ФГАОУ ВО «Севастопольский государственный университет»
ФГАОУ ВО «Национальный исследовательский технологический университет «МИСиС»»
ФГБОУ ВО «Алтайский государственный технический университет им. И.И. Ползунова»

Конференция проводится при финансовой поддержке Российского Фонда Фундаментальных Исследований (грант №18-08-20074)

МЕЖДУНАРОДНАЯ НАУЧНО-ТЕХНИЧЕСКАЯ КОНФЕРЕНЦИЯ
«СОВРЕМЕННЫЕ НАПРАВЛЕНИЯ И ПЕРСПЕКТИВЫ РАЗВИТИЯ ТЕХНОЛОГИЙ ОБРАБОТКИ И ОБОРУДОВАНИЯ В МАШИНОСТРОЕНИИ 2018»

INTERNATIONAL CONFERENCE ON MODERN TRENDS IN MANUFACTURING TECHNOLOGIES AND EQUIPMENT 2018

Севастополь
10 – 14 сентября 2018 г.

НАУЧНАЯ ПРОГРАММА

SCIENTIFIC PROGRAM

Международный программный комитет

Председатель: **Новосёлов Ю.К.,** д.т.н., проф. ФГАОУ ВО «Севастопольский государственный университет» (Россия)
Сопредседатели:
Абдулгазис У.А., д.т.н., проф., ГБОУ ВО РК «Крымский инженерно-педагогический университет» (Россия)
Михайлов А.Н., д.т.н., проф., ГОУ ВПО «Донецкий национальный технический университет» (Донецк, ДНР)

Члены программного комитета:
Дуюн Т.А., д.т.н., проф. (БГТУ им. Шухова, Белгород)
Prof. G. Bahadirov (IMSS named after Urazbaeva, UZB)
Prof. A. Buchacz (Silesian Technical University, POL)
Prof. N. Danijarov (Karaganda St. Tech. Un., KAZ)
Новосёлов Ю.К., д.т.н., проф. (СевГУ, Севастополь)
Харченко А.О., к.т.н., проф. (СевГУ, Севастополь)
Бохонский А.И., д.т.н., проф. (СевГУ, Севастополь)
Покинтелица Н.И., д.т.н., проф. (СевГУ, Севастополь)
Prof. R. Giniavichus (Vilnius Gediminas Tech. Un., LTU)
Assoc. prof. A. Giutuni (Tunis Tech. University, TUN)
Хейфец М.Л., д.т.н., проф. (НАН Беларуси, Минск)
Хандожко А.В., д.т.н., проф. (БГТУ, Брянск)
Assoc. prof. G-J. Jasper (Plymouth University, GBR)
Prof. R. Kasper (OVG University Magdeburg, DEU)
Prof. S. Khristoforian (St. Eng.Un. of Armenia, ARM)
Барсуков Г.В., д.т.н., проф. (ОГУ, Орёл)
Prof. O. Pruteanu (Tech. Un. “Gh. Asachi”, ROU)
Prof. M. Radovanovic (Tech. Un. of Nis, SRB)
Prof. A. Toca (Technical University Moldova, MDA)
Assos. prof. A. Srivastava (Sham. In. of Eng. and Techn. IND)
Assoc. prof. K. Monkova (Tech. University Kosice, SVK)
Мерсон Д.Л., д.ф.-м. н., проф. (ТГУ, Тольятти)
Prof. Z. Sharifov (Azerbaijan Technical. University, AZE)
Козлов А.М., д.т.н., проф. (ЛГТУ, Липецк)
Суслов А.Г., д.т.н., проф. (МГТУ им. Н. Э. Баумана)
Гусев В.В., д.т.н., проф. (ДонНТУ, Донецк)
Якубов Ф.Я., д.т.н., проф. (КИПУ, Симферополь)
Маликов А.А., д.т.н., проф. (ТулГТУ, Тула)
Носенко В.А., д.т.н., проф. (ВолгГТУ, г.Волжский)
Язьев Б.М., д.т.н., проф (ДоНТУ, Ростов-на-Дону)
Коротков А.В., д.т.н., проф. (КузГТУ, Кемерово)
Литвинов С.В., к.т.н., доцент (ДоНТУ, Ростов-на-Дону)

Организационный комитет конференции
(редакционная коллегия)

Председатель:

Братан С.М., д.т.н., профессор, ФГАОУ ВО «Севастопольский государственный университет», Севастополь

Сопредседатели:

Горбатюк С.М., д.т.н., профессор, НИТУ «МИСиС», (Москва)
Леонов С.Л., д.т.н., профессор, ФГБОУ ВПО «Алтайский государственный технический университет им. И.И. Ползунова», (Барнаул)
Глезер А.М., д.ф.-м.н., профессор, НИТУ «МИСиС» (Москва)

Ученый секретарь: **Рощупкин С.И**., к.т.н., доц., СевГУ

Члены оргкомитета:
ФГАОУ ВО «Севастопольский государственный университет»:

Богуцкий В.Б., к.т.н., доц.
Левченко Е.А., к.т.н., доц.
Новиков П.А., к.т.н., доц.
Тараховский А.Ю, к.т.н., доц.
Колесов А.Г., к.т.н., доц.
Владецкая Е.А., к.т.н, доц.
Пянковская. М.В., аспирант.

УВАЖАЕМЫЕ КОЛЛЕГИ!

Приглашаем Вас принять участие в Международной научно-технической конференции

«СОВРЕМЕННЫЕ НАПРАВЛЕНИЯ И ПЕРСПЕКТИВЫ РАЗВИТИЯ ТЕХНОЛОГИЙ ОБРАБОТКИ И ОБОРУДОВАНИЯ В МАШИНОСТРОЕНИИ 2018 (ICMTMTE 2018)»

Работа конференции направлена на предоставление возможности для учёных и представителей производства обобщить результаты последних достижений в области технологий производства изделий из всех типов материалов, промышленного оборудования и инструмента, обсудить направления развития новой техники и технологий, установить полезные связи между партнёрами для будущего взаимодействия.

Конференция проводится с 10 по 14 сентября 2018 г. на базе ФГАОУ ВО «Севастопольский государственный университет»: конференц-зал университета, поточно-лекционные аудитории.

Контактные телефоны

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Адрес организационного комитета:

299053, г. Севастополь, ул. Университетская, 33, ФГАОУ ВО «Севастопольский государственный университет», оргкомитет конференции «Современные направления и перспективы развития технологий обработки и оборудования в машиностроении».

