


EXERGY CONCEPT FOR RADIANT HEATING AND COOLING

<p>Project type <input type="checkbox"/> Diploma project <input checked="" type="checkbox"/> Bachelor <input checked="" type="checkbox"/> Master <input type="checkbox"/> Special course</p>		
rerequisite	11127 (desired)	
Background	<p>Modern office building has often problems with too high indoor temperatures resulting in a cooling demand. An energy efficient office building has to solve this challenge.</p> <p>Radiant heating and cooling systems are deemed to be rather energy efficient. However pure numbers of energy consumption are inappropriate for proper comparisons.</p> <p>The problem with comparing amounts of energy is that the quality of the energy is neglected. Where 11W of electric energy may be enough to keep a energy savings light running for one hour, 11W of heat wouldn't do the trick.</p> <p>This is where the exergy concept makes a difference. Exergy is a direct measure for the work that can be accomplished. Thus an amount of exergy always reflects the same value.</p>	
Project Description	<p>The scope of this project is to make an exergetic comparisons of different radiant heating and cooling systems as well as air based systems.</p> <p>This will partly be based on an identification of possible sources for free cooling and then evaluate their ability for usage in conjunction with radiant systems.</p>	
Notes		
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