

ALTAVE's mining solution is featured by the Brazilian Mining Association

ALTAVE intelligent monitoring is promoted in material from IBRAM

ALTAVE, leader in intelligent monitoring for large areas, joined the Brazilian Mining Association (IBRAM) in 2022. The new partnership reinforces the company's commitment to a different, more efficient and safer mining. To promote the partnership, ALTAVE revealed more about its history and how we solve the sector's main problems through an innovative solution trusted by industry leaders. Read the full content:

"ALTAVE offers a complete intelligent monitoring solution to support operators's decision-making in critical areas, avoiding serious incidents in the monitored region through the integration of cameras and software.ALTAVE offers a complete intelligent monitoring solution to support people's decision-making in critical areas, avoiding serious incidents in the monitored region through the integration of cameras and software. Founded in March 2011 by two engineers trained at ITA (Instituto Tecnológico de Aeronáutica), ALTAVE is installed in an office in the Technological Park of São José dos Campos/SP, and in Uberlândia/MG. In 2016, the company became known internationally due to the successful deployment of four persistent monitoring balloons over a wide area at the RIO 2016 Olympic Games, ensuring the security of all Olympic venues in Rio de Janeiro.

Its monitoring service is complete, from problem analysis to contracting, maintenance and lifecycle support, including cameras and proprietary software powered by artificial intelligence, generating relevant, real-time and georeferenced information to support the customer's decision-making process and avoid serious incidents in the monitored area or surroundings. ALTAVE provides efficient, differentiated and quality solutions for relevant institutions in the sectors of Defense and Security, Energy, Mining, Ports, Agribusiness and Oil and Gas.

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For the mining sector, ALTAVE's complete system offers unique advantages in asset, environmental and occupational monitoring, such as:

- Automatic and real-time detection of invasion, fires, and structural alterations in dams.
- Robust system installed **outside the flood spot area**, maintaining availability in any situation.
- Customized software according to the characteristics of the plant.
- Installation of cameras in towers, masts, and captive airships up to
 200 meters high, capable of detecting up to a 30km radius.
- Complete solution without intermediaries, guaranteeing efficiency, maintenance and development of the system throughout its lifecycle.

How this innovative solution works

After analyzing the main problems of the activity, ALTAVE starts the implementation of high-tech cameras positioned at a privileged height, using any structure in the activity. This equipment is integrated with the company's proprietary software, ALTAVE Harpia, also installed by the company in the customer's monitoring center.

Through artificial intelligence, the software detects patterns and issues alerts in real time whenever abnormal movement is detected, such as fire outbreaks or movement in restricted regions.

The cameras carry out automatic rounds and are equipped with technology capable of capturing information not visible to the human eye. With this process, decision making is improved, and the activity security team is engaged efficiently, protecting critical assets on site and reducing operating costs.

The ALTAVE Harpia software provides relevant information interpreted by artificial intelligence, in real time and with georeferencing through a personalized interface for each diagnosed problem, with live

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transmission and reports stored in the cloud or on a local server. Autonomously, this technology interprets and detects anomalies in the monitored area or surroundings.

Innovation can also be combined with equipment and systems already installed in the activity, minimizing costs and increasing plant protection. With all this support for decision making, it is possible to maximize monitoring efficiency, as errors resulting from human interpretation of data are minimized.

Robustness - Uptime over 99%

Another aspect that consolidates the ALTAVE solution is its robustness. The system is connected in areas far from the flood zone, maintaining availability in any situation.

Even in remote areas, the operation maintains more than 99% uptime, with power redundancy and network connectivity. ALTAVE uses alternatives such as solar energy and IoT antennas to ensure the constant functioning of the system.

Located in São José dos Campos/SP, ALTAVE is also in Uberlândia/MG, where its monitoring center is located, responsible for system support, software updates and guaranteeing the success of the system with customers. "

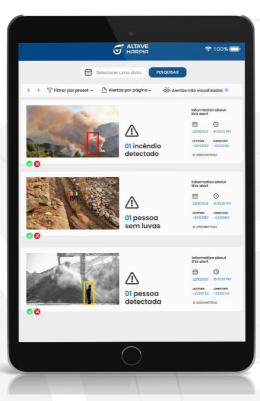
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ALTAVE Harpia intelligent monitoring software interface, in use by industry leaders. In mining, the software helps Samarco fight fires and invasions at the Germano Mine, in Minas Gerais. The new system reduced the reaction time of Samarco operators by 80%.

About ALTAVE

ALTAVE is a Brazilian company, accredited as a Strategic Defense Company (EED), with patented technology in Brazil and abroad. The company obtained the CE marking, indicating the approval of the quality of its product to be marketed throughout the European Union. ALTAVE's turnkey, autonomous and customized solution is already implemented on five drillships, in accordance with the strict standards set forth by Petrobras. With over 50K monitoring images hours on rigs alone, ALTAVE's Visual AI solution is positioned to solve the biggest safety issues and drive operational excellence in the oil and gas industry.

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ALTAVE has been offering efficient, differentiated and quality solutions for over 10 years for the Defense and Security, Energy, Mining, Ports, Agribusiness and Oil and Gas sectors.

Learn more: <u>altave.com.br/en</u>

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