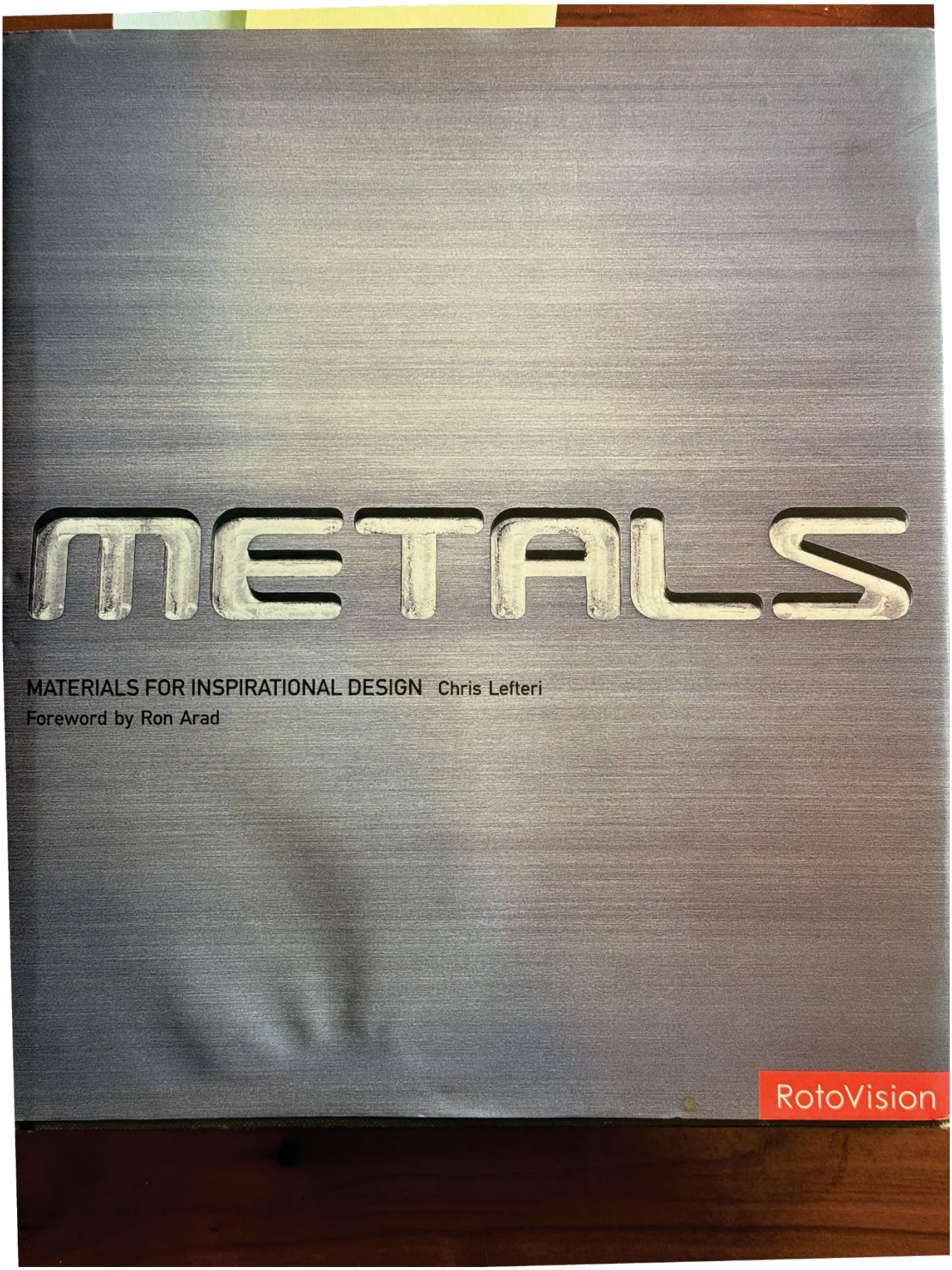

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Metals

Materials for Inspirational Design

Chris Lefteri

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A RotoVision Book
Published and distributed by RotoVision SA
Route Suisse 9
CH-1295 Mies
Switzerland

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10 9 8 7 6 5 4 3 2

ISBN 2-88046-762-4

Edited by Becky Moss
Book design by Lucie Penn
Cover design by Luke Herriott
Photography by Xavier Young

Reprographics in Singapore by ProVision Pte. Ltd.
Tel: +656 334 7720
Fax: +656 334 7721

Printed and bound in China by Midas Printing Ltd.

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Profile designs

Extrusion is another common process applied to a range of metallic and non-metallic materials. The key aspect of this manufacturing process is that it allows you to produce a long strip of a profile, which can then be sliced into the desired lengths. Aluminum ↘ is a popular material for extrusions, as it has a low melting point. This is an essential characteristic of all extrusion ↘ materials, which include copper ↘, stainless steels ↘, medium and low carbon steels, and magnesium.

Extrusion is often combined with other methods, for example, extrusion blow-molding for plastics, or impact extrusion for metals. For standard metal extrusion however, there are two main forms: direct extrusion, where the metal is forced through a stationary die, allowing for longer lengths to be produced; and indirect extrusion, where the die compresses the metal producing less friction but shorter lengths.

Dimensions	**2250mm wide overall**
Key Features	**Allows for production of long, continuous lengths of the same shape**
	Allows for both solid and hollow shapes
	Low cost
	Can be applied to a range of materials
More	**www.aluminium-extrusion.hydro.com**
	www.omkdesign.co.uk
	www.aec.org
Typical Applications	**The process is universal and can be applied to most areas of design and engineering, including tubing, sheet materials, structures and body frames for motor vehicles, furniture, and components for consumer electronics**

Saville Bench
Designer: Rodney Kinsman
Manufacturer: OMK Design
Date: 1992

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