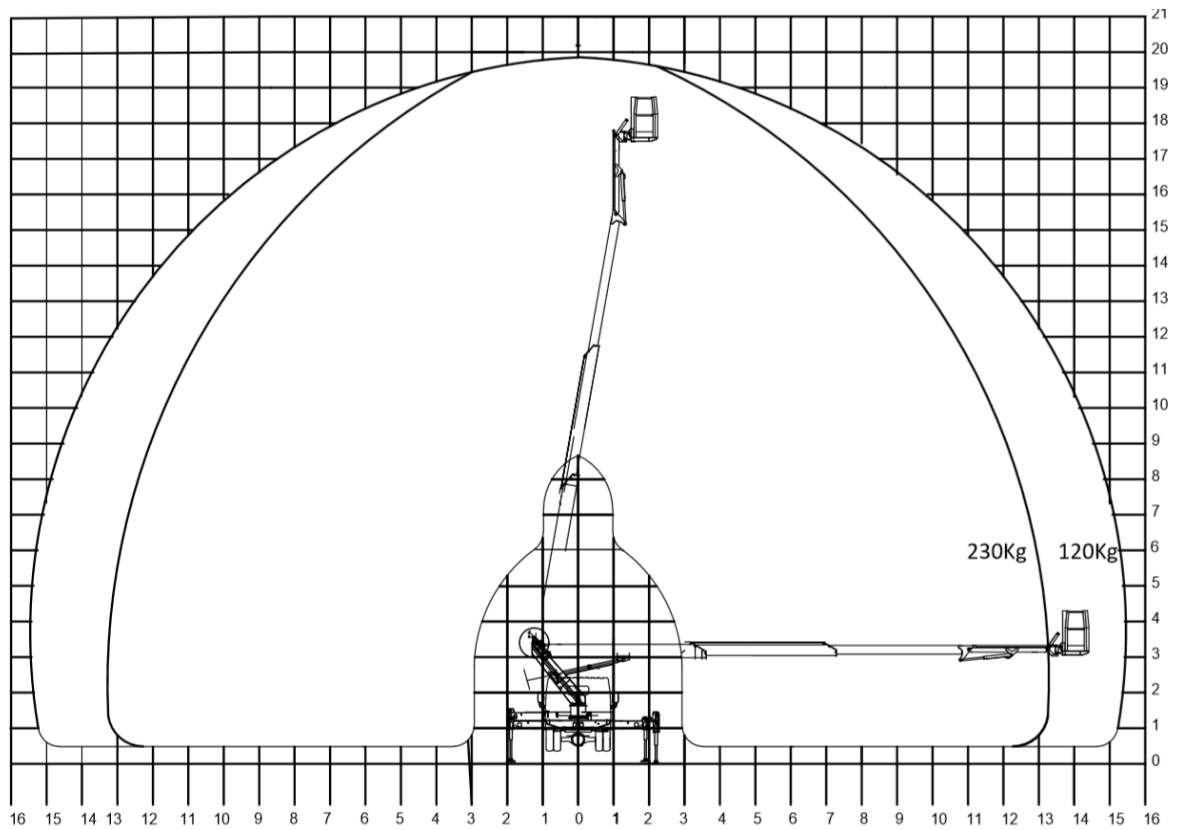
All steelwork will be shot-blasted prior to painting primer/undercoat and gloss finish. Typical paint thickness 90 to 110 microns.

## PINS, BUSHES AND FITTINGS

All pins are stainless steel running in bushes that can be greased. All fittings, nuts and bolts are plated against corrosion.



**20-15 GA**



**20-15 WORKING ENVELOPE**





