The RF-Gun Based Injector for the Tesla Test Facility Linac, S. SCHREIBER, DESY for the TESLA COLLABORATION - The TESLA Test Facility Linac (TTFL) at DESY is in the commissioning phase. During 1997 a first accelerator module was tested successfully. Eight superconducting cavities have accelerated the beam to an energy of more than 120 MeV. The injected 10 MeV electron beam was produced by a subharmonic injector using a thermionic gun, a buncher cavity, and one standard superconducting acceleration cavity. Since the achieved single bunch charge is not as high as needed for a TESLA Linear Collider a laser driven RF gun is required. At present, two similar guns are under construction at Fermilab and DESY. The first one will produce 8 nC bunches with almost the TESLA time structure, i.e. 1 MHz repetition rate in 0.8 ms long bunch trains. This allows beam dynamics experiments in the TTFL. The second gun being developed at DESY will produce a very small emittance of normalized 2E-6 m rad at a reduced single bunch charge of 1 nC. The length of the bunch train will be 0.8 ms as well, the repetition rate can be increased to 9 MHz. This RF gun is needed to drive the planned DESY Free Electron Laser experiment. An overview about the installation is given and results of first experiments are described.