The Holder-On: An Important Tool in Hot Riveting



Rivet gang using rivet hammer (left) and holder-on "bucking bar" (right) in construction of the Empire State Building *Photograph: Lewis Hine, 1931, NY Public Library Digital Gallery* [Insert: detail of bucking bar of similar type]



Commercially available pneumatic holder-on used with pneumatic rivet hammer in a demonstration at Lansing Community College, Lansing Michigan



Craftsman-designed holder-on specialized for riveting at Fraser Shipyards, Inc. (Superior, Wisconsin) demonstrated by Adam Mena at Lansing Community College



After positioning the working end of the holder-on over the manufactured head of the rivet, Mena secures the holder-on against the bracing.



Mena uses the lever of the holder-on to apply pressure to hold the hot rivet in place. The process must be completed quickly so the rivet does not have time to cool.



Roger Morrison drives the hot rivet with a pneumatic rivet hammer while the holderon keeps the rivet securely in place.