

Foreword to the Second English Edition

When the first edition of this book appeared in the summer of 1973, the first heat transfer plants using organic media had just been successfully installed in industry. Since then the technique has been developed further, new requirements and regulations have been established, and new fields of application opened up. Among others, the possibility of transferring and finely regulating heat up to and beyond 300 °C almost without increase in pressure is one of the main advantages of this heat transfer technique. In addition to water and steam, refrigerants, organic media, salt melts, liquid metals and hot gases are also considered heat transfer media in an extended sense. In this specialized industrial technology book, however, the systems described will be limited to those designed primarily for liquid circulation of organic heat transfer media.

Up to the present, this book is still the only standard work which comprehensively describes this technique.

The newest edition represents not only the most recent level of development of the technique but also the latest status of the regulations, the knowledge of which is essential for the planning, construction and operation of plants of this type.

The general principles on which heat transfer technology is based will not be dealt with here in their full depth. For this purpose I have put together other publications of my own covering pipe technology, heat transfer, heat exchangers, strength of materials calculations, flow and pressure losses, centrifugal pumps, as well as an atlas of materials data.

Thanks to an active exchange of experience with manufacturers and operators, it was not only possible to update this publication, but much of the actual practical experience itself was able to be worked into the text.

For this reason, in order to keep such a standard work up to date, it would be important that suggestions and tips would continue to be forwarded to me (please note my exact address on the bookmark).

Walter Wagner