



THE BUDAPEST UNDERGROUND

Installing the first escalator

The inhabitants of Budapest use the city's public transport on an average of twice a day, or 730 times a year. Since this figure includes newly-born babies as well as bed-ridden old people, it is therefore obvious that Budapest people make very frequent use of the yellow

trams and the silver-and-blue Budapest buses. It is no wonder then that they are interested in any innovations affecting the transport system.

This interest of course fans and feeds the rumours which preceded the construction of the new Buda-

pest underground and have accompanied its building right from the start. At first there was a rumour that it was impossible to build an underground in Budapest because there are so many subsoil thermal springs that the tunnels would be washed away. Later Budapest people

spoke knowingly about caved-in caissons, condemned buildings under which the soil supposedly moved, rolling stones and minor earthquakes and many other similar "news".

All this time the actual building proceeded, sometimes fairly speedily, sometimes delayed by a shift to more urgent tasks. And although the day of opening will follow a full twenty years after the first stone was turned, by the spring of 1970 there will be regular runs on the first stretch of the underground. (Strictly speaking this won't be the very first stretch of Budapest underground; there is already a 3,750 metre-long stretch directly under the surface which started operation in 1896 as the first underground on the Continent and is still in use.)

Initial geological research—prior to the Second World War—predicted that it would be hard going to build the underground, and consequently the idea was given up for a while. Still, hot-water springs were not

found either during the first explorations, nor during the period of construction, and not a single building collapsed over the tunnels. The most difficult task of 1968 has been the building of the tunnel under the Danube—but in this case again it wasn't the water which brought problems to the drillers, but the rocks which were exceptionally hard.

The first line will be ten kilometres long. Its east terminal is at present still practically in the suburbs. It will start on the surface, and gradually make its way down deeper and deeper into the earth. The other end of the line will be in central Buda, but in the meantime the line crosses under the Danube to the Pest side and runs beneath the main Pest thoroughfares—from where people will go down to the stations by escalator—before returning to the Buda side. The recently built pedestrian subways were planned so that hardly more than a door has to be cut before they are connected with the escalators.

This first deep underground line will be opened to traffic in two stages. The first opening ceremony will take place on April 4, 1970, the 25th anniversary of the liberation of Hungary. The underground trains will run over a stretch of 6.5 kilometres, as the remaining three-and-half kilometre section of the line will not be completed before 1972.

The first trains have already arrived. On the stretch of the line to open in 1970, forty-four carriages made in Moscow and painted the brown-and-yellow of the typical Budapest trams, will run at a speed of 33 kilometres per hour—or almost three times faster than the regular trams which jolt along in Budapest traffic jams. The Budapest Telephone Factory is supplying the automatic safety and traffic control equipment on the basis of a licence from the Swiss firm of Integon; and the escalators—11 for the first section—are being made by the Kotlyakov Factory in Leningrad.



In the air-lock where they slowly level out the difference in atmospheric pressures

Behind the shield under the Danube





The first new underground train arrives in Budapest

Today, one and a half years before the opening of the first section, the underground construction work presents an "almost finished" atmosphere. One thousand two hundred people are working in the tunnels, but it would be impossible to count all the people who are connected with the needs of the future underground in the various factories, shops and enterprises. The tunnel is already being drilled under the Danube—although this will be needed only for the second section, and the part of the line to start functioning in 1970 can already be travelled on, if you like even by car. The first seven stations are already taking shape, their walls faced with marble and granite; the water insulation is being reinforced, and the light-tubes are being fitted. Each station will be built in the same modern style, but the dominant colour scheme is to vary, so that even foreign tourists who may have difficulty with the Hungarian-language signs should know where they are.

By the time the first trains speed along the east-west line, the plans, for the next, north-south line will be ready. Passenger counts on the trams and buses indicate that it is advisable for the underground to take over as much of the surface traffic as possible—as soon as possible. When the first line is completed in its full length of ten kilometres, it is expected to shift seven and a half per cent of the total traffic from the surface. The second, which is to link the fringe districts of northern Ujpest with south-eastern Kispest via the city centre, should carry an additional 12.5 per cent—or in other words, the two lines together will handle one-fifth of the traffic of Budapest public transport at a speed three times as fast as the present.

The joint length of the two underground lines will add up to almost 25 kilometres, and eventually—though this will take several years—additional lines will expand the underground network.

Endre Várkonyi

Preparing the iron sheets for insulation

