

ConductorBarSystems.com

Request for Quote Data

Fax to: 402-896-9474

Email to: info@conductorbarsystems.com

Contact name _____
Phone _____
Fax _____
E-mail _____

Date _____
Company _____
Address _____
City, State, Zip _____

APPLICATION

1. Application Type: Runway___ Bridge___ Monorail___ Other _____
2. New approved installation?___ Extend Existing___ Replacement___
3. System Length: _____(feet)
4. Total # of Conductors: ___ Will one conductor be designated as a ground? Yes ___ No ___

ENVIRONMENTAL DATA

Describe the environment where the conductor system will be located:

1. Indoors___ Outdoors___ Both Indoors & outdoors___ Outdoor & Ice ___
2. Ambient temperature range: Minimum _____ Maximum _____ (deg F)
3. Will a heater wire need to be included? Yes ___ No ___
4. Is there a source of corrosion present? Yes ___ No ___
If yes, describe the corrosive: _____
5. Other environmental issues (dust,etc.) _____

MECHANICAL DATA

1. Vehicle Speed _____(feet per min.) Duty Cycle: _____
2. Number of vehicles or trolleys: _____ Crane Class (if applicable): _____
3. Will Conductor Bar Systems be supplying mounting brackets? Yes ___ No ___
4. Does the system include any curves? Yes ___ No ___
5. Other mechanical considerations: _____

ELECTRICAL SPECIFICATIONS

1. Number of power feeds: _____
2. Location of power feeds (check all that apply) Center ___ Multiple ___ End ___
Distance power feeds will be from end of system: _____
3. Number of power phases: _____ Operating voltage: _____(V) AC ___ DC ___
4. Total current draw:(sum of all vehicles) _____ Amps
5. Demand Factor ___ (typically 0.9)
6. Operating Frequency _____(Hz - U.S. is 60 Hz)

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Your single source for conductor bar systems!

Appendix I - Selection of Systems

- **Intermittent Duty -**

Assumes that the current is “on” for a period of time and “off” for a period of time; i.e.: one “duty cycle”. The conductor is allowed to cool between “on” phases. A 50% duty cycle is most common – i.e.: one minute on and one minute off. Since a crane cannot lift continuously, nor is current flowing at maximum for long periods of time, most operate at a 40% duty cycle or less. So a 50% duty cycle is sufficient. However, cranes that see heavy duty, especially Class D and E cranes (see end of this Appendix), may push the conductor beyond a 50% intermittent duty rating.

- **Collector Electrical Capacity -**

A limited selection of collector capacities is available, since collectors only power the crane/vehicle they service. Additional collectors can be used if the crane/vehicle load exceeds the collector rating. Note that the load will not be shared equally among multiple collectors. The collector closest to the power feed will carry a larger load than those farther down the line. So when using multiple sets of collectors, make sure the collector capacities are adequate for this scenario.

CMAA Crane Classifications

Provided for general information only.

- **Class A** (Standby or Infrequent Service) Performs precise lifts at slow speed, with long idle period between lifts. Performs lifts at full or near rated capacity. Power houses, public utilities, turbine rooms.
- **Class B** (Light Service) Light service requirements at slow speed. Performs 2 to 5 lifts/hour, light to occasional full loads, at 10 ft. average height. Repair shops, light assembly, service buildings, light warehousing.
- **Class C** (Moderate Service) Moderate service requirement with loads averaging 50% of capacity. 5 to 10 lifts per hour at 15 ft. average lift height. Not more than 50% of lifts at rated capacity. Machine shops, paper mill machine rooms, etc.
- **Class D** (Heavy Service) Bucket/magnet duty, where heavy duty production is required. Loads of 50% capacity handled constantly. 10 to 20 lifts per hour averaging 15 ft. lift height. Not over 65% of the lifts at rated capacity. Heavy machine shops, foundries, fabricating plants, steel warehouses, container yards, lumber mills, etc.
- **Class E** (Severe Service) Loads approaching capacity throughout the life of the crane. 20 or more lifts per hour at or near rated capacity. Magnet/bucket cranes for scrap yards, cement mills, lumber mills, fertilizer plants, container handling.
- **Class F** (Continuous Severe Service) Handles loads approaching capacity continuously under severe service conditions throughout the life of the crane. Includes custom designed specialty cranes performing work critical to the total production facility. Needs to have the highest reliability and ease of maintenance.