

Stanray TN-84C Underfloor Wheel Truing Machine Data Sheet

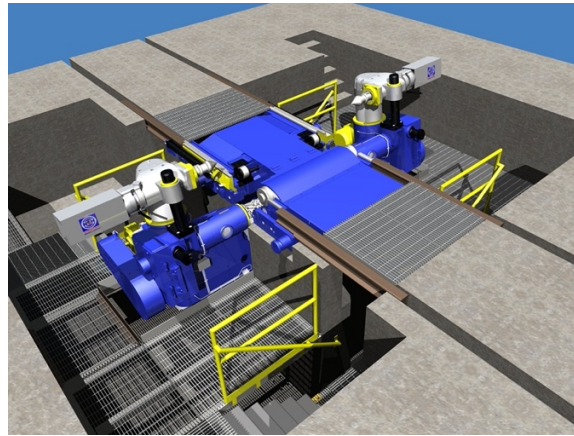


The **Stanray[®] TN-84C Underfloor Wheel Truing Machine** is an underfloor pit-mounted milling machine, capable of simultaneously profiling both wheels of a wheel set using the axle centers as the machining reference point. It is capable of profiling wheel sets to necessary specifications for tape size, concentricity, and plane dimensions in any of the following situations: 1) while the wheel set is under a locomotive, passenger or freight car, transit vehicle, or other rolling stock, 2) while the wheel sets are mounted in a truck, and 3) while the wheel set is demounted as a single set.

The Stanray reprofiles both wheels simultaneously to equal diameters, leaving a witness groove at the flange of the profile. The full profile milling technology does not require undercutting the tread surface or flat spots by 1.6 mm (1/16 inch) as required for single point turning method on the underfloor lathe. Substantial material and cost savings as well as increased mileage are therefore utilized by full contour milling.

Both wheels of a wheel set will be finished automatically to the diameter that is required to clean up, while removing the minimum amount of metal possible.





Machine Dimensions

| | | |
|--------------------------------|------------|-------------|
| Fabricated Beam Maximum Length | 120 in. | 3048 mm |
| C-Frame Maximum Width | 225 in. | 5715 mm |
| C-Frame Maximum Height | 107 in. | 2717.8 mm |
| Total Weight | 40000 lbs. | 18143.67 kg |

Pit Dimensions

| | | |
|--------|---------|-----------|
| Length | 310 in. | 7874 mm |
| Width | 305 in. | 7747 mm |
| Depth | 113 in. | 2870.2 mm |

General Specifications

| | | |
|-------------------------------|--|------------|
| Production | Up to 12 wheel sets per 8-hour shift | |
| Diameter Accuracy | + /- 0.020 in. | +/- .5 mm |
| Eccentricity | + /- 0.020 in. | +/- .5 mm |
| Profile Accuracy | + /- 0.010 in. | +/- .25 mm |
| Surface Finish | 200 RMS axially, 150 RMS on wheel circumference | |
| Milling Cutter Speed | 230 RPM | |
| Hydraulic Centering Ram Force | 6600 lbs. | 2.9 kN |
| Hydraulic Hold-Down Force | 15 tons | 133 kN |

Utility Requirements

| | | |
|---------------------|---------------|---------------|
| Electrical Power | 76 kW | |
| Hydraulic Reservoir | 90 US gallons | 340.69 liters |

Wheel Set Dimensions

| | | |
|------------------------|---------|---------|
| Maximum Wheel Diameter | 58 in. | 1475 mm |
| Minimum Wheel Diameter | 23 in. | 585 mm |
| Maximum Axle Load | 50 tons | 445 kN |

Updated August 23, 2021