

A P P E N D I X G

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(cont'd.)

Location: Zürich, Switzerland
Operator: University Hospital, Zürich
Manufacturer: Pressure vessels by Gebrüder Sulzer, Winterthur, Switzerland
Completion: 1975

Technical details:

Operating pressure	0.5-101 bar			
Dimensions of chamber	1	2	3	4
Diameter (mm)	2500	2000	2000	3500
Internal length (mm)	—	3200	1600	—
Hatch diameter (mm)	800	800	800	1300
Volume (m ³)	8	10	6.5	22

Filled with air, heliox or pure oxygen; chamber 4 only water.

Purpose:

- Development of practicable diving procedures for off-shore exploration (field oriented)
- Solutions for special problems of deep diving down to 1000 m in form of basic research
- Development of decompression and treatment tables
- Development of decompression tables for high altitudes (mountain lakes)
- Hyperbaric therapy of divers
- Hyperbaric oxygen therapy of various deceases or accidents
- Investigation of fatal diving accidents

Switzerland, with its deep water lakes and a tradition of highly skilled engineering, has made a great contribution to oceanology starting with Jacques Piccard's bathyscaphe. This bathyscaphe plumbed the depths of the Mariana Trench. In the later 1950s Hannes Keller pioneered the use of oxy-helium gases in the sea. Piccard further designed and had built in 1968 the *PX15* submersible, later known as the *Ben Franklin*, and earlier the *Auguste Piccard* built as *PX8* in 1963 and used for oceanographic studies. Professor Bühlmann at Zürich University has made a notable contribution to diving technology in particular studies related to decompression theory and practice.

More recently the first main hyperbaric simulator was developed under the direction of Benno Schenk at the University Hospital, Zürich. This facility includes the use of the hyperbaric chambers for the treatment of diving accidents and for hyperbaric oxygen therapy. The complex was completed late in 1975.