

Underhung Systems vs. Top Running Cranes

A Top Running Crane can be designed to lift massive loads, but is far less versatile than the Underhung Crane. One of the major advantages of an Underhung Crane is its ability to interlock with a fixed spur, crossover, and adjacent cranes. This interlocking capability allows a load to be transported throughout the plant system without the need to set it down, thereby eliminating rehandling.

In wide crane bays, Adjacent Underhung Crane Runways can be suspended directly from the overhead building structure without the need for interfering support columns. Underhung Cranes operate side by side without interfering with each other or the overall operation. They have the ability to pass each other on their independent runway systems. To accomplish the same multiple service with top riding equipment, you must either add auxiliary columns to the building or gantry legs to the bridge; both of which interfere with the plant operation.

In general, for equal spans, capacity and runway support centers, the Underhung Crane System is lighter than the top running system. In extremely wide building bays, one long Underhung Crane can operate on a multiple-runway system minimizing the depth of the bridge girder and the weight of the operating equipment. These features result in lower initial equipment cost and lighter design requirements in the building or supporting structure.

If your loads are 20 tons or less, the light and versatile Underhung Crane System probably is your best choice.

Underhung Cranes		
FEATURES	ADVANTAGES	BENEFITS
Interlocks & Switches	Integrated handling system eliminates unnecessary load re-handling	Lower material handling equipment cost; Increased Productivity
Multiple Runways In One Crane Bay	Ability to pass loads in the bay; Multiple individual hook coverage	Lower material handling equipment cost; Increased Productivity
Flexible Track Suspension	Less stress transmitted to the building	Lower building costs
Multiple Runway Crane	Lighter weight crane	Lower building cost; Lower crane cost

