

Where's

The



J Israel Turnquist

Chiller

Water?

Turn a Page  
and  
Follow Me !

TURNQUIST



## About The Author

Plus a little extra ....

Jim Turnquist began his involvement with chilled water cooling and air conditioning systems in the late 1960's, working for a distributor of Servel's water-cooled absorption chillers. He had a first hand introduction to the newly developed gas-fired, air-cooled, absorption cycle chillers when they were introduced. Over the next 30 + years, Jim devoted his time specializing in this technology and has become an expert on designing, installing, servicing, repairing and maintaining these chillers. In the late 1990's, Jim provided consultation for a new company who was developing new absorption cycle technology for chilled water systems and he even assisted them in the writing of their product manuals.

Jim's purpose for the writing of this book, is to provide an open door to anyone who may have even the smallest interest in chilled water cooling, to expand upon its effectiveness in today's world and to hopefully excite some hydronic heating people to cool their heels, with a little temperature reversing logic. This book, if you care enough to buy it and read it, provides years of factual field experience and some other neat things which cannot be found in any publication. This book stands alone, being specifically tailored & opinionated to chilled water cooling systems.

And that's a fact, J Israel Turnquist, Author.

Singularly responsible for this book's good and bad content, and maybe even a few smiles you may find along the way.

Other Books by this author; "Thirty Years of Gas-Fired, Air-Cooled, Absorption Cycle Cooling". 520 pages. Everything, Anyone, would ever care to know or learn regarding Servel™ Chillers.

JIT Publications

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# C O V E R

Courtesy Of;

The Hundreds  
Of Satisfied Customers,

Who Are Enjoying Their Comfortable

Hot Water Heating Systems !

And Those Who Have Found

A New & Exciting Experience

In Chilled Water Cooling Systems !

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# INTRODUCTION

Radiantologists<sup>1</sup>, like no other persons, know that the science of Hydronicology<sup>2</sup>, has existed for ages. Hydronicists<sup>3</sup>, first mastered the application of hot water being applied as an efficient and effective heating source. Radiantologists have now taken Hydronicology to a new and exciting level. Through the design and addition of numerous new Radiant Heating Devices (cement, wood, tile, carpet and metals), Radiantologists have developed a method of incorporating Tubing (specially designed and manufactured tubing I might add) into these devices to create a New and Exciting World of Radiant Panel Applied Heating.

The Question Still Remains ..... "Where's The Chilled Water ?"

Radiantologists and Hydronicists, like no other persons in the HVAC Industry, know and understand the importance of; 1- A Good and Proper Application. 2- The necessity of a Properly Designed System. 3- The requirement for a Properly Sized Piping (tubing) System. 4- The requirement for a Properly Sized Pumping System. 5- The requirement for Properly Sized and Applied Flow Control Items. 6- The requirement of Properly Installing a System, as Designed, and as Recommended by a Manufacturer. 7- And last, to Properly Maintain any Installed System.

Boy, it sounds to me like you've just installed a "Chilled Water System" ? So .... why aren't you installing Chilled Water Cooling Systems ?

There are a lot of manufacturers today who are producing stand-alone chilled water cooling units. These Units (Chillers), only require water piping (copper/pvc), gas piping (some chiller types<sup>4</sup>) and electrical wiring to be connected to them, and then to their load zone distribution systems. Hey, that sounds like a boiler's requirements to me. There are also many manufacturers today who are producing stand-alone air distribution devices (no duct work). Every year, new and exciting air distribution units are introduced which offer; 1- simplicity of design. 2- ease of application and connection. 3- diversity and flexibility of use. 4- aesthetic pleasure for the consumer. SO, ..... "Where's The Chilled Water ?"

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1- Rá-dee-an-tol-ó-gists; radiant wetheads who know what they are doing.

2- Hi-dron-ik-tol-ó-gee: the ability to put hot water to work for a useful purpose.

3- Hi-dron-ti-cists; first wetheads to discover hot water's useful purpose.

4- There are two (2) basic chiller types; Electric Chillers (no gas) and Gas-Fired Chillers with minimal electrical needs.

# DEDICATION

THIS BOOK IS DEDICATED TO THE RADIANT INDUSTRY

THIS BOOK IS DEDICATED TO  
THE RADIANT PANEL ASSOCIATION  
AN ORGANIZATION WHICH PRIDES THEMSELVES IN PURPOSE,  
FUNCTIONALITY, AND ENDLESS EDUCATIONAL PROGRAMS,  
FOR YOU AND ME, TO BE THE BEST WE CAN BE,  
IN TODAY'S, HEATING AND COOLING INDUSTRY.

THIS BOOK IS DEDICATED TO THE "EMRPA".  
THE EASTERN MICHIGAN RADIANT PANEL ASSOCIATION.

NO WHERE IN THIS WORLD HAVE I MET SO MANY NICE  
INDIVIDUALS,  
WHO ARE WILLING TO SET ASIDE BUSINESS DIFFERENCES AND  
COMPETITION,  
FOR THE BETTERMENT OF ALL, HAVING A COMMON INTEREST,  
IN A GROWING AND EXCITING INDUSTRY.

THIS BOOK IS DEDICATED TO YOU,

THE WETHEADS OF THE WORLD !