

Duty Cycle Quiz

1. Overview

What is a duty cycle? Every overhead crane has a duty cycle. The duty cycle is determined by factors such as starts per hour, capacity lifts, sub-capacity lifts, environment, shifts used, material carried, etc... A ladle crane in a steel mill that is constantly carrying full-capacity loads of molten steel is a F-Severe Duty crane. The mill wants the crane to be fully loaded and always moving to maximize production. A hoist in a machine shop is likely a class “C” hoist, because it makes much less picks than a mill crane, is not always at capacity, and is not in a hostile environment. Actual crane capacity has no bearing on duty cycle. It’s possible to have a five ton class “C” overhead crane, or a five ton class “F” overhead crane. It’s the usage that matters.



fig 101



fig 102

Fig. 101: A class “C” five ton hoist. (MSRP \$5,400)

Fig. 102: A class “E” five ton hoist. (MSRP \$54,000)

It’s important to note that hoists are actually classified by an M-series number. However, that m-series number must be aligned with the class-letter (like class “D”) of your crane.

The Quiz

Question	Answers	Point Value	Write in score here.
How many starts per hour?			
How many lifts			

below capacity per hour?			
How many at or near capacity lifts per hour?			
How many shifts per hour?			
Describe the environment.	<ul style="list-style-type: none">• Relatively clean.• Foundry• Steel Mill• Pickle House		
	<ul style="list-style-type: none">•		