

# INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

## **SAFETY BULLETIN #25**

### **CAMERA CRANES**

This Safety Bulletin pertains to the safe assembly and usage of powered and manually operated, counterbalanced camera cranes (including telescopic cranes such as Technocranes) for motion picture production. This Safety Bulletin may also be applicable to jib arms and similar types of units.

In addition to reviewing this Safety Bulletin, the construction, striking, inspection, and operation of camera cranes should be done by properly trained personnel after consulting the manufacturer's/vendor's operating manual.

Also, consult Safety Bulletin #8 - Guidelines for Insert Camera Cars when camera cranes are used in conjunction with insert cars, tow dollies, or process trailers.

#### **Exclusion Zones**

- Designate an exclusion zone where only personnel necessary to construct/strike the camera crane are allowed.
- Movement of the camera and/or the crane can create a hazard to the cast and crew. A designated exclusion zone should be created to ensure that only personnel necessary to film the sequence are near the crane.

#### **Construction/Strike**

- Allow sufficient time to construct, inspect, test, and strike equipment.
- The manufacturer/vendor operation manual should show assembly instructions, maximum payload, and maximum gross weight in all configurations, safety precautions, and maintenance procedures. The manufacturer's/vendor's instructions shall supersede this Safety Bulletin when different. Read and follow all manufacturers'/vendors' placards on the equipment.
- Camera cranes have heavy parts and may require considerable force and precision to construct/strike. Have an adequate number of people available to lift, lower, or position parts. Use hoists, lifts, tailgates, or other material handling equipment to assemble or move the unassembled camera crane, where feasible.
- During construction/striking, keep the arm in balance as much as possible. Build out the front and back of the arm evenly, adding counterweights as necessary. Use a manufacturer/vendor-supplied support or a support that is adequately stable and rated for the load while constructing/striking the camera crane.
- Cranes may have many pinch and nip points. Care must be taken during operation, construction, and strike.

## Camera Crane Base

- The camera crane base should be on a flat and level surface, platform, or track system capable of supporting the intended load. The weight of all personnel, equipment, and the camera crane should be taken into consideration.
- Using the largest base that is practical increases the stability of the unit. The appropriate base for a crane is determined by the shot, surroundings, necessary height & length, and total load.

## Weight & Balance

- The payload on the boom arm should not exceed that which can be balanced by the counterweight system supplied with the equipment. Additional counterbalance weights that are greater than the manufacturer's/vendor's specifications should not be used. The manufacturer/vendor should be consulted regarding all extension configurations that are not explicitly specified in the operating manual.
- The stability of the crane must be maintained by controlling the weight and balance. Using brakes or securing the arm to the base can cause instability and create a tip-over hazard.
- When handling uncoated lead weights, appropriate protective gloves should be worn, and hands should be washed after use.
- Only remove or add equipment, step on or off a camera crane, or modify the camera crane after obtaining approval from the operator.
  - Stepping off a balanced camera crane without providing a counterbalance (e.g., another person to replace the weight) can cause the arm to move rapidly and possibly cause serious injury.

## Outriggers/Stabilizers

If the camera crane is equipped with outriggers/stabilizers, follow the manufacturer's/vendor's instructions regarding their proper use. Adequate means of distributing the outrigger/stabilizer load should be used when appropriate. Ensure that the feet of the outriggers/stabilizers will not sink into soft soil or asphalt.

## Spot Plan

- Review the location where the camera crane will be operated. Identify potential hazards in the location and plan appropriately.
  - Consideration should be given to wind, rain, extreme heat, cold, and other atmospheric conditions, whether natural or manmade, which can affect the safe use of camera cranes.

## Inspection

Camera cranes should be inspected prior to use by a “Competent Person” (someone who is capable of identifying hazards in the work area, and who has authorization to take prompt corrective measures to mitigate them) following an inspection protocol supplied by the manufacturer/vendor. If components are missing, damaged, or improperly fitted, the equipment should be removed from service. Missing or damaged components are to be replaced or repaired in accordance with the manufacturer’s/vendor’s procedures prior to the equipment being returned to service.

## Operation

- Cast and crew working near a camera crane should wear appropriate Personal Protective Equipment (PPE), as determined by a Competent Person.
- Passengers must be secured with seatbelts or fall restraint systems that are in good working condition and used whenever the crane is in operation.
  - For more information on seat belts, please see Safety Bulletin #37 - Vehicle Restraint Systems - Seat Belts and Harnesses
- During camera crane operation, there must be adequate clearance from potential obstructions or hazards (e.g., power lines, helicopter rotors, fire sprinkler heads, cast and crew).

## High Voltage Clearances

- Special attention must be given to working around high-voltage power lines. If the voltage is unknown, check with the local utility provider.
- Please refer to Safety Bulletin #25 - Camera Cranes, “Addendum A” – Power Line Distance Requirements for minimum clearance distances and further guidance.

## Moving the Camera Crane

- Tip-over hazards may occur when pushing camera cranes on slopes or over uneven surfaces such as cables, speed bumps, or curbs.
- Special care is to be used when operating camera cranes on a curved track. A top-heavy load and excessive speed could cause a tip-over.
- When moving a camera crane on or off the track, the arm weight should be considered to reduce the chances of the unit tipping over.

## After Camera Crane Operation

Unattended camera cranes should be secured to prevent movement of the unit (e.g., by adding or removing manufacturer/vendor-supplied weights from the weight bucket).