Co-innovation is the way of the future. Think outside the boundries of your company and see that there are many more solutions to a problem than you could have found on your own. We believe that in building long term relationships with our clients, coinventing and co-engineering, we can achieve fantastic results.

We have done so very successfully in the past and will continue to do so in the future.

Our advantages:

- Almost 25 years of international experience in the nuclear industry
- Innovative and flexible engineering team
- Experienced in requirements planning, based on a functional specification
- Knowledge and experience in mechanical calculations
- Knowledge of materials and how to apply them in a nuclear environment
- Knowledge and experience in manufacturing

As a result, you can be sure that what was engineered can really be manufactured. Furthermore, you are assured that the functional requirements actually will be met in the end product.

Change the future

Supporting transitions in the nuclear industry

We help you to think outside the box



EWAC engineering capabilities

- 2D and 3D design
- Finite Element Analysis (FEA)

Pressure vessel design

- Calculations according to:
 - ASME VIII
 - PED
- Pressure testing up to 1,200 bar
- Wide experience in dealing with Notified Bodies

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Solutions developed by

EWAC

Manufactured by

ENGINEERING





Nineties - Co-development of Mo-99 production line

The Mo-99 production line in the Netherlands delivers the highest purity Mo-99 in the world and has the lowest rate of Xenon emissions. Thanks to strong client-supplier cooperation, EWAC Engineering has been able to co-develop all major parts necessary for Mo-99 production, which are still being used today.





Parts supplied by EWAC Industrial

Mo-99 transport bottles Uranium solution vessels Uranium filters Uranium collection filters Precipitation vessels Decontamination vessels lodine separation vessels lodine solution vessels Filtration columns



2013 onwards - Facilitating the transition from **HEU to LEU**

As the international rules regarding the proliferation of High Enriched Uranium have become stricter, the Mo-99 production process will have to switch to Low Enriched Uranium. This has major implications on the Mo-99 production process.

A few of the major components in the production process are currently being redesigned and tested and EWAC Engineering plays a major role in the fundamentals of these developments. Most of the developed parts are now in the qualification stage.







Special hot cell developed to separate used Ir-192 sources from their cables which have been used in brachytherapy. The cell has been designed in such that used sources can be easily posted in, after which the container is opened and one by one the cables are separated from the sources.

Sources are collected underneath in a tungsten container, which is send to long term storage facilities. Cables are decontaminated and are disposed as waste metal.

and waste.

Mo-99-bottles for international transport of Mo-99-solutions.

Tungsten analysis container, for analysis of highly active liquid waste.

I-123 production line This production line was developed in such a way that the formulation of several different compositions of I-123 is possible within one production cell. Much effort was spent on optimizing the production process, making it more intuitive and efficient for the user.

For temporary projects we can provide seasoned engineers with a high level of theoratical and practical knowledge. In many cases our engineers are hired to get things moving and support change projects.

Hot cell for Ir-192 source disposal

Transport and storage

EWAC Industrial supplies several transport and storage containers for nuclear medicine, analysis

Temporary in-house project management