

The first member of this engine family was born in 1947. The first tests of a nine cylinder engine designated the AI 14 were completed in the Ukrainian city of Zaparozhye. The engine was designed by the Design Bureau of Alexandr Ivchenko and was named AI 14 in honor of the first letters of his first and last name. The engine had a displacement 621 cubic inches and developed 260 HP. The first production version was released in 1950 and was designated the AI-14R. There was also a version called AI-14V designed for helicopters. Thousands of these engines were manufactured over the years in both Russia and many of the Soviet block countries.

In 1956 WSK- Kalisz in Poland started to produce under license a version called AI-14RA. These engines powered the Yak-12, the PZL 101 and the Wilga aircraft among others. In the early 1960s, the Czechoslovakian company AVIA begin to manufacture a modified version of the AI-14 designated the M462 and later the M462-RF. The M462 powered the Z-37 agricultural aircraft and develops 315HP. About the same time in China was produced the HS6 engine, the Chinese version of the AI-14R and in 1965 the HS6A, the 285HP version.

Meantime, in 1959, a Design Bureau is established in Voronezh (now OKBM) under the leading of Ivan Vedeneyev with the main goal to develop aviation piston engines. The first engine upgraded by this bureau is the AI-14RF, a 300 HP version. In the middle of 1960s the Vedeneyev Bureau designed the helicopter engine M-14V26 for the Kamov Ka-26 a twin engine helicopter. Major improvements were made and all the main engine parts were redesigned. The result is a 325 HP engine with a right angle nose case reducer.

The M14P series engine is based on the M-14V26 engine. A large number

of parts are identical for both engines. The M-14P engine develops 360 HP having an excellent ratio between weight and power.

Production of the first series M-14P engine was started in the early 1970s at the Voronezh Mechanical Plant. Ten years later they begin the fabrication of the second series engines. The second series made some improvements of the internal parts as well as modifying the external configuration of the cylinder heads. The designers also included provisions for a centrifugal oil filter which is seen as the large boss that is located on the left hand side of the nose case.

ROMANIAN PRODUCTION

In 1983 there was established in Romania, the Aviation Engines and Reducers Plant of I.Av. Bacau. They produced the Yak-52 airplane. They also started producing the M-14P and M-14V26 engines, the reducers R-26 and VR-126 and the jet engine RU-19A300. The company I.Av. Bacau has since become S.C. AEROSTAR S.A. The former Aviation Engines and Reducers Plant is now a separate company having the name MOTORSTAR S.R.L.

Starting with the year 1999, MotorStar S.R.L. introduced some improvements at the M-14P engines. They developed an adapter drive for UMA tachometers and an adapter for Skytronics alternators. They also developed and installed an adapter drive for a vacuum pump. The engine look was improved by adding the “dress kit” consisting of many chrome plated bits. They developed a “Western” SAE#2 propeller shaft for the engine. In 2000 they developed the Romanian 400 HP version. The gear train of the supercharger was modified and the maximum impeller speed reached 30000 RPM. The result is a higher manifold pressure and more power.

In 2001 MotorStar S.R.L. developed an electric start system for the M-14P engine using the electric starter, produced by B&C.

Also in 2001, MotorStar S.R.L. Designed and began manufacture of the M-14D.

Based on the M-14V26 engine the M-14D is a direct drive engine with the similar performance as the Continental W-670 engine, but smaller diameter and less weight.

MotorStar S.R.L. continues to produce the M-14P engine as well as overhaul the M14P, the M-14V26 and the AI-14R engines.