HUB TECH IA

Step-by-step instructions for safe piercing

Safety guides in Vaca Muerta

Classification of Deliverable Report 21: Use Case - Security Guides - Safe drilling in Vaca Muerta:

Classification 1: By Main Resource

- Selected option: Oil and ÿ Gas (main), Water + energy (secondary).
- Justification:

  It focuses on the generation of operational and security guides for Critical activities related to the safe drilling and extraction of hydrocarbons (oil and gas). It also addresses water management in key processes such as fracking, albeit in a complementary role.

Classification 2: By Activity within Vaca Muerta

- Selected option: Automation and Standardization of Protocols
- Justification:

  The document emphasizes the automated creation of protocols and guides detailed to ensure safety and efficiency in operations drilling, using Generative Artificial Intelligence to standardize operational processes and mitigate risks.

Classification 3: Type of AI Technology Used

- Main selected option:

  1ÿÿGenerative AI Models,

  3ÿÿNatural Language Processing (NLP) Systems, 6ÿÿAI Platforms for Data Integration and Big Data,

4ÿÿMachine Vision and Image Analysis Systems.

- Justification:

  The report explicitly details the application of advanced technologies such as ChatGPT-4 (generative model based on natural language), analysis real-time predictive, visual systems for continuous monitoring and dynamic optimization through integration of sensors and operational data.

Classification 4: By Strategic Impact on the Industry

- Selected option: AI for Industrial Risk and Safety Management
- Justification:

  The report focuses on the strategic impact associated with the improvement in the risk management, prevention of work accidents and optimization of safe drilling conditions through intelligent systems that They allow you to anticipate problems and significantly reduce incidents operatives.