К СВЕДЕНИЮ УЧАСТНИКОВ

ПРИБЫТИЕ участников конференции 10 сентября 2018 г.

РЕГИСТРАЦИЯ участников 10 сентября (с 9.00 до 18.00) и 11сентября (с 8.30 до 9.00) 2018 г. по адресу: г. Севастополь, ул. Гоголя, 14, главный холл.

ПРОЕЗД от автовокзала троллейбусами № 4, 17, 20, маршрутными автобусами № 17, 20, 25, 26 до остановки «Университет».

Порядок работы конференции

10 сентября, понедельник
9.00-18.00 – Прибытие, регистрация, размещение участников конференции
11 сентября, вторник
8.30-9.00 – Регистрация участников
9.00-11.00 – Пленарное заседание
11:00-11.30 – *Перерыв на кофе*
11.30-13.10 – Пленарное заседание
13.10- 14.00 – *Перерыв на обед*
14.00-15.40 – Пленарное заседание
17.00-18.30 – Морская прогулка на теплоходе «Доброход» по Севастопольской бухте.
12 сентября, среда
09.00-11.00 – Секционные заседания
11.00-11.30 – *Перерыв на кофе*
11.30-13.00 – Секционные заседания
13.00-14.00 – *Перерыв на обед*
14.00-16.00 – Секционные заседания
16.00-16.30 – *Перерыв на кофе*
16.30-19.15 – Секционные заседания
13 сентября, четверг
09.00-11.00 – Секционные заседания
11.00-11.30 – *Перерыв на кофе*
11.30-13.00 – Секционные заседания
13.00-14.00 – *Перерыв на обед*
14.00-16.00 – Секционные заседания
16.00-16.30 – *Перерыв на кофе*
16.30-18.00 – Секционные заседания
18.30 – Банкет
14 сентября, пятница
9.00-10.00 – Заключительное пленарное заседание.
Закрытие конференции.
Выезд участников конференции

Рабочие языки – русский, английский

Регламент

Продолжительность *пленарных докладов* – 25 минут, включая ответы на вопросы.
Продолжительность устных докладов – 15 минут, включая ответы на вопросы.
Стендовые доклады – в формате А1 (вертикальное или горизонтальное расположение).

Программа конференции

11 сентября, вторник

ПЛЕНАРНОЕ ЗАСЕДАНИЕ

Актовый зал 9.00 – 15.40

9:00 Открытие конференции:

- **Нечаев Владимир Дмитриевич.** Приветственное слово ректора Севастопольского государственного университета
- **Братан Сергей Михайлович.** Приветственное слово председателя организационного комитета конференции. Информация о работе конференции

9:20 *ПЛ-1* **Wang Yanhu, Konovalov Sergey, Chen Xizhang**
Effect of applied load on welding stress at different time periods

9:45 *ПЛ-2* **Alexander Glezer**
Modern materials strengthening techniques by extreme effects

10:10 *ПЛ-3* **Zakaria Boumerzoug**
Joining of Dissimilar Materials by Friction Stir Welding

10:35 *ПЛ-4* **Vladimir Nosenko**
Grinding of titanium-based alloys

Перерыв на кофе

11:30 *ПЛ-5* **Dervis Ozkan, Mustafa Sabri Gok, Mecit Oge, Abdullah Cahit Karaoglanli**
Milling Behavior Analysis of Carbon Fiber-Reinforced Polymer (CFRP) Composites

11:55 *ПЛ-6* **Anatoly Suslov, Oleg Fedonin, Dmitry Petreshin**
Forming and developing engineering technology as a science

12:20 *ПЛ 7-* **George Kotiev, Aleksey Diakov**
Establishment of production of special wheel and track technology for extreme natural-climate conditions of the Arctic

12:45 *ПЛ-8* **Vladislav Lavrinenko, Anastasiya Polyakova, Artyom Polyakov**
Analysis of the applicability of die pressing method for ring-shaped parts fabrication

Перерыв на обед

14:00 ПЛ-9 **Yury Panfilov, Leonid Kolesnik**
Vacuum methods of surface treatment with subnanometer roughness

14:25 ПЛ-10 **Nikolai Muliukhin, Dmitriy Lobanov, Vladimir Grigoriev, Viktor Gartfelder**
Computer-aided design of resonance-free vibration systems

14:50 ПЛ-11 **Sergey Kondakov, Aleksandr. Dyakonov, Nikita Dubrovskiy**
Simulation modeling of the curvilinear motion of an industrial tractor with a differential rotation mechanism and tracking trajectory stabilization system

15:15 ПЛ-12 **Aleksey Diakov**
Научные методы разработки ходовых систем высокоподвижных безэкипажных наземных транспортных средств

СЕКЦИЯ № 1
ПЕРСПЕКТИВНЫЕ ТЕХНОЛОГИИ И ПРОЦЕССЫ ОБРАБОТКИ МАТЕРИАЛОВ. ОБОРУДОВАНИЕ И ИНСТРУМЕНТ

ПЕРВОЕ ЗАСЕДАНИЕ

12 сентября, среда

Актовый зал 9.00 – 19.15

Руководители: Братан С.М., д.т.н., проф.
Тараховский А.Ю., к.т.н., доцент

9:00 У 1.1 ***O. Berdnik, I. Tsareva, L. Krivina, Y. Tarasenko***
Development of a modern comprehensive technology for extending the life of turbine blades of SGT Siemens power plants and alike

9:15 У 1.2 ***A.M. Makarov, O.V. Mushkin, M.A. Lapikov***
Use of additive technologies to increase effectiveness of design and use of a vacuum gripping devices for flexible containers

9:30 У 1.3 ***T. Burchenkova, V. Slavkina, V. Nelub***
Modern technologies for the production of composites based on inorganic binders

9:45 У 1.4 ***V. Shuvaev, N. Krylova***
The formation of the quality parameters of the surface layer by ultrasonic

10:00 У 1.5 ***V. Svinin, A. Samsonov, A. Savilov, A. Pyatykh***
Self-oscillations suppression when turning the non-rigid shafts by the spring cutter and the spring headstock center

10:15 У 1.6 ***D. Starodubtseva, Vinh Le Tri, V. Koltsov***
Formation of the surface roughness during grinding with flap wheels after shot peening

