

Pre-Production (Planning) Memo

These guidelines are intended to give recommendations for the safe assembly and use of powered and manually operated counterbalanced camera cranes and telescopic camera cranes in the motion picture & TV industry. This safety bulletin may also be applicable to jib arms and similar types of units. Please consult [Actsafe Safety Bulletin #8 - Guidelines for Insert Camera Cars](#) when camera cranes are used in conjunction with insert cars, tow dollies or process trailers.

REGULATORY REQUIREMENTS


WorkSafeBC Requirements:

Following the guidelines in this document may help to comply with General Duties of Employers, Supervisors, and Workers to create a safe and healthy workplace, including, but not limited to:

- Workplace Inspections - General Requirement OHS Regulation Part 3 3.5
- Young or New worker Orientation OHS Regulation Part 3 3.23 (2) (d)(j)

Production Requirements

- Each camera crane should be accompanied by an assembly/usage manual supplied by the manufacturer/vendor. The manual should clearly show assembly instructions, maximum payload and maximum gross weight in all configurations, safety precautions, and maintenance procedures. Where different, manufacturer's/ vendor's instructions shall supersede this Safety Bulletin. Read and follow all manufacturer's placards on the equipment.
- Only persons trained in the safe use of each specific camera crane should assemble and/or operate these devices.
- When used, camera cranes should be inspected daily by qualified personnel (e.g., key grip, camera crane/dolly grip, vendor's representative (crane technician) or other qualified personnel, 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.
- Using the largest surface that is practical increases the stability of the unit. The appropriate base for a crane is determined by the height, length and total load; refer to the operating manual.
- The camera crane base should be levelled or on a 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.
- The payload on the boom arm should not exceed that which can be balanced by the counterweight system supplied with the equipment. No additional counter weight, other than that supplied by the vendor should be used. The manufacturer/vendor should be consulted regarding all extension configurations that are not explicitly specified in the operating manual.
- Pushing camera cranes across slopes or over uneven surfaces such as cables, speed bumps, or curbs can cause the unit to tip over.
- **Review [Actsafe Power Line Distance Fact Sheet](#)** to ensure proper clearances from overhead wires are maintained.
- Page 3 of this safety bulletin should be attached to the back of the call sheet on days when counterbalanced and/or telescopic camera cranes are being utilized.
- Comply with WorkSafeBC accident/incident reporting requirements.



CHECK LIST

- Call Sheet Memo
- Power Line Clearance Requirements Met?
- Overhead Obstructions Assessed
- Safety Meeting(s)
- Local Permits (if required)


OPERATING VARIABLES

WEATHER EXTREMES: Extra precautions should be taken when using a camera crane in extreme weather conditions such as freezing conditions, rain/snow, wind/turbulence (natural and man-made). Check with manufacturer’s wind ratings prior to use.

Control Measures for Cast & Crew Safety

The following control measures should be implemented to protect the cast and crew while a camera crane is in use:

- Cast, crew and background performers should be aware of:
 - Crane’s operating area
 - Points of impact (areas under the crane where you may strike your head)
 - Crane’s range of motion
 - Crane’s extension area (for Technocranes)
- If the camera crane is equipped with outriggers/stabilizers, follow the manufacturer’s instructions regarding their proper use. Care should be taken to ensure that dolly track or the feet of the outriggers/stabilizers will not sink into soft soil or asphalt, otherwise, the unit may tip over. Adequate means of distributing the outrigger/stabilizer load should be used, when appropriate.
- When operating a camera crane, qualified personnel should ensure that there is adequate clearance for operation. Potential obstructions or hazards, such as power lines, helicopter rotors, fire sprinkler heads, etc. should be considered.



ATTENTION

If the crane is extended to its full reach and, furthermore, the arm is directed upwards, gusts of wind at open-air locations can threaten the crane’s stability.

Do not work in a wind stronger than force three (3 Beaufort or 20 km/h = 15 mph)

~ as recommended by Technocrane for all their cranes.



DID YOU KNOW?

Telescopic camera cranes (e.g. - Technocranes) operate in a different way from counter-balanced camera cranes. Telescopic camera cranes:

- do not carry any riders.
- can extend out (telescope) as fast as 7 feet per second.
- are heavier and use a wider, heavier track.
- have counterweight stacks that move.

- Seat belts are to be provided on all camera cranes where passengers are required for operation. Seat belts must be maintained in good condition, and used by all passengers.
- When stepping on or off of a camera crane, or when adding or removing payloads, do so only after approval from the person operating the unit. Stepping off of a balanced camera crane without providing a counterbalance (e.g., another person to replace the weight) can cause the arm to elevate rapidly and possibly cause serious injury.
- Equipment shall not be attached to, nor altered on, the camera crane without the authorization of the crane technician.
- Cast, background, and crew should not pass under a camera crane unless authorized by the crane technician.
- Personal Protective Equipment (PPE) shall be worn as appropriate. Technicians loading or unloading weights from the crane should wear CSA approved protective footwear.
- The camera crane’s operating area should be identified. Cast, background, and crew should not enter the crane’s operating area without the appropriate permission.
- Crew members and crane technicians should not use any electronic device (mobile telephone, tablets, video monitors) while operating the crane.

END OF PRE-PRODUCTION MEMO