

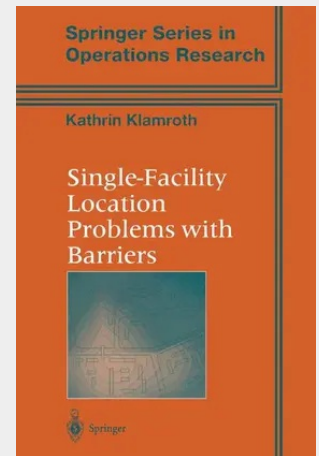
Single-Facility Location Problems with Barriers

Everyday life bears a multitude of location problems and locational decisions. These may be as simple as how best to place a pencil on a desk without having to reach too far and still keeping the work space clear, up to the question of where to place the next out of hundreds of thousands of transistors on a microchip. Some of these questions have easy answers, while others are so complex that not even satisfactory solutions are available, never mind asking for optimized placement. The scales of problems reach from microchip design up to global trade and may demand consideration of one, two, three, or even more dimensions. As modern life encounters an ever increasing concentration in many aspects, usually a multitude of restrictions will be imposed on a problem.

These restrictions may be classified as regions of limited or forbidden placement of a new facility or as regions with limitations on traveling. Areas where the placement of a new facility is forbidden, referred to as forbidden regions, can be used to model, for example, protected areas or regions where the geographic characteristics forbid the construction of the desired facility. Limitations on traveling are constituted by barrier regions or obstacles like military regions, mountain ranges, lakes, big rivers, interstate highways, or, on smaller scales, machinery and conveyor belts in an industrial plant.

Everyday life bears a multitude of location problems and locational decisions. These may be as simple as how best to place a pencil on a desk without having to reach too far and still keeping the work space clear, up to the question of where to place the next out of hundreds of thousands of transistors on a microchip. Some of these questions have easy answers, while others are so complex that not even satisfactory solutions are available, never mind asking for optimized placement. The scales of problems reach from microchip design up to global trade and may demand consideration of one, two, three, or even more dimensions. As modern life encounters an ever increasing concentration in many aspects, usually a multitude of restrictions will be imposed on a problem.

These restrictions may be classified as regions of limited or forbidden placement of a new facility or as regions with limitations on traveling. Areas where the placement of a new facility is forbidden, referred to as forbidden regions, can be used to model, for example, protected areas or regions where the geographic characteristics forbid the construction of the desired facility. Limitations on traveling are constituted by barrier regions or obstacles like military regions, mountain ranges, lakes, big rivers, interstate highways, or, on smaller scales, machinery and conveyor belts in an industrial plant.



53,49 €

49,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780387954981

Medium: Buch

ISBN: 978-0-387-95498-1

Verlag: Humana

Erscheinungstermin: 17.10.2002

Sprache(n): Englisch

Auflage: 2002

Serie: Springer Series in Operations Research and Financial Engineering

Produktform: Gebunden

Gewicht: 1080 g

Seiten: 202

Format (B x H): 160 x 241 mm

