The pioneer in petroleum engineering - now called Lt. Shmidt Baku Engineering Factory, will soon complete a quarter century of its existence. The enterprise, well-known not only in our country but abroad, originated from the small-scale repair workshops of the Austrian industrialist Levenson and the local capitalist Khatisov.

The old-timers in the factory still remember the gloomy picture of the distant past, the crowded and smoky shop blocks, the heavy physical labor, use of force, the lack of any kind of hoisting and transport mechanisms and electrical lighting. The working conditions were very bad.

After the victory of Soviet Power the workers of the factory took to restoring the production. They applied all their experience, all their strength and knowledge for creating a national petroleum engineering industry.

The working of the factory was considerably complicated during the years of the Great Patriotic War. There were not enough refractory materials and ferroalloys, no steel-making pig iron and other materials necessary in the production. However, the factory managed to overcome these difficulties.

Extensive research yielded substitutes for the lacking materials, and their production was arranged from local raw materials. The factory could not only melt liquid metal without break, but could also satisfy the Republic's need for widely different grades of steel and various rolled shapes. The factory mastered the manufacture of more than 50 new grades of steel.

The Party and the Government highly appreciated the strenuous labor of the factory staff in the days of the Great Patriotic War. In 1942 the factory was awarded the Order of Lenin for its services in supplying military equipment for the front. The best people in the factory won orders and medals. During the war years the Shmidt Factory men won the first place 42 times in all-union competitions, received the Challenge Red Banner of the USSR State Defence Committee 22 times, and the Challenge Banner of the All-Union Central Council of Trade Unions 13 times. After the victorious end of the war the Red Banner of the USSR State Defence Committee was given to the factory for perpetual keeping.

After the war the factory built and put into operation new and excellently equipped fitting and assembly, sucker-rods, plate-welding, and forge shops; a compressor plant, a central factory laboratory, and a christmas-tree shop; the steel foundry was partially reconstructed.

The factory's production registered a 61% rise during 1958-1965, of which 59% was due to increased output per man-hour. There was a considerable rise in the production of the most important types of petroleum equipment during this period. For instance, the production of blow-out preventers was doubled, and that of rotary tables and swivels increased four times. The rise in the output of christmas trees was 24%, and high-pressure equipment (up to 640 atm) 7.5 times.

Now this factory is a specialized enterprise for manufacturing drilling rigs, sucker rods, blow-out preventers, rotary tables, swivels and other equipment. Its production increased 60 times, compared to 1920.

The factory was the first in the Soviet Union to perfect the production of special high-pressure blow-out prevention assemblies for production and exploratory wells: 12" blow-out preventers for 400 and 640 atm test pressure, and 16" for 250 atm pressure. The designs of these blow-out preventers have not only high technical characteristics. They are highly reliable and convenient for operation. The factory was also the first in the Soviet Union to perfect the production of special high-pressure wellhead assemblies: casing heads and christmas trees, which can operate at pressures up to 1000 atm.

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During 1965-1966 the factory changed over fully to the progressive technology of high-frequency-current heating of sucker-rod ends for stamping. A semiautomatic production line was organized for machining pump-rod heads. The recently set-up highly-mechanized Christmas tree shop has started producing small Christmas trees of much higher reliability and reduced weight (to 50%). The factory has mastered the production of the drilling unit A-80 for extra-deep drilling and 12" blow-out preventers designed for 640 atm pressure.

The Lt. Shmidt Factory participated several times in International Exhibitions and World Fairs, representing the Soviet petroleum engineering industry. Its products are exhibited at the Exhibition of Achievements of the National Economy. It won a silver medal at the Brussels Work Fair. Its products are used in all oil regions of the country, and it supplies equipment to almost 20 countries. Its workers are strengthening operational relations with the workers of other sister republics every year. The products of this factory are supplied to twelve Union Republics. In its turn, the factory receives from them various materials and component assemblies for the equipment produced by it.

Our factory is proud not only of its external relations, but also the great quantity and quality of its equipment. Its main asset, the people, is the closely-tied multinational body of workers trained in revolutionary traditions. The factory has given rise to many inventors and advanced workers in production, engineers, and production managers.

The worthy representatives of the great family of workers are Mamedpasha Melikov, Hero of Socialist Labor and assembler of molds in the steel foundry, Zinaida Doromina, electrical winder, Vladimir Zhukov, blacksmith, Ruben Andriasov, fitter-assembler, Givi Kirvalidze and Aleksandr Kochetkov, turners, Shamil Safarov, deputy of the Supreme Soviet of the Republic and molder, Foreman Vazgen Baluyan, noted innovator of the Republic, Engineers G. Efendiev, A. Kuzin, and B. Romanov, State Prize winners who were awarded this title for organizing continuous production lines for sucker rods, and many others.

The factory so faced with great tasks during the current five-year plan. Compared to 1965, its volume of production should rise by 52% at the end of the plan with average annual growth rate of 7.1%. The production of important types of equipment like Sh8 rotary tables, ShV-14 and ShV-15 swivels, and blow out preventer assemblies are to be doubled, and that of hydraulic brakes tripled by 1970.

The production will develop not only in respect of output but also in respect of quality and technical characteristics. During the current five-year plan it is contemplated to develop prototypes and start batch-production of petroleum equipment designed for much higher pressures and load capacities than those that are made at present, equipment that could be produced and operated efficiently (lighter and high-efficiency designs). Such equipment are rotary tables and swivels of 200-300t load capacity, hydraulic brakes for rigs of 200t load capacity, 320-500 atm working pressure die-type blow-out preventers with hydraulic remote-control, universal blow-out preventers for 200-320 atm working pressure, straight-way Christmas trees with and without packing grease, etc.

All-around experimental research and technological designing activities are planned for increasing the service life of the manufactured equipment. There will be further improvement in the organization and specialization of production of blow-out preventer assemblies and universal preventers. These will be closed product sections for manufacture of rotary tables, swivels, hydraulic brakes, and well-head assemblies.

Mechanical-assembly, experimental, tool, and heat-treatment shops, stores, and engineering blocks are planned to be built in order to ensure the development envisaged for 1966-1970 and the following years.

Since the September (1965) Plenum of the CPSU Central Committee the factory has done and is doing a lot of work, which forms the part of preparation for changing over to the new conditions of work, for example, calculated verification of the factory capacities, drawing up technical industrial and financial plan, calculation of turnover means, revision of current wholesale prices, etc. The innovators in the factory have made a great contribution to the improvement of production and its economics. In 1966 fifteen inventions and 650 rationalization schemes were introduced with a provisional yearly saving of about 75,000 rubles.