During the development of ITER HHF components manufacturing it is necessary to provide reliable joints between heat sink material made of CuCrZr bronze and the supporting construction made of austenitic steel. Four different methods have been tried out: - Hot Isostatic Pressing (HIP), - HIP assisted brazing, - Furnace assisted brazing, - Casting. The investigation of structure and properties of joints show that HIP and casting provide the better results than the other technologies. However, HIP is relatively expensive technology, and big size HIP furnace is required for the full scale components manufacturing that are not available in RF now. Therefore, casting was selected as a reference manufacturing technology for the primary wall of ITER modules in RF. The paper summarizes the results of bronze/steel joints manufacturing and investigation of their properties.