

Solid Storage Materials



Storage Medium	Temperature		Average density (kg/m ³)	Average heat conductivity (W/mK)	Average heat capacity (kJ/kgK)	Volume specific heat capacity (kWh _t /m ³)	Media costs per kg (US\$/kg)	Media costs per kWh _t (US\$/kWh _t)
	Cold (°C)	Hot (°C)						
Solid media								
Sand-rock-mineral oil	200	300	1,700	1.0	1.30	60	0.15	4.2
Reinforced concrete	200	400	2,200	1.5	0.85	100	0.05	1.0
NaCl (solid)	200	500	2,160	7.0	0.85	150	0.15	1.5
Cast iron	200	400	7,200	37.0	0.56	160	1.00	32.0
Cast steel	200	700	7,800	40.0	0.60	450	5.00	60.0
Silica fire bricks	200	700	1,820	1.5	1.00	150	1.00	7.0
Magnesia fire bricks	200	1,200	3,000	5.0	1.15	600	2.00	6.0