

MESSENGER

News and Information from **BERENTT**

Updated Supply Arrangements

Owing to a major change in circumstances at Berentt Medical Technology (BMT), I would like to advise all customers of changes to ordering and service agreement contracts and maintenance. Until recently you have been ordering PAKs and arranging service agreements with Berentt's distributor, Landauer Radiopharmaceuticals P/L (LDRP).

EFFECTIVE IMMEDIATELY ALL ORDERS FOR PATIENT ADMINISTRATION KITS (PAKs) AND SERVICE CONTRACT ENQUIRIES, MUST COME DIRECTLY TO MYSELF ON 0404 842 237 OR cfbut@bigpond.com !!

No doubt you have all seen the Landauer Radiopharmaceuticals

P/L (LDRP) announcement that had sold 'its Technegas business' to Cyclo-medica Australia P/L (CMAPL).

It is bemusing that a distributor, LDRP, selling products and services under a distribution agreement with the supplier, BMT, could consider that it had an asset to sell?

Anyway, as of right now, if you need PAKs or to renew your service contract, contact myself and I will ensure the orders are fulfilled and the service agreements honoured!

If you wish to continue to support Berentt Medical Technology and provide competition in the marketplace to guarantee reasonable consumables prices, please call me directly.

I WILL PERSONNALLY CONTACT ALL CURRENT SUPPORTERS OVER THE NEXT WEEK OR SO TO ASSURE YOU

THAT ITS BUSINESS-AS-USUAL AT BERENTT MEDICAL TECHNOLOGY!

In fact, it's better than that. Now that the old Distribution Agreement is voided, I will be able to relate to you on a far more direct basis.

Further, Berentt Medical Technology has the license for registration of the Vent-medis kits with the TGA (319260). Berentt has service engineers who have been servicing and designing Technegas generators for nigh on 40 years!

For a truly seamless way forward, call or email me on the numbers listed below.

Charles F Buttigieg

0404 842 237

cfbut@bigpond.com

And the Truth shall set you free

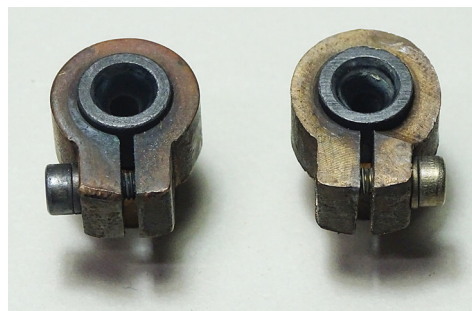
A History of the evolution of Consumables used in a Technegas generator

Technegas generators have been in use to perform nuclear medicine studies for the detection of P.E. since 1985. Almost 40 years later, Technegas remains arguably the best imaging modality for not only P.E. but potentially a raft of other respiratory co-morbidities!

However, in recent times, there have been questions raised regarding precisely what constitutes the most appropriate contacts and crucibles used to produce Technegas.

So, we thought it about time to put the matter to bed by addressing the evolution of the kits used to manufacture and deliver Technegas.

The original contacts used in a Technegas generator to manufacture Technegas used to perform Ventilation/Perfusion Single Photon Emission Computed Tomography (V/P S.P.E.C.T.) in the diagnosis of Pulmonary Embolism (P.E.) were gunmetal and carbon.



This is an image of the original contacts: Carbon encased in gunmetal.

From the mid-1980's through to 1989 and hundreds of thousands of patient studies, these were the standard contacts supplied by Tetley P/L. There were few, if any complaints, from customers over many years of use before the change to brass and carbon contacts in 1989.

This change occurred not because of any fault in the system, it was purely based on pragmatism: the gunmetal contacts were labour intensive and expensive to produce and brass/carbon cheaper: simple economics!

Many other metals were tried and tested, but brass and carbon proved to be the best.

So, to portray that somehow

brass/carbon contacts are integral to the production of Technegas, when the brass and carbon were not introduced until after Technegas had been used in the field for several years is simply false! Up until this time, only 0.14ml crucibles were being produced by Tetley P/L.

In 1992, large crucibles (0.3ml) were introduced into the German market by Mr Peter Altmann. As with so many unheralded events, the inspiration for the development came from Mrs Sigrund Altmann!



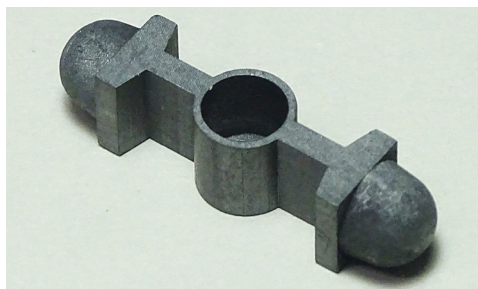
DGN, German Meeting ca. 1989
Peter Altmann, Altmann & Partner GmbH with Customer

In Germany, technetium generators are often very small by Australian standards making loading of the 0.14 ml crucible and the generation of Technegas time consuming.

