Qualitative impact of investigated models and use cases depending on packing size and storage size

Storage size → / Particle size ↓		Single blow operation		Hold (stand-by)		Cyclic operation		Annual simulation	
Variable fluid properties		Med	Med	Low	Low	Low	Low	Low	Low
		Low	Low	Low	Low	Low	Low	Low	Low
Effective conductivity		Low	Low	Low	Med	Low	Low	Low	Low
		Med	High	High	High	Low	High	Med	High
Wall losses		Low	Low	Low	Low	Low	Low	Low	Low
		Low	Low	Low	Low	Low	Low	Low	Low
Single-phase model		–	–	–	–	–	–	–	–
		Low	Low	Low	Low	Low	Low	Low	Low
Bidisperse model		High	Med	Low	Low	Med	High	Med	Med
		–	–	–	–	–	–	–	–