

Ferro and SCR Power Consumption



The charts below can be used to estimate battery charger energy consumption for most typical charging applications. For the best possible accuracy different charts are provided for each popular battery voltage. The charts have been designed for use with flooded lead acid batteries, and are based on typical AMETEK charger efficiencies. Model to model and lot to lot efficiency variation is small, but does exist, and will cause slight deviations from the chart below.

To use the charts to estimate energy consumption, follow the steps and example chart outlined below.

1. Find the chart that matches the application battery voltage (6, 12, 18, 24, 36, or 40 cells).
2. Locate the battery AH rating for your application (965 AH for example) on the vertical left hand scale of the chart.
3. Follow the AH value from #2 above, horizontally over to the line representing the average discharge level (20, 40, 60, 80, or 100 percent) of your application.
4. Project down vertically from the intersection of the AH value and discharge level line to the lower horizontal axis and read off your KWH (kilowatt hours) consumed.
5. To estimate energy costs per cycle multiply the number from #4 above times the electrical rates (\$ / KWH, \$0.04 to \$0.14 per KWH is typical) for the application facility.







