

TABLE OF CONTENTS

	Page
LIST OF TABLES	iv
LIST OF FIGURES	v
NOMENCLATURE	vii
INTRODUCTION	1
PURPOSE AND OBJECTIVES	6
I. STRESS ANALYSIS	7
A. Formulation of Governing Equations	10
B. Method of Solution	15
C. Resulting Stress Equations	22
1. Two-Dimensional Wafer Profile-With Shear	22
2. One-Dimensional Wafer Profile-Zero Shear	38
3. Rigid Anvils-Zero Shear	42
4. Two-Dimensional Hollow Wafer-With Shear	43
II. EXPERIMENTAL FACILITIES AND PROCEDURES	46
III. STRESS AND PRESSURE DISTRIBUTIONS	56
IV. FUTURE WORK	85
SUMMARY AND CONCLUSIONS	86
APPENDIX I. COMPUTER PROGRAMS AND SAMPLE RESULTS	88
REFERENCES	117
SELECTED BIBLIOGRAPHY	119