

## EDITORIAL

## NEW ISSUE

## Communication and information

Inflation, a familiar term from the realm of economics, is also being used more and more often today in the field of the media.



Manfred Brugger, Hydro-Elektrik GmbH

One consequence of our fast-moving times is that people who would be interested in new developments increasingly fail to hear about them because within a very short time they are no longer breaking news. This occurs against the background of an explosive growth in the amount of information pouring over the individual every day. Identifying what information is actually important is becoming a problem.

This is where we come in: it is our intention to link information to communication.

Our friendly team, these regular information summaries focussing on the Hydro-Elektrik GmbH group as well as our recently overhauled internet site all stand behind the range of information we can offer you. Access our specialist knowledge of water and water-conditioning technology. At Hydro-Elektrik and at RWT we look forward to talking to you. mb

## TECH TALK

## RAVENSBERGER WASSERAUFBEREITUNGSTECHNIK GMBH

## Ownership changes at RWT

On January 1st 2001 the Ravensburg company Hydro-Elektrik GmbH took over the Gütersloh company Ravensberger Wasseraufbereitungstechnik Kurt Meyer GmbH.

With effect from January 1st 2001 the Ravensburg company Hydro-Elektrik GmbH took over the Gütersloh company Ravensberger Wasseraufbereitungstechnik Kurt Meyer GmbH. Kurt Meyer, the founder and owner of RWT, disposed of his company as he is now getting on in years. The new managing partner at RWT GmbH is Klaus Hesse (see other side of page).

Taking over RWT GmbH means that Hydro-Elektrik GmbH can

enjoy a considerable expansion of its range of products and customer structure.

While Hydro-Elektrik concentrates on oxidative water-conditioning systems, RWT specializes in particular in the fields of full desalination as well as conventional filtration systems. Bruno Bachhofer, managing director of the Hydro-Elektrik groups of companies, regards this combination of the two companies as making for an ideal

complementation of each other. It is thus a long-term goal to achieve joint presentation and marketing of the products of the two companies which currently work auto-nomously.

Furthermore, synergy effects will occur in production due to the use of shared resources. An increase of around 5% turnover is expected in the current year. The 30 or so employees of RWT GmbH between them turn over about DM 8 million per year.

## „HUMIN REMOVAL“ RESEARCH PROJECT IN NORWAY

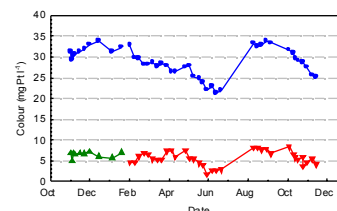
## Bacteria generate drinking water

Top-quality drinking water following ozonization and biofiltration treatment

An excellent quality of drinking water is being produced by a modified compact drinking water unit made by Hydro-Elektrik. This installation which works on the ozonization and biofiltration system is located at the lower end of the Leirsjøen reservoir near Trondheim in Norway. At the end of January the first results of research were presented at a symposium at the university in Trondheim.

Back in the summer of 1999 Hydro-Elektrik GmbH had given the Norwegian SINTEF group a research contract to test and optimize its well-proven compact system technology. The objective was to determine the optimum process parameters for conditioning typical Norwegian untreated water. The particular problem with water of this kind is the high content of humic

material (TOC = Total Organic Carbon) which results in a yellow-brown water with a strong color and a bitter taste.



The unit achieved reductions averaging 80% in the color, 70% in ultraviolet absorption and 50% in chemical oxygen consumption.

Ozonization splits the larger molecules into smaller fragments, thereby making them available to biological processes. This activity is comparable to the mastication of food.

The biological stage meant a degradation or mineralization of

the TOC by up to 30%.

The drinking water so generated meets the requirements of the relevant Norwegian drinking water directive. SINTEF is one of the largest independent research organizations in Europe.

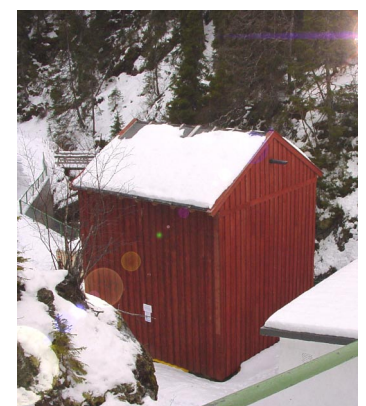


Fig: This building with a floor area of approx. 5 x 5 m accommodates the complete pilot plant.

## NEWS &amp; TRENDS

## POOLWATER EQUIPMENT

North Korea has ordered poolwater equipment to a total value of approx. DM 3.5 million. The order centres around forty-five H 25/40 series compact filter units plus a comprehensive selection of accessories.

## AQUATRAINER

Horses feel good in Aquatrainers manufactured by Bogenhard which are operated using ozone-treated circulating water. Bogenhard manufactures treadmills used in motion therapy for horses.

## ALUMINIUM REMOVAL

A conditioning plant for deacidification, aluminium removal and disinfection with an order value of around DM 700 000 has been supplied by Hydro-Elektrik to the city of Goldkronach in Upper Franconia.

## ART

The Compass Fountain in the centre of Kressbronn is now the seventh public fountain to be constructed by collaboration between artists and Hydro-Elektrik using the very latest in water engineering technology.

