Synera ⊸ SEAT

Customer Story

SEAT is building an agentic AI system to take body-in-white development further

After cutting individual engineering processes by over 95% with Synera, SEAT is applying the same agentic AI to its most business-critical question: whether a component can be manufactured, in thirty minutes instead of four weeks.

5 min

from 2 hours

A body-in-white workflow, now more precise

1 hour

from 42 hours

Over 95% time saved on a body-in-white workflow

30 min

from 4 weeks

The next step: feasibility assessment potential, agentic AI system

Manufacturability was answered last, when the design was already locked

Body-in-white ran in strict sequence: design, then simulation, then manufacturing validation last. By the time simulation flagged a part that could not be made, the geometry was locked and the cost of changing it had multiplied.

Ask the manufacturability question during design, not after it

With Synera automation already proven in production, SEAT went further. Specialist AI agents now validate manufacturability during design, while the geometry can still change, so the answer arrives when it is still cheap to act on.

> We are breaking the ceiling. The reduction in time is important, but so is the precision and the quality in general.

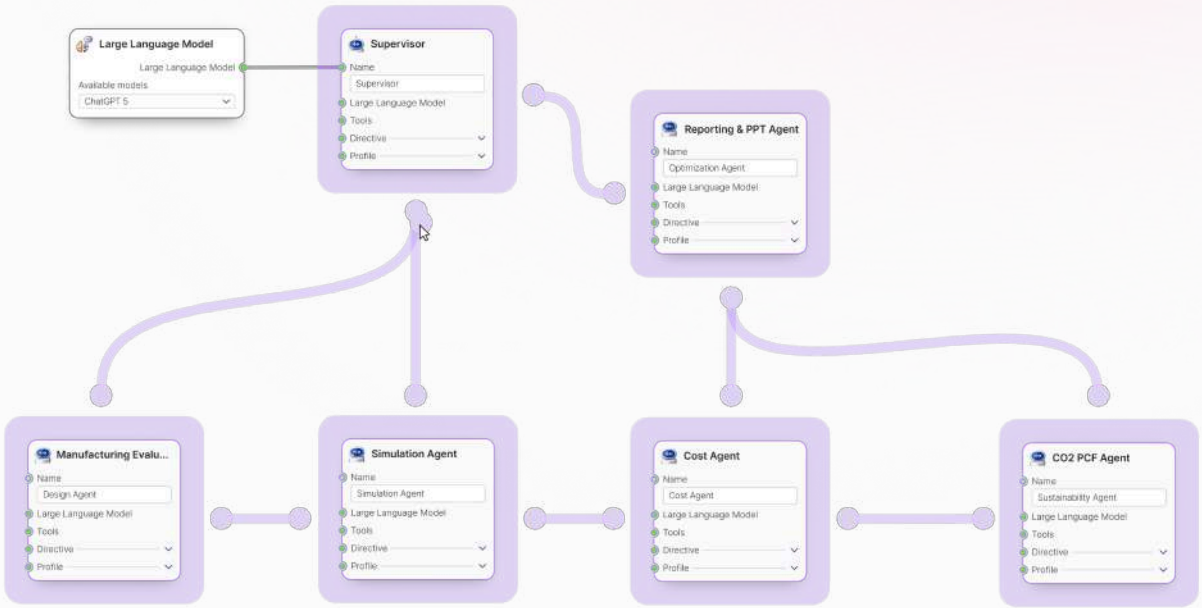
Juan de Dios Escribano Felguera

Manager SEA/EK-K1 Body Development & Corrosion Protection, SEAT

A feasibility check any designer can run, powered by specialist AI agents

The agentic system is built on the workflow automation SEAT already had in production. Connectors to CAD, Altair simulation tools, and the material database give the agents the same data engineers use directly.

Rule-based workflows run the forming simulation and geometry extraction. Every calculation is deterministic, not approximated by an LLM, and specialist agents handle the analysis from there.



The five-step process, engineer in control

- Designer uploads a component, asks in plain language
- Supervisor agent calls the specialist agents in sequence
- Agents extract geometry, run the forming simulation, evaluate manufacturability
- System returns a verdict, problem areas flagged
- Engineer decides: revise the CAD, re-submit, or ask cost and CO2 follow-ups

Potential to return a first answer in 30 minutes

Feasibility answered in design, not discovered after tooling

Putting the feasibility check in designers' hands with Synera changes the economics of the whole program

- **Time savings:** Weeks of simulation queue time recovered per component.
- **Material and cost savings:** Issues caught before tooling is locked, when a fix stops at a CAD edit, not a six-figure rework.
- **Democratized access:** Designers run a full forming simulation without specialist support, and that knowledge stays encoded for the whole team.
- **Team capacity:** Simulation engineers freed for higher-complexity work.

From workflow automation to a deployed agentic system

Stage	What was built	Result
2025: Automation	First workflow automations in production, targeting product quality, durability, and ergonomic comfort	2 hrs → 5 min; 42 hrs → 1 hr
2025: Scale	Multiple use cases moved into production across body-in-white	Over 95% time saved across use cases
2026: Agentic system	Manufacturing feasibility system built and presented live at CDFAM Barcelona; now deploying at SEAT	4 weeks → 30 min (potential)

SEAT

About SEAT

SEAT S.A. is a Spanish automotive manufacturer headquartered in Barcelona, part of the Volkswagen Group. Its body-in-white engineering team develops the structural steel and aluminum framework that forms the core of every vehicle, before exterior panels and interior components are fitted.

Synera

About Synera

Synera is the platform purpose-built for agentic AI for engineering. It connects engineering tools and executes real engineering work across CAD, CAE, and PLM, without vendor lock-in, and deploys on-premises so engineering IP stays secure. With 80+ integrations and 170,000+ workflows in production, Synera is relied on by 6 of the 10 top automakers, including BMW, Hyundai, and Volvo Trucks.

Take the next step

See it in action

Not sure where to start?