

Engineering services provision for the purposes of rocket and space industry makes one of the most promising and rapidly growing areas of activity of "Dneprotyazhmash" PJSC. This includes developing, manufacturing, assembling and servicing of ground support equipment for promising space rocket complexes.

Since 2005, "Dneprotyazhmash" PJSC in collaboration with enterprises of State Space Agency of Ukraine designs, develops and manufactures units for launch and processing facilities for launch vehicles of Brazil (Cyclone-4 project), USA (Antares project) and other countries.

The most recent and ambitious project of the enterprise, which is currently on the manufacturing and testing stage, is binational Ukrainian-Brazilian project on Cyclone-4 integrated launch vehicle launch provision from Alcantara launch site (Brazil).

Under this project "Dneprotyazhmash" PJSC manufactures the equipment for launch vehicle, payload unit and integrated launch vehicle assembling and its transition to the launch facility with the following accessories connection and erection to the launch position.

Ground support equipment set, designed and manufactured by "Dneprotyazhmash" PJSC includes 5 major launch complex units, 6 sets of servicing equipment, stationary bench for payload unit servicing and a set of docking accessories and communications for launch and processing facilities.





With nearly all units of Cyclone-4 ground support equipment being fully developed and manufactured by Ukrainian enterprises ("Dneprotyazhmash" PJSC, "Yuzhnoe" SDO, "Yuzhmash" PA etc.) the decision has been made to deploy a Plant Test Complex "Dry Launch Site" (PTC) testing facility within the territory of "Dneprotyazhmash" PJSC. The ultimate reasons for the test facility deployment were to guarantee and ensure realiable work of the units produced along with minimizing expenses on their installation in Brazil. Plant test complex is intended for launch and processing complexes units testing and workout.

Plant test complex consists of building structures equipped with technical communications and processing and servicing equipment.

Building structures imitate Alcantara launch site (for launch pad and installation and erection unit assembling), launch site railway access, structures for launch vehicle loading imitation (mass mock-ups), engineering systems and communications and a fragment of spacecraft and payload unit assembly and test facility.





In 2008-2010, "DTM" PJSC designed, developed, manufactured, tested and delivered to the customer - Orbital Sciences Corporation (USA), mechanical ground support equipment (MGSE) under the collaborative Ukrainian-American Taurus-II project, renamed Antares since 2011. MGSE for Antares ILV assembly and servicing was successfully tested and put into operation in U.S. Wallops spaceport (USA).

The first launch of «Antares» was successfully held on April 21, 2013.

MGSE delivered includes:

- set of installation-assembly dollies and the bench for ILV servicing;
- set of hoisting devices;
- set of servicing devices and accessories;





The first stage of the launch «Antares» is on assembly and docking trolleys



Accessory set



Meeting of the delegation of JSC «Dneprotechservice» and Corporation «Orbital» at a briefing devoted to the first launch of Antares



Antares was before the start