

## Simmons SCP-400 Single End Combination Press Data Sheet

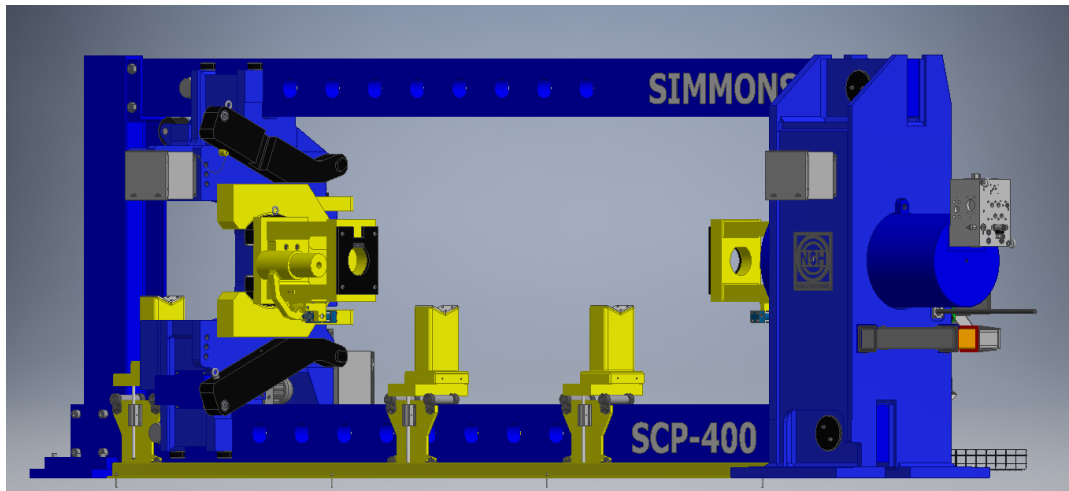


The **Simmons SCP-400 Single End Combination Press** is designed to mount and demount railway wheel sets. The press uses a moveable abutment to oppose the pressing forces from the single pressing cylinder. The abutment can be positioned as necessary for both mounting and demounting operations by removing two powered locking pins, freeing it to be positioned either manually or with the aid of an optional on-board controller. Swing-in tooling is mounted to both the abutment and the pressing ram. This tooling is manually positioned by the operator.

The wheel set is loaded manually with the aid of an overhead crane system, and is held on elevators throughout mounting and demounting operations. The Wheel Press Recorder will automatically capture the mount force versus distance graph and store that data along with wheel set information entered by the operator. After the components on one end of the wheel set are mounted or demounted, the operator then uses the overhead crane to turn the wheel set end-to-end. The process is repeated to process the remaining components.

Press operation rates are variable due to the variety of wheel sets that can be processed. Rates can range from 8–32 wheel sets per 8-hour shift depending on wheel set complexity and the number of components and operations necessary per wheel set. The press can move to position within a 0.020 inch or 500 micron accuracy. Spike control is provided, allowing components to press up against an axle feature as a means of positioning.





#### Machine Dimensions

Press Length	273 in.	6934 mm
Press Width	280 in.	7122 mm
Press Height	88 in.	2235 mm
Total Weight	34000 lbs.	15500 kg
Vertical Distance Between Tie Bars	60 in.	1524 mm
Ram Stroke	26 in.	660 mm
Maximum Opening, Ram (Retracted) To Abutment	109 in.	2768 mm
Minimum Opening, Ram (Retracted) To Abutment	35 in.	890 mm

#### General Specifications

Production	8-32 wheel sets per 8-hour shift	
Accuracy	+/- 0.020 in.	+/- 500 microns
Maximum Pressing Force	400 tons	3560 kN
Rapid Ram Extend Speed	120 in/min	50 mm/s
Rapid Ram Retract Speed	140 in/min	60 mm/s
Maximum Pressing Speed	11 in/min	4.5 mm/s

#### Utility Requirements

Electrical Power	52 kW
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#### Wheel Set Dimensions

Maximum Wheel Diameter	52 in.	1320 mm
Minimum Wheel Diameter	24 in.	600 mm
Maximum Axle Length	102 in.	2590 mm
Maximum Axle Diameter	10.5 in.	265 mm

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