KNOW YOUR UPPER LIMITS

- One of the most common, serious operational problems in lifting applications is those utilizing lifting beams, strong backs or spreaders. It is critical to makes sure that upper limit devices, intended to stop the hook or load from contacting any other structure or the hoist/crane itself be properly adjusted and maintained. Failure to pay attention to this important safeguard can result in severe crushing, breaking and cracking damage to the equipment, as well as load chain and wire rope breaks. In the most dangerous cases, the load is dropped with potentially catastrophic consequences, often with serious injury. Here are some safeguards to prevent this expensive problem:
- When it is decided to use a lift beam of any type, make sure to review its use carefully and try to arrange it so that it cannot come into contact with any other structure, including the equipment itself.
- If it is possible for the lift beam to contact the equipment, decide if it possible to add additional limits or protective devices so that this can be avoided.
- Make sure that the limit switches provided with the equipment are in operation during regular inspections and that the operators test them before the beginning of every shift.
- Make sure that the operators are instructed on the safe use of lifting beams, spreaders and buckets, and clearly understand the dangers involved. They should know and understand the limit devices function and watch the hook and load as it is lifted.
- Do not operate the hoist or crane if these limit devices are not functional.
- If, despite these safeguards, an accident does occur, make sure to shut down the equipment and conduct a full inspection of the equipment. It is recommended a 100% test loading be conducted before resuming operation.
- Special care should be taken with hoists that do not have lower geared type limits that would allow the operator to run the rope off the drum, or to reverse wind the rope on the drum. This would result in the upper limits being non-functional.