



POWDER PUMPS

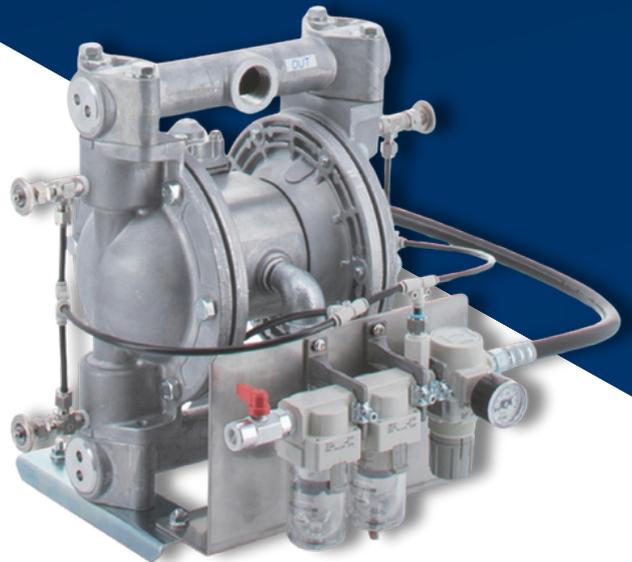
Yamada® Powder Pumps were specifically designed to move bulk solids more effectively throughout your process. They are a cost effective replacement for Augers and Conveyors and eliminate unsafe and labor intensive means of moving bulk powders. These heavy duty pumps consistently transfer fine-grained (100um or finer), low bulk density (70 to 700kg / m³), dry powders in a dust-free operation. Yamada offers a base unit specifically for light powders, which include the following standard features:



	NDP-25	NDP-40	NDP-50	NDP-80
Threaded port	✓			
DN Flanged port		✓	✓	✓
Combi connection Aluminium pumps DN Flange + RC threaded		✓	✓	✓
Aluminium or Stainless steel housing	✓	✓	✓	✓
One piece manifold	✓	✓	✓	✓
Diaphragm options CR and NBR	✓	✓	✓	✓
316SS center rod	✓	✓	✓	✓
Patented spring active air valve	✓	✓	✓	✓
Bolted mating surface	✓	✓	✓	✓
Compressed air induction system	✓	✓	✓	✓
Optional: Reinforced center rod + Bolted diaphragm package		✓	✓	✓
Optional: Stainless steel Y-manifold		✓	✓	✓

Applications

- Activated carbon
- Acrylic Resins
- Aluminum Oxide
- Bentonite
- Carbon Black
- Cereal Flours
- Clay Powder
- Diatomaceous Earth
- Pearlite
- Pesticides
- Pharmaceuticals
- Pigments
- Powder Coatings
- Powdered Plastics
- Powdered Rock
- Quartz Powder
- Expanded Mica
- Fire-extinguishing Powder
- Fumed Silica
- Ground Limestone
- Kaolin
- Micro Dolomite Filter
- Dust
- Salicylic Acid
- Silicones
- Starch
- Talc
- Toners



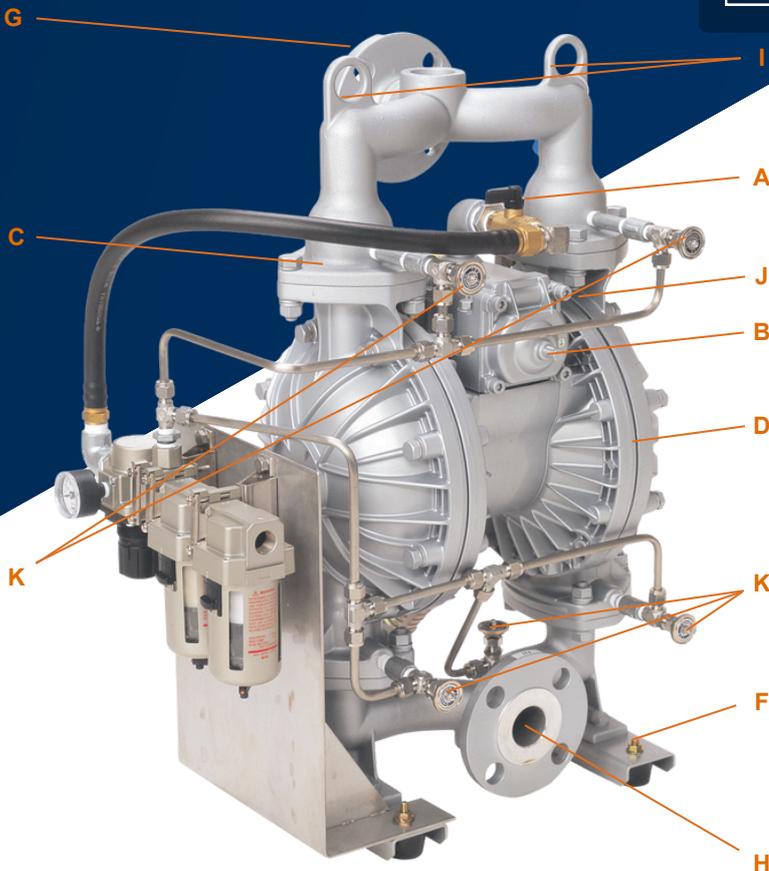
POWDER PUMP PRINCIPLES OF OPERATION



Specifications:

- Conveying distance depends upon the micron size and the bulk density of the powder. For example fumed silica can be conveyed 45 meter while flour a maximum of 12 meter. Refer to the Yamada "Pumpable Powders" data sheet for specific materials.
- Powder must be 150 mesh (106 micron) or smaller size particle / powder and dry. The Pump will not pump crystals or flakes and the bulk density should be less than 700kg / m³. The higher the bulk density, the shorter the conveying distance and the lower the flow rate.
- The Pump can be located a maximum of 4,5 meter above powder source. The powder characteristics dictates the real maximum.
- Yamada recommends aeration / fluidization of the powder a minimum of 10 to 15 seconds prior to starting the pump- premature diaphragm, center shaft, and center disk failure can be avoided.
- PTFE check balls are recommend for sticky powders. Yamada recommends regulating compressed air to 5 Bar (70PSI) Maximum.

	Max. discharge volume
NDP-25	Approx. 200kg/hr
NDP-40	Approx. 500kg/hr
NDP-50	Approx. 1000kg/hr
NDP-80	Approx. 1500kg/hr



- A : Air Valve
- B : Reset Button
- C : Out Manifold
- D : Out Chamber
- E : In Manifold
- F : Pump Base
- G : Discharge Port
- H : Intake Port
- I : Lift Point
- J : Ground Connection Point
- K : Needle Valve

