

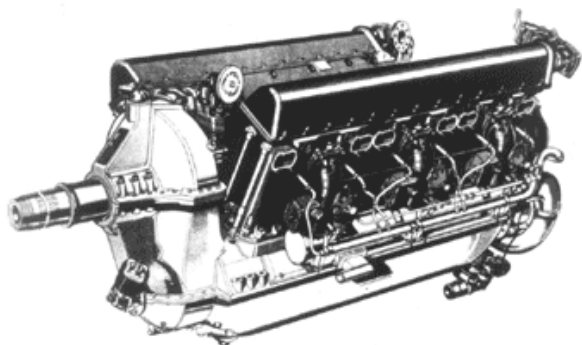
## History



At the end of the 19th century along with electrification of the Russian Empire capital, a new branch of mechanical engineering emerged, i.e. electrical engineering industry. Electrical mechanical plant "V. Saveliev & Co." was one of the first enterprises in this industry, which was found in 1891. Since then, the Saint-Petersburg Open Joint-Stock Company "Krasny Oktiabr" starts its history.

In 1919 the plant was nationalized and was managed by Petrogubelectro of Petrograd Council of National Economy. From 1921 to 1924 the plant is involved in implementation of GOELRO Plan, i.e. construction of the first-ling of Soviet power engineering: "Krasny Oktiabr" power plant in Petrograd, which generates electricity and heat to the city even today. On September 5, 1925 the plant was renamed as "Krasny Oktiabr" and in 1927 the plant has merged with the Leningrad State-Owned Integrated Automobile Repair Plant (former "Russian Renault" plant). "Russian Renault" plant was set up in 1914 and during the years of World War I it specialized on assembly and repair of aircraft engines, including aircraft designed by I.I. Sikorsky "Ilya Muromets", motor vehicles, as well as production of military items; by 1927 the plant was found in a strained economic situation and was preserved. "Krasny Oktiabr" continued to manufacture electrical engineering products for a long period, up to beginning of 50-s. Just during rehabilitation period of national economy after the Great Patriotic War, the plant has produced 42000 explosion-proof motors for coal mining and chemical industry.

In consistency with plans for industrialization, mechanization of agriculture and building of armed forces of the country during 20-30-s of the previous century, the plant has launched new production lines. Thus, in 1928 the plant commenced to produce lifting and conveying machines, which later was singled out as a separate



production facility and gave impetus to set up PTO named after S.M.Kirov. Since 1930 the plant started to produce various assemblies for tanks BT-2, BT-5, T-26, T-28 and ammunition. At the same time along with the key products, the plant manufactured spare parts for caterpillar tracks "Fordzon-Putilovets", "Jon Dir", "Caterpillar" and "International" with a total amount of 3.2 M (pre-war!) US dollars annually. Spare parts and assemblies for agricultural equipment were produced in 50-s (for harvesters C-4, peat loaders, "Belarus" caterpillar tracks).

Production and technological level of "Krasny Oktiabr" which was achieved in 1930-s, as well as experience acquired by company personnel during repair of aircraft engines were called for in pre-war period, when design bureaus and industry were assigned a task to develop aircraft flying faster and higher than the same of fascist Germany. In consistency with AF qualitative re-armament programs, adopted by SNK USSR in September 1939, the plant was transferred to the Peoples' Commissariat of Aviation Industry and in 1940 it starts to produce aircraft engines M-105 designed by V.Y. Klimov. In 1941-45, under conditions of evacuation, the plant had produced more than 10000 piston-type aircraft engines M-105/VK-105/VK-107 for Yak-1, Yak-3, Yak-7, Yak-9, Pe-2, LaGG-3, Er-2. The plant was awarded with a Red Banner of Labor order for successful activities during war period.

In 1946 within the framework of jet aviation development program the plant arranges an Independent Design Bureau headed by Chief Designer V.Y.Klimov (later IDB was singled out as an independent pilot plant No. 117, today Klimov JSC). The plant and IDB proceed to design and manufacturing of turbojet engine VK-1 for MiG-15 and other types of aircraft. Since 1950 the plant develops a full-scale production of RD-10A turbojet engines for first serial jet fighters Yak-15, as well as for Su-9, La-150 and others; since 1954 - RD-9B designed by A.A. Mikulin for MiG-19 fighter and for a number of years the plant produces RAT-52 jet-powered aviation torpedo.