10:30 У 1.7 ***E.V. Artamonov, V.V. Kireev, V.A. Zyryanov***
An interlocking side mill with retrofittable carbide blades for processing of coarse-pitch tooth wheels

10:45 У 1.8 ***E.V. Artamonov, A.M. Tveryakov, A.S. Shtin***
Determination of maximum working capacity of retrofittable cutters on the basis of physical-mechanical features of tool hard alloys

Перерыв на кофе

11:30 У 1.9 ***V. Masyagin, R. Bazhenov, R. Artyukh***
Calculation of the linear technological sizes with adaptation

11:45 У 1.10 ***S. Gorbatyuk, V. Kondratenko, L. Sedykh***
Tool stability analysis for deep hole drilling

12:00 У 1.11 ***P. Pereverzev, A. Akintseva, M. Alsigar***
Improvement of the quality of designed cylindrical grinding cycle with traverse feeding based on the use of digital twin options

12:15 У 1.12 ***I. Zybin, K. Trukhanov, A. Tsarkov, S. Kheylo***
Backing Plate Effect on Temperature Controlled FSW Process

12:30 У 1.13 ***A. Korotkov, V. Korotkov***
Grinding tools made of grains with controlled shape and orientation

12:45 У 1.14 ***P. Pereverzev, A. Akintseva, M. Alsigar***
Impact of Metal Removal Features in the Reverse Zones on Shaping of the Machined Surface in the Process of Cylindrical Grinding with Traverse Feed

Перерыв на обед

14:00 У 1.15 ***C. Yakubov, R. Dzhemalyadinov, V. Skakun***
Improving material cutting by application of natural origin oil.

14:15 У 1.16 ***A.E. Seleznev, A. Smirnov, P.Yu. Peretyagin***
The influence of hydrojet surface processing on the adhesive strength of wear-resistant coatings deposited on a metal-cutting tool of oxynitride ceramics

14:30 У 1.17 ***V. Kuts, I.Kiselev, S. Voronov***
Vibrations reduction in milling by using singular spectral analysis

14:45 У 1.18 ***D. Abdulgazis, E. Umerov, U. Abdulgazis***
Analysis of mathematical models of drilling describing surface quality and tool overload protection aspects

15:00 У 1.19 ***I. Ivanov, I. Pleshcheev, A. Larkin***
Vibratory drilling with digital adaptive control

15:15 У 1.20 ***R.Yu. Nekrasov, U.S. Putilova, Yu.A. Tempel***
Precision CNC machining and ways to achieve it

15:30 У 1.21 ***N. Zhukov, V. Kuts, B. Suldin***
Investigation of the plain milling process dynamic stability taking into account the contact interaction on the flank face of the cutting wedge

15:45 У 1.22 ***V.S. Tynchenko, V.E. Petrenko, A.V. Murygin***
Control of the induction soldering on the basis of process temperature indirect measurements

Перерыв на кофе

16:30 У 1.23 ***V. Krutsilo, N. Papsheva, O. Akushskaya***
The field of rational application of the methods of hardening treatment

16:45 У 1.24 ***I. Lutoshkin, A. Madanov, Y. Polyanskov***
Model of control over cutting tool demand in a machining shop

17:00 У 1.25 ***I. Kiselev, N. Jukov, K. Deev***
Automated block-by-block correction of milling parameters by means of numerical simulation

17:15 У 1.26 ***I. Kotenko, I. Saenko, A. Branitskiy***
Improving the performance of manufacturing technologies for advanced material processing using a Spark-based big data and machine learning framework

17:30 У 1.27 ***D. Aleynikov, A. Lukyanov , A. Savilov, D. Paikin***
Investigation of cutting forces oscillation when high productivity milling

17:45 У 1.28 ***A.A. Udalov, S.V. Parshin, A.V. Udalov***
Theoretical investigation of the effect of the taper angle of the deforming roller on the limiting degrees of deformation in the process of flow forming

18:00 У 1.29 ***E. Rybalkin, E. Yagyaev, L. Shron, V. Bogutsky***
Mathematical model of a non-stationary electromagnetic process in arc welding with external influence

18:15 У 1.30 ***V. Bogutsky, Y. Novoselov, L. Shron***
Calculating the profile of intermittent grinding wheel for the sharpening teeth of the broach

18:30 У 1.31 ***O. Kirillov, V. Smolentsev, S. Yukhnevich***
The technology of combined processing of extruded materials

18:45 У 1.32 ***K. Rakhimyanov, V. Yanpolskiy, R. Kadyrbaev***
Forming the structure and properties of the loaded layer in abrasive discs during grinding carbon steels
19:00 У 1.33 ***S. Bratan, E. Vladetskaya***
Flat Grinding Model, Considering Internal Dynamics of the Process

ВТОРОЕ ЗАСЕДАНИЕ

13 сентября, четверг

Актовый зал 9.00 – 18.00

Руководители: Харченко А.О. к.т.н., проф.
Новиков П.А., к.т.н., доцент

9:00 У 1.34 ***V. Gileta, A. Beznedelnyy***
The mechanism of wearing of the hard alloy tool under ultrasonic reinforcing finishing treatment
9:15 У 1.35 ***Kh. Rakhimyanov, V. Marusina***
Perspectives of the industrial recycling of hard-alloy materials waste by electro-erosive grinding
9:30 У 1.36 ***A. Rakhimyanov, A. Loktionov, N. Gaar***
Technological possibilities of high-precision plasma cutting in processing materials of different class
9:45 У 1.37 ***K. Rakhimyanov, M. Ivanova, S. Vasilevskaya***
Anodic behavior of amorphous and nanocrystal alloys during the electrochemical processing
10:00 У 1.38 ***M. Burnashov, A. Prezhbilov***
Optimization of modes for processing water-ice cleaning of machine parts
10:15 У 1.39 ***A. Pishchukhin, G. Akhmedyanova***
Multidimensional analysis of monitoring and diagnostic information on the technological process
10:30 У 1.40 ***N.V. Nesterov, B.S. Vorontsov***
Development and improvement of lost foam casting technology based on mathematical modeling
10:45 У 1.41 ***А.Г. Тарабрин, С.А. Нестеров, А.Е. Зверовщиков***
Повышение эффективности программирования пятикоординатной обработки моноколес турбин на основе применения современных CAD/CAM технологий

