Press release

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See the details – Digital high speed cameras in action

If you want to see a detailed flight and impact of a bullet, the muscle tension of an athlete during a hundred meters race, a close captioned flapping of the wings of a bird, or the impact of a defensive linebacker sacking a quarterback, then you have to look into high speed image processing cameras. In fact, high speed cameras have advanced to a level that they are first priority for the film, television or quality control industries in shooting high resolution films and pictures at sports events, nature documentaries or crash tests in Full HD.

Hardly any industry has in recent years developed as the industrial image processing industry. Thanks to an ever-continuous development of imaging sensors and higher computational power, image processing systems have become potent in performance. Considered some few years ago as almost priceless, high speed cameras are now affordable and cheaper to produce.

Today, high speed cameras can process up to 2000 images per second in high resolution and thus, are hardly to be ignored in image processing and research. Whether in crash tests, motion analysis, error detection in manufacturing, business-intern material and quality control, high-speed cameras can capture every close-up detail.

One of the market leaders in the field of high speed cameras is *PCO AG* in Kelheim, Germany. Their main high speed camera *pco Dimax S* allows an astonishing frame rate of up to 2200 frames per second with a full resolution of 1920 x 1080 pixels. This digital CMOS camera system is suited for material testing, impact tests or super slow-motion shots. Individually designed and combined with proprietary algorithms, the CMOS chip produces high quality images in dark or low light conditions with no discernible noises.

The *FASTCAM IS-1M* by *Photron,* a U.S company, offers up to one million frames per second. The camera is equipped with a high-sensitivity CCD sensor which is suitable in taking shots of high-speed phenomena, such as the analysis of fuel combustion or forensic ballistics.

Another company *Vision Research,* recently introduced a new slow motion camera called *Phantom Flex 4K*. This new camera can record high speed images up to 1,000 frames per second with extremely high resolution at 4096 × 2304 pixels (4K industry standard).

The Marmalade, a company in Germany, has developed a robotic arm on which high-speed cameras can be mounted to shoot images in real life sequences as opposed to the quasi-static nature of current high-speed cameras. *Spike*, as this system is called, will open up entirely new ways of shooting breathtaking videos of fast moving objects.

Innovation in this field is ongoing. The scientific world, movie makers and regular customers should be excited about the next generation of high speed cameras.

EXPO21XX not only offers the online trade fair *VISION 21XX* as a prime source of information and presentation of industrial image processing and camera systems, but also the category "***Vision"*** under EXPO21XX NEWS.

For more exciting high speed videos visit our video section of VISION 21XX.

About EXPO21XX:

Connecting your business - EXPO21XX is the place where your customers are!

EXPO21XX is an online exhibition platform which was foundedto bring conventional trade fairs to the internet. Trade fairs demand that you display your brands or products short-term at one location, mostly for a few days or a week. EXPO21XX serves as a better alternative by bringing the products online to help manufacturers virtually and yet profitably launch their products. The essences of the products are presented through quality videos, images and descriptions.

Today more than 3500 exhibitors mainly from America, Europe and Asia are displaying their products and solutions in over 400 exhibition halls. The products include but not limited to electric motors, sailing yachts, agricultural machinery and industrial robots. EXPO21XX offers an extensive business network connecting the leading technological companies from industrial manufacturing, services, consumer goods and research. EXPO21XX.com is continuously working develop other new business areas and exhibition tools to expand and improve the presence of participating companies and institutes to the global market.

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