

This work is about properties of top quark and methods of their measurements, which took place at D0 detector. At the beginning the history of the quark model is summarized followed by introduction to D0 detector at Tevatron collider in the USA. The rest of the work is dedicated to methods of measurements of important top quark properties. The most of attention is paid to measurements of production cross section and top quark's mass. The following topics are decay width, determination of the mass difference between top and antitop quarks and determination of top quark's electrical charge. In the end the newest values of top quark's properties are summarized.