

SPACE PROPULSION SYMPOSIUM (C4)
Propulsion System (1) (1)

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JSC "NPO ENERGOMASH NAMED AFTER ACADEMICIAN V.GLUSHKO" - LEADING RUSSIAN
ENTERPRISE ON THE DEVELOPMENT AND PRODUCTION OF LIQUID PROPELLANT
ROCKET ENGINES. EXPERIENCE AND PROSPECT.

Abstract

Joint Stock Company "NPO Energomash named after academician V.Glushko" is a leading company in the world on development of powerful liquid propellant rocket engines for space launch-vehicles, one of the leaders of the world market of science intensive and high-tech products. Its history goes back to the May 15, 1929. Over the years, about 60 rocket engines were developed at NPO Energomash. Such engines were produced serially and operated and continue to operate in the space launch vehicles. To date, approximately 40 Over the past 25 years, JSC "NPO Energomash" has developed a number of unified LOX-kerosene rocket engines of new generation with unique power and operation performances. LPRE of this line, taking in account the wide range of thrust throttling, provide thrust from 60 up to 800 ton and can meet the needs of advanced launch-vehicles for all payloads. The unification of technological solutions applied in the engines of LOX-kerosene line of Energomash allows for a short time and with high quality to develop the new engines to any advanced launch-vehicle with a small amount of developed engines. The historical information about the company, information about the current situation with the development and production of LOX-kerosene rocket engines: RD171M for "Zenit" LV; RD180 for "Atlas" LV and RD191 for new Russian "Angara" LV, about the prospects of Russian and world cosmonautics in the context of the off-the-shelf LPRE modernization are presented in the report. The information on the advanced work of Energomash on development of newest rocket engines, on researches of rocket propellants etc. is presented also.