

WB4-3-INV

Present status of superconducting wire development in China: RE-123 CCs and related applications

*Yutaka Yamada^{1,2}, Yue Zhao^{1,2}, Zhiyong Hong^{1,2}, Zhijian Jin²

Shanghai Superconductor Technology Co. Ltd.¹
Shanghai Jiao Tong University²

The activity of RE-123 Coated Conductor (CC) at Shanghai Superconductor Technology Co. Ltd (SST) and related applications will be presented.

SST coated conductor is progressing with focusing on the large market such as electric power applications and fusion such that 30 micron thin Hastelloy substrate tape was successfully produced in mass-production system. Furthermore, high J_e at 4K and high fields was achieved at above 220kA/mm² at 4K, 12T with I_c of 570A.

Recently we have many HTS projects in China including cable, FCL, accelerator, high field magnet and so on. Typical examples of these projects used SST tape will be introduced such as Shanghai Cable Project: 1.2km long REBCO cable installed in the center of Shanghai downtown.

Keywords: Coated Conductor, large scale production, high critical current, applications in China