One day when Peter Altmann was complaining to his wife, she said to him, "why not just make a bigger crucible?" Thus, was born the large 0.3ml crucible.

Peter Altmann invented, produced and maintained the production specifications for the manufacture of the large crucibles and to make any claims to the contrary is not true.

Further, large, carbon crucibles



This is an image of the large 0.3ml crucible invented by Peter Altmann.

have been in use in hundreds of thousands of patients throughout Europe, since the 1990's and the Technegas generator specifications HAVE NOT needed to be adjusted or altered to allow for the use of the large crucibles!!

When considering the question of contacts and the requirement for brass to produce Technegas, let Dr Bill Burch have the last say.

It is the considered opinion of the inventor of Technegas, Dr. William Burch, that brass plays absolutely no part in the production of Technegas.

To quote Dr Burch:

"To Whom It May Concern:

I have been requested to provide an opinion as to the value of using brass in the contacts of the Technegas generator.

My name is Doctor William Martin Burch and I am the inventor of Technegas.

The brass plays NO PART in the production of Technegas. The brass, which followed gunmetal, was the second attempt to hold the carbon contacts in place between the pedestals during the simmer and the burn process.

The Technegas manufacturing process simply requires carbon to be raised rapidly to a high temperature, AND THAT IS THE TOTAL SUM!!

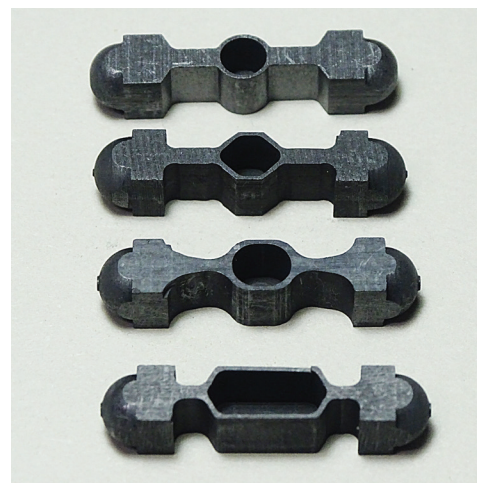
Various attempts were made to simplify the process and to make it simpler to repair/replace the contacts, as required.

In my opinion the brass plays ABSOLUTELEY no part in the process of Technegas production.

Signed:

William Martin Burch

Date: 12th day of August 2020



Progression of crucible designs through to the practical and highly successful German designed large volume crucible.



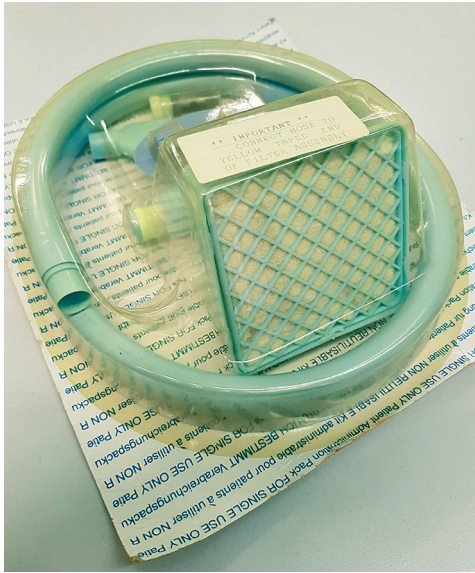
The large crucibles have been sold, certified by Almedis GmbH, since 2002. Since that time, close on 300,000 V/P studies have been successfully performed with few if any failures or complaints.

IMPROVEMENTS IN FILTER DESIGN AND EFFICIENCY

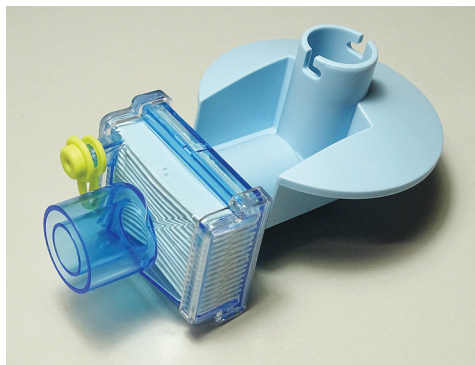
At about the same time, Peter Altmann began using Pall filters instead of the old wool filled units being used by Tetley/Vita Medical.

And it was quite fortuitous that this was the case as Tontine in England ceased to supply the woollen filters.

These Pall filters were tested and found to be better, because HEPA filters have a rigid matrix design. This design negates the possibility that particles escaping from the HEPA filter may leave a channel behind which other particles may follow. The Pall filters were duly adopted by Tetley/VitaMedical/Cyclomedica.



Wool filled filter from 1989 PAS.



The much improved Pall filter design.

During visits to Germany Tetley/Vita service engineers brought back to Australia these Pall filters being used by Peter Altmann. These filters were tested stringently and found to be superior to those being used at the time.

The current filter is the 4th version in the evolution of filters.

