

Blockchain technology - applicability in the traceability of a product throughout the supply chain

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1. Blockchain in the industrial field

Blockchain is a common, distributed, chronological, immutable and cryptographically secure digital register that facilitates the process of recording transactions saved on multiple computers (nodes) in different locations which allow the assets to be easily tracked throughout the entire business network, regardless of their nature. Similar to a database, it can record continuously and scalable, the information added by users, as well as all the operations performed by and between users. Each new added operation or transaction that takes place in a blockchain is called a "block", which as it is added, the new link is characterized by a unique identity called "hash" and forms an unbroken chain of information with records that can be public and verifiable. Thus, not having a central source of recording the information, they become a very difficult target for cyber attackers who want to alter or steal information about transactions, as well as in industrial espionage situations, as it can happen in companies which have in their portfolio the distribution of irrigation systems and installations, from which I chose to exemplify the benefits of using blockchain for the entire operational flow of the product PE 75x2 ½ compression fitting (elbow).