A FAMILY COMPANY SINCE 1969

Bortek™ INDUSTRIES, INC.

KUBOTA® ENGINES
WORTH ITS WEIGHT IN RELIABILITY

EQUIPMENT

Kubota
Power | Reliability





- **There are Kubota engines for all fuel types**: LPG, Gasoline, and Diesel
- **The engine accounts for up to 1/4 the cost of a cleaning machine --** Kubota engines are worth any added cost in the long run as they are unmatched in terms of reliability and lowest cost of operation
- **Designed specifically for use in industrial applications --** these are not just an adapted automotive design.
- **Internal protected and lubricated gear driven valve-train**
  - -NO timing belt, pulleys, or tensioner
  - -HIGH reliability
- **Non-interference design**
- **Cast iron engine block and head for less thermal stress and long-life**
- **Based on diesel design = Heavy Duty!**
- **Access to global parts and service support!**

FIRST IN POWER CLEANING EQUIPMENT

SERVICE & FULFILLMENT CENTERS

PENNSYLVANIA LOCATIONS
105 North 16th St | Lebanon, PA 17046
4713 & 4719 Old Gettysburg Rd | Mechanicsburg, PA 17055
11070 Parker Dr | North Huntingdon, PA 15642
1318 Bob Mellow Dr | Olyphant, PA 17434

NEW JERSEY LOCATIONS
2702 Cindel Dr, Unit 1 | Cinnaminson, NJ 08077
100 North 12th St | Kenilworth, NJ 07033

CONNECTICUT LOCATIONS
39A N Plains Industrial Rd | Wallingford, CT 06492

ENGINE FEATURE COMPARISON TABLE

Engine Attribute	Advance with Kubota®	Tennant® with Mitsubishi®	Kubota® Advantage
Engine Valve Timing Mechanism – Coordination of motion of pistons and valves	Internally geared camshaft. Lubricated and protected from dirt and designed for the life of the engine.	External timing belt. Exposed to dirty application conditions that can compromise belt life. Periodic replacement is required, or there is a risk of catastrophic failure.	Higher reliability and uptime. Reduced maintenance. No risk of catastrophic damage to valves due to timing belt failure. Designed to run reliably in tough industrial applications.
Potential for Pistons to Contact Valves – Interference Design	Due to internal lubricated camshaft gears have minimal risk of valve train timing failure.	If timing belt slips or breaks, extensive damage to the valves, cylinder head, pistons, crankshaft, and bearings may occur, resulting in expensive repairs.	Virtually no risk of unplanned and expensive engine down time and repair due to timing issues.
Engine Head and Block Material –	Cast iron block and head with comparable thermal expansion rates reducing stress on head gaskets and cylinder head bolts.	Cast iron block with aluminum cylinder head have differing thermal expansion rates, placing greater stress on the head gasket.	A Kubota design cast iron cylinder head mated to the cast iron cylinder block is better suited to industrial applications for long-term durability. Whereas typical automotive-based engine designs are optimized for higher maximum power output, reduced weight, and minimal production cost (aluminum head/cast iron block). Kubota's use of common materials between the cylinder head and block reduces stresses in the gasketed joints resulting in long-life. This minimizes the likelihood of random head gasket failures and associated downtime in high hour usage applications.
Crankshaft Bearings and Cylinder Block	High capacity crankshaft bearings and cylinder block designed for diesel engine loads for long life.	Crankshaft bearings and block optimized for lighter duty automotive usage of gasoline.	Kubota main bearings are more heavy duty in design since they are based on the diesel platform; this provides greater reliability and longer life. More rigid engine structure on engine block (since borrowed from diesel) results in less radiated noise and vibration.
Parts and Service Availability	World renowned for their reliability and for their parts and service network when needed.	Limited support network, but does not carry the same reliability nor service access reputation.	Well established quality reputation and service network to stand behind their products.

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