Перерыв на кофе

11:30 У 1.42 ***A. Zverovshchikov, V. Zverovshchikov, S. Nesterov***
Comprehensive ensuring of quality of surfaces of details at centrifugal-planetary volume processing.
11:45 У 1.43 ***O. Kovalev***
Comparative analysis of performance characteristics of nozzle heads for powder transportation in a laser cladding and direct material deposition
12:00 У 1.44 ***E. Nesterenko, A. Kuzin***

90 degrees two-angle bending method with due to blank's elastic spring back properties

12:15 У 1.45 ***R. Nekrasov, A. Galinskii, O. Tempel***
Stellite surfacing technology

12:30 У 1.46 ***A. Starikov, U. Putilova, O. Tempel***
Determination of machining errors caused by dynamic deformations from process equipment

12:45 У 1.47 ***V.I. Guzeev, D.Yu. Pimenov***
Methodology of designing integrated technological processes for manufacturing CNC machined parts

Перерыв на обед

14:00 У 1.48 ***Ya. Soler, Mai Dinh Si, D.Yu. Kazimirov***
Contact Ability Optimization of the Surface of Titanium Parts with Different Stiffness during Flat Grinding by Highly Porous Wheel

14:15 У 1.49 ***A.V. Balaykin, R.A. Vdovin, E.M. Dobryshkina***
Analysis of Possibilities of High-Speed Prototyping Technology in Hot Section Manufacturing

14:30 У 1.50 ***N.V. Nosov***
Surface quality study based on quasi-optimal correlation algorithms

14:45 У 1.51 ***N.V. Nosov, A.A. Cherepashkov***
Features of technological basing in machining parts on CNC machines

15:00 У 1.52 ***S. Gorbatyuk, V. Kondratenko, L. Sedykh***
Investigation of the deep hole drill stability when using a steady rest

15:15 У 1.53 ***P.A. Nikishechkin, N.Yu. Chervonnova, A.N. Nikich***
Approach to the construction of specialized portable terminals for monitoring and controlling technological equipment

15:30 У 1.54 ***I. Telegin, T. Shumilova***
Comparing the efficiency of flowsheets for hot die forging on crank presses

15:45 У 1.55 ***L.V. Chuchkova, E.A. Lozhkina, D.S. Ovdina***
Structural features of the alloyed layers formed by electron beam melting in the air atmosphere

Перерыв на кофе

16:30 У 1.56 ***M. Bolotov , I. Grachev, E.Kudashov***
Investigation of assembly uncertainty of parts, taking into account the deviation of the shape of their surfaces

16:45 У 1.57 ***L.I. Martinova, N.N. Fokin***
An approach to creation of a unified system of programming CNC machines in the dialog mode

17:00 У 1.58 ***V.A. Nekit, S.I. Platov, M.L. Krasnov***
The nature of the change of the surface temperature of the workpiece during hot rolling of pipe steel

17:15 У 1.59 ***A.K. Belan, V.A. Nekit, O.A. Belan***
The simulation of cold volumetric stamping by the method of transverse extrusion

17:30 У 1.60 ***V. Mironenko , E. Matsuro, C. Ledovskikh***
Reverse engineering as a way to optimize and design parts produced by elastic-medium drawing

17:45 У 1.61 ***N.V. Syreyshchikova, D.Yu. Pimenov***
Fundamental research and methods of quality assurance of coated abrasive

СЕКЦИЯ № 2
ИННОВАЦИОННЫЕ МАТЕРИАЛЫ. УПРОЧНЯЮЩИЕ ТЕХНОЛОГИИ И ПОКРЫТИЯ

ПЕРВОЕ ЗАСЕДАНИЕ

12 сентября, среда

Ауд. 103 9.00 – 16.00

Руководители: Глезер А.М., д.т.н., проф.
Шрон Л.Б. к.т.н., доц.

9:00 У 2.1 ***I. Tsareva , O. Berdnik ,M. Maximov, V. Kuzmin***
High thickness coatings of zirconium dioxide for thermal protection of metal alloys

9:15 У 2.2 ***N.Y. Dudareva, L.I. Zaynullina, E.I. Ustimova***
The influence of microstructure of Al-Si alloy and microarc oxidation modes on corrosion resistance of the formed coatings

9:30 У 2.3 ***E. Smolentsev, A. Kadyrmetov, M. Kondratyev***
Optimization of process of application plasma hardening coating

9:45 У 2.4 ***E. Nosova, F. Grechnikov, N. Lukonina***
Research of structural entropy of sheet aluminium alloys depending on annealing temperature

10:00 У 2.5 ***A. Leonov***
Effect of alumina nanofibers content on the microstructure and properties of ATZ composites fabricated by spark plasma sintering

10:15 У 2.6 ***A.I. Kustov, I.A. Miguel***
Development of methods of acoustic microscopy for monitoring the structure and properties of coatings for various purposes

10:30 У 2.7 ***N. Antonova***
Evaluation of Adhesion Strength of Protective Coatings with Al Powder by Adhesion Work of Initial Suspension towards Metal Surface

10:45 У 2.8 ***V.N. Kostin, O.N. Vasilenko, A.V. Byzov***
Modelling of magnetic field and flux in objects having surface-hardening and transition layer

Перерыв на кофе

11:30 У 2.9 ***V.N. Kostin, O.N. Vasilenko, A.V. Byzov***
Multiparameter method of surface hardening quality testing

11:45 У 2.10 ***N. Musin, N. Dudareva***
Investigation of the effect of the coating formed by microarc oxidation on the piston top on the thermal state of the internal combustion engine parts

12:00 У 2.11 ***D. Mashtalyar, I. Imshinetsky, S. Sinebryukhov, S. Gnedenkov***
Characterization of PEO coatings on the magnesium alloy MA8 formed in electrolyte containing ZrO2 - SiO2 nanoparticles

12:15 У 2.12 ***V.I. Betekhtin, M.V. Narykova, A.G. Kadomtsev***
Evolution of the structure of ultrafine-grained metals and alloys in creep tests

12:30 У 2.13 ***E. Marinin, G. Gavrilov, A. Chirkova***

The Increasing of the Operational Stability of Wood-working tools by the laser cementation

12:45 У 2.14 ***G. Gavrilov, A. Bratuhin., E. Marinin***
Laser-thermal Hardening of the Tools Set for Cold-forming Fasteners

Перерыв на обед

14:00 У 2.15 ***S.V. Reznik, P.V. Prosuntsov, K.V. Mikhailovsky***
Development verification of coatings made from porous ceramic-matrix composite materials

