

HOW TO SELECT MOST SUITABLE PUMP MODEL. Important parameters.	Typical situations where Gear pump type normally is the best choice:	Typical situations where Piston pump type normally is the best choice:
VISCOSITY	When you work with higher viscosity concentrates, <i>Newtonian</i> from 50 cP and higher or <i>Non-</i> <i>Newtonian</i> from 1600 cP/3600 cP (60/30 rpm Brookfield spindle #4) and higher. <i>If in doubt, please</i> <i>send us data sheet on</i> <i>concentrate.</i>	When you work with lower viscosity concentrates, Newtonian up to 20 cP or Non-Newtonian up to 1600 cP/3600 cP (60/30 rpm Brookfield spindle #4). <i>If in doubt,</i> <i>please send us data sheet on</i> <i>concentrate.</i>
FLOW RANGE	When a lesser flow range is enough. Gear pump type is especially well suited when the unit is intended to be used in (33%-) 50%-100% of the max flow specified, for example at open deluge installations, or when the flow is divided in 1, 2 or (3) monitors/nozzles. <i>Consult each Data sheet for more</i> <i>specific flow range.</i>	When a wider flow range is requested. Piston pump type is especially well suited at sprinkler installations or other installations with a request of low start up flow. <i>Consult each Data sheet for more</i> <i>specific flow range.</i>
MAX PRESSURE	When the working pressure in system is max 12 bar .	When the working pressure in system is max 16 bar .
PRESSURE/FLOW CURVE	When you work with systems that has a pump/flow curve as follows; low pressure = low flow, high pressure = high flow.	When you work with systems that has a pump/flow curve as follows; high pressure = low flow, low pressure = high flow. (For ex. Sprinkler systems)
SUCTION/GRAVITY FEED	When one needs a system that is also capable of sucking concentrate from a tank that is placed <i>below</i> the foam pump inlet. (If so, Automatic air relief valve needed). <i>Note! Gravity feed is</i> <i>always preferable if possible.</i>	When a system with gravity feed is suitable, i.e. the concentrate tank is placed <i>above</i> the foam pump inlet.
<u>Other general advantages</u> <u>for each pump type:</u>	1. Gear pump is a rotor pump type therefor the vibrations will be minimized as the pump rotates together with the water motor.	1. Piston pump has a very flat pump curve and is therefore more accurate over a wide flow range.
	2. Gear pump needs less maintenance, no need of oil lubrication. (Except pumps with timing gears.)	2. On piston pump it is possible to easily divide the dosing into three parts, for example a 3% pump into a 1-2-3% pump.

The above is a list of general factors to consider, *Note! some of them could be contradicting to each other*. To enable us to give a *more specific proposal* for each installation, please fill in our "A Guide to choose FIREMIKS" and send to us for our evaluation.

Document: FIREMIKS How to select Piston pump - Gear pump

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