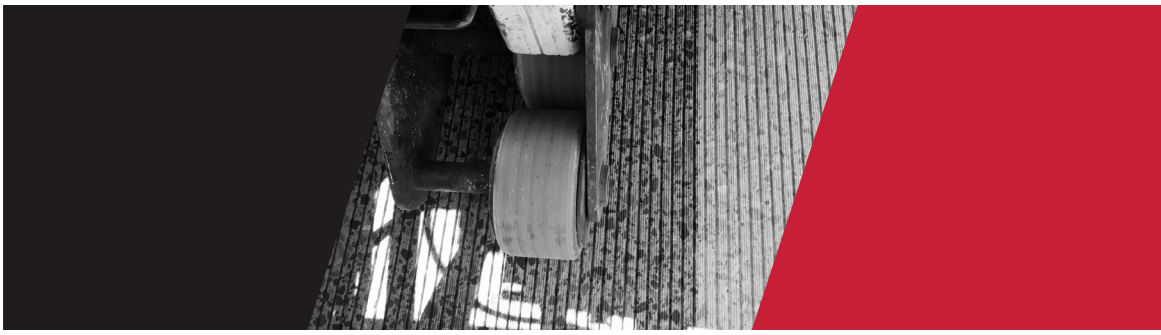
IGGA
International Grooving & Grinding Association
Your Pavement Preservation Resource® since 1972

diamond grinding

Production or bump grind: What is the better value?

Learn how to apply grinding to optimize $$ spent.



DOTS ACROSS THE COUNTRY DIAMOND GRIND PAVEMENT to optimize pavement performance while minimizing their spending, often employing it to smooth out uneven spots in a pavement. They specify bump grinding—that is, grinding restricted to just the uneven areas—in an effort to address only troublesome locations and thereby conserve resources while meeting smoothness requirements. However, when it comes to diamond grinding, this selective approach is not always the most effective one.

When leaving short sections of unground pavement between bump-ground segments, it is possible to increase the cost of the diamond grinding procedure while reducing the best outcome for the pavement surface. Increased costs can occur when machine operators stop and start a grinding pass, lifting the grinding head and then taking the time to reset it at the appropriate depth when addressing the next bump. This increases the overall amount of time, effort and fuel consumed, thereby increasing costs. While bump ground surfaces can significantly improve ride quality and increase pavement longevity, nothing beats the performance of a continuously ground, production surface. Performing a production grind, i.e., grinding the pavement full lane width and length, to a specified maximum IRI measurement, will achieve better results in terms of ride quality, friction, sound, fuel emissions, and aesthetics at a lower square yard cost in most cases.

Bump grinding is normally based on hourly pricing as opposed to continuous production grinding which is typically based on square yard pricing. With this in mind, paving project managers and rehabilitation plan designers often lay down numerous start and stop points for the grinder operator to navigate thinking that they are saving money by doing so. This is often not the case. On the contrary, combining some of these patches into a continuous grind can actually be less expensive and provide a better end product for the driving public.

Additionally, when pavement engineers are at the drafting table designing new, heavily phased paving projects, they should anticipate a significant amount of bump grinding and thereby consider incorporating continuous diamond grinding over the entire project to obtain the best value and performance from the grinding product.

In summary, each project should be evaluated carefully before the work begins to determine where diamond grinding will be required and how best to approach the task to achieve a smooth, safe and economical pavement surface. Best results will always be achieved laying out a plan in advance, hiring a reputable contractor and trusting the advice of your grinder operator.

To learn more, contact the IGGA or visit IGGA.net.