

## Technical Data And Logistics

<b>Product No</b>	1710-0: EmWatKit4000 including 4000 U-CANs with zipper closing. (10 litres collapsible jerry cans). 1710-1: EmWatKit4000
<b>System Output</b>	4000 litres per hour
<b>Pump Head</b>	30 metres
<b>Pump Drive</b>	Diesel
<b>Filter Life, sand</b>	Unlimited
<b>Filter Life, active carbon</b>	Approx. 20.000 cubic metres before recharging.
<b>Start Up Consumables</b>	Sufficient for 1200 hours operation included in the kit.



**Maintainance and testing** Daily cleaning of inlet strainer, sludge trap, chlorine and flocculation units and field testing of water quality. Back-washing at intervals influenced by raw water quality.

**Use** The EmWatKit4000 is used as the key water supply system during emergencies and by organisations establishing water supplies in remote areas where surface water (fresh water) is available from lakes or rivers.

**Transport and Packaging** The EmWatKit4000 is packed in wooden crates and palletised.  
Pallet 1: contains EmWatUnit4000, diesel engine water pump, two Pillowtanks, Plastec Tap Stations, flexible tubes, installation kit and connection kit.  
Pallet 2: contains 4000 U-CANs (Prod. No. 1710-0)

**Weight and Volum** Pallet 1: size 2,1x1,2x1,4m. Weight 950 kg.  
Pallet 2: size 1,2x0,8x1,7m (Euro Pallet). Weight 650kg.  
**No single unit inside the crate weighs more than 100kg!**

**Options** Water Monitoring Kit, Electric Driven Pump.  
Skid Mounted Units: 2-6-10-15-20 cubic metres per hour.  
Trailer Mounted Units: 10-15-20 cubic metres per hour.  
EmWatKit4000 Winter with all equipment installed in a heated tent including 28 cubic metres Water Reservoir and three Plastec Tap Stations with HiFlo taps.

**Safe Drinking Water** This health perspective is the core of the Scan-Water Companies' efforts to distribute clean, affordable water.

Scandinavian Water Technology is a leading supplier of field-tested drinking water supply systems for emergencies and development programs, incl. purification, storage, transport and distribution.

Scandinavian Water Technology (Plastec AS) has been supplying the UN Agencies and leading international NGO's for more than 15 years, and is member of the Norwegian Emergency Preparedness System (NOREPS).

All Plastec's traditional products and services aimed at the emergency relief and development markets will be managed by the Scan-Water companies in Norway, Finland and South-Africa. We are confident that the new focus given to this will serve you as a customer or partner even better in the future.

Scandinavian Water Technology AS, trading as Scan-Water, is a 100% owned subsidiary of Plastec AS. Included in this change are the following subsidiaries; Nerox Filter OY of Finland has changed its name to Scan-Water Finland, and Scan-Water South Africa continues under the present name.



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01.2005

## SAFE DRINKING WATER FOR IMPROVED HEALTH



## EmWatKit4000

4000 litres per hour capacity

**A complete, portable, independent system for purification, storage and distribution of drinking water, using any available fresh water source.**



## PRINCIPLES OF OPERATION

A diesel driven pump operates the system. The raw water is sucked into the strainer/prefilter screen and pushed through the flocculation chamber. The tube length between the flocculation chamber and sand filter unit needs to be at least 60 metres to provide time for the flocculant to work. The water passes through the sand filter and activated carbon filter. Filtered water flows through the chlorination unit adding chlorine for disinfection of the water before storage in the Pillowtanks. The drinking water is distributed through four Plastec Tap Stations with HiFlo taps.

## SAFE DRINKING WATER FOR REMOTE COMMUNITIES

In Kwa Zulu Natal, South Africa, the majority of the people depend on surface water: rivers, wells, ponds and dams. This water is for drinking, and is often shared with cattle as well.

During 2000 and 2001, the region was severely hit by a cholera epidemic and many water sources turned out to be contaminated. The epidemic became difficult to control.

With a Norwegian grant, PLASTEC AS supplied CBO network with 7 large, complete, portable Water Purification Units, later to be known as the EmWatKit4000, a complete, stand-alone system that uses existing surface water for purification, storage and distribution. Within hours after arrival, the units were installed at different riverbanks and large ponds and served thousands of people for many months. Some units are still in place due to lack of permanent water supply systems in remote areas.



