

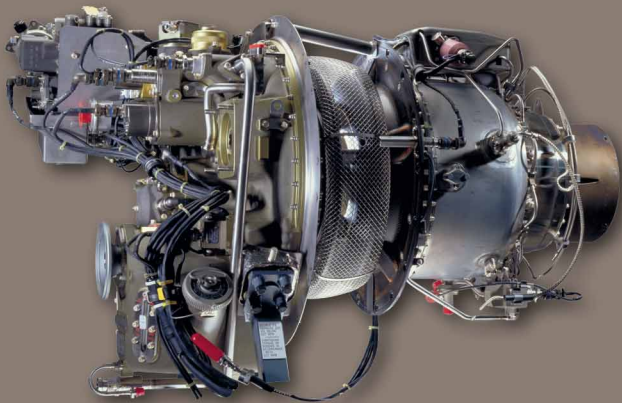
# ARRIUS 2K2

FOR THE A 109 POWER LUH

GENERATING POWER AND PERFORMANCE



The Arrius family new generation turboshafts are developed to power light singles and light twins. The Arrius 2K2 maintains the same global structure as the Arrius 1, while generating 40% more power. Ideal for time sensitive requirements of Light Utility Helicopters.



## The Arrius family

- > Entered service in 1983.
- > Maturity: over 5,000,000 operating hours.
- > 2,700 engines delivered.

## > The Arrius 2K2 experience

- 60 Arrius 2K2 ordered by South Africa, 40 by Sweden, 22 by Malaysia.
- Primary missions: aerial transport of staff and liaison elements, air messenger service, maintenance support, command and control.
- Unbeatable in hot and high conditions, superior responsiveness, unmatched rise rate.
- Clean burning, Arrius 2K2 has extremely low smoke number.

## Simple modular design

- Very low scheduled maintenance: under 1 minute per flight hour.
- Few maintenance tools.
- Wholly replaceable modules.

## Reduced cycle consumption

- Life limited parts last 2 overhaul periods.
- Reduced operating costs.

## Low direct maintenance costs

- Long TBO period, 3,000 hours.
- Long component life.

## Engine Electronic Control Unit experience

- Improves overall safety, reduces pilot work load.
- Indicates operational parameters.
- Drives engine life safely to its TBO limit.
- Signals maintenance actions on automatic engine overrun display.
- OEI training function.
- N1 control optimizes engine life.

> Helicopters:



A 109 Power LUH  
powered by two Arrius 2K2

**Engine Electronic Control System**  
• More than 20 years of experience.

**Air intake**  
• Lowest engine installation losses on the market.

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

**Reduction gear**  
• Designed and tested with high torque and speed margins: (torque 30%, speed 4%).

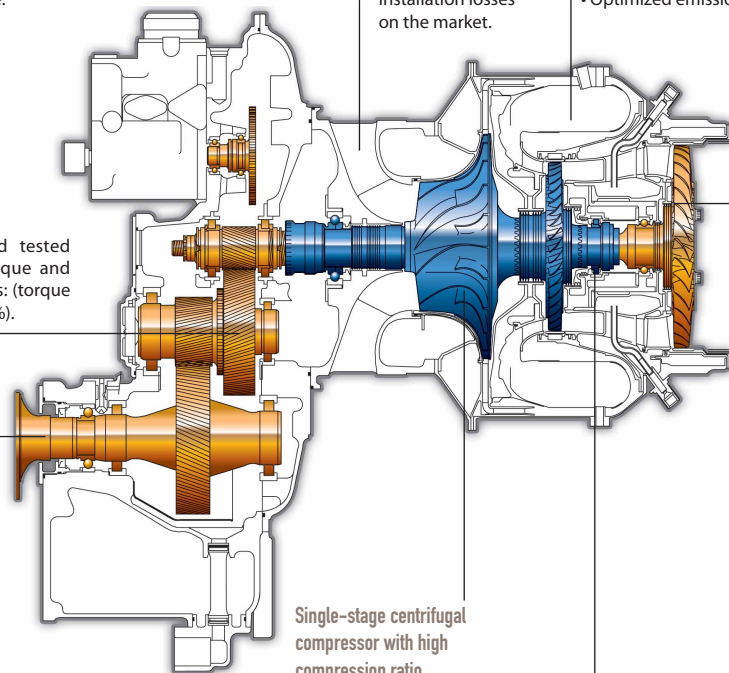
**Power output shaft**  
• 6,000 rpm.

**Maintaining close contact with Arrius 2K2 operators worldwide**  
• Turbomeca-approved Repair & Overhaul centers.  
• 24/7 Turbomeca hotline.

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

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

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



> Technical Characteristics (ISA, sea level, kW/shp):

Arrius	2K2
> Application	A 109 LUH
> One Engine Inoperative (OEI)	kW/shp
OEI 2.5 min.	590/791
OEI continuous	534/716
> All Engines Operative (AEO)	kW/shp
Take-off	534/716
Max. continuous	454/609

> Geared to rapid response:

- Offering a high rate of climb the Arrius 2K2 delivers the superior rapid response pilots expect from a Turbomeca engine.
- MTOW A109 LUH, Arrius 2K2: 3,000 kg / 6614 lb (ISA sea level) in both Cat A and Cat B class.

Turbomeca is dedicated to the design, production, sale and support of gas turbines for helicopters. Turbomeca offers the world's most comprehensive range of engines, along with strong industrial cooperation associated to close-by customer services structures. Dedicated to 2,350 customers in 155 countries, Turbomeca provides a proximity service thanks to its 16 sites, 26 Maintenance Centers, 24 Repair & Overhaul Centers and 90 Field representatives and Field technicians.



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