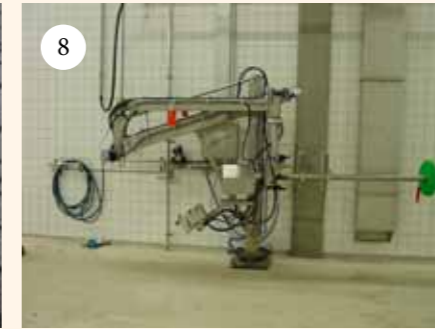
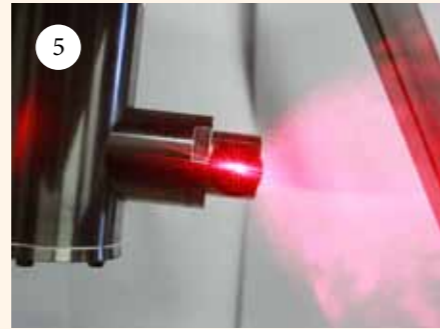




ContratEch Cleaning Solutions B.V.



The CyberjEt®, more specifically “Robotized Cleaning in Place,” is a validated tank-washing robot which saves 80 to 85% in liquid.

Worldwide thousands of tanks with varying dimensions and purposes are cleaned daily.

That cleaning, often C.I.P (Cleaning In Place), is synonymous with using large amounts of water, chemicals and long circulation steps.

Today the α -jEt®, a complete new idea and therefore new designed machine (thanks to the help of Wouter Plak and Wout van Hoek) has been showed to the world.

The α -jEt® offers a totally revolutionary turnabout in the way we can realize a cleaning, we now even can use the more expensive products like foam and gell. We therefore only speak about a new method ...R.CIP® (Robotized Cleaning In Place).

The originally concept of the CyberjEt® is the brainchild of D.G.F.Verbeek Ir, who primarily studied the process of more economical chemical tanker washing in 1988 as assigned by the VROM (Ministry of Housing Spatial Planning and the Environment) at the TU in Delft. Subsequently NOVEM (the Netherlands Agency for Energy and Environment) participated in the first test machine

which operated very successfully on a inland chemical tanker from VOPAK for more than 1 ½ years.

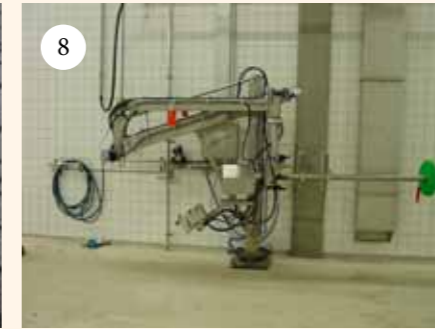
Mr Wijnveldt rased ContratEch and took on the total concept which included construction and international commercial operations and converted the machine into a fully-operable turnkey system. The last major change has been that the company structure have been changed so that the knowledge is situated with ContratEch Cleaning Solutions by and a new Company Process Solutions by is raised, that's part of a few other northern companies (see below), is responsible for handling the daily business.

Apart from the α -jEt® Process Solutions carries a line of famed other products like MDM and Perissinotto pumps, Fluid dynamics, Toftejorg, Breoncherry, Hake, Kohiko, Grosvenor and many many others but al of very high quality. Also a unique Turnkey delivered system for the City of Amsterdam were several truck and street sweepers (see photo 8) are cleaned.

1. Client-specific design of CyberjEt® fully built in stainless steel 1.4435 on a Hosokawa blender, ready for use. Nowadays, a machine with a 4500 mm stroke can be supplied. Result after cleaning with only 10 barg and cold water. (CSK photo2)

3. α -jEt® single or dual nozzle brewery or food application and according to EHEDG regulations develop. Also possible in biotechnology version

4. Dryer/blender, as it looks after the CyberjEt's® 30-second process of flushing larger amounts of residue.



5. α -jEt® project with laser teach-in technology.

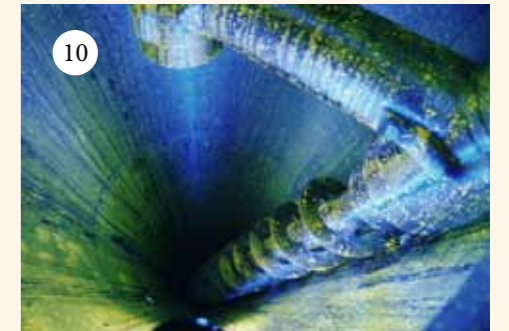
6. Impression of skit building by Gawa

7. Impression of cleaning jet with only 2,5 barg and very high impact maximum distance for cleaning purpose 15meter.

10. A video camera installed inside a tank keeps track of CyberjEt's® performance after the inner walls and bolts of the tank are sprayed with a fluorescentsodium solution, riboflavin.

The α -jEt® (electronic adjustable fixed ratio tank cleaning robot) concept is based on a number of stepped motors steered by a intelligent software program devised to take account of such elements as shape of tank and “pollution”. At the same time also capable of cleaning objects with more intensity – spot washing – and even allowed product recovery with nitrogen. This is a great success in the pharmaceutical industry and ensures a pay back time of sometimes only 8 weeks (photo 4)! Also the option of finally having access to genuine electronic validation (photo 10 standard Riboflavin testing) opens many doors also in biotechnology industries.

These robots have been developed in collaboration with W.N.A. Burggraaf Ir, in compliance with EHEDG requirements and meets the most stringent standards of hygienic design.



Left to right:

Ir. D.G.F. Verbeek,
J.M. Wijnveldt and
M.T. Souhuwat

