## **Teledyne Bowtech**



## Teledyne Bowtech

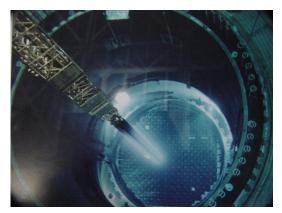




- Established 1990 in Aberdeen, Scotland
- 50<sup>th</sup> acquisition of Teledyne in February 2015
- Leaders in underwater and harsh environment vision systems
- Specialists in Oil & Gas, Defence, Nuclear and Scientific Research
- Renowned for Quality, Reliability, and Cost effectiveness

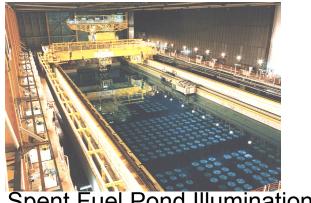
### **Nuclear Products**





**Reactor Core Illumination** 

Suppliers of High **Quality cameras with** illumination, positioning units and control systems



Spent Fuel Pond Illumination

 Spent Fuel Pond **Illumination & Visual Monitoring** 

# **Nuclear Applications**











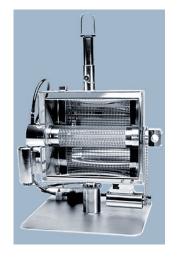


- Remote Inspection of Processes
- Spent Fuel Pond Illumination & Visual Monitoring
- New Facility Builds
- Defense



## **Nuclear Pedigree**







**HPS Illumination** 



LED Illumination

- Inspection & Lighting With ALARA/P savings
- Bowtech upgraded legacy incandescent to HPS lamps in '90's and 00's.
- Despite higher CAPEX, They offered higher reliability and long term operational cost savings. Av. 400 hour life increased to 25,000 hours plus 8 x more output/ watt.
- •With extensive LED experience underwater LED illumination has been developed as the new LED E Light. This will reduce change outs half, leaner still and can be recycled on site with new replacement LED's

## **Nuclear Pedigree**





- Inspection & Lighting With ALARA/P savings
- Bowtech designed the BOWCAM encapsulated camera with lighting to solve an issue in the then BNFL Sellafield VIT plant. Still supplying product which has evolved over the last 3 decades. Saves time, money, delivers and is easy to dispose of.
- The Surveyor SD and HD and Pioneer are inspection cameras are designed exclusively for nuclear use and provide the vey best images with this and similar technology provided across Europe.

# **Nuclear Pedigree**



#### Brief Highlights

- Re-lamped most European pools with HPS lighting 8 x output, 12 x Lifetime
  NOW BEING DOUBLED WITH LED LIGHTING
- HPS lighting to new build UK reactors and existing in Europe
  AS ABOVE
- Incandescent lighting and inspection to most UK and European facilities
  AS ABOVE
- Encapsulated camera and lights still in use after over 20 years HAR plant
- Multiple bespoke vision systems designed, delivered and supported
  Sellafield Dungeness Hunterston Doul Chalon Dounreay etc
- Core inspection for UK Navy

### Clients





















#### The Future





Thank you

**Any Questions Please**