Diamond Grinding Machine Requirements for Bump Grinding Applications

BUMP GRINDING ON NEW CONSTRUCTION does not require the same equipment as commonly used on full surface grinding such as production grinding. Production grinding often necessitates heavier and larger machines to provide the power and weight needed to increase production.

Bump grinding on new construction removes less material over smaller areas since it is corrective grinding, addressing localized roughness issues. As such, the weight and power of the equipment are not as critical. In addition, smaller machines have a maneuverability advantage over larger equipment.

Figure 1 indicates the three series of diamond grinders produced today (i.e., 6000, 4500 and 1500). The drawings are approximately to scale and provide additional information on their effective wheelbases and weight. The most current models in each of these series are PC6004EC, PC4505 and PC1505XL. As indicated in the figure, the 6000 series is the only unit that has its own water storage.

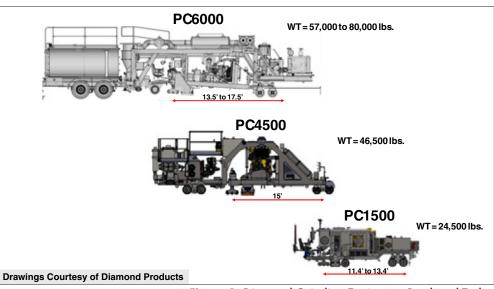


Figure 1: Diamond Grinding Equipment Produced Today

For bump grinding, a machine weighing a minimum of 21,000 lbs. is more than adequate to accomplish the work.

For both bump grinding and production grinding, a minimum effective wheelbase of 12 ft. and a minimum grinding head width of 3 ft. is recommended.



ABOUT IGGA

The International Grooving & Grinding Association (IGGA) is a non-profit trade association founded in 1972 by a group of dedicated industry professionals committed to the development of the diamond grinding and grooving process for surfaces constructed with Portland cement concrete and asphalt. In 1995, the IGGA joined in affiliation with the American Concrete Pavement Association (ACPA) to form what is now referred to as the Concrete Pavement Preservation Partnership (IGGA/ACPA CP3). The IGGA/ACPA CP3 now serves as the lead industry representative and technical resource in the development and marketing of optimized pavement surfaces, concrete pavement restoration and pavement preservation around the world.