

FALCON 75 ACLM - Automated Cone Laying Machine



Figure 1: Falcon 75 on an Iveco Daily 70 chassis

Product Characteristics:

The FALCON 75 ACLM is a premium solution for automatic cone laying, featuring some unique characteristics:

- **EASY:** Easy to operate through touch screen control panel.
- **RESILIENT:** Machine design suited for all-weather use (except snow).
- **RELIABLE:** Developed and tested since 2015 and with experience of 150'000+ cones deployed and collected over hundreds of kilometers of lane closures.
- **FAST:** FALCON 75 out-performs most competitor systems based on speed.
- **SAFE:** Minimal exposure of machine structure to live traffic. Zero exposure of moving parts to live traffic.
- **FLEXIBLE:** Various modes allow for use in different traffic management settings.
- **Swiss Quality:** Designed, developed, and manufactured in Switzerland.
- **FALCON 75** is our 3rd generation cone laying machine. With close to 10 years of experience with automated cone laying systems, we've raised the bar for performance and reliability.

Technical Data:

- The machine is designed for the use with 750 mm, 5 kg cones, Type Falcon 75. The Falcon 75 cone can be delivered with different types of reflective sleeves, depending on local requirements.
- The machine is designed to be mounted on the back of a truck bed or inside a curtain side body.
- Recommended chassis type: Iveco Daily 70 or similar / bigger.
- Cone Storage:
 - Model S: 225 cones.
 - Model M: 360 cones.
 - Model L: 450 cones.
- Net weight without cones:
 - Model S: Approx. 2'200 kg.
 - Model M: Approx. 2'850 kg.
 - Model L: Approx. 3'500 kg.
- Gross weight:
 - Model S with 225 cones: Approx. 3'400 kg.
 - Model M with 360 cones: Approx. 4'800 kg.
 - Model L with 450 cones: Approx. 5'900 kg.
- Machine length:
 - Model S: Approx. 4225 mm.
 - Model M: Approx. 5605 mm.
 - Model L: Approx. 6525 mm.
- To be installed on min. 2'000 mm wide flat bed.
- Max. working speed:
 - Deploy: Approx. 7.5 cones / minute.
 - Collect: Approx. 6.5 cones / minute.
- Distance between cones: Can be freely set by operator within a range of 3-100 m.
- Taper functions: Automatic Taper left to right and right to left functions. Number of cones and spacing between cones as per local requirements.
- User friendly touch screen for remote control and camera system display.
- Process is monitored by 4 cameras.
- The machine is run by a 48 VDC / 180 Ah battery on board of the machine. This is sufficient for approx. 750 cones cycles. External battery charging: 230 VAC, 16 A.
- Battery support charging form vehicle engine upon request.

- Cones can be placed and picked up all the way across the back of the vehicle including to the outside of the vehicle L/R on each side. This is to cover a full lane of 3'500 mm. Preset modes for work in medium and narrow lanes (e.g. hard shoulders).
- Modes of operation:
 - Continuous deployment of cones in one lane at a set distance while driving forward.
 - Continuous collecting of cones in one lane while driving backwards.
 - Single cone deploy/collect at user defined position (e.g. to do tapered layouts at work zone start and end).
 - Taper modes.
- Remote access functionality through GSM network for training, check-ups, data logging and trouble shooting.
- Signalization:
 - Two orange beacons at both sides of the machine.
 - Light arrow or similar can be installed at the back of the machine as per customer's request.

FALCON 75 Cone Data:

- Height: 750 mm. Cone Base: 400x400 mm
- Weight: Approx. 5.2 kg
- Stacking pitch: Approx. 55 mm
- Different types of reflective sleeves available.



Figure 2: Falcon 75 cone