

## ***EF-H superconducting conductor of 450 m manufactured***



The first EF-H (equilibrium field at the high field side) superconducting conductor of 450 m for the EF-4 coil has been manufactured.

The PF (poloidal field) conductor manufacturing building was built in Naka Fusion Institute in March 2009 and the superconductor manufacturing machines were installed in the building in September 2009. Two superconductors using the copper dummy cables were manufactured as a trial and these met the specifications and successfully passed the helium leak test.

### **STP- PC Chair made first technical tour for JT-60SA**

For the 6<sup>th</sup> Meeting of the Satellite Tokamak Programme Project Committee (STP-PC) held in Naka, Ibaraki on 30 March, the chair of the STP-PC, J. Pamela (Agence ITER France), and another member of the STP-PC, D. O'Brian (European Commission), visited Naka Fusion Institute. They also made the first technical tour of the superconductor manufacturing facility in the new buildings, negative-neutral beam injector (N-NBI) facility, power supplies for N-NBI and electron cyclotron heating, and viewed the JT-60U tokamak in the torus hall from the JT-60 visitor booth.



## Outer double wall fixed for its welding



Welded port stub & ribs

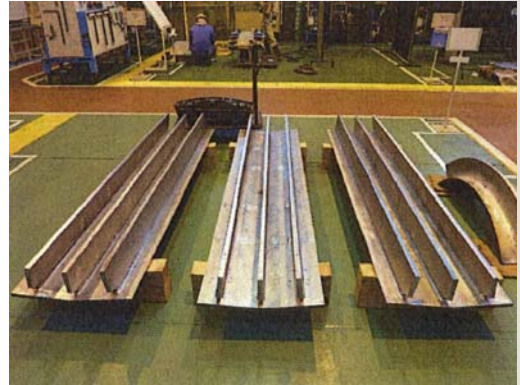


Fixed double outer wall

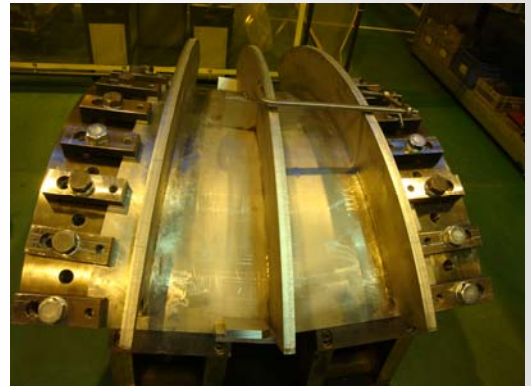
The port stub and ribs of the outboard trial manufacturing of the upper half of the 20 degree sector for the vacuum vessel were welded, and the outer double wall was temporary fixed for its welding. TIG welding and continuous plug welding for the first layer of the inner wall are going to be tested.

The straight and the curved sections of the inboard trial production of the upper half of the 20 degree sector were connected by welding, and the results of dimensional measurement are being analyzed.

## Ribs for first series production inboard section almost completed



All the ribs required for the inboard straight sections (20 degree x 4) forming two of the 40 degree sectors were welded to the inner walls for the vacuum vessel manufacturing.



As for the four inboard curved sections forming two of the 20 degree sectors, all the ribs required were welded to the inner walls using MAG welding, and the inner walls were welded to each other using plasma welding.

## Brazing for divertor target examined

In order to examine the feasibility of brazing for the divertor target, a sample of the divertor target was manufactured by using the vacuum furnace at the manufacturer's factory, and the whole brazing process was witnessed by JA HT members. It was found that Ti coating worked better for brazing for the divertor target than Ti/Cu coating. Further brazing examination is going to be carried out to find out the optimal conditions for mass production.





## Meetings

### JT- 60SA delegation visits W7X for Workshop



A JT-60SA delegation visited W7-X at the Max Planck Institut für Plasmaphysik in Greifswald to attend the JT-60SA/W7X workshop on 17-18 March. Click the picture above for more information.

April 28, 2010  
7<sup>th</sup> Meeting of the BA Steering Committee, Rokkasho, Japan

June 19-23, 2010  
Int. Cryogenic Engineering Conf. 23 - Int. Cryogenic Materials Conf. 2010  
Wroclaw, Poland

June 21-25, 2010  
37<sup>th</sup> EPS Conference on Plasma Physics,  
Dublin, Ireland

September 14-16, 2010  
9<sup>th</sup> Technical Coordination Meeting  
Naka, Japan

[Click here to view more information](#)

## Local



On 3 March, Hina-matsuri (“hina” means small dolls and matsuri means a festival) is held in Japan in order to pray for young girl's growth and happiness, so this festival is also known as Girl's Festival. Most families with girls display special hina dolls representing the Emperor, Empress, attendants, and musicians in traditional court dress of the Heian period (794-1185) on a five or seven-tiered stand covered with a red carpet.

At Ju-ni sho shrine in Daigo-town, Ibaraki, Hina-matsuri is held around that day. The stairs with almost 100 steps to the shrine are decorated with a lot of hina-dolls, and it is said that this is the longest hina-dolls' display in Japan. Japanese harps are played and some traditional sweets and sake are served at the festival.

[Visit Daigo commerce and industry association's website for more pictures of the festival.](#)

## Contact Us

The JT-60SA Newsletter is released monthly by the JT-60SA Project Team. Suggestions and comments are welcome and can be sent to [masayasu.sato@jt60sa.org](mailto:masayasu.sato@jt60sa.org).

### Sixth meeting of STP- Project Committee held in Naka



The 6<sup>th</sup> Meeting of the STP-PC was held in Naka on 30 March. The progress of the project was reported to the STP-PC from the Project Leader and the EU and JA Project Managers.

Before the above meeting, the 3<sup>rd</sup> Joint Project Meeting was held on 29 March in the ITER building in Naka, jointly with the three BA projects, IFMIF/EVEDA, IFERC and STP, to discuss common issues such as the data management system.

## Calendar

March 29, 2010  
3<sup>rd</sup> Joint Project Meeting  
Naka, Japan

March 30, 2010  
6<sup>th</sup> Meeting of the STP Project Committee,  
Naka, Japan

April 12-14, 2010  
8<sup>th</sup> Technical Coordination Meeting,  
Frascati, Italy