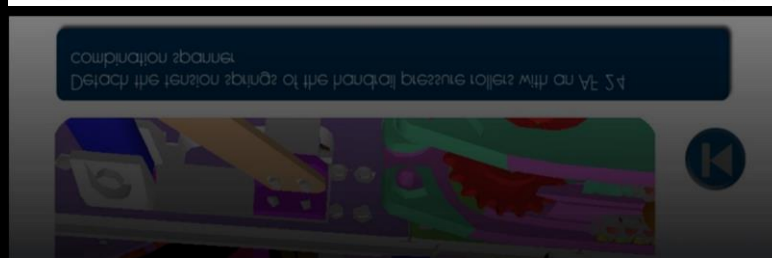


Virtual reality & Design and Training

3D virtual reality is becoming widely used during the design process, and later during the training tasks. This is true in many different fields, e.g. architecture or mechanical engineering. Most engineers and architects use computer CAD programs during the design process. The models are drawn on the computer screen using orthographic or conic projections and different rendering options that help the designer to better understand the relationship between the different elements.

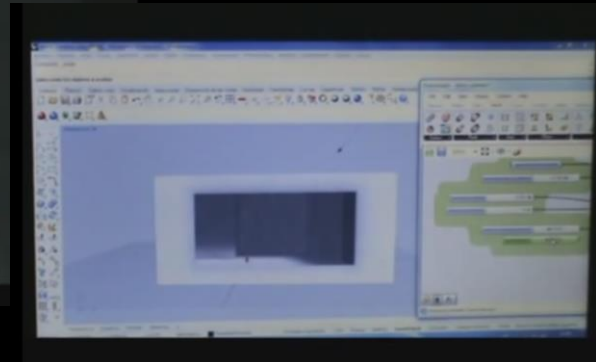


Virtual Reality allows the designer not only to see but to get into the 3D model. The immersion into the new creation can be crucial in the validation of the final design. On the final steps of the design wheel, key aspects of the fabrication process and maintenance have to be considered. Again, immersive tools as the CAVE are valuable.



Finally, once the product is on market, technicians have to be train in the new item. Instead of paper reference manuals, the new generations demand virtual online tutorials, even using augmented reality, even designed using a serious game philosophy.

As lecturers of Technical Drawing , we prepare our students of Mechanical Engineering in these new technology challenges. This is the first reason of our interest in this field. We also offer our knowledge and equipment to private companies to improve their design procedures.



Projects

FUO-EM-093-2013 http://youtu.be/-p_SkBfJYnA

Análisis de modelos reales (NX) para poder definir una metodología de trabajo que sirva para que el diseño sea optimizado, de tal modo que estos puedan ser transferidos a modelos virtuales en un tiempo mínimo

IP Santiago Martín

Thyssenkrupp Elevator Innovation Center, S.A.

26.365,00 €

SV-PA-2013-ECOEMP-86

Investigación de la biomimética aplicada a técnicas generativas de diseño mediante realidad virtual e incorporación al ciclo integral del diseño industrial (BIOINDESIGN)

IP Ramón Rubio

Principado de Asturias

57.745,75 €

FUO-EM-213-2012 <http://youtu.be/698Rer6Cy1A>

Desarrollo de tecnologías para el diseño generativo e inmersión virtual 3D para edificación sostenible y bajo consumo energético

IP Ramón Rubio

Ayuntamiento de Gijón

15.335,00 €

FUO-EM-037-2011

Aplicación de técnicas de simulación al material de soporte de muestras en el laboratorio de reproducción asistida

IP Ramón Rubio

Androastur, SL

26.000,00 €



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