Automated Fiber Lay-up Machine

TFL is a Robotic AFP (Automated Fiber Placement) from TSUDAKOMA, which can accurately lay narrow slit tapes on complex shapes. High productivity has been achieved by individual control of multiple slit tapes. At the same time, the compact head allows it to reach narrower spaces. You can apply it to complex shapes of work-pieces such as channel forms, which were difficult to produce with a machine.





TFL uses thermoset prepreg slit tape. 16 spools can be installed in the creel box as standard. Those tapes are delivered to the head at optimized tension control. TSUDAKOMA's tension control technology was originally developed for textile machines. High quality slit tapes can be produced using our TPS prepreg slitter.

A traveling axis for Robot and a positioner can be combined in this system. TSUDAKOMA's rotary tables with BallDrive[®] mechanism (original latest driving technology) are employed as a positioner, which support high speed and precise positioning.



This information is based on results obtained from a project commissioned by the New Energy and Industrial Technology Development Organization (NEDO).