Almedis/Berentt use longlife Pall filters with a 4000 burns capacity.

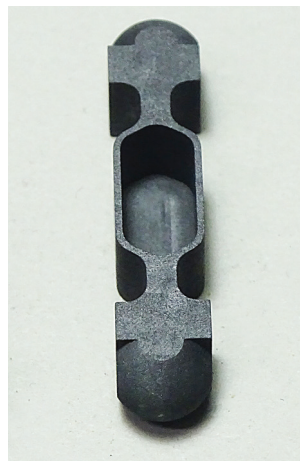


Another example of one of the old, less efficient wool-filled filters.

CRUCIBLE UPGRADED DESIGN AND INITIAL SUPPLY

Around 2005, Mr Bjorn Altmann, the son of Peter Altmann, joined Vita Medical/Cyclomedica Australia P/L.

Mr Bjorn Altmann proposed in 2006 to Vita Medical/Cyclomedica Australia P/L that they act as a sub-manufacturer for the large crucibles (0.3ml capacity) under Almedis specifications. As such, Vita Medical/Cyclomedica Australia P/L became a sub-manufacturer for Almedis GmbH FOR THE LARGE CRUCIBLES ONLY!



At all material time, Almedis GmbH, owned the specifications and manufacturing rights FOR THE LARGE (0.3ml capacity) crucible. So, there you have it.

1. Large (0.3ml capacity) high purity, solid carbon crucibles were the I.P. of Mr Peter Altmann.
2. Vita Medical/Cyclomedica Australia P/L acted as a SUB-MANUFACTURER for Almedis GmbH
3. High purity, solid carbon contacts have been in use since at least 2002 and performed admirably in hundreds of thousands of scans.
4. Almedis GmbH began using Pall Filters in the 1990's and Vita Medical/Cyclomedica Australia P/L ADOPTED this use in due course.

Thus endeth the lesson!!

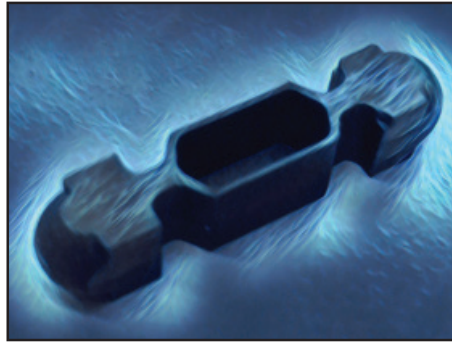


Quality consumables and generator servicing at highly competitive prices.

Join the growing list of Berentt customers who've made the switch and enjoy the benefits.

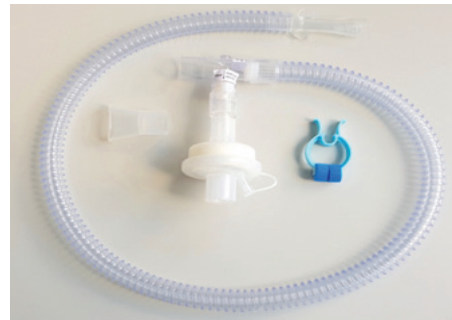
Vent-Medis disposable kit for Ventilation Scintigraphy

**Large 0.3ml
highest purity
graphite crucible**



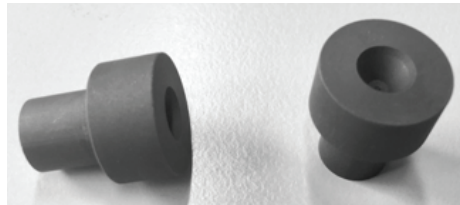
Vent-Medis Kits include the improved high-purity, high-volume carbon crucible with a 0.3ml bowl capacity. This crucible saves time and minimises multiple simmers allowing the use of dilute Tc-99m generator elutions thus reducing operator radiation exposure.

**Rugged design
smooth-bore
patient
delivery set**



The inhalation breathing unit contains a high efficiency HEPA, exhalation filter, T-piece with robust non-return valve, a robust one meter smooth-bore tubing with 15mm inner diameter and the special generator connection. A rigid mouthpiece and a nose clip complete the set.

**High purity
and long life
graphite
contacts**



With every Vent-Medis Box you get one pair of high-purity carbon contacts for 50 scintigraphic examinations. The carbon contacts are very robust and fit the Generator specifications with great contact reliability.

Vent-Medis Kits

**Larger volume crucible
equals more efficient use of
dilute Tc-99m eluate**

High-Efficiency HEPA filter

Time and cost saving

**Less radiation through
reduced simmers**

**Improved and more
reliable crucible contact**

More rugged design

Improved packaging

TGA Certified

Reliability of supply

CE marked

Major price advantage

Contact - Charles Buttigieg
Managing Director and CEO
Berentt Medical Technology
76 Thackeray Rd Reservoir VIC 3073
+61 ((0) 404 842 237
charles@berentt.net
www.berentt.net



Solutions - Not Questions