

Figure 13.24-8 Pneumatic Tire Roller Tire Offset

13.24.10 Vibratory Roller

The rollers discussed previously use only the weight of the roller to achieve compaction while operating in static mode. Vibratory rollers are capable of imparting an impact loading on the mixture as they vibrate during operation. It is possible to control the frequency and the amplitude of the vibratory effort imparted by the roller. Figure 13.24-9 shows a vibratory roller in use.



Figure 13.24-9 Vibratory Roller

13.24.11 Trench Roller

Trench rollers can be utilized to compact asphalt mixtures in situations where the width of course to be rolled is too narrow for traditional type rollers. Figure 13.24-10 shows a trench roller.



Figure 13.24-10 Trench Roller

13.24.12 Aggregate Spreaders

Aggregate spreaders are sometimes referred to as chip boxes or spreader boxes. They are used to distribute cover aggregate over a freshly applied asphalt emulsion in seal coat operations. Figure 13.24-11 shows an aggregate spreader in use.



Figure 13.24-11 Aggregate Spreader

13.24.13 Rotary Power Broom

Rotary power brooms can be used in multiple applications related to paving operations. They are used to clean existing pavements or previously placed underlying mixtures prior to placing tack coat. They can also be used to clean existing pavements prior to applying asphalt emulsion for seal coat. A third use for power brooms can be to remove excess cover aggregate from a newly placed seal coat. A rotary power broom is shown below in Figure 13.24-12.