

Cheyney Design Experience

The Sapphire Alliance is a global group of the most experienced Xray Inspection companies, who are collaborating to produce the most reliable, best supported systems on the market. The individual alliance members have installed many hundreds of automatic Xray inspection systems, in many cases over a period of more than 20 years. The Alliance was inaugurated in March, 2006 at a conference in Kings College, Cambridge in England.

The Cheyney team started together in the early 1980's developing some of the first automated gauging and statistical process control systems. Early in our history, development commenced on Xray components and automatic vision systems. We worked on some of the very first linear diode array Xray detectors as well as imaging electronics for both optical and Xray applications. Over the period the team has been responsible for many of the key developments in end-of-line Xray inspection working with the major names in the industry.

- In 1983, the team were consultants to Thomson (now Thales) on the development of one of the first linear Xray detectors.
- From 1987, we developed and manufactured imaging electronics for this linear detector, which was sold under the Thomson marque
- In the late 1980's we developed Xray imaging electronics for OIS (later Elbicon, then Barco, now BEST) and Intertest (later Graseby, Goring Kerr and now Thermo)
- In 1989 we developed our first generation Xray linear detector, which was supplied and later licenced to Goring Kerr (now Thermo)
- In the early 1990's we developed many special applications for Goring Kerr including the first real-time hardware pre-processors and integrated software packages.
- In the mid 1990's as part of a collaboration between Goring Kerr and Anritsu we assisted in the development of the Anritsu Xray processing platform, which is now a leading brand in the Xray market.
- We also developed our second generation Xray linear detector and supplied many users including Cintex (now part of Loma Inspection Systems, a division of ITW).
- In the late 1990's we developed the Xray software application for Loma Inspection Systems and designed and manufactured all the modules used by Loma until 2002.
- At the end of 2000, the team joined the Mettler Toledo group and were responsible for the complete range of Safeline Xray equipment until 2005.

The Cheyney team continue with research and development into innovative techniques for the radiographic inspection of products. We maintain close links with several academic institutions and are at the forefront of the technology.