14:15 У 2.16 ***V. Kuzmin, E. Kornienko, I. Gulyaev, S. Vashchenko, D. Sergachev***
Application of supersonic air plasma torch for metallic nickel-based alloys spraying

14:30 У 2.17 ***A. Bocharov, V. Vigovskiy, V. Nelub***
Metal coating of carbon fabric and properties of the carbon-fiber-reinforced plastic

14:45 У 2.18 ***C. Yangyang, G.V. Malysheva***
Method for determining the rational regimes of curing products from polymer composite materials

15:00 У 2.19 ***A.S. Borodulin, A.N. Kalinnikov, A.G. Tereshkov, A.M. Kharaev***
New polymeric binders for the production of composites

15:15 У 2.20 ***V.M. Gavrish, G.A. Baranov, Yu.O. Velyaev, O.P. Gavrish***
Study on production of composites based on epoxy matrix modified by hard-alloy waste processing products

15:30 У 2.21 ***N. Cherkashina, V. Gavrish, T. Chayka***
Experiment – calculated investigation of composite materials for protection against radiation

15:45 У 2.22 ***N.M. Derbasova, O.P. Gavrish, Yu.O. Velyaev***
Research of some technological and physico-mechanical characteristics of composite materials obtained by modification of epoxy binder with copper and copper oxide nanopowders

ВТОРОЕ ЗАСЕДАНИЕ

13 сентября, четверг

Ауд. 103 9.00 – 17.45

Руководители: Горбатюк С.М., д.т.н., проф.
Колесов А.Г. к.т.н.

9:00 У 2.23 ***I. Shakirov, A. Zhukov, P. Kuznetsov, V. Bobyr', T. Fedina, O. Korznikov***
Investigation of physical and mechanical properties of iron based samples manufactured by selective laser melting

9:15 У 2.24 ***R.S. Khmyrov, C.E. Protasov, A.V. Gusarov***
Influence of the conditions of selective laser melting on evaporation

9:30 У 2.25 ***Y. Pristinskiy, N.W. Solis Pinargote, A. Smirnov***
Spark plasma and conventional sintering of ZrO2-TiN composites: A comparative study on the microstructure and mechanical properties

9:45 У 2.26 ***N. Dudareva, R. Gallyamova***

The influence of chemical composition of aluminum alloys on the quality of oxide layers formed by microarc oxidation

10:00 У 2.27 ***Е.В. Абдульменова, С.Н. Кульков, О.Ю. Ваулина***
Определение гранулометрического состава металлического порошка TiNi

10:15 У 2.28 ***P. Podrabinnik, A. Mironov, I. Gershman***
The influence of secondary structures on wear resistance of experimental aluminum alloys for monometallic slide bearings

10:30 У 2.29 ***N.A. Zaitsev, I.I. Khryashchev, A.A. Shatulsky***
Timing on homogenization of single-crystal heat-resistant alloys

10:45 У 2.30 ***V.V. Mishakin, A.V. Gonchar, V.A. Klyushnikov***
Relationship between the characteristics of the crystallographic texture of low-carbon steels with accumulation of damages at the early stages of fatigue failure

Перерыв на кофе

11:30 У 2.31 ***A. Kulemina, I. Kovenskiy***
Influence of the conditions for obtaining coatings on the structure and properties

11:45 У 2.32 ***E.V. Romashkov, S.E. Krylova, A.P.Fot, O.A. Romashkova***
The Influence of Heat Treatment Conditions on Structuring of Steel for Production of Injection Molding

12:00 У 2.33 ***A. Burakov, E. Neskoromnaya, A. Babkin***
Removal of the Alizarin red anionic dye using graphene nanocomposites: A study on kinetics under dynamic conditions

12:15 У 2.34 ***D. Kurnosov, A. Burakov, I. Burakova***
Development of a bentonite clay/carbon nanotubes composite for liquid-phase adsorption

12:30 У 2.35 ***E. Mkrtchyan, A. Burakov, I. Burakova***
Malachite green adsorption on graphene nanocomposites: A study on kinetics under dynamic conditions

12:45 У 2.36 ***A.V. Logunov, D.V. Danilov, R.V. Khramin***
High-strength nickel-based alloy SLGS-5 for operation in active marine salt corrosion environment

Перерыв на обед

14:00 У 2.37 ***A. Logunov, S. Zavodov, D. Danilov***
The challenges in development of nickel-based heat-resistant superalloys for gas turbine disks and creation of a new superalloy with increased operational characteristics

14:15 У 2.38 ***M. Oge, D. Ozkan, M.B. Celik, M.S. Gok, A.C. Karaoglanli***
An Overview of Utilization of Blast Furnace and Steelmaking Slag in Various Applications

14:30 У 2.39 ***E. Priymak , A. Atamashkin, A. Stepanchukova***
Effect of post-weld heat treatment on the mechanical properties and mechanism of fracture of joint welds made by Thompson friction welding

14:45 У 2.40 ***С.Е. Крылова***
Разработка и реализация технологии восстановления и упрочнения деталей энергетической и нефтегазодобывающей отрасли Оренбуржья методом лазерного воздействия

15:00 У 2.41 ***Ю.Н. Драгошанский, В.И. Пудов***
Влияние высокочастотной термомагнитной обработки на электромагнитные свойства аморфных материалов

15:15 У 2.42 ***D. Privezentsev, A. Zhiznyakov, Ya. Kulkov***
Analysis of the microhardness of metals using digital metallographic images

15:30 У 2.43 ***A. Shchegolkov, A. Shchegolkov, A. Demidova***
The use of nanomodified heat storage materials for thermal stabilization in the engineering and aerospace industry

15:45 У 2.44 ***G. Khalikova, O. Sitdikov, V. Trifonov***
The effects of applied pressure and die temperature on the structure and mechanical properties of squeeze cast Al–4.8Cu–1.2Mg wrought alloy

Перерыв на кофе

16:30 У 2.45 ***Zaw Ye Aung, P.V. Prosuntsov, S.V. Reznik***
Influence of single-walled carbon nanotubes' diameter and length on the thermal conductivity of polymer composites

16:45 У 2.46 ***A. Shchegolkov, T. Dyachkova, E. Burakova***
Heat storage materials based on polymers modified with functionalized carbon nanotubes

17:00 У 2.47 ***T.A. Duyun, D.A. Bushuev, M.A.Sukharev, V.G. Rubanov***
Simulation of large-size plain bearings processing using a virtual prototype of machine module

17:15 У 2.48 ***A.I. Kondakov, A.S. Vasiljev***
Evaluation of the types of multiproduct manufacturing of machine components and some aspects of their design

17:30 У 2.49 ***N. Pokintelitsa , E. Levchenko***
The Study of the Kinetics of the Protective Coating Formation in the Mechanochemical Vibrational Method

СЕКЦИЯ № 3
ОБЩИЕ ПРОБЛЕМЫ МАШИНОСТРОЕНИЯ И МОДЕЛИРОВАНИЯ ТЕХНИЧЕСКИХ СИСТЕМ.

