Data Systems Performance Engineering LLC Grounding, Bonding, and Shielding Services

- Evaluate system grounding requirements: dedicated grounds, low impedance grounds, intrinsic safety grounds, logic grounds, lightning protection grounds, computer room isoplanar grounds (computer floor system or separate grid), AC system grounding, DC system grounding, specialized Telco grounding, input/output device grounds, data network grounds, etc.
- Investigate and remediate ground loop conditions
- Troubleshoot problems in existing grounding systems relating to input/output device instability, network problems, computer crashes, data corruption, AC line instability, equipment failures, etc.
- Evaluate existing site for grounding system suitability including measurement of existing ground system to the IEEE 81 standard where possible
- Recommend grounding system connection to power system, transient protection devices, intrinsic safety barriers, and new equipment
- Document grounding system installation or problem correction requirements: drawings and specifications
- Design new grounding systems
- Procure equipment
- Interface with contractor installing equipment
- Inspect work performed; measure impedance of ground system to IEEE 81 standards and measure impedance of connections to equipment and data highways; measure quality of connections in the grounding system
- Assure grounding systems are in compliance with applicable Intrinsic Safety system standards where required.