## MOZAMBIQUE: FLOODING AND DISASTER PREPAREDNESS

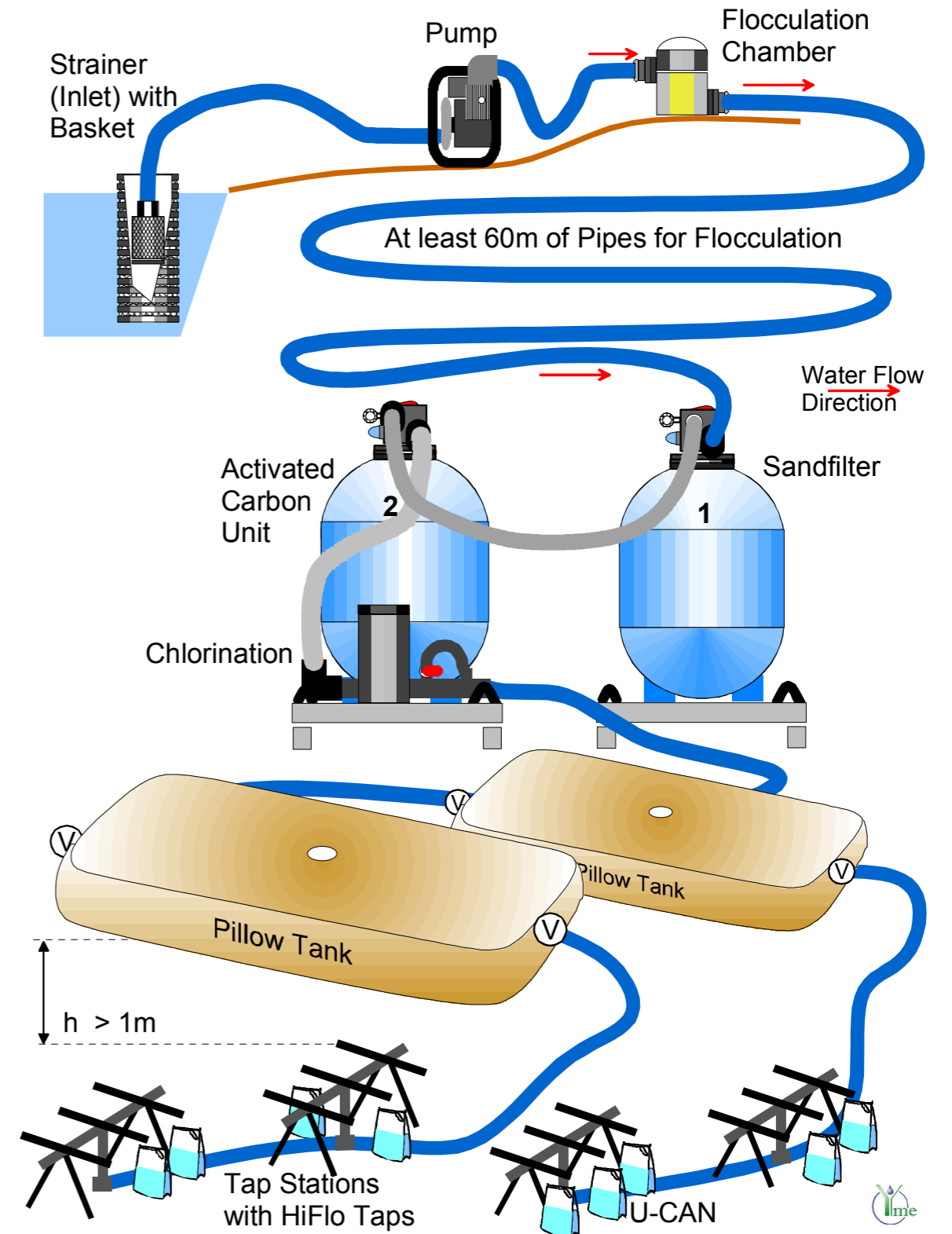
During 2000 Mozambique experienced the worst floods in its history, attracting worldwide attention and response. Again, Plastec's quickly and easily deployable purification units and the unique U-CANs were used by UNICEF and the Mozambiquan authorities.

In fact, the experiences were evaluated to be so satisfactory that UNICEF Mozambique later purchased 15 complete units for the emergency preparedness plan of Mozambique, deploying units all over the country and providing necessary training. During this exercise the system virtually became the Mozambiquan standard.

Based on the above, Plastec invited various key aid organisations to propose further improvements and to comment on the contents that were being planned for a complete stand-alone Kit. Early 2002 the EmWatKit 4000 was introduced to UN OCHA and is now in use in emergency preparedness with World Vision.

◀ Pillowtank, pumps and tap stations.

## EMWAT KIT 4000 (SCHEMATIC PRESENTATION)



<b>Complete</b>	- all the components needed for this stand alone system are supplied in one kit.
<b>Compact</b>	- logistically unique, the kit fits on a standard pick-up.
<b>Commissioning</b>	- all components can be carried by only 2 persons and set up in 2-6 hours, thereafter, one person can run the system.
<b>Credibility</b>	- the kit has been developed and perfected in cooperation with UNICEF, OCHA and World Vision and has been extensively field tested world wide.