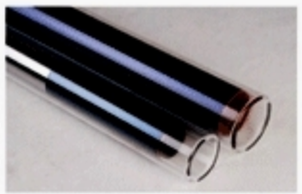
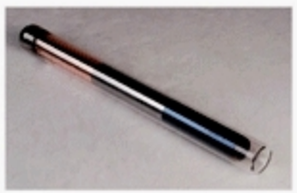
FUJISOL

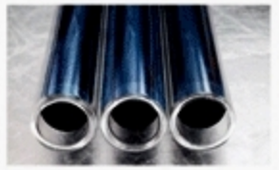
THREE-TARGET TUBE

Three-target **all-glass vacuum heat collection tube property and specification**

Structure		All-glass double-tube co-axial structure
Glass material		High borosilicate 3.3 glass
External pipe diameter and thickness		Φ=47±0.7mm &=1.6mm Φ=58±0.7mm &=1.6mm Φ=70±0.7mm &=2.0mm
Internal pipe siameter and thickness		Φ=37±0.7mm &=1.6mm Φ=47±0.7mm &=1.6mm Φ=58±0.7mm &=1.6mm
Pipe length		800mm 1200mm 1500mm 1600mm 1800mm 1900mm 2000mm 2100mm
Absorptive coating property	Structure	Cu/SS-ALN(H) /SS-ALN (L) / ALN
	Sediment method	3 target magnertron sputtering plating
	Specific absorption	a_s=0.93～0.96 (AM1.5)
	Emission ratio	ε_h=0.04～0.06 (80℃±5℃)
Vacuum tightness		P≤5.0×10⁻³帕 (Pa)
Idle sunning property parameters		Y=260～300m².℃/KW
Solar irradiation for obtaining a preset water temperature	H≤4.7MJ/ m²(Φ58)	H=3.7～4.2MJ/ m²
	H≤3.7MJ/ m²(Φ47)	H=2.9～3.2MJ/ m²
Average heat loss coefficient		U_{LT}=0.4～0.6W/(m².℃)



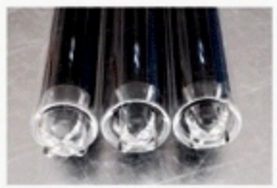


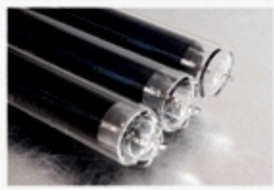


SINGLE TARGET TUBE

Single target All-glass vacuum heat collection tube property and specification

Structure		All-glass double-tube co-axial structure
Glass material		High borosilicate 3.3 glass
External pipe diameter and thickness		Φ=47±0.7mm &=1.6mm Φ=58±0.7mm &=1.6mm Φ=70±0.7mm &=2.0mm
Internal pipe siameter and thickness		Φ=37±0.7mm &=1.6mm Φ=47±0.7mm &=1.6mm Φ=58±0.7mm &=1.6mm
Pipe length		800mm 1200mm 1500mm 1600mm 1800mm 1900mm 2000mm 2100mm
Absorptive coating property	Structure	AL/AL-ALN(H)/AL-ALN(L)/ ALN
	Sediment method	Single target magnertron sputtering plating
	Specific absorption	a_s=0.90～0.93(AM1.5)
	Emission ratio	ε_h=0.05～0.075(80℃±5℃)
Vacuum tightness		P≤5.0×10⁻³帕(Pa)
Idle sunning property parameters		Y=220～260m².℃/KW
Solar irradiation for obtaining a preset water temperature	H≤4.7MJ/ m²(Φ58)	H=4.1～4.4MJ/ m²
	H≤3.7MJ/ m²(Φ47)	H=3.1～3.4MJ/ m²
Average heat loss coefficient		U_{LT}=0.6～0.7W/(m².℃)





THREE-CAVITY TUBE

Specification of three-cavity glass vacuum solar energy collecting tube

Adding one more complete glass tube in the normal tube, raising the heating efficiency by decreasing the water content, not the heating area. The heating efficiency can improve 30% by this way.

GATHER THE HOT TUBE