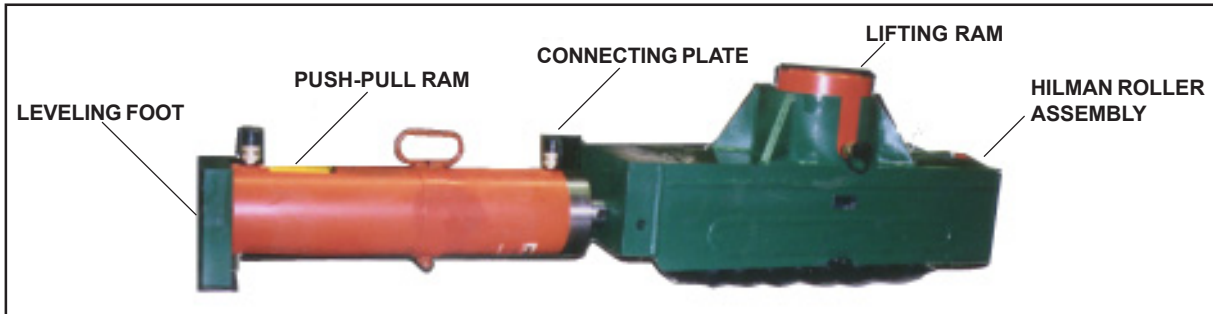


INCREMENTAL BRIDGE LAUNCH SYSTEM



Combining high capacity Hilman Rollers with single and double-acting hydraulic rams creates an efficient, time-saving lift and roll system for launching and positioning bridge segments.

The Hilman Incremental System consists of two centralized hydraulic pumps and hoses connected to push/pull rams. These rams are mounted to an equal number of Hilman Rollers via an adapter which is threaded into a connecting push plate. Single-acting hydraulic lift rams are mounted on top of the Hilman Rollers; they are also connected to a hydraulic pump. The Bridge Launch System is set under the bridge or on a launch platform. "Idler" Rollers are placed at appropriate contact points to carry the load as it is moved. The bridge rests on piers or some falsework when the system is not activated.

The rollers used can have a variety of capabilities and load carrying capacities. Some require a hydraulic ram atop the roller as pictured. This allows the ram to be raised, the section blocked, and the roller to be moved or repositioned. The rollers are often used in the inverted position. Many bridges have a slight radius or "bank" to them. This translates into a minimal but tolerable side drag on the rollers.

