

CRACOW UNIVERSITY OF TECHNOLOGY

Chair of Bridge, Metal and Timber Structures
31-155 KRAKÓW ul. Warszawska 24, tel. 12 628-20-33

LABORATORY EXERCISES # 3-4

Student.....

Topic:

1. Elaborate a protocol of static tensile steel test. Analyze mechanical properties.
2. Elaborate a protocol of static tensile aluminum test.
3. Elaborate a protocol of Brinell hardness test. Based on the result, identify the grade of steel.
4. Elaborate a protocol of Charpy impact test hammer Based on the result, identify the subgrade of steel.
5. Basing on values of strength steel specimens, obtained at universal testing machine, calculate design value of yield strength.

Grade, date

#	Material (St / Al)	d _{nom} [mm]	M [kg / m]	L _e [mm]	A ₅ [%]	A _{gt} [%]	R _e [MPa]	R _m [MPa]	Comments
1									
2									
3									
4									
5									
6									

#	P [kN]	t [s]	d ₁ [mm]	d ₂ [mm]	d _{average} [mm]	HB [MPa]	R _m [MPa]	Steel
1								
2								
3								
4								

#	T [°C]	Notch (U/V)	Hammer [kJ]	h [m]	h ₁ [m]	KU / KV [J]	Steel
1							
2							
3							
4							