Stone Matrix Asphalt

Theory and Practice

Krzysztof Błażejowski

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Foreword

Many years have passed since the beginning of stone matrix asphalt's (SMA's) worldwide success. Therefore now the right moment has come to review all accessible information.

Through this new book I have tried to assemble, in an organized manner, a certain body of knowledge obtained from a vast number of publications the world over, thus providing a review of the achievements of numerous engineers from various countries working on bringing recognition to SMA and developing its design methods. I did my best to explain that knowledge and to present it in an accessible way. Some useful hints resulting from my experiences encountered during the introduction of SMA in the early 1990s, discussions with many process engineers, and later reflections and observations round out the theoretical deliberations.

Knowledge of SMA is steadily improving, and new test results are revealed every now and then. In light of this, the moment when we can say that we really "know everything" about it is still far away. Alas, there is not one foolproof method for obtaining a perfect SMA in this book. Moreover, I tend to think such a recipe does not exist at all. This is not necessarily a bad thing because there is nothing like the ability to think and imagine when designing a mixture. The information put into the text is intended to help with using SMA. The range of accessible literature is really broad, so its accumulation and explanation are almost like putting together a jigsaw puzzle. Only the combination of many pieces of information enables associating certain relationships or finding out cause-and-effect relations. It is the reader's task to judge whether that jigsaw puzzle has been appropriately completed.

Undoubtedly, the diversified terminology and the methods of testing properties of constituent materials and mixtures were quite a challenge when compiling this book.

Summing up this foreword, I feel that it should be emphasized again that the knowledge of this technology constitutes the considerable sum of experiences of many people. Therefore there is no particular individual who knows "everything" about SMA. In other words, no matter how much you already know about SMA, it is always worth broadening your knowledge!

Krzysztof Błażejowski

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Author

Krzysztof Błażejowski, a graduate of the Civil Engineering Department of the Warsaw University of Technology, Poland, completed his PhD dissertation at the Kielce Technical University, Poland. Since 1992 he has been working as a research engineer for the Road and Bridge Research Institute in Warsaw, Poland, and then in research departments of various companies that manufacture such products as road binders, aggregates, and concrete. He is also the author of a series of publications on asphalt surfacing. In addition, Dr. Błażejowski remains active in standardization and training. When he is not involved in writing or research, Dr. Błażejowski spends time as a mountain guide.