**CAR-WASH WATER CONDITIONING**

# Environmentally friendly, pleasantly fresh

Car washes with the „Blue Angel“ environment symbol are a possibility



**PERSONALS**

**SKETCH PORTRÄIT**

**Klaus Hesse -  
managing director  
at RWT**

The new managing partner of the Gütersloh company Ravensberger Wasseraufbereitungstechnik (RWT) GmbH is 51-year-old Klaus Hesse whose appointment came into effect on the first day of 2001.



Hesse has more than 25 years service with RWT both in project management and as confidential clerk. Innovative technologies, flexible solutions, close cooperation with customers and implementation of the individual requirements of the market are the primary goals of the new managing director:

[www.rwt-verfahrenstechnik.de](http://www.rwt-verfahrenstechnik.de)

**INFORMATION REQUEST**

- Information about car-wash water conditioning
- Information about RWT company
- Please contact me

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

Fax \_\_\_\_\_

E-mail \_\_\_\_\_

Under the model designation „HYDROZON P 10 i“ Hydro-Elektrik is launching a powerful and compact system for the environmentally friendly conditioning of circulation water in car washes.

The system produces clear process water with a pleasantly fresh smell. The wash water as conditioned by the system is 100% reusable, rich in oxygen and has a pleasant smell. Depending on the volume of waste water these systems pay for themselves within 1 to 3 years.

Reusing the conditioned water leads to washing agent savings of up to 80%. Furthermore, the stricter limit values applicable when waste water is routed into the public sewerage system are met with ease. Car washes equipped with these systems thus satisfy the criteria for awarding the “Blue Angel” environment symbol. Two years service has clearly and impressively demonstrated exactly what the fully automatic car washes can do.

The installations require little maintenance and have a high degree of operational reliability. The switchgear installation, the generously dimensioned filter container and also the other components are brought together in an extremely compact unit.

The heart of the systems, however, is the ozone generator which is integrated in the filter container. This plate-type ozone generator - itself a tried and tested product of the company - delivers up to 16 g of ozone per hour.



The latest findings in the field of oxidative water conditioning were rigorously implemented in the design and development of this system. The system can therefore also be integrated into existing installations. In this connection see the box below.

These units are available for conditioning requirements of 10 m<sup>3</sup>/h and 15 m<sup>3</sup>/h, which will cover the requirements of all conventional car washes.

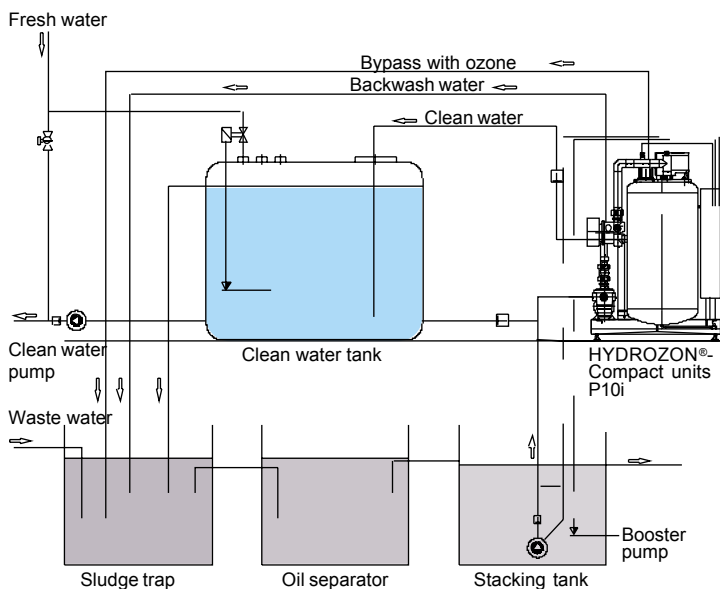
**How it works**

The waste water accruing in the car wash is first collected in a so-called sludge trap. This is where sedimentation of the coarse and settling contaminants takes place. The waste water then flows via the coalescence separator (oil separator) into the stacking tank. However, water cleaned in this way still contains not only substances which make it turbid but also and above all dissolved organic substances which undergo biodegradation processes which give off a strong and musty odour.

This is where water conditioning technology steps in, first to freshen up the water from the stacking tank with ozone and then by filtering it. Ozone is activated oxygen and is produced in the ozone generator from atmospheric oxygen. The presence of the ozone results in disinfection of the water as well as in degradation of the organic substances contained in the water. In addition, improvements are achieved in flocculation and thus in the separation performance of the filter.

The filtered water is conducted into the clean water tank from where it passes through pressure elevation pumps back into the car wash. At regular intervals the filters which contain special materials are flushed with conditioned water.

**PRINCIPLE OF CAR-WASH WATER RECYCLING**



**PUBLISHED BY**

[www.hydro-watertreatmentssysteme.de](http://www.hydro-watertreatmentssysteme.de)

**Publisher**

Hydro-Elektrik GmbH group  
 Aneglestraße 48/50  
 D-88214 Ravensburg  
 Telephone +49 (0) 751 / 6009 - 0  
 Fax +49 (0) 751 / 6009 - 33  
 info@wasseraufbereitungssysteme.de



**Editor**

Manfred Brugger  
 redaktion@wasseraufbereitungssysteme.de

**Layout**

Silvia Mesmer

**Company publication**

Not to be reprinted even in the form of extracts without express permission in writing. Hydro-Elektrik GmbH can accept no liability for unsolicited manuscripts or photographs. This publication is sent free of charge to interested parties. All legal claims are excluded.