Arrius 2R
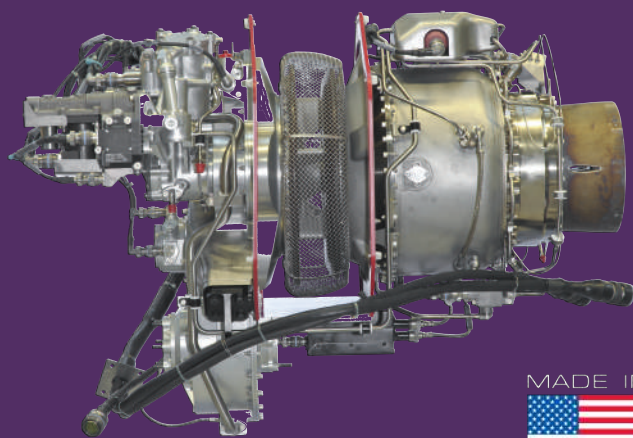
BELL 505
JET RANGER X

The Arrius 2R is the most competitive and technologically-advanced engine in its class.

The Arrius 2R delivers performance within the 450-550 shp range, while improving safety and lowering pilot workload through a Full Authority Dual-channel Engine Control (FADEC). The twin-module engine configuration is designed to keep costs of operation low. Backed by Turbomeca's commitment to excellence, the engine powers the new Bell 505 Jet Range X helicopter.

MADE IN

U. S. A.

The Arrius 2R is setting new standards:

> **Safety First**
  • Dual-channel FADEC reduces pilot workload
  • First engine in its class to offer such technology

> **Simple Design, Easy Maintenance**
  • Easy engine access
  • Interchangeable modules
  • Most parts are replaceable in the field

> **Low Direct Maintenance & Operating Costs**
  • Low Specific Fuel Consumption
  • 3,000 hours TBO
  • High cycle limit on life limited parts

> **Low Environmental Footprint**
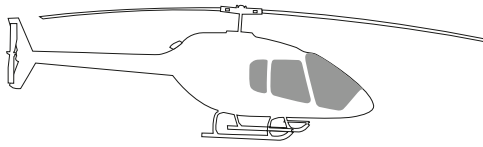 • Clean burning
  • Low NOx and noise

> **The Arrius Experience**
  • Backed by 7.5 million flight hours
  • Worldwide local support

> **Fast devlopment schedule**
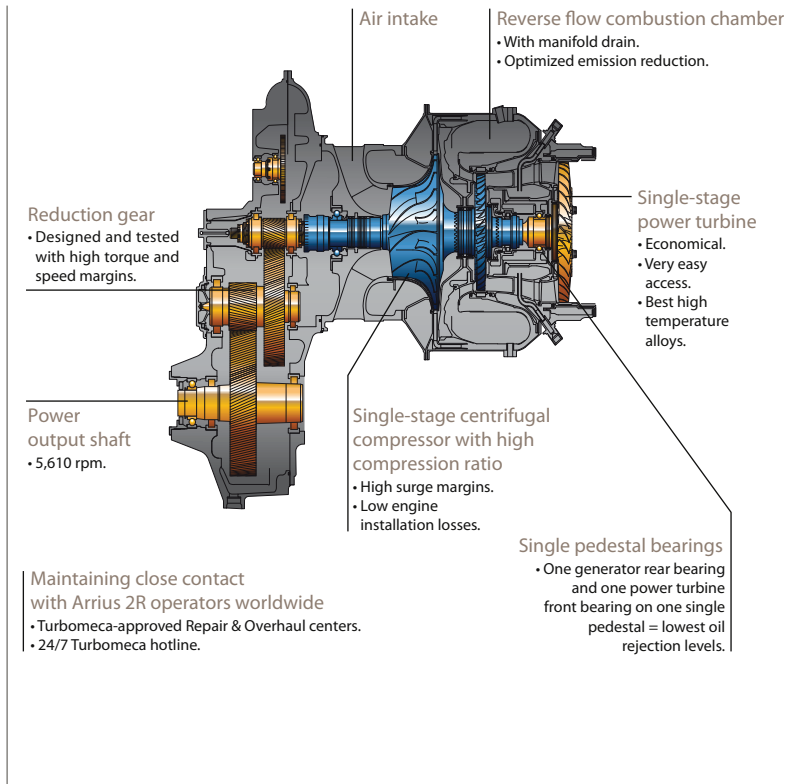
SAFRAN
Turbomeca

> Helicopter:

**Bell 505
Jet Ranger X
powered by one Arrius 2R**

> Multi-mission helicopter:

- Training
- Police
- VIP
- Personal Transport
- ENG
- Observation
- Utility

Air intake

Reverse flow combustion chamber
• With manifold drain.
• Optimized emission reduction.

Reduction gear
• Designed and tested with high torque and speed margins.

Single-stage power turbine
• Economical.
• Very easy access.
• Best high temperature alloys.

Power output shaft
• 5,610 rpm.

Single-stage centrifugal compressor with high compression ratio
• High surge margins.
• Low engine installation losses.

Single pedestal bearings
• One generator rear bearing and one power turbine front bearing on one single pedestal = lowest oil rejection levels.

Maintaining close contact with Arrius 2R operators worldwide
• Turbomeca-approved Repair & Overhaul centers.
• 24/7 Turbomeca hotline.

> Power Rating (ISA, sea level,shp/kW):

	Mechanical Limit	Thermal Limit
> Take-off	472 shp (352 kW)	504 shp (376 kW)
> Max Continuous	433 shp (323 kW)	457 shp (341 kW)

Turbomeca (Safran) is the leading helicopter engine manufacturer and, since its foundation in 1938, has produced over **72,000 turbines**. Turbomeca offers the widest range of helicopter engines in the world and has more than **2,500 customers in 155 countries**. Turbomeca has fifteen sites and operates on each continent, providing its customers with a proximity service through **39 distributors and certified maintenance centers**, **16 Repair & Overhaul Centers**, and **90 Field Representatives** and Field Technicians.

SAFRAN
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