



## SUSPENDED SYSTEMS

### An Overview



© Gravitec Systems, Inc. 2009

**MANY** industrial situations require the worker to be suspended while carrying out a task. This creates some confusion among users about what constitutes primary and secondary systems and just what is required to properly protect the worker. The answers are straightforward: Once a worker is suspended from a system, this system becomes the primary means of support. A secondary fall arrest system that is independently anchored is required to properly protect the worker.

Very few regulatory agencies offer specific directions about system requirements for suspended workers. Regulatory agencies do offer such directions for window cleaning, bosun chair work, single-point suspended scaffolding, scaling operations and similar industries. Always refer to your Competent Person and appropriate regulatory agencies for local compliance requirements.

The task to be carried out will determine how workers should be suspended. If the task requires workers to move up and down, for example, a system must be specified that will support such activity. Ideally, system operation should be in the hands of the suspended worker. However, in some cases an attendant may control the system. If so, the suspended worker and attendant will need to communicate with each other either by radio or hand signals. The local environment should also influence which system is used. Systems using cable work well in hot or abrasive environments. Pulley systems are very safe and con-

venient, but do not function well if pulley lines contact the structure. The length of suspension will also determine which system is best. Many pulley systems become unwieldy at around 100' (30.5 m) at which point a single-line system may be the best solution.

The user's skill level must also be considered. Descent control units (rappel devices) are the most versatile and can be used in almost any application. However, they are also the most dangerous and require a higher level of physical and technical ability from the user. Pulley systems are the safest, easiest to use and easiest to troubleshoot.

