



## CMAA Crane Service Classes with Duty Cycle Definitions

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Service Class	Description	Duty Cycle Definitions
Class A	<b>Standby or Infrequent Service</b>	This class normally includes installation and maintenance cranes. This equipment usually operates at slow speeds for precise handling with long idle periods between lifts. Maximum capacity lifts are sometimes required.
Class B	<b>Light Service</b>	This class of crane is used in repair shops, light assembly operations, service buildings, light warehousing, etc. Service requirement is light and speeds are slow. Loads vary from none to occasional full capacity. Lifts per hour would range from 2 to 5, and average 10 feet per lift.
Class C	<b>Moderate Service</b>	In terms of numbers, most cranes are built to meet Class C service requirements. This service covers cranes that may be used in machine shops or paper mill machine rooms. In this type of service, the crane will handle loads that average 50% of the rated capacity with 5 to 10 lifts per hour averaging 15 feet. Not over 50% of the loads at rated capacity.
Class D	<b>Heavy Service</b>	This service covers cranes which may be used in heavy machine shops, foundries, fabricating plants, steel warehouses, container yards, lumber mills, etc., and standard duty bucket and magnet operations where heavy duty production is required. In this type of service, loads approaching 50 percent of the rated capacity will be handled constantly during the working period. High speeds are desirable for this type of service with 10 to 20 lifts per hour averaging 15 feet, not over 65 percent of the lifts at rated capacity.
Class E	<b>Severe Service</b>	This type of service is reserved for top riding bridge and gantry type multiple girder electric overhead traveling cranes and requires a crane capable of handling loads approaching rated capacity throughout its life. Applications may include magnet, bucket, magnet/bucket combination cranes for scrap yards, cement mills, lumber mills, fertilizer plants, container handling, etc., with 20 or more lifts per hour at or near the rated capacity.
Class F	<b>Continuous Severe Service</b>	This type of service is reserved for top riding bridge and gantry type multiple girder electric overhead traveling cranes and requires a crane capable of handling loads approaching rated capacity throughout its life. Applications may include custom designed specialty cranes essential to performing the critical work tasks affecting the total production facility. These cranes must provide the highest reliability, with special attention to ease of maintenance features.