Spanish company offers digital twin for modeling mechanical systems

Summary

Profile type
Technology offer

Company's country
Spain

POD reference
TOES20250618021

Profile status
PUBLISHED

Type of partnership
Commercial agreement with technical assistance

Targeted countries
• World

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Term of validity
18 Jun 2025
18 Jun 2026

Last update
18 Jun 2025

General Information

Short summary

A Spanish technology provider that offers modeling, simulation and digital twin services for modeling mechanical systems, is looking for companies willing to include digital solutions to manage the behavior of their machines, equipment, and structures through commercial agreement with technical assistence

Full description

A digital twin is a virtual replica of a physical system, process, or product that can be used for modeling, analysis, and optimization. In the case of modeling mechanical systems, a digital twin can be used to create a virtual representation of a physical machine or component, and then simulate its behavior in different scenarios, such as changes in operating conditions, loading conditions, or material properties. By analyzing the results of these simulations, engineers can gain insight into the performance of the system and identify opportunities for optimization. In addition to simulation, digital twins can also be used for predictive maintenance, allowing engineers to detect potential issues before they occur and schedule maintenance activities accordingly.

The spanish company began operations in 2015 as an innovation consulting company focused on promoting the use of the latest technological advances, as artificial intelligence and digital twin, in conjunction with robust business models to enabling engineers to optimize performance, reduce maintenance costs, and improve reliability of

mechanical systems.

The Spanish firm models and simulates mechanical systems by analyzing the data collected by sensors, identifying potential problems before they occur, allowing for proactive maintenance and reducing the risk of equipment failure and downtime. Their models include the following elements:

- Rigid three-dimensional mechanical elements with joints (with inertia tensor)
- Flexibilities
- Non-linearity (contacts)
- Control systems and subsystems

with the objective of:

- Understand the behavior of the mechanism system
- Optimize the kinematics and dynamics of the mechanism
- Optimize system control

Spanish firm seeks companies willing to includr a digital solutions to manage the behavior of their machines, equipment and structures through a commercial agreement with technical assistance.

Advantages and innovations

Digital twin focussed in modleing mechanical systems

Technical specification or expertise sought

Stage of development

Already on the market

Sustainable Development goals

• Goal 9: Industry, Innovation and Infrastructure

IPR Status

Secret know-how

IPR Notes

Partner Sought

Expected role of the partner

Companies open to including a digital solution to manage the behavior of their machines, equipment and structures

Type of partnership

Commercial agreement with technical assistance

Type and size of the partner

- **Big company**
- **SME 50 - 249**
- **SME 11-49**

Dissemination

Technology keywords

- **01001002 - Digital Systems, Digital Representation**

Market keywords

- **02007025 - Consulting services**
- **02006009 - Other computer services**
- **02007014 - Other industry specific software**
- **02007011 - Manufacturing/industrial software**

Targeted countries

- **World**

Sector groups involved