Progress assessment

The following materials refer to the course MS&S and are to be used for everyday and progress assessment.

Test 1

1. Denote the geometric parameters in a diagram of the lathe cutter.
2. Specify the zones of plastic deformation in the area of chip formation.
3. Cutting tool materials: basic types, codification, chemical composition, maximum cutting speed and area of application.

Test 2

1. Area and types (nature) of wear, wear criteria.
2. How to determine the optimum tool life? The optimum tool life of a carbide cutter used for roughing operations performed on universal machine tools and semi-finishing operations performed on the CNC machines.
3. Functions and types of coolant.

Test 3

1. Hole machining operations, parameters and accuracy.
2. Two schemes of milling, advantages and disadvantages.
3. The most common tool materials and types of milling cutters.

Test 4

1. Types of grinding operations and abrasives.
2. Codification of grinding wheels (indication of the abrasive type, grain size, structure, bond type, etc.).
3. The procedure of selection and calculation of grinding parameters and power.