

Metalworking's
MECHANICAL
PRESS
HANDBOOK



A basic handbook on the design and use of such presses

Published by Metalworking Magazine

221 Columbus Avenue
Boston 16, Massachusetts

A Cahners Publication

METALWORKING'S MECHANICAL PRESS HANDBOOK

TABLE OF CONTENTS

Chapter 1	Press Types and Capacities	1
Chapter 2	Press Drives	18
Chapter 3	Clutches and Brakes	33
Chapter 4	Flywheels and Motors	46
Chapter 5	Cushions and Counterbalances ...	58
Chapter 6	Slide Adjustments and Gibbing ...	71
Chapter 7	Design of Press Structures	
	Part 1 - Beds and Slides	84
	Part 2 - Tie Rod Shrinking	95
	Part 3 - Uprights and Crowns	105
Chapter 8	Overload Devices	112
Chapter 9	Electrical Press Controls	
	Part 1 - Protection of Operating Personnel	123
	Part 2 - Protection of Equipment .	132
Chapter 10	Press Lubrication Systems	140
Chapter 11	Gap Frame Presses	151
Chapter 12	Straight Side Presses	
	Part 1 - Single and Double Action	164
	Part 2 - Accelerated Motions and Triple Action	178
Chapter 13	Transfer Presses	
	Part 1 - Feeds and Die Design	188
	Part 2 - Loading and Slide Design .	197
Chapter 14	Welding Presses	210
Chapter 15	High Productivity Presses	
	Part 1 - Types of Equipment	222
	Part 2 - Economics	233
Index		245
Index to Charts and Formulae		247