

Materials Selection

04/12/2018: Presentation of students work

	<i>Group</i>	<i>Time</i>
<i>1</i>	22. You are asked to select structural materials for terrestrial gas and volatile liquid storage. Do minimum two examples for each case.	<i>9 : 00</i>
<i>2</i>	21. You are asked to select structural materials for large wind turbines. Moreover, determine the possible differences between the sea location and the earth location.	<i>9 : 20</i>
<i>3</i>	16. You are asked to select materials for the windings of electric heater for a sauna.	<i>9 : 40</i>
<i>4</i>	6. You are asked to select materials for bike frame.	<i>10 : 00</i>
<i>5</i>	20. You are asked to select materials for sole of bicycling shoes for road use.	<i>10 : 20</i>
<i>6</i>	7. You are asked to select materials for noise and heat insulation in commercial planes.	<i>10 : 40</i>
<i>7</i>	11. You are asked to select materials for crossbow suspensions for trucks.	<i>11 : 00</i>
<i>8</i>	10. You are asked to select materials rock drill augers.	<i>11 : 20</i>
<i>9</i>	1. You are asked to discuss about the materials which are used for the fuselage of small planes (e.g. Cessna).	<i>11 : 40</i>
<i>10</i>	18. You are asked to select materials for the blades of a gas turbine compressor. Explain the reason for high corrosion resistance properties.	<i>12 : 00</i>

Presentation (15 minutes) + Questions (5 minutes)

The slides and the presentation must be in English.

For the respect of the work of the other groups it is mandatory to assist to the other presentations.

11/12/2018: Presentation of students work

	<i>Group</i>	<i>Time</i>
<i>1</i>	<i>12.</i> You are asked to select structural materials for a plane wing.	<i>9 : 00</i>
<i>2</i>	<i>15.</i> You are asked to select materials for the exhausting system of a car.	<i>9 : 20</i>
<i>3</i>	<i>17.</i> You are asked to select materials for the landing gears of commercial planes.	<i>9 : 40</i>
<i>4</i>	<i>3.</i> You are asked to select materials for the train wheels.	<i>10 : 00</i>
<i>5</i>	<i>14.</i> You are asked to select materials for hydro-kinetic power generator in rivers.	<i>10 : 20</i>
<i>6</i>	<i>13.</i> You are asked to select materials for wave energy converter (Buoy of hollow hemispherical shape	<i>10 : 40</i>
<i>7</i>	<i>8.</i> You are asked to select materials for 23m-yacht in tropical conditions.	<i>11 : 00</i>
<i>8</i>	<i>9.</i> You are asked to select materials for Icebreaker ships.	<i>11 : 20</i>
<i>9</i>	<i>2.</i> You are asked to select materials for ceramic component installed in valves for faucets.	<i>11 : 40</i>
<i>10</i>	<i>4.</i> You are asked to select materials for high speed cutting tools and turning cutting tool.	<i>12 : 00</i>
<i>11</i>	<i>5.</i> You are asked to select structural materials for rail profiles and to discuss about the way to assemble them.	<i>12 : 20</i>
<i>12</i>	<i>19.</i> You are asked to select materials for light armor (bulletproof vest, ballistic shield...).	<i>12 : 40</i>

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