

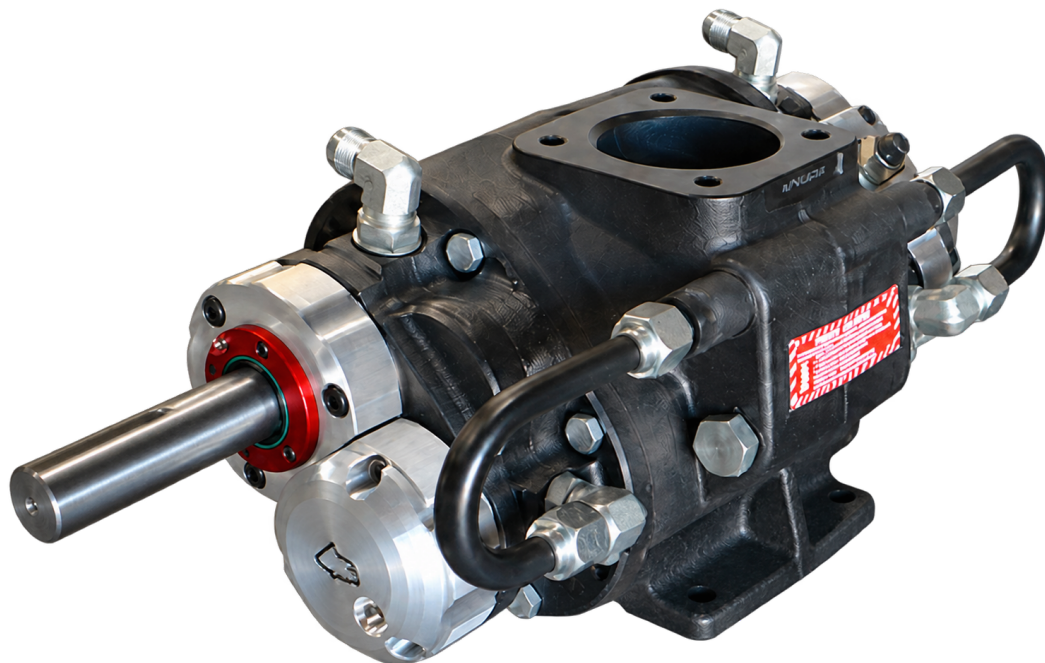


ASPHALT SYSTEMS

Bearing Pumps

- Rev D

Predictable in production. Consistent in reverse.



600 Series bearing pump

TECHNICAL PAPER

Rev D | 2026.09.23

Document BCP-TP-BP

Rev D: Corrects the bearing description and cutaway to spherical roller bearings.

BearCat Pumps

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Know what to expect when you reverse

BearCat bearing pumps operate very consistently in forward and reverse. **What the pump does during production tells you clearly what to expect when you reverse it for cleanout.** That predictability is a major advantage over a bushed pump.

Support that stays consistent

Four heavy-duty spherical roller bearings support both gear shafts at both ends. The rollers carry the load and maintain gear position as the direction of rotation changes.

Rolling support extends service life in abrasive material and keeps forward operation a useful guide to reverse performance. With stable shaft support in both directions, everyday production gives the operator a clear view of pumping condition.



Spherical roller-bearing cutaway. Representative view: [Timken](#).

Why a bushed pump can surprise you

A bushing supports a shaft on a sliding surface, with asphalt providing lubrication. Abrasive material accelerates wear, and that wear can concentrate on the loaded side. The pump may continue delivering well in forward rotation while the support wears unevenly.

Reverse the pump and the load changes direction. The idler gear can shift across the worn clearance, opening a larger gap between its teeth and the housing. More material slips internally instead of being drawn back through the line.

Flow can stop while material remains in the line. The operator may think cleanout is complete, only to find a cold blockage or a pump that will not prime at the next startup. Good forward delivery did not reveal the weak reverse performance.

PRODUCTION TELLS THE STORY

With bearing pumps, changes in pumping efficiency show up consistently in both directions. Operators can use production performance to judge reverse-cleanout capability and plan service before a worn pump disrupts the job.

Service reference: [Pump and Meter Manual Rev E](#).