ALMACRAWLER

ALMAC-PACIFIC.COM.AU

BI-LEVELING - A NEW ERA FOR TRACKED, AERIAL PLATFORMS

As AlmaCrawler continue their research and development into new technologies, the hire and rental industry now benefits from an innovative, patented machine functionality, Bi-Levelling.

With extensive experience in the aerial work platform sector, the Italian-based AlmaCrawler team, have now evolved the capabilities of access equipment beyond traditional aerial platform designs. The highly-sought-after patented technology, Bi-Levelling, has rapidly affirmed the Almac brand across global markets.

What is the Patented Bi-Levelling System?

The bi-levelling system allows our machines to overcome longitudinal slopes of *up to 20˚, and lateral slopes of up to 15˚. This functionality significantly increases performance, safety, and comfort by auto-levelling the chassis or aerial structure, even in the most extreme conditions. Inclined terrain and other multi-level surfaces can now be overcome using bi-levelling functionality, allowing users a greater return on their investment.

This unique product capability, with simple user experience and superior market adaptability, caters to professional end-users including Arborists, and the rental and construction sectors.
Today the bi-levelling system is installed on all lifts produced by Almac. Coupled with our intelligent, integrated anti-collision detection technology, Almac machines are considered one of the safest and most reliable in the world.

TECHNICAL TALK

ATHENA Scissor Lifts

Automatic levelling is completed by three independent hydraulic cylinders that are mounted in the undercarriage.

The undercarriage has two independent bi-level legs to adjust the lateral inclination of the chassis, with a hydraulic cylinder at the rear of the undercarriage to adjust the longitudinal inclination. Utilising independent undercarriage bi-level legs, allows for unique positioning on worksites up to 20 degrees inclination. It also allows the operator, in certain circumstances, to level the machine on multi-level surfaces such as a raised concrete slab or steps.

The system will not permit lifting until the chassis is within the safety of a zero-degree level.

The safety network utilises twin channel inclinometers to measure the real time inclination of the chassis, and the working height of the platform. When working, if the system detects that the elevated machine changes inclination, the alarm will sound, and further movement is restricted until the inclination is corrected. For our EVO range, this inclination adjustment can be completed up to 6.5m working height (known as proactive levelling).

0402 982 999

Call today for a no-obligation discussion.

JIBBI Boom Lifts

Automatic levelling of the JIBBI is completed using our unique design of a dynamic, aerial structure that is adjusted at the slew ring base, by means of two hydraulic cylinders. Prior to lifting the aerial structure, the automatic levelling program will complete the adjustment of the aerial structure alone, bringing the inclination to zero-degrees.

Adjusting the aerial structure alone, allows the JIBBI to maintain a fixed footprint of the undercarriage for maintaining stability, while operating on inclines up to 15-degrees in any direction.
The comprehensive leveling system of the JIBBI utilises twin channel inclinometers on all individual moving components of the machine. This range extends from the undercarriage and base inclination through to all individual aerial components such as main boom, jib arm and platform level. The onboard machine ECU compiles the data in real time, ensuring the operator is always safe, stable and level whilst operating.

Whilst operating elevated drive, the system is monitoring for and inclination changes of the chassis and base sensors greater than one-degree. Where this occurs, the aerial structure can be re-adjusted at height, back to one-degree, utilising the proactive-levelling system, standard on all JIBBI models.

The rubber track-drive system provides excellent tracking and manoeuvrability in all conditions. Non-marking tracks are fitted as standard to prevent the machine leaving marks on concrete surfaces.

BILLENNIUM Spider Lifts

The Billennium is the first spider lift of its type, able to work at height with or without the stabilisers deployed. When operating on longitudinal slopes up to ten-degrees, or lateral slopes of up to five-degrees, the operator may choose to work without the stabilisers deployed. This ensures a narrower footprint and allows elevated driving; a first in the spider lift market.

When working on slopes greater than 10/5 degrees, and to obtain maximum working height and outreach, the stabilisers can be deployed automatically from the operators control station, without the requirement to leave the platform. Automatic levelling of the Billennium is completed utilising four hydraulic stabilisers. In the case of the Quick-PRO model, the operator can select the desired footprint for the stabilisers to deploy to, being narrow, wide, or partial selections. This is completed from the operator's console, without the need to leave the platform to manually set stabilisers to narrow/wide footprint settings.

Automatic levelling is controlled by the main onboard computer. This system actively monitors ground pressure of the stabilisers by means of pressure transducers, installed in each stabiliser cylinder. Once the correct ground pressure has been set, the onboard computer will modulate the required stabiliser cylinders to obtain zero-degrees of the chassis prior to lifting of the aerial structure. The chassis level is monitored by use of a twin channel inclinometer.

This can all be controlled by use of a single automatic levelling switch.

Contact Almac Pacific today on 0402 982 999 for a no-obligation discussion or visit www.almac-pacific.com.au.

*Varies by machine model