Materials Science and Engineering

Evaluation Test

TOPIC 5. METALLIC MATERIALS

5.1 Types of steels: stainless, tool. Light alloys. Copper alloys.

Important: Mark the right answer with a X. The correct answers will mark + 1 points while the incorrect answers will mark as -0.33 points. Non answered questions will not mark nor positively nor negatively. The resulting mark will not be smaller than 0 in any case. There is only one correct answer per question. Good luck!

A low alloy steel with a microstructure of proeutectoid ferrite and small quantities of pearlite is most probably:	
	A tool steel
	A low carbon steel
	A high carbon steel
	A high strength low alloy steel

Austenitic stainless steels:	
	contain large amounts of Ni
	are ferromagnetic
	have the lowest corrosion resistance of all stainless steels
	do not usually suffer form sensitization

A cast Iron with a microstructure exhibiting cementite regions surrounded by pearlite is	
	a ductile iron
	a grey ion
	a malleable iron
	a white iron

A strengthening method commonly applied to heat treatable wrought aluminium alloys is	
	Strain hardening
	Grain size reduction strengthening
	Precipitation hardening
	Solid solution strengthening

A copper alloy with the designation C60600 is a:	
	Cu-Sn alloy (Tin bronze)
	Cu-Al alloy (aluminum bronze),
	Cast copper, Cu-Zn-Si alloy (bronze and silicon brass)
	Cu-Zn-Sn alloy (zinc-tin brass)

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