

VEXCEL IMAGING GMBH

Serving the Global Aerial Sensor Market



Changing the way people acquire, analyse, visualise and disseminate geospatial information is the ambition of Vexcel Imaging GmbH, manufacturer of UltraCam and provider of remote-sensing technologies. Based in Graz, Austria, the company was purchased by Microsoft in 2006 and has 45 specialised staff and sales offices worldwide. <P>

Vexcel Imaging GmbH was founded in Austria in 1993 by Dr Franz Leberl, who had previously formed two US corporations: the now 24-year old remote-sensing organisation Vexcel Corporation, and Vexcel Imaging Corporation. The latter focused on photogrammetric technologies, including the UltraScan 5000 precision photogrammetric scanner. A private company, Vexcel Imaging GmbH, was launched to continue the

efforts begun in the US, culminating in the development of the UltraCam line of digital aerial cameras.

Microsoft

In May 2006 the company and parent company Vexcel Corporation were acquired by Microsoft, largely for its UltraCam and 3D-modelling innovations and to further the advancement of Microsoft's Virtual Earth mapping initiative. Since the acquisition, Vexcel Imaging remains focused on its photogrammetric business, while Vexcel Corporation continues to provide remote-sensing technologies and services for a broad range of geospatial solutions, and government customers with value-added Virtual Earth offerings.

Business Philosophy

Led today by managing director Alexander Wiechert, Vexcel Imaging GmbH exists to provide the aerial-mapping community with photogrammetric products based on the latest, advanced technological developments. Business philosophy is guided by a commitment to providing customers with high-quality photogrammetric products at competitive price/performance ratios to best position clients to compete in the geospatial services market.

Flagship Products

The company's flagship product, the UltraCam large-format digital aerial mapping camera, was first introduced in 2004 to offer customers an option to traditional film aerial technology and larger image format than was then available in aerial sensors. Since the launch of the first UltraCam model, UltraCamD, the company has continued to enhance the product, primarily through improvements to image footprint and storage subsystem, resulting in the UltraCamX and UltraCamXp. Most recently Vexcel Imaging entered the medium-format camera market with its UltraCamL medium-format digital photogrammetric system, a more compact and lighter solution than the UltraCam large-format systems. In working towards a more complete photogrammetric system, Vexcel Imaging has also recently introduced its UltraMap workflow software for managing and distributing data collected with the UltraCam systems.

Worldwide Support

The Vexcel Imaging has 45 employees in Graz, where most R & D, sales, support, and administration are located, as well as an additional sales-and-support team in Boulder (USA). The sales teams are backed by a support team with calibration labs in both Graz and Boulder, which also serve as spare-parts depots and provide loan cameras made available to customers on a case-by-case basis. Vexcel Imaging GmbH partners with organisations across the globe to provide worldwide sales and support for its cameras.

Virtual Earth

In addition to its activities on behalf of the UltraCamXp, UltraCamL and UltraMap offerings for the global aerial-sensor market, Vexcel Imaging GmbH develops camera- and software systems specifically for Microsoft's Virtual Earth project. This includes fully automated orthorectification software and algorithms for automated 3D-model generation. These software developments are being used at Microsoft to process UltraCam imagery and generate 3D-city models.

Combining Technology

The strengths of Vexcel Imaging GmbH reside in its technical and community knowhow combined with its ability to tap into Microsoft innovations, arguably a unique value position within the remote-sensing industry. This technology integration in part enables Vexcel Imaging GmbH consistently to offer new products priced such that they are also accessible to small organisations. As it innovates, the company provides newer and better technologies that include an upgrade path to allow customers to migrate to new products without necessarily needing to abandon their existing tools. Three large-format camera systems have been introduced since 2004, and an upgrade path exists for each.

Opportunities

Vexcel Imaging GmbH will continue to augment its camera developments and break into new markets as it has recently done with the UltraCamL medium-format digital photogrammetric camera. The next big challenge and opportunity will be in processing software. New features will be implemented to allow digital photogrammetry to serve applications currently being served by other technologies. According to Alexander Wiechert, 'we have not even scratched the surface of what photogrammetry can do'. He sees future opportunities in enhanced processing software that will extend digital-camera sensor capabilities to more and more applications, 'software leveraged hardware', the original philosophy of Vexcel Imaging GmbH. In addition to more generic applications, such as ortho-image generation or 3D-model production, for which Vexcel Imaging has already augmented the automation and quality in Microsoft's Virtual Earth, the focus will be on serving specific vertical markets, such as corridor mapping, through UltraCam sensors, to the fullest extent of metadata generation.