ПЕРВОЕ ЗАСЕДАНИЕ
12 сентября, среда

Ауд. 110 9.00 – 17.45

Руководители: Сидоров Д.Е., к.т.н, доц.
Левченко Е.А. к.т.н., доц.

9:00 У 3.1 ***O. Lukashuk, K. Letnev, A. Komissarov***
Efficiency Increase in Excavation Control as Primary Reserve of Performance Increase for Open-Pit Excavators

9:15 У 3.2 ***O. Zavyalov***
Optimization of the parameters of the piston pin bearing of the tractor engine taking into account the solution of the lubrication problem

9:30 У 3.3 ***S. Abdulov, I. Trusevich, A. Volkov***
Ensuring the amphibious capabilities of the amphibious vehicle based on the hydrodynamic buoyancy principle

9:45 У 3.4 ***Y. Lagunova, I. Ivanov, S. Horoshavin***
Perfection of constructive schemes of drive of running equipment of a career motor transport

10:00 У 3.5 ***I. Taratorkin, V. Derzhanskii, A.Taratorkin***
Oscillation damping in the power unit when starting the engine equipped with the Common Rail system

10:15 У 3.6 ***I. Taratorkin, V. Derzhanskii, A. Volkov***
Stabilization of Transport Tracked Vehicle Trajectory

10:30 У 3.7 ***K. Salamandra***
Static analysis and parameters synthesis of planetary-layshaft transmissions with three power flows

10:45 У 3.8 ***V. Shestakov, P. Babenkov, S. Horoshavin***
Features of designing hydraulic excavator in APM WinMachine

Перерыв на кофе

11:30 У 3.9 ***S. Ovsyannikov, E. Kalinin***
Features of calculation of plough for walking tractor

11:45 У 3.10 ***N. Artyomov, M. Podrigalo, A. Abdulgazis, U. Abdulgazis***
Determination of output-input ratio of mobile machine wheeled mover

12:00 У 3.11 ***N. Artyomov, M. Podrigalo, A. Abdulgazis***
Analyzing the dynamics of a single car wheel

12:15 У 3.12 ***M. Lemeshko, M. Molev, I. Golovin***
Hydraulic technological machines with adaptive drive structure

12:30 У 3.13 ***A. Kiryukhin***

Stabilization of vibrations of rotary machines in radial sliding bearings with integrated liquid dampers

12:45 У 3.14 ***S.L. Vasilevykh, A.V. Udalov, E.S. Shelihov***

The constructing of an equivalent mechanical model of distributed machine system with various technological equipment

Перерыв на обед

14:00 У 3.15 ***A.V. Ilyakhinskiy, V.M. Rodyushkin, E.K. Berezin***

Ultrasonic flaw detection capabilities at first stage of technological process of ship engine overhaul

14:15 У 3.16 ***V. Kopyrin, O. Smirnov, M. Deneko***

Optimisation of reactive power consumption regimes by the electric centrifugal pumps installations

14:30 У 3.17 ***M.V. Kharchenko, E.S. Zambrgitckaya, E.V. Suvorova***

Modelling of the process of the friction couple contacting and examining the conditions of forming an adsorbating monolayer on the friction surface regarding the use of a lubricant material

14:45 У 3.18 ***A. Gonchar, V. Mishakin, K. Kurashkin***

Thermo-ultrasound method for determining the damage of structural material.

15:00 У 3.19 ***Y. Tarasov, A. Radyuk, S. Gorbatyuk***

Research of heat stresses in components of blast furnace tuyere

15:15 У 3.20 ***V. Erofeev, D. Kolesov, A. Leonteva***

Nonlinear waves in an elastic guide interacting with an elastic-inertial foundation

15:30 У 3.21 ***S. Glech, V. Dushko, I. Blagovidova, V. Kramar***

Calculation of the number of sensors sufficient for accurate measurement of the ice load pressure on the walls of the oil platform

15:45 У 3.22 ***A.A. Cherepashkov, P.A. Samoylov***

Modeling and analysis of the effectiveness of dynamic models of complex automated systems of machine-building production

Перерыв на кофе

16:30 У 3.23 ***V. Erofeev, E. Lissenkova, A. Malkhanov***

Wave resistance to movement of objects along the rocket track guides

16:45 У 3.24 ***G. Chernova, , A. Sinkov, Y. Moiseev***

Evaluation of efficiency of buses "Volgabus" with determination of critical values of vibration acceleration of transmission

17:00 У 3.25 ***Y.A. Gol'tsov, , A.S. Kizhuk, V.G. Rubanov***

Chaotic dynamics of a pulse-modulated control system for a heating unit

17:15 У 3.26 ***D. Elovenko, A. Hirsch, V. Kräusel***

Mathematical model of one and two-step methods calculation of thermal fields and stress-strain state of multilayer cylindrical constructions

17:30 У 3.27 ***A. Popov, R. Valiev***

Non-exponential networks in production

ВТОРОЕ ЗАСЕДАНИЕ

13 сентября, четверг

Ауд. 110 9.00 – 17.30

Руководители: Богуцкий В.Б., к.т.н, доц.
Владецкая Е.А., к.т.н., доц.

