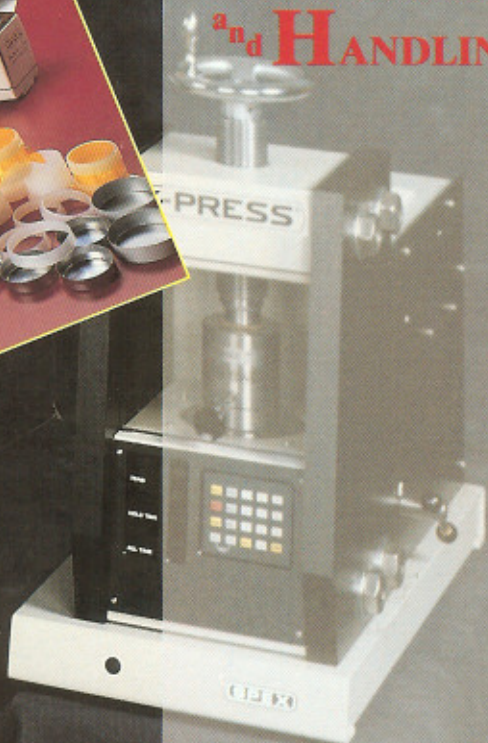




SPEX HAND BOOK — OF — SAMPLE PREPARATION and HANDLING



SPEX

TABLE OF CONTENTS

How to Use this Handbook

I. Products and Techniques for Sample Preparation 1

Pulverizing and Blending

When to Pulverize	3
How to Select a Laboratory Mill	3
Characteristics of Grinding Containers	3
Helpful Hints about Grinding	10
Further Preparation of the Sample	12
Products for Pulverizing and Blending	12

Pressing and Pelletizing

When to Pelletize	51
How to Prepare Pellet Samples	52
Helpful Hints About Pressing	52
Selecting the Pellet Die	61
Reinforcing Pellets with Spex-Caps	64
Choosing a Laboratory Press	65

Dissolution

Microwave Sample Preparation	69
Developing Applications for Organic Materials	72
Teflon Decomposition Vessels	75

Fusion

When to Employ Flux Fusion	77
How to Prepare a Fused Sample	78
How to Select a Fusion Flux	78
Products for Fusion	79
Graphite Crucibles and Handling Equipment	84

II. Products and Techniques for X-Ray Fluorescence Spectroscopy (XRF) 89

Sample Requirements	91
Preparing Powder Samples for XRF	92
Particle Size Effects	93
Reinforcing XRF Pellets with Spec-Caps	94
X-Cells for XRF Liquid Samples	96
Selecting Thin Film Windows for XRF	100

How To Order	111
Catalog Number Index	115
Subject Index	117