During 60 years, starting for the first serial Mi-1, Mi-4 and Yak-24, "Krasny Oktiabr" has equipped more than 22 000 helicopters with power plants and took part in practically all helicopter building programs of the country. These figures are smashing by the number of manufactured Mi-8 items, Mi-6 and Mi-26 - helicopters with the unbeaten cargo lifting capacity, as well as combat Mi-24 and Ka-50, amphibious helicopters Mi-14, shipborne Ka-27 and Ka-29, passenger helicopters Mi-8P, Mi-171, Mi-172, Mi-38, Ka-32, Ka-226T and other helicopters. Today the plant has a full-scale production of 17 power plant types for 12 models of "Mi" and "Ka" helicopters.

In consistency with jet weapons and equipment development programs in 1956 the plant has set up an

Independent Design Bureau for development of LPE (liquid-propellant engines), at first as an affiliate of OKB-45 and -500 and later as an independent entity headed by Chief Designer A.S. Mevius (today Aviation Design Bureau). For more than 30 years up to 1992, the plant had produced LPE and onboard power supply cells for missiles of anti-aircraft missile systems (AAMS), intercontinental ballistic missiles (IBM) and geophysical missiles and space missile carriers (MC) on their basis. Today MC "Strela" and "Rokot" are used in international programs and for the benefit of national economy to launch up to 1800 kg of payload to the space orbit (e.g. two communication satellites). In relation to own weight and maximum thrust, LPE manufactured by "Krasny Oktiabr" were the most "light" in USSR and USA for that time and class. AAMS "Desna", "Volkhov", "Volga", "Vega", "Krug" and others formed a basis for missiles forces of the country Air Defense and for a number of other countries. Besides, these systems were experienced in combat environment during various conflicts. On May 1, 1960 the spy aircraft U-2 was hit by a missile equipped with an engine of "Krasny Oktiabr".

At the beginning of 70-s the USSR started full-scale production of new weapons, namely combat helicopters Mi-24A. As far as combat helicopters are concerned, "Krasny Oktiabr" produces main gearboxes, swashplates and tail transmissions. In total, the plant supplied about 3000 helicopters of Mi-24/25/35 type to the Russian Air Force and abroad. In 1995 a new type of combat helicopter, i.e. Ka-50 "Black shark" was adopted in the army and for this type of helicopter the plant started production of the main and intermediate gearboxes.



Many customers in our country are familiar with traditional products of "Krasny Oktiabr", namely engine-driven equipment and mini agricultural equipment. More than 70 years ago, in 1930 the plant has established full-scale production of the first domestic motorcycles L-300 "Krasny Oktiabr". In

1940 (due to launching of aircraft engines production) production of the last model L8 was transferred to Izhevsk and Serpukhov cities, where it was produced under other brands. In 1956 production of engines was resumed and since then the plant has produced more than 10 millions of engines D-4/6/8/14 for motorbikes. Since 1985 the plant has started to produce the most popular model of engine-driven gears "Neva" (more than 600000 in total), as well as working attachments. Today, apart of "Neva", the plant produces a variety of two- and four-stroke engines, hoes, motor pumps and other complicated consumer goods.

In 1980, within the framework of programs for development of the 4 generation combat aircraft complexes "Krasny Oktiabr" has launched production of aircraft accessory gearboxes (KSA) for front-line fighters MiG-29 and gas turbine engines-power units (GTDE) for heavy fighters Su-27. Later the plant established production of 6 types of AAG for the last versions of MiG-29 fighters, shipborne MiG-29K and a number of foreign aircraft. Gas turbine engine-power set GTDE-117(1) is supplied in several versions for MiG-29, MiG-29K/KUB, MiG-35, Su-27, Su-30, Su-34, Su-35 and other aircraft.

One of the first items, which was established in 90-s according to conversion program, are an air starter SV-65(B) for starting of TV7-117S(V) engines of Il-114 passenger airliners and helicopter Mi-38-2.