

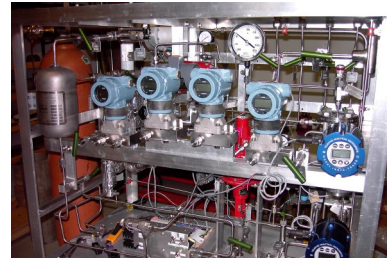
# Custom Tritium Systems Overview

## Application

Tritium processes are exceptional in their variety, frequently applying a combination of cryogenics and relatively high temperatures and vacuum, and sometime high pressure. Tritium systems design involve unique measurement problems, ultra low leakage, critical containment and some difficult tritium storage problems. Frequently the tritium systems required are one of a kind with no other similar systems to which they can be compared. Tritium equipment is often complex and expensive, yet clients always have scheduling and other project management constraints.

## Features

- 20 years experience in tritium system design and manufacture
- Tyne was initially created for the nuclear industry and so is fully acquainted with the documentation needs of a nuclear power plant, and yet as a production facility we are also very aware of the minimum documentation required for proper control.
- Many of Tyne's contracts involve Research and Development and we know the challenges and particularly the costs and scheduling risks involved, and can take action to keep these to a minimum.
- Tyne has ASME approved welders and NDE personnel; we follow a strict QA regime, and we know what is needed to design and build high quality tritium equipment.
- Tyne has ASME approval (through TSSA) to design and build vessels and piping/tubing systems.



## Description

Tyne's strength lies in its ability to both design and build tritium systems. For complex tritium systems it is this combination of skills which makes Tyne a better more practical designer, and a cautious and understanding manufacturer that is more aware of the consequences of inadequate manufacturing or design.

Tyne has Project management skills enabling it to fully control contracts and to be clear about their direction. Tyne designs and plans where the project is going and guides it under the specified quality levels before the many steps are initiated. Tyne also knows what manpower and skill commitments it is undertaking and to plan accordingly to avoid pitfalls. It understands the approvals process involving exchange of information, and creation of sound working arrangements with its Clients to share advice and experience throughout the job to secure the best ultimate solutions.

Tyne has been involved in design studies, and conceptual and detailed designs, supplying all drawings and documentation in formal recognized formats; it has been involved in supplier selection (it has its own approved suppliers list) and carries out procurement, expediting, and auditing. It has its own receiving inspection and controlled storage. Tyne also has its own well proven methods of material control with traceability to heat numbers and CRN numbers if required. It is very familiar with the creation of history dockets.

We perform tritium systems design, manufactures tritium instruments, tritium systems, glove boxes, tritium handling vessels and equipment. We do research and development, testing, commissioning, and site installation. We can undertake a wide work scope including the provision of laboratory infrastructure.