Ensuring the operational continuity and efficiency of your most critical IT infrastructures.

For organizations eager to control IT costs while increasing the availability, efficiency and capabilities of their most crucial data centers, few technical requirements are more critical than power and cooling. As today’s enterprises prepare to optimize for the challenges of next generation computing and networking applications, Carousel Industries’ Power and Cooling Quick Check delivers the confidence you need to make intelligent IT planning decisions.

Preparing For The Next Generation Data Center

Businesses everywhere today are seeking new paths towards growth and profitability, efforts that are drawing ever more attention to the modern data center. Next generation server upgrades and replacements - necessary advancements for adopting powerful new innovations, ranging from virtualization to high density computing and blade clusters - are generating significantly more heat, drawing greater power consumption and often driving higher operating costs than their predecessors.

With this Data Center Power and Cooling Quick Check, you will learn how you can prepare your data center to face these new challenges head on.

› Optimize your existing power and cooling infrastructure to facilitate future growth and manage costs
› Increase data center flexibility to ease asset consolidation and/or expansion
› Prepare your critical facilities for offsite colocations, moves or network migrations
› Ready an objective, detailed environment and health survey of your data centers

Applicable to data centers under 1,000 square feet and/or up to five server racks, this Power and Cooling Quick Check is an ideal option for isolating and identifying the most vital risks and opportunities present in your critical computing centers.

Power and Cooling Evaluation

Often consuming more than 45% of a typical enterprise’s IT budget, power and cooling expenses have been found to represent the second largest common budgetary line item associated with data center operations. By reviewing your data center’s energy management, Carousel Industries can identify gaps in your power/cooling planning and opportunities for making your facility more robust and efficient.

Our power and cooling review includes:

› Rack level power analysis
› Visual UPS inspections
› Visual room power distribution inspection
› Visual precision cooling inspection
› Room drawings with dimensioning produced in Microsoft Visio

Room CFD (Computational Fluid Dynamics) Analysis

Leveraging a sophisticated room mapping process called Computational Fluid Dynamics, our Power and Cooling Quick Check includes a 3D report, charting room airflow and the heat convection vectors produced by running or proposed computing hardware. Drawing on an extensive database of manufacturer product specifications, this CFD analysis produces a highly detailed graphical data model predicting exactly how heated air will move and be generated in your server room.
Armed with this report, your organization can make intelligent and highly effective decisions about hardware planning, room layout, cooling and physical infrastructure design.

- As-built room drawings produced in Microsoft Visio
- Detailed description and analysis of existing data center infrastructure
- Report outlining areas of concern, including photos if necessary
- Suggested solution proposal with cost estimations

This Quick Check is designed for data center floor spaces up to 1,000 square feet in size. For larger data facilities, even more detailed and sophisticated are available through a custom readiness assessment. Contact Carousel Industries’ Physical Infrastructure division for more details.

All Critical Facilities Quick Check recommendations are based upon industry standards including TIA-942 (Telecommunications Industry Association), NFPA (National Fire Prevention Association) code 72E & 75 Standard for the Protection of Information Technology Equipment, ASHRAM Thermal Guidelines for Data Processing Environments, EIA-310-D Cabinets, Racks, Panels and Associated Equipment, NEC (National Electrical Code) and Gartner Best Practices.

Carousel Industries: Your Partner in Data Center Physical Infrastructure.

In a world growing increasingly digital in every way, today’s enterprise data center serves as the vital heart of business productivity, profitability and continuity. In the race for market growth, power in the data center translates into robust dominance in the marketplace.

As today’s premier converged communications solutions provider, Carousel Industries offers a full range of technology services, ranging from IP telephony and data center infrastructure design to the most advanced data security options available today. With our single source approach and extensive base of telecommunications and data center expertise, Carousel Industries engineers can help your organization optimize your company’s most critical facilities to best meet your growing business needs.

For more information on how Carousel Industries can help make your enterprise more flexible, productive and secure, contact us today at 800.401.0760 or visit us on the Web at www.carouselindustries.com.

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Did you know?

- for every dollar spent on data center hardware, an additional $0.50 is spent on power and cooling? [1]
- enterprise data center power and cooling costs have risen over 800% since 1996? [2]
- 36% of surveyed businesses expect to run out of data center capacity in 2011-2012? [3]
- that the average cost of an unplanned data center outage is over $500,000? [4]

[4] “Calculating the Cost of Data Center Outages” (SL-24659 R02-11), Ponemon Institute LLC, Feb 1 2011