

# RUEIL TECHNICAL CENTRE

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The Rueil Technical Centre is home to the Renault Powertrain Engineering Department, **which designs and develops powertrains** (engines plus gearboxes) for all Renault and some Alliance vehicles.



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

▶ **Competitiveness**

## BASIC FACTS

**Rueil is a modern innovation-oriented technical centre** that handles every imaginable aspect of powertrain engineering. It employs around two thousand engineers and technicians working on design and production engineering for the engines and gearboxes of the future, and on constant

reliability upgrades for the powertrains of today. The centre forms the hub of Renault's Powertrain Excellence programme, which puts the strongest possible emphasis on engineering quality to ensure customers get high-reliability, high-durability engines and gearboxes. Extensive use is made of sophisticated CAE (computer-assisted engineering)

systems that not only provide detailed 3D views of the product under development, but also enable engineers to design the processes and tools that will be used for making it. In response to mounting customer demand, the Rueil Technical Centre also provides the impetus for developments in more ecological combustion systems, as featured in biofuel engines.

## IN SHORT

**THE RUEIL TECHNICAL CENTRE IS HOME TO THE RENAULT POWERTRAIN ENGINEERING DEPARTMENT, RESPONSIBLE FOR DESIGNING AND DEVELOPING RENAULT GROUP ENGINES AND GEARBOXES.**

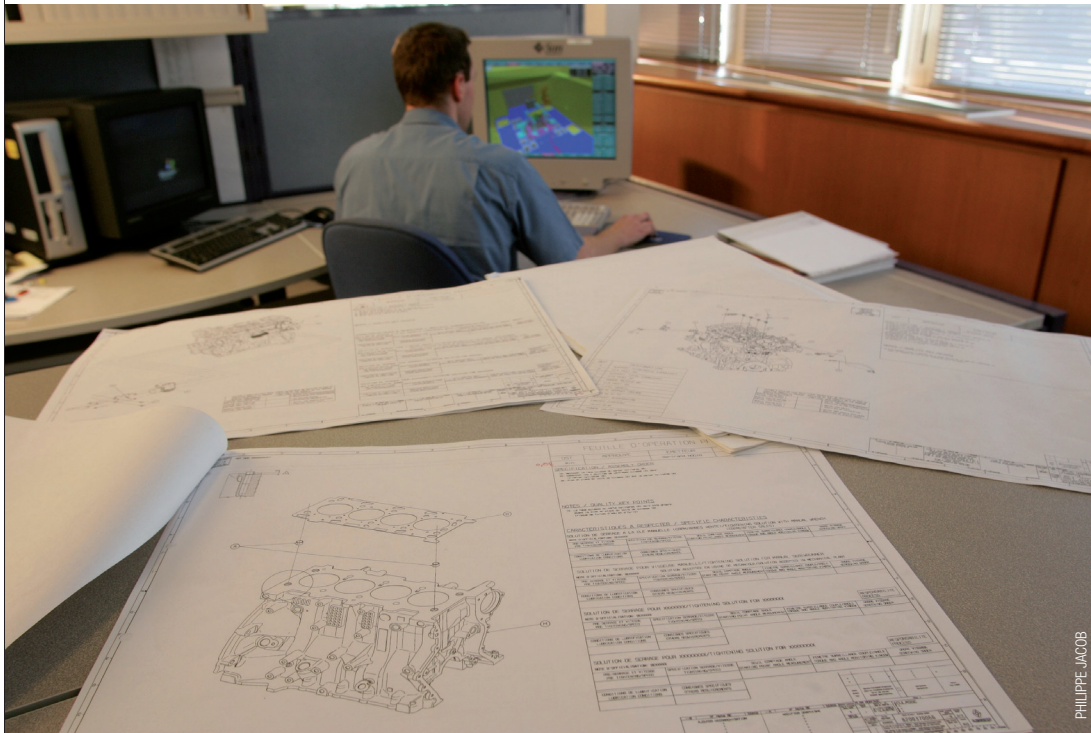
## HOW DOES IT WORK?

**Working from detailed drawings,** CRPM (Powertrain Prototype Centre) assembles prototype powertrains from one-off parts bought directly from specialist suppliers. Assembly work calls for high-precision expert skills akin to those of a jeweller.

The finished prototypes go to the Lardy Technical Centre, around fifty kilometres away, for rigorous

testing. When they come off the Lardy testbenches, many hours later, they are sent back to CRPM for dismantling and metrological analysis to check the wear on each component and deduce the reliability of the powertrain subsystems. In this respect CRPM acts as a two-way interface between theoretical design work and grassroots findings by plant personnel.

As well as engineering the powertrains themselves, the Rueil centre also designs the manufacturing process, tooling and assembly instructions that will be used at the powertrain assembly plants, again with overriding attention to powertrain quality, operator ergonomics and care for the environment.



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