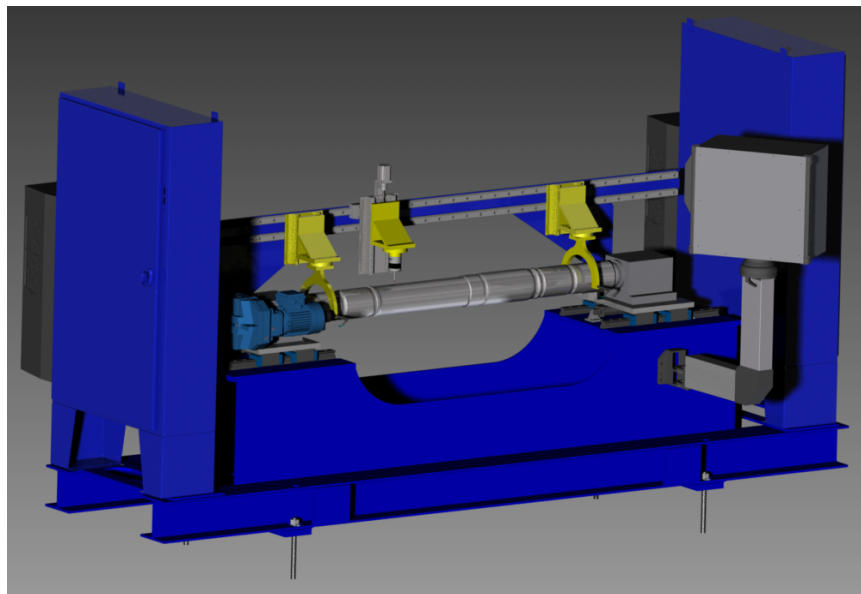
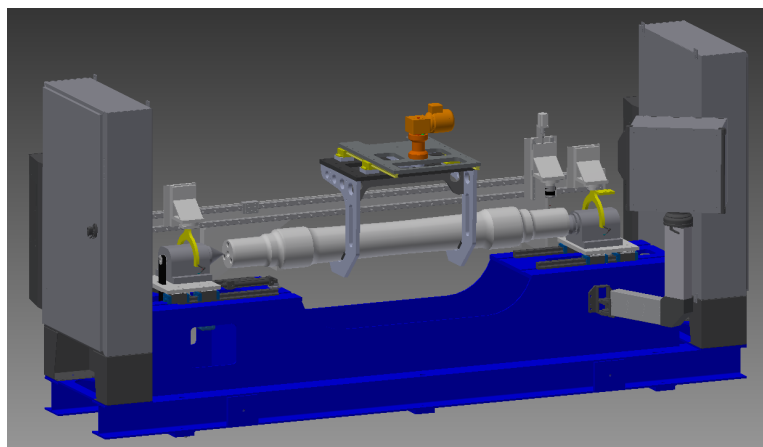


Simmons AXM-430 Axle Measurement System Data Sheet



The **Simmons AXM-430 Axle Measurement System** automatically inspects railroad axles to determine if the axle is acceptable for use in a wheel set. The AXM-430 measures the diameter, taper, and total indicated runout (TIR) of the cylindrical axle features (e.g., bearing journal, wheel seat, and gear seat), and the location of critical axle features along the length of the axle. The machine also performs the measurements necessary to detect a bent axle.

The AXM-430 can interface with wheel shop automation systems to automatically route the axle to a mounting press, a lathe, or a scrap area based on the measurements that are performed. The machine can also function as a standalone machine and the measurement results can be stored to a database hosted locally on the machine or hosted remotely on the customer's server.



AXM-430 with optional overhead axle gantry



Machine Dimensions

Length	190 in.	4810 mm
Width (With Panel)	77.5 in.	1966 mm
Height	82 in.	2083 mm
Weight	8500 lbs.	3855 kg

Measurements Taken

Diameter	+/- 0.0001 in.	+/- 0.0025 mm
Taper	+/- 0.0002 in.	+/- 0.005 mm
Total Indicated Runout	+/- 0.0010 in.	+/- 0.025 mm
Bent Axle Detection	+/- 0.0004 in.	+/- 0.010 mm
Length and Location of Features	+/- 0.004 in.	+/- 0.102 mm

Utility Requirements

Electrical Power	22 kW
Compressed Air	1 scfm @ 80 psi

Wheel Set Dimensions

Maximum Wheel Seat Diameter	10.1 in.	257 mm
Minimum Wheel Seat Diameter	5.1 in.	129 mm
Maximum Axle Length	102 in.	2591 mm
Minimum Axle Length	60 in.	1524 mm
Maximum Weight	2000 lbs.	909 kg

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