KISTLER EQUIPMENT COMPANY

Conductor Bar RFQ Data

Fax to: 402-896-9474 Email to: info@kistlerequipment.com

Contact name _____ Date_____

Phone_____ Company_____

Fax_____ Address_____

E-mail_____ 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. Ambiant 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)

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 that 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.