9:00 У 3.28 ***A. Govorkov, M. Lavrenteva, I. Fokin***
Mathematical modeling of making mechanical engineering products based on an information model

9:15 У 3.29 ***E. Masyutkin, V. Masyagin, B. Avdeyev***
Mathematical model of orientation of a ferromagnetic particle in magnetic field

9:30 У 3.30 ***V. Krupenin***
Distributed impact elements and their use in modeling vibration fields in machine structures

9:45 У 3.31 ***S. Eremeykin, G. Panovko, A. Shokhin***
Analysis of oscillations of a mechanical system with inertial exciters at an alternating position of it's mass center

10:00 У 3.32 ***A. Ivanovskaya, V. Popov***
Mathematical model of the volumetric hydrodrive's dynamics, sensitive to the loading variation

10:15 У 3.33 ***A.V. Dmitriev, V.E. Zinurov, O.S. Dmitrieva***
Influence of elements thickness of separation devices on the finely dispersed particles collection efficiency

10:30 У 3.34 ***I.N. Madyshev, O.S. Dmitrieva, A.V. Dmitriev***
Efficiency of Cooling the Water Droplets Within Jet-Film Unit of Cooling Tower Filler

10:45 У 3.35 ***S. Petrosov, M. Lemeshko, A. Kozhemyachenko***
The robotized stand for the diagnosing compression refrigerating machines

Перерыв на кофе

11:30 У 3.36 ***V. Desnitsky , I. Kotenko***
Security Monitoring of Cyberphysical Systems: Water Supply Case Study

11:45 У 3.37 ***M.Makeev, V. Sinyakin, S. Meshkov***
Reliability prediction of RFID passive tags power supply systems based on RTD under given operating conditions

12:00 У 3.38 ***E. Sokolova***
The study of algorithms for 3D's engineering object representing with regard to their construction specifics

12:15 У 3.39 ***A. Kabanov , A. Balabanov***
The modeling of an anthropomorphic robot arm

12:30 У 3.40 ***B. Avdeyev, V. Prosvirnin, R.R. Dema***
Calculation of magnetic devices cleaning coolants in the agro-industrial complex

12:45 У 3.41 ***S.V. Belousov, S.A. Pomelyayko***
Design of the universal agricultural working body and study of its parameters

Перерыв на обед

14:00 У 3.42 ***S.K. Papusha, A.E. Bogus, V.I. Konovalov***
Interaction of rotary working body of roller type with the object of processing

14:15 У 3.43 ***K. Mashkov, V. Rubtsov, I. Rubtsov***
Development of robotics technologies in agriculture

14:30 У 3.44 ***A. Dorokhov, V. Khamyev, K. Lepeshkin***
Modernization of sieves of grain cleaning machines

14:45 У 3.45 ***A.V. Lavrov, I.G. Smirnov, M.A. Litvinov***
Justification of the construction of a self-propelled selection seeder with an intelligent seeding system

15:00 У 3.46 ***E. Smekhunov, E. Chaika, I.Gritsay***
The determination of the single piece dispenser parameters

15:15 У 3.47 ***O. Zavyalov***
For an incompressible lubricant in the bearing sliding surfaces of the spherical segments with the adjusted surfaces

15:30 У 3.48 ***K. Nemtinov, A. Eruslanov, Y. Nemtinova***
Rationale construction of individual elements of technological complex

15:45 У 3.49 ***D. Liakhmanov, V. Gay, I. Polyakov***
A method of predicting the time of failure of a rolling bearing

Перерыв на кофе

16:30 У 3.50 ***D. Ogorelkov, V. Mironov, O. Lukashuk***
Durability of metal structure under quasi-static load

16:45 У 3.51 ***M. Mechikova, N. Zemlyakova, E. Medjuha***
Improving the economic efficiency of Russian industrial enterprises

17:00 У 3.52 ***M. Mechikova, N. Kovaleva, O. Vorontsova***
Innovative development of Russian industrial enterprises

17:15 У 3.53 ***M.V. Yanyukina, M.A. Bolotov***
Modeling of turbine wheel assemblies taking into account the deformation of parts

ЗАКРЫТИЕ КОНФЕРЕНЦИИ

14 сентября, пятница

Актовый зал 9.00 – 10.30

1. Сообщение руководителей секций.
2. Обсуждение стендовых докладов
3. Выступления и дискуссии.
4. Обсуждение заключения и рекомендаций конференции.
5. Принятие решения.
6. Закрытие конференции.

СТЕНДОВЫЕ ДОКЛАДЫ

Стендовая сессия I (11 сентября)

С 1.1 ***A. Kumaritov, E. Sokolova***
Research and development of decision-making methods for creating 3d objects in mechanical engineering

С 1.2 ***T. Ivanova***
Research of working capacity of grinding wheels

С 1.3 ***T. Ivanova***
Design and technological methods of reducing of thermal stress in grinding process

С 1.4 ***N. Baurova, A. Anoprienko, Y. Romanova***
The performance evaluation for rivet bonded joints in production and machine maintenance

С 1.5 ***A. Konoplin, N. Baurova, S. Abrakov***
Application of glue machinery repairs in Arctic conditions

С 1.6 ***A. Vereshchagin, V. Vereshchagin***
Improving the cutting tool durability by applying multi-layer coatings

С 1.7 ***K. Rakhimyanov, N. Gaar, A. Loktionov***
Possible mechanisms of electrochemical processing activation ARMCO-iron

С 1.8 ***Y. Semenova, Y. Nikitin, A. Rakhimyanov***
Revealing the technological modes range for ultrasonic surface hardening of cast iron

С 1.9 ***Kh. Rakhimyanov , S. Vasilevskaya***
Prospects of combining electro – erosive and electrochemical processes in forming the holes of a small diameter in difficult – to – process materials

С 1.10 ***Y. Dimov, D. Podashev***
Robotic edge machining with abrasive brushes

С 1.11 ***N. Revenko, T. Berkutova, O. Silivanova***
Systematization of the definitions characterizing the content of services provided by industrial enterprises

С 1.12 ***O. Medvedeva, A. Yanyushkin, V. Popov***
Energy calculation of contact surface adhesion at interaction in different media

С 1.13 ***V. Popov, A. Yanyushkin, P. Arkhipov***
Combined electric diamond grinding of materials prone to adhesive diffusive interaction

С 1.14 ***O. Medvedeva, P. Arkhipov, A. Yanyushkin***
Influence of hard alloys CEDG modes on the size of dissolved layer

С 1.15 ***A.A. Dyakonov, A.V. Herreinstein, A.S. Degtyareva-Kashutina***
Thermophysical problem for high-speed processing

С 1.16 ***A. Kurochkin, V. Vagin, A. Karpesh, N. Dyorina***
Control system for electrohydraulic drive of a mobile sinking hoisting plant

С 1.17 ***I. Ovsyanikova, A. Tarapanov***
Development of a virtual management system for the cutting process using neural networks

С 1.18 ***S.Kanyukov, A. Konovalov, O. Muizemnek***
Interactive communication between the user and the computer-aided design system of shaft forging on presses

