

## CUSTOMER CASE STUDY

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AVEVA helps Brazil-based KTY Engenharia deliver on its promise to continuously evolve and bring its customers the best in engineering practices.

KTY Engenharia  
Industry - Engineer, Procure, Construct

### Goals

- To increase design accuracy and quality.
- To manage data more efficiently.
- To integrate data between documents.

### Challenges

- Multiple projects going at once require collaboration with external partners.
- KTY Engenharia is committed to always evolving.
- Potential errors had to be avoided before they caused delays.

### AVEVA Solution

- Instrumentation
- Electrical

### Results

- Production of datasheets, equipment lists and load lists are now organized and optimized.
- Diagrams are now more intelligent.
- Interoperability with other design tools saves time and effort.
- They have developed projects with over 172 plants.
- 500 cables have been connected quickly and efficiently.

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## KTY Improves Production Processes with Visual Engineering

**Sao Paulo, Brazil** – KTY Engenharia has served the oil & gas, energy, and infrastructure industries both domestically and abroad for over 30 years.

### Gaining Essential Visibility of the Path Ahead

The quantity of data involved with any engineering project creates a focus on attention to detail that can test even the most experienced engineers. One of the main concerns requiring extreme sophistication in the early design stages is the reliability and trustworthiness of information shared between documents. Large projects involve a complex interchange of documents and multidisciplinary information – an area where the slightest error can cause the biggest delays.

KTY is constantly evaluating new technologies to improve its working practices. The company considers mastering the use of AVEVA tools core to this strategy and believes it demonstrates to its customers that KTY is always evolving. Multiple projects, running concurrently, require that the firm's teams and its systems are in regular contact with external partners, that the tools used by all parties are fully capable of interoperability, and that collaboration is best supported by shared data across all project workflows.

Fillipe, an electrical engineer at KTY, considers the company's commitment to best practice a key part of its competitive advantage. For KTY's electrical engineering teams, understanding cable routing, producing datasheets, equipment and load lists, and often importing data from diverse systems required greater clarity to improve design quality. It became clear that gaining the ability to see potential errors, clashes and dead-ends in cable routing could only be achieved with tools able to deliver 360° vision.

### Better Results Through Enhanced Design Intelligence

AVEVA consultants introduced Fillipe and his teams to the advanced dimension of design direction that could be achieved by integrating AVEVA Electrical with AVEVA Instrumentation to harness the process

improvements achievable with visual engineering. The two solutions share the same SQL database, enabling the firm to share and control equipment and connections, besides making cable management via 3D models.

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“Working with software developed exclusively for electrical projects, we're able to produce better results at various stages of the project. We learned that AVEVA Electrical can share information with AVEVA Instrumentation and AVEVA PDMS, which makes our processes faster and integrates information between documents.”

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**Fellipe,**  
Electrical Engineer, KTY Engenharia

Applying the cable routing solution via a 3D model enabled the KTY electrical team to route more than 4,000 cable runs (more than 200 km of cables) and obtain more accurate data from voltage drop calculations, and precise materials lists, generating savings for its customers.

KTY's Instrumentation Manager, Roberto, explains the scope of benefits the company has achieved using AVEVA Instrumentation, particularly with regard to compatibility of the materials catalogues across different projects by noting they have developed projects with 172 plants, over 1,300 instruments, 170 datasheets, and that more than 500 cables have been connected quickly and efficiently.

Such achievements represent a significant improvement on previous practices where each discipline had its own catalog of materials for cables and cableways, describing the same material differently.



## Taking the Right Direction

Based on its experience of the process improvements driven by AVEVA tools, the KTY team is looking to enhance its future operations and provide a highly efficient Engineering & Design phase for the company's clients.

KTY Engineering seeks to surprise its customers, not only with their track record of proven technical quality in over 30 years of activities, but also with their ability to work with new technologies that improve production processes.

“We intend to continue using AVEVA tools and adopt them as a working standard. Satisfaction with the results will lead us to adopt the other AVEVA solutions to integrate with all other disciplines at the same level of quality.”

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Valter,  
Systems Administrator, KTY Engenharia



**AVEVA**

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