

Since its launch in 1977, 28 versions of the Arriel family have been developed to meet different airframe and mission requirements. The Arriel 2S2 powers the Sikorsky New Generation S 76.

The Arriel family

- ▶ 25 years of outstanding reliability
- ▶ 19 Millions operating hours
- ▶ 6,000 engines delivered



New Generation S 76 powered by two Arriel 2S2



Arriel: 640 - 944 shp

Generating Power and Performance

The Arriel 2S2 concept

- ▶ Reduces operating cost through optimized acceleration modes.
- ▶ Clean burning with significantly low NOx levels.
- ▶ The engine control technology, dual channel EECU, adds no extra cycle consumption.
- ▶ Best weight-to-power ratio in its category.

Missions

- ▶ EMS, SAR, Police, VIP, aerial work, corporate, off-shore liaison.

Dual channel Engine Electronic Control Unit

- ▶ 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.
- ▶ The Arriel 2S2 uses a dual channel EECU associated with automatic third channel back-up.

Turbomeca is the first engine manufacturer to offer dual channel EECUs for the civil market.

Arrius
480 - 716 shp



TM 333
900 - 1,100 shp



Ardiden
993 shp
mech. power



MTR 390
1,280 - 1,600 shp



Makila
1,800 - 2,100 shp



RTM 322
2,100 - 2,650 shp

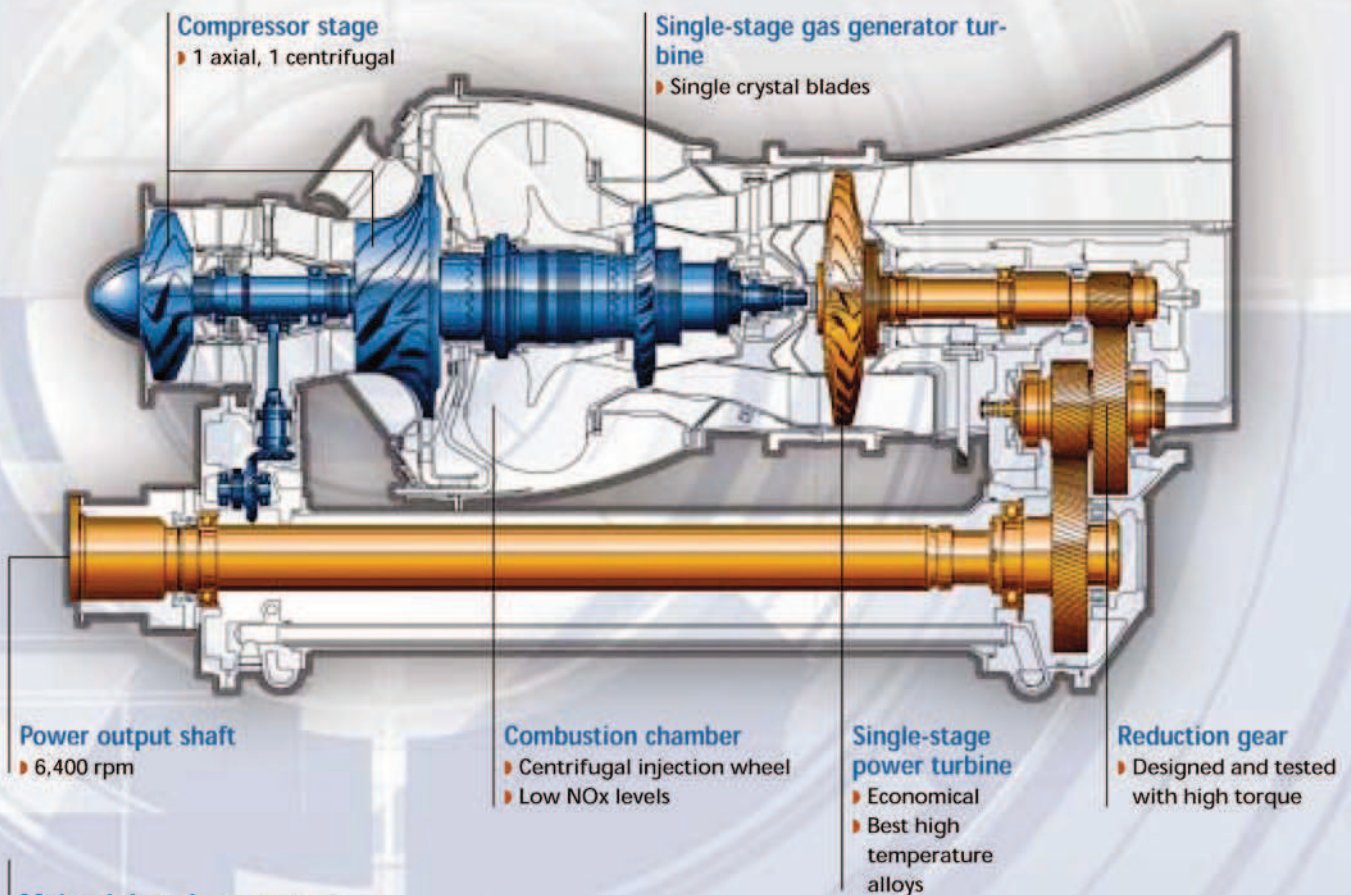


Sharing the same drive. That's how we turn the blades.

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

ARRIEL	2S1	2S2
Application	S 76 C+	NG S 76
One Engine Inoperative (OEI)	kW / shp	kW / shp
OEI 30 sec.	735 / 986	786 / 1,054
OEI 2 min.	663 / 889	713 / 956
OEI continuous	638 / 856	686 / 919
All engines operative (AEO)		
Take-off	638 / 856	704 / 944
HIP/SARM 30 min.	638 / 856	704 / 944
Max. continuous	587 / 787	636 / 853

- Compared to the Arriel 1 equipped with a 2-stage gas generator turbine, the Arriel 2 draws the benefits of the latest technology developments: the single stage turbine with single crystal blades brings 30% more power, with no increase in weight, to the Arriel 2S2 on the New Generation S 76.
- MTOW S 76 C+, Arriel 2S1 : 5,300 kg / 11,700 lb
- OEI ratings can be used up to 10 minutes cumulated time for the contingency (OEI 2min.) and 30 sec. cumulated for the super contingency (30 sec.) without any shop visit required.



Maintaining close contact with Arriel 2S operators worldwide

- Turbomeca-approved Repair & Overhaul centers
- 24/7 Turbomeca hotline

Turbomeca is the world's leading manufacturer of small-to-medium gas turbine engines. Turbomeca designs, develops, manufactures and supports helicopter engines for operators across the world. Unique in aviation history, helicopter engines have been the company's core business for over 50 years. Today, nearly half of the world's civil helicopters are Turbomeca-powered.

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