С 1.19 ***V. Velikanov, N. Dyorina, O. Panfilova***

Stability of a mine excavator with a variable cab position

C 1.20 ***V.G. Gusev, A.A. Fomin, V.A. Saldaev***
The schemes analysis of profile milling of long and non-technological workpieces

C 1.21 ***A.I. Belousova, A.V. Moiseev***
Experimental researches of determination of degree of interaction of a working organ with the object of treatment in plant growing

C 1.22 ***S.V. Belousov, A.I. Belousova***
Experimental researches of plant protection means

C 1.23 ***V. Poroshin, A. Shlishevsky***
The forecasting of deformational and strength properties of metals with uniformly scattered defects in form of spherical hollows at single and cyclic loading

C 1.24 ***M. Ivanov, O. Burlachenko, A. Lyashenko***
Efficiency of Use of the Solid-State YAG:Nd-Laser for Hardening of High-Strength Cast Iron VCH 70-3

C 1.25 ***E.S. Palkina***
Using Business Process Improvement Concept to Optimize Enterprise Production System in Conditions of Innovative Economic Development

C 1.26 ***V. Velikanov, N. Dyorina, I. Usov, Igor Usov (jr)***
Coefficients determination of fuzzy products rules in a fuzzy model for excavators' ergonomics estimation

C 1.27 ***A. Unyanin, A. Khazov***
The process of interaction between abrasive disk and a workpiece while grinding under ultrasonic vibrations

C 1.28 ***V. Smolentsev, A. Kuzovkin, I. Drozdov***
Application of two-component technological media for surface processing with a high degree of curvature

C 1.29 ***G.M. Martinov, A. Al Khoury, A. Issa***
An approach of developing low cost ARM based CNC systems by controlling CAN drives

C 1.30 ***Y. Tarasenko, L. Krivina, S. Kirikov***
Pulse micro-surfacing as nonconventional method within the comprehensive technology of the gas-turbine engine recovery

C 1.31 ***M. Nazarov, E. Kiselev, A. Popovich***
Using of machine parts abstract elements in nc-programs developing for the cnc machines

C 1.32 ***A. Yanyushkin, V. Popov, D. Rychkov***
Application of protective coatings in combined electric diamond grinding

C 1.33 ***E. Degodya, O. Shavakuleva***
Effect of liquid glass on the surface properties of different minerals

C 1.34 ***V.G. Gusev, A.V.Morozov***
Deviation from planeness of surfaces after the combined peripheral grinding

C 1.35 ***V. Mazur***
Experimental Research in Automobile Non-Pneumatic Tire Force Heterogeneity

C 1.36 ***I. Kutlubaev, E. Matcko, O. Panfilova***
Method of identification of parameters of closed planetary train based on exploratory design

C 1.37 ***M.R. Bahrami***
Mechanics of Diagnostic Machine on Electrical Transmission Lines Conductors

C 1.38 ***M. Rashkovets, A. Nikulina, O. Klimova-Korsmik***

High-speed direct laser deposition of 51Ni-14Co-10Cr-6Al-5Mo alloy: Microstructure and Phase composition

C 1.39 ***A. Antsupov, V. Antsupov, M. Slobodianskii***
Analytical Testing and Methods For Increasing the Durability Of Plunger Hydraulic Cylinders

C 1.40 ***I. Yaitskov***
On the issue of formation the air noise component at workplaces of the diesel locomotives crews

C 1.41 ***V.A. Perfilov, V.A. Lugovaya, V.V. Yaroshik***
The formation of composite coatings with high hardness with high-speed heating

C 1.42 ***A. Bogdanov, A. Permyakov, Y. Zhdanova***
Research of kinematics of actuating group of anthropomorphic gripper with general drive

C 1.43 ***A. Khomichev, I.Trusevich***
Finite element method application to calculate the friction discs of the hydromechanical transmission control system

C 1.44 ***V. Smolentsev, A. Kuzovkin, S. Safonov***
Nano-transformations in the surface layer of materials under combined processing by unbound granules

C 1.45 ***M. Naumova, I. Basyrov, K. Aliev***
Reengineering of the ore preparation production process in the context of "Almalyk MMC" JSC

C 1.46 ***S. Makarov, V. Dement'yev, T. Makhneva, E. Makarova***
Numerical simulation of the non-regular mode of cooling a high-temperature metal billet by the flow of a gas-liquid medium

C 1.47 ***T. Makhneva, V. Dement'yev, S. Makarov***
The influence of tensile stresses on the properties of reverted austenite in nanostructured steel at overcooling

C 1.48 ***V.P. Pavlov, V.M. Kudoyarova, A.A. Philippov***
Modeling of the elastic characteristics of a long-fiber reinforced composite with an arbitrary orientation of the reinforcing fibers

C 1.49 ***A. Brover, G. Brover, O. Moysova***
Structural effects in laser processing zones of chemical coatings

C 1.50 ***S. Dmitriev, V. Malikov, A. Sagalakov***
Subminiature eddy current transducers for thickness measurement

C 1.51 ***V. Artiukh, V. Kukhar, E. Balalayeva***
Refinement Issue of Displaced Volume at Upsetting of Cylindrical Workpiece by Radial Dies

C 1.52 ***O. Anikeeva, A. Ivakhnenko, O. Erenkov***
Approaches to nonlinear theory creation for machine tools geometric accuracy

C 1.53 ***O. Anikeeva, A. Ivakhnenko, O. Erenkov***
Bases of variational method for calculating of metal-cutting systems accuracy

C 1.54 ***I. Lyuminarsky, S. Lyuminarsky***
Kinematic error of a harmonic drive

C 1.55 ***A. Keropyan, Y. Babichev, P. Sizin***
Investigation of the process of controlled starting of the open-pit locomotive for ensuring the maximum adhesion coefficient at the starting

C 1.56 ***A. Denisenko***
Impact of manufacturing errors of ball screw system on performance characteristics

Стендовая сессия II (12 сентября)

С 2.1 ***P. Ogar, Y. Alpatov, D. Gorokhov***
Relative contact area in metal-polymer joints

С 2.2 ***M. Nekhoroshev, M. Orlov, A. Ryazanov***
Using a parametric 3D assembly of a GTE combustion chamber to quickly generate its model sector

С 2.3 ***A. Ryazanov, A. Shvetsov***
Modeling the run of a control program for turning GTE compressor disk workpieces on a virtual CTX alpha 500 dual-spindle CNC lathe

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