AMERICAN CONCRETE PUMPING ASSOCIATION
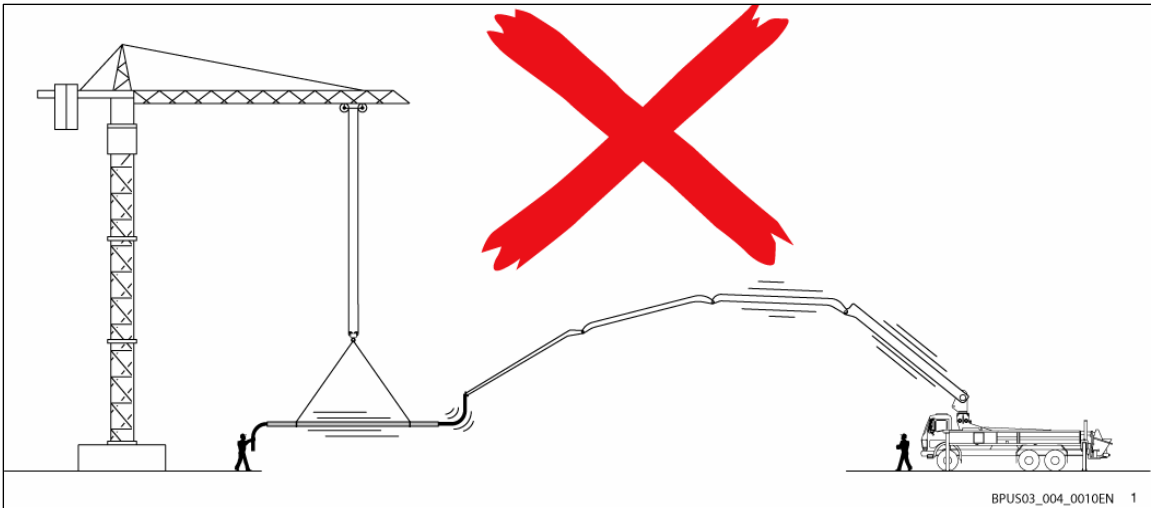
Position Paper

Crane Use For Horizontal Concrete Pump Boom Extension

It is the position of the American Concrete Pumping Association, in conjunction with major crane and concrete pump manufacturers, that cranes must never be used to suspend a working concrete delivery line in an attempt to extend the horizontal reach of a boom pump. There are many reasons for this restriction; the main points are as follows:

- The boom and the crane have differing pivot points and modes of control. It is not possible to continuously and accurately coordinate their movements. This will always result in loads being imparted into both booms. Many of these loads will violate the design intent of the placing boom and the crane and may compromise their structural integrity. The result of these violations of design intent could be tipping, damage, and potential failure of both the crane and the boom.

- In normal operating conditions, a concrete delivery line will have natural vibrations and movements that can be transmitted to the crane through its suspension lines. Crane manufacturers do not design their machinery with this intended application and continued use has been shown to create structural problems in the unit.

If, for reasons related to the site layout, pumping must be carried out over greater horizontal distances or into inaccessible places, it must be performed in accordance with the manufacturer's instructions.

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This is a position on only one aspect of concrete pumping, informed by the collective experience of leading technical personnel in the industry. Contractors, pumpers and others at the site have ultimate responsibility for safe and effective performance of the job. The American Concrete Pumping Association expressly disclaims any responsibility for damages arising from the use, application, or reliance on this position and information contained herein. Manufacturer's recommendations supersede any and all information provided by the ACPA.