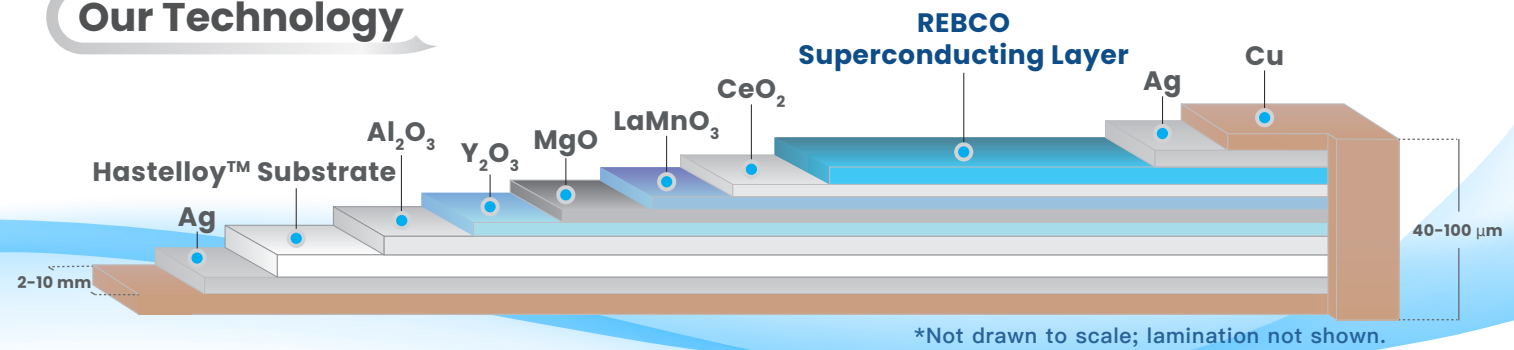


2G HTS Tapes (REBCO)

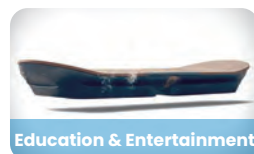
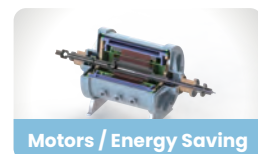
Our Company

Shanghai Superconductor Technology Co., Ltd. (SST) employs physical vapour deposition techniques for mass production of cost-effective REBCO tapes. The products demonstrate superior mechanical properties and high critical current densities over a broad range of temperatures and magnetic field strengths. As a result, SST products have been deployed in transportation, electric power, high energy physics research and fusion sectors and successfully manifested stable and competent performances. In addition, SST also provides associated equipment and engineering services including but not limited to coil winding machines and HTS magnets.

Our Technology



Applications of 2G HTS Tapes



Our Products

APPLICATIONS	Electrical	Width	Grades	Ic(77K,s.f.)	
			3.3mm	4mm	10mm
S+	130-155 A				
SUP	155-170 A				
3.3mm	4mm		10mm	S	114-160 A
				S+	160-190 A
				SUP	190-210 A
3.3mm	4mm		10mm	S	300-420 A
				S+	420-500 A
				SUP	500-550 A
ELECTROMAGNETIC	Width	Grades	Ic(4.2K,10T)		
			S	217-260 A	
	3.3mm	4mm	10mm	S+	260-303 A
				SUP	303-347 A
				S	266-320 A
	3.3mm	4mm	10mm	S+	320-372 A
				SUP	372-425 A
				S	700-840 A
	3.3mm	4mm	10mm	S+	840-980 A
				SUP	980-1120 A
				S	
CUSTOMIZABLE SPECIFICATIONS	Substrate	30μm Hasterlloy™ 50μm Hasterlloy™			
	single piece length	Any length below 1000m			
	Post-processing	Copper plating	Thickness options	Total thickness	Total width
			5μm*2	65μm±10%	3.3mm、4mm、10mm
			10μm*2	75μm±10%	
		20μm*2	95μm±10%		
		Copper lamination	Thickness options	Total thickness	Total width
			75μm*2	205μm±10%	4.8mm、6mm、12mm
	100μm*2		255μm±10%		
	SS304 lamination	Thickness options	Total thickness	Total width	
80μm*2	215μm±10%	4.8mm、6mm、12mm			
COMMON PROPERTIES		Copper plating	Copper lamination	SS304 lamination	
	Joint resistance	30nΩ·cm ²			
	Tensile strain	0.40%			
	Tensile strength (77 K/Mpa)	>100Mpa	>400Mpa	>800Mpa	
	Min. bending diameter (mm)	11-15	15-20		



More Cost-Effectiveness
More Possibilities

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Major Projects

(Commercial HTS deployment at multiple kilometers scale)

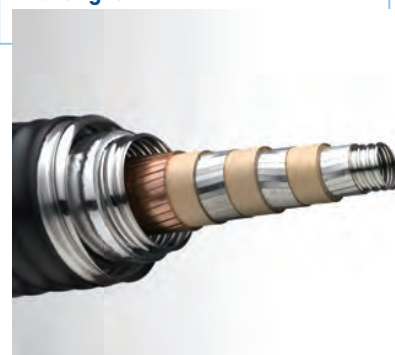
Fusion



Commonwealth Fusion Systems

4mm wide HTS tapes with copper-plating

1.2km HTS cable demonstration in Shanghai



State Grid/SECRI

4.8mm wide HTS tapes with copper lamination

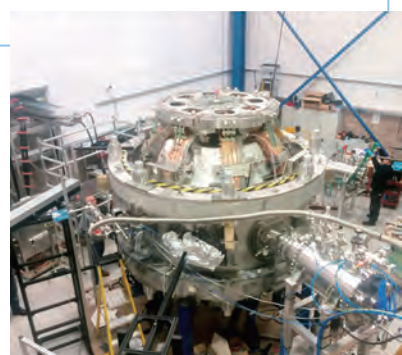
220 kV AC Current limiter



ZhongTian Technology

12mm wide HTS tapes with SS304 lamination

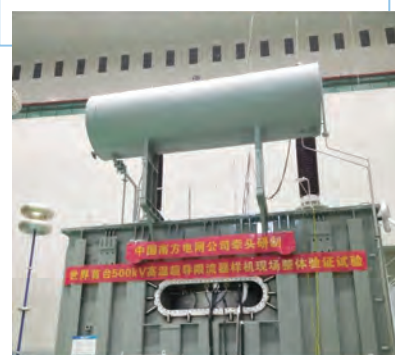
Fusion



Tokamak Energy

10mm wide HTS tapes with copper-plating

500 kV AC HTS current limiter



Guangdong Grid

4.8mm wide HTS tapes with copper lamination

160 kV DC Current limiter



Guangdong Grid

12mm wide HTS tapes with SS304 lamination

Partners and Clients



2G
HTS Tapes (REBCO)