

# TECHNOCENTRE

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At a vast 150-hectare complex in Guyancourt, near Paris, the Technocentre houses most of Renault's vehicle design functions, which were previously scattered across over fifty different sites. **The centre is designed to optimize synergies throughout the transition from design intention to finished vehicle.**



- ▶ Safety
- ▶ Environment
- ▶ Life on board
- ▶ Mobility

▶ **Competitiveness**

## BASIC FACTS

The Technocentre addresses the need for synergy and optimally effective interchange of ideas among the functions involved in vehicle inception. Cross-functional practice is facilitated by having all concerned work at the same site: designers, electronics engineers,

acoustics specialists, vehicle architects, ergonomists, etc. To stimulate constructive dialogue under a collective approach based on convergence of expert knowledge, the Technocentre buildings themselves were designed consistent with the inherent logic

of the new vehicle design process. The first building houses the earlier design phases, then as we move through the Technocentre, so we advance through the design process, right up to the final prototype phase, which implements final production tooling.

## IN SHORT

SINCE IT WAS OPENED IN 1998, THE TECHNOCENTRE HAS FORMED THE HUB OF ALL RENAULT'S ENDEAVOURS ON NEW-VEHICLE DEVELOPMENT, FACILITATING PRODUCTIVE INTERCHANGE AMONG ALL DESIGN AND RELATED FUNCTIONS. ITS STRUCTURE, ORGANIZATION AND TECHNICAL FACILITIES ARE SPECIFICALLY GEARED TO OPTIMIZING WORK AT EACH DESIGN PHASE, SHORTENING LEADTIMES, LOWERING COSTS, AND ENSURING EVER-HIGHER QUALITY LEVELS.

# HOW DOES IT WORK?

## Visitors to the Technocentre

arrive at the Avancée building, which measures 74,000 square metres and houses upline Engineering functions including Design, Preliminary Project Development, R&D and Product planning. This is where the shapes, forms and technologies of tomorrow's cars are dreamed up.

**At the heart of the Technocentre is the Ruche (1) building** ("hive" in French), which measures 147,000 squares and consists of eight units communicating via an immense glazed nave. It can accommodate up to five simultaneous vehicle projects. Variable teams are formed to meet the specific requirements of each

successive vehicle development project, with input from all major automotive functions, such as architecture, assembly, equipment, bodywork and electronics.

**The Diapason building** houses a test centre and the Quality Department. At the Technocentre Labos building, materials scientists use sophisticated scientific and industrial laboratory instrumentation to run comprehensive tests on all the materials — steel, plastic, glass, etc.— liable to be used in vehicle manufacture. Everything comes under the most rigorous scrutiny.

**The Proto building (2)** is where Renault builds the prototypes

needed to validate each new vehicle, and the industrial process that will be used for making it.

**The Gradient building** houses central production engineering and logistics functions.

Work at this remarkable innovation-oriented facility is not restricted to developing concept cars and prototypes for future vehicles. Throughout the design phases leading up to release of a new vehicle, the Technocentre also takes charge of developing and validating the processes that will be used for making it.



## TECHNOCENTRE, KEY FIGURES

**150** hectares of grounds (100 hectares landscaped)

**10,000** carpark places

**3** virtual image walls (1:1 scale)

**11,500** people

**20** km of roadways

**4,000** Gflop processing power

**900** work and conference rooms

**5,000** computer-aided engineering workstations

**12** supercomputers