“KAIZEN Management Model and its application in the fertilizer industry”

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Demonstrate how KAIZEN can work in practice, from the improvement in the process of loading road-rail of sulphur.
METHODOLOGY

Bibliographical Research

Field Research

Data and images provided by the company
QUALITY MANAGEMENT

• Makes work more productive, generates motivation to resources’ direction and allows them to reach satisfactory results;

• For this, it is necessary to use techniques and tools to measure and control process performance;

• KAIZEN is a way of ensuring quality in processes.
Most important concept in Japanese management;

Companies worldwide have used in their processes, in the quest for improved quality of products and services, to meet the needs of customers, reducing time and costs of operations and, thereby, obtaining the desired profit.
KAIZEN

Management Profit

Management of quality and safety | Costs Management | Logistics Management

Operations of the workers | Information | Equipment | Products and Materials

Standardization

Five Ss (good maintenance)

Elimination of *muda* (waste)

Teamwork | Individual discipline | Moral | Quality circles | Ideas

Areas of impact

Three key elements of *Kaizen*

Fundamentals
ULTRAFÉRTIL

• Key enterprise in Brazilian agribusiness;

• Largest supplier of products to fertilizers.
SULPHUR LOADING

Study of improving the loading time of the wagons
KAIZEN in the Sulphur Loading

• Multidisciplinary team trained in the philosophy of KAIZEN Management Model;

• Brainstorming, field observations and interviews;

• Objective: to develop actions for process improvement.
RESULTS

1 - Lid Opening
2 - Inspection
3 - Loading
4 - Lid Closing
5 - Cleaning
6 - Movement
RESULTS

Moviment  Moviment  Moviment  Moviment

Lid Opening  Inspection  Loading  Lid Closing  Cleaning

Balance
Increase of 50% in the loading

Quantity of sulphur loaded

Before

151,20 Thousand Tons / Month

After

226,80 Thousand Tons / Month
CONCLUSIONS

• Process standardization;
• Increased performance;
• Cultural change.
CONCLUSIONS

By applying the model of continuous improvement, KAIZEN, the sector of loading road-rail of sulphur obtained a significant change in its working method, obtaining elimination of rework, reducing time and costs, and increased productivity.
Thank You All!