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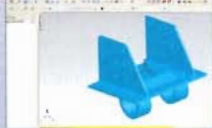
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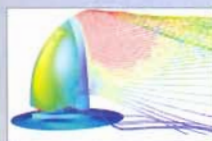
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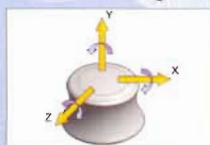
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75 Выбор видеокарты для работы в среде КОМПАС-3D



Graphics card choice for work in KOMPAS-3D environment

80 3D-манипулятор 3Dconnexion + Autodesk Inventor = работа в удовольствие!



3Dconnexion 3D mice + Autodesk Inventor = work with pleasure!

АРХИТЕКТУРА, СТРОИТЕЛЬСТВО И ГИС

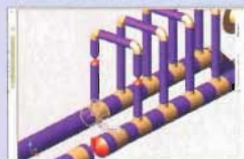
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CSoft company: Model Studio CS Pipelines system

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93 3D-принтеры. Что выбрать? (часть II)



3D printers: which do we choose? (part 2, finale)

7 The "Military" Theme

Editor-in-chief note comments the hottest points of the current issue in the highlight of the crisis on world financial markets and honours *Observer* partners that still stayed with the magazine. For full English text, please, see page 7.

KINGS AND CABBAGE

8 "Kings" and "cabbage" – 2008.

2008 year financial indexes of the top CAD/CAM/PLM vendors. Part 1. Revenue comparative analysis and other factual aspects of the nomination approach in the period of the world crisis

The comparison and description of financial index dynamics of the main market players, "CAD/CAM/PLM market kings" – is a major task for traditional analytical article-project "Kings and cabbage", that *Observer* Editorial prepares annually and exclusively for its readers. The 1st part of the article this year deals with analysis of CAD/CAM/PLM market leaders' achieved revenue in the past year, outlines first "kings" losses and defines new trends on CAD/PLM market occurred due to the world financial crisis.

MACHINE BUILDING AND RELATED INDUSTRIES

18 Digital prototyping: Autodesk strengthens competitiveness of worldwide SMB manufacturers (part 1)

The 1st part of White Paper prepared by *International Data Corporation (IDC)* analyzes introduced by *Autodesk* new Digital Prototyping (DP) concept. DP covers industrial design, design & engineering data vaulting and collaboration and is considered as part of product lifecycle management. To discuss the global pressures that are forcing business process changes upon small and medium-sized design and engineering companies worldwide *IDC* has interviewed two SMBs – *Bosch Rexroth* and *HTC* company.

24 Automating the design validation process.

Today's CAD and PLM software tools help ensure product design quality with accuracy and efficiency

The *NX* product manager from *Siemens PLM Software* company discusses the issues associated with design validation and how companies can effectively manage and automate this process to avoid it becoming a bottleneck that delays a product's time to market or negatively affects product quality. The article consists of the following chapters: validation issues; improving validation productivity & quality; managing validation with PLM and CAD technology.

29 *SpaceClaim* act II, in which the true identity of the hero is revealed. Q&A with new *SpaceClaim* CEO C. Randles

CADCAMNet Editor-in-chief analyses the "round trip" of *SpaceClaim Corp.* and its flagship product *SpaceClaim Professional*, debuted in March 2007. In act I *SpaceClaim* was a new 3D design editor but not a typical CAD program. In act II 15 months later *SpaceClaim*, a "universal design

editor", became a "natural 3D design system". New *SpaceClaim* CEO explains company's new goals.

33 Creative two-dimensional modelling in integrated system *ADEM-VX*. Article for designers

The specialists of *ADEM Group* company (Moscow, Russia) in their article directed to designers share experience of fully integrated CAD/CAM/CAPP system *ADEM-VX* application for hybrid 2D/3D modelling in product design, in preparation of design documentation, in process planning and preparation of technical documentation. Four main principles of creative modelling have been formulated.

37 *SolidWorks*: face to GOSTs (part 2)

SolidWorks Russia company (Moscow) discusses the support for Russian State Standards (GOST) in CAD system *SolidWorks*. As known all created parts should be performed in compliance with national standards. That is why support for GOST in CAD systems is essential issue for its users. The following chapters are considered in the 2nd part: the 5th stop "Weld assemblies"; drawing preparation & release; internet community and conclusions.

42 *Mastercam* for *SolidWorks X3 MU1* – peculiarities and operation sequence

The specialist of company *COLLA* (Riga, Latvia), official representative of *Mastercam* products in Russia & CIS, considers the functionality of *Mastercam for SolidWorks X3 MU1* – new commercial release of special CAM application from *CNC Software* company for popular CAD system *SolidWorks*. Application allows *SW* designers to create NC programs much faster and easier. The following chapters are considered: interface; the distinctions from basic *Mastercam* version; system configuration; display of central point and coordinate system axes; operation sequence, including *HST Surface Toolpaths*, *FBM Drill* and *FBM Mill*.

48 *Padgett Machine* company surpassed competitors owing to CAM system *FeatureCAM*

Delcam company (Birmingham, UK) and its US office (Utah, USA) represent the experience of their customer *Padgett Machine, Inc.* (Oklahoma, USA) that works for aircraft maintenance industry. 95% of the company's work involves military aircraft, including parts for F-16s, B-52s and other famed fighters and bombers. Since implementing *FeatureCAM* its 5-axis machining features and system efficiency across the range of CNC machines in their shop have helped *Padgett Machine* company to increase the amount of performed orders on 30% and increase its profit.

50 High-precision machining using wire-cutting machine without expensive high-precision accessories

Process engineer at tools production of *Metropolitan Jeweller's Plant "ADAMAS"* (Moscow, Russia) shares the experience of solving a time problem in the process of high-precision machining using wire-cutting machine *Sodick A325* with NC system *Mark 25*. After made research instead of using expensive high-precision accessories author suggests to use two control programs for positioning of the blank and for blank presentation before actual machining. to page 6 →