Abstract
The energy tests for tractors are standardized and guided by norms which permit the principal indexes of the tractor to be determined. This paper reflects the results of tests of the traction and the potential of the power drive of the New Holland 6610S tractor on an asphalt road while in third, fourth, fifth and sixth gear speeds, respectively. The method known as the MNX Norm "Agricultural tractor - Determining the potential and traction power of the power drive - Test method" and the NC "Agricultural and Forest Machinery. Energy evaluation. Methodology for this purpose". The results of these measurements were processed using the CurveExpert version 1.3 and Microsoft Excel XP 2002 software programs with which the tractor traction power characteristics were determined. The maximum power recorded for the power drive on an asphalt road was 18.03; 22.02; 24.89 and 34.14 kW for third, fourth, fifth and sixth gear speed, respectively.

Keywords
Traction power, power drive, load cell, amplifier, fuel gauge, multimeter.