

DYNAMICS, STRENGTH AND RESOURCE OF METAL STRUCTURES OF PORT HANDLING MACHINES



The scientific school was founded in 1993 by Doctor of Technical Sciences, Professor Pustovyy V. M. of the Department of Mechanization and Automation of Ports on the basis of Odessa State Maritime University.

The main activity of the school is to study the problems of changes in the technical condition of port handling machines, the strength of their metal structures, research and development of methods for determining the residual resource.

Under the guidance of Professor Pustovyy V. M. 7 candidate dissertations have been prepared and defended, 2 doctoral dissertations and 1 candidate dissertation are being researched.

Over the years, the scientific staff of the school has developed and put into operation more than ten industry regulations and organizational and methodological documents, the main of which are: MU-00/1997 “Guidelines. Portal cranes. Metal structures and mechanisms. Methods for determining the residual resource”, MU 001.03-A-2003 “Portal cranes, reloading cranes. Modernization”, “Regulations on planned and preventive repairs of port cranes of seaports”, OMD 22460848.003-2012 “Portal cranes, reloading cranes. Expert inspection”, TU U 33.1-22460848-001.2018 “Specialized reloading complexes. Repair. Modification. Operation”. MU-00/1997 “Guidelines. Portal cranes. Metal structures and mechanisms. Methods for determining the residual resource.

In the period of 2002–2003 the Register of the park of portal cranes of seaports of Ukraine (15 ports) was created, the technical condition was investigated and resource parameters on each crane and on each port as a whole were defined.