

MATERIALS AND STRUCTURES SYMPOSIUM (C2)  
Space Structures I - Development and Verification (Space Vehicles and Components) (1)

Author: Mr. Qiu Huayong  
Aerospace System Engineering Shanghai, China, China, ureca@163.com

Mr. Liu Zhi  
Aerospace System Engineering Shanghai, China, China, forve@126.com

Ms. Zheng Yunqing  
Aerospace System Engineering Shanghai, China, China, cool\_ding@163.com

Mr. Shi Junwei  
Aerospace System Engineering Shanghai, China, China, junweishi@hotmail.com

THE DEVELOPMENT HISTORY AND APPLICATION STATUS OF CHINA'S MANNED  
SPACECRAFT DOCKING MECHANISM

**Abstract**

Abstract: The rendezvous docking technology was the key mission in the second phase of China's manned spaceflight project, the docking mechanism was one of key technologies. The development history of the dock mechanism of China's ShenZhou spaceship and TianGong target spacecraft was introduced in this paper, including the investigation things, the research things, the design things, the test things and so on. In ShenZhou-8, ShenZhou-9 flight missions, China's docking mechanism performed perfectly. Combined the flight conditions, the current and future application status of China's docking mechanism were discussed.