

# Customer Success Story

## Machine Efficiency up, Error Rate down

**The Turkish wiring harness manufacturer Nursan has implemented the 4Wire CAO manufacturing execution system from DiIT. Since then, the company's machine efficiency has increased considerably and the error rate has dropped significantly.**

Nursan is pursuing an ambitious growth strategy. The MES from a third-party provider that the Turkish wiring harness manufacturer had previously used in the P1 production area was not suitable for implementing this strategy. "We use high-tech machines for cutting and stripping cables and attaching connectors," explains Ahmet Arslan-Hakkı Akyol, Projects Coordinator and Maintenance Director at Nursan. "However, with the previous MES, we were not able to fully utilize the potential of these machines. We could not control them efficiently enough or ensure sufficient production quality."

Due to communication problems between the MES and the machines, Nursan's employees were unable to track which machines were producing efficiently and which were not. They were also unable to use the software to read out measurement results from the machines, for example whether the cables were the right length. This meant that Nursan was unable to perform automatic quality checks before starting the machines. These challenges led Nursan to look for a new MES solution. The company wanted to increase productivity, reduce waste and support its growth strategy.



# Since the introduction of 4Wire CAO, the efficiency of our machines has increased considerably and the error rate has decreased significantly.



Ahmet Arslan-Hakkı Akyol, Projects Coordinator and Maintenance Director at Nursan

## Comprehensive Evaluation

As part of a comprehensive evaluation, Nursan put several MES solutions to the test. Using test installations in real production environments, the wiring harness manufacturer tested various systems over several months, comparing their range of functions, performance and usability. At the end of this test phase, Nursan finally opted for the MES 4Wire CAO (Cutting Area Optimization) from DiIT. This software is specifically developed for the control and optimization of wire harness production and can communicate with machines from various global manufacturers.

“The evaluation showed that 4Wire CAO best meets our traceability and quality requirements for our production and allows us to control our machines efficiently,” says Ahmet Arslan-Hakkı Akyol, explaining the decision. “This MES is a state-of-the-art ready-to-use solution backed by a provider with many years of expertise in developing software specifically for the wiring harness industry. We can also connect machines from different manufacturers, giving us maximum flexibility for future investments.”

## Uncomplicated Implementation

Together with DiIT, Nursan implemented 4Wire CAO at three production sites and experts from the software provider provided detailed training to employees on how to optimize production with the MES. As part of the implementation, the software was connected to machines from Komax, Schleuniger and other manufacturers and integrated into an ERP system from SAP. The MES reads work orders and material data from this system.

It took only three months from the start of the implementation to have the software up and running. “Apart from minor problems, the implementation went smoothly and without complications,” reports Ahmet Arslan-Hakkı Akyol. “We received excellent support from DiIT’s IT department in solving these problems.”

## “Expectations fulfilled”

Around 500 Nursan employees are now using 4Wire CAO. The MES enables them to carry out all the necessary quality checks and they are always informed about the efficiency of the machines. Large screens in the production areas show the most inefficient and most effi-

cient machines in real time. This enables them to identify and react immediately to inadequate production performance.

Ahmet Arslan-Hakkı Akyol is satisfied: “The software fulfills our expectations. It enables us to use the machines correctly and to organize our production efficiently and with high quality. Since the introduction of 4Wire CAO, the efficiency of our machines has increased considerably and the error rate has decreased significantly.”

## About Nursan

Nursan Kablo Donanımları A.Ş. is one of Turkey’s leading wiring harness manufacturers. The company designs, develops and produces cable harnesses for all electrical functions in vehicles. Headquartered in Istanbul, it has additional sites in Turkey and Bulgaria and employs around 7,500 people. Nursan’s customers include global OEMs such as Hyundai, Ford, Fiat and Isuzu, as well as Turkish automotive and vehicle manufacturers such as Otokar, Temsa, Isuzu, Togg and TürkTraktör.

## Contact:

DiIT GmbH  
Ferdinand-Porsche-Str. 3  
82205 Gilching, Germany

sales@diit.de  
Phone +49 8105 3987200  
Fax: +49 8105 3987201

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