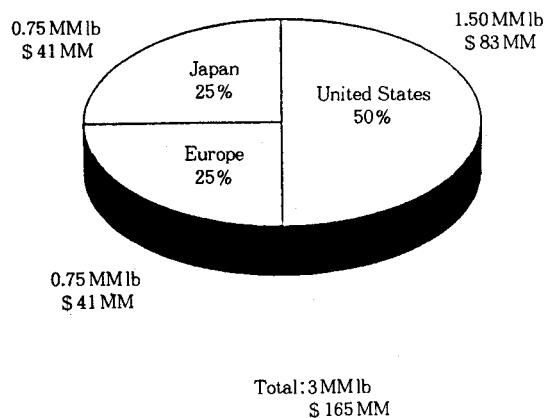
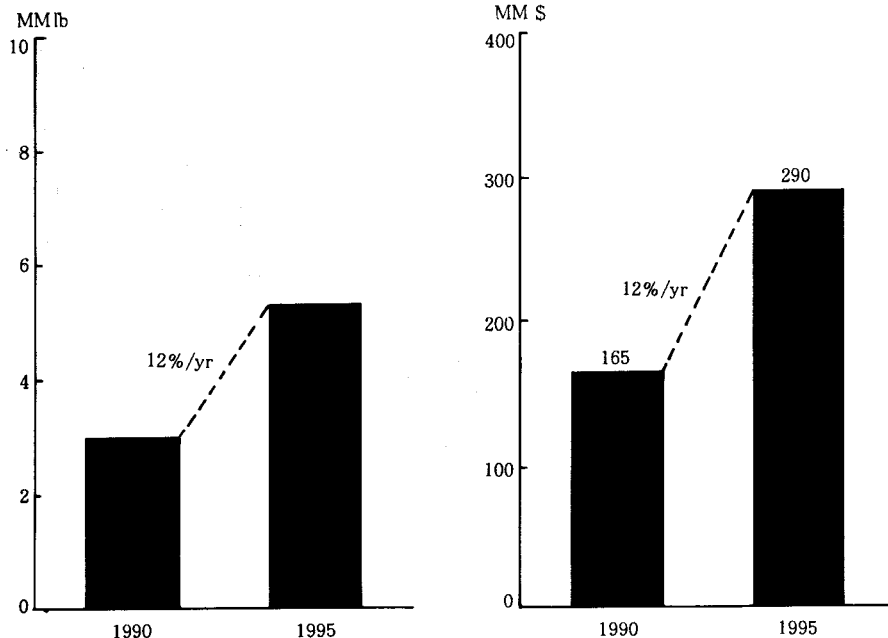


Polyimide Films

■ 1990년 기준 Polyimide Films의 지역별 시장규모



■ 1990-1995 Polyimide Films의 세계시장 규모



Note: Dollar amounts are in 1990 dollars.

■ Polyimide Films의 응용분야

Electronics

Flexible circuit boards
Molded circuit boards
Tape automated bonding process

Electrical Insulation

Electric motor and generator insulation
Flat cable
Formed coil insulation
Magnet wire insulation
Transformer and capacitor insulation
Wire and cable wrap

Composite Fabrication

Vacuum bags used in fabrication of resinmatrix composites

Miscellaneous

Pressure-sensitive tapes
Traction belts on computer printers

■ Flexible circuits에서 Polyimide Films의 응용분야

Aerospace

Avionics
EMI shielding systems
Flight control systems
Jet engines
Navigational instruments
Thermal control systems

Automotive

Audio systems
Dashboard connections
Electronic fuel-injection systems
Emission control device
Engine control systems
Ignition systems
On-board computers
Pressure sensors

Computers

Disk drives
Mainframe computers
Personal computers
Printers

Consumer Electronics

Calculators
Cameras
Cassette players
Compact disk players
Smart cards
Stereos
Telephones
Typewriters
VCR's

Defense

Armament
Communication systems
Guidance components
Infrared detectors
Navigational equipment
Radar systems

Food

Food processing systems

Industrial Instrumentation and Control

Combination gasket/circuits
Machine-tool controls
Membrane switches
Oil well sensing devices
Programmable sensors
Robotics
Torque sensors

Medical Devices

Cardiac pacemakers
Hearing aids
Medication delivery systems

Telecommunications

Central office switches
Telephone desk sets
Telephone handsets

■ Polyimide Resins과 Films의 제조업체 현황

Company	Product Lines	Company	Product Lines
A.D.Tech	C	Granmont(Montedison)	R
Airtech International	F, C	ICI	R, F
Allied-Signal	R, F	Kanegafuchi Chemical Industry	R, F
American Cyanamid	R	Monsanto	R
American Durafilm	C	National Starch and Chemical(Unilever)	R
Ciba-Geigy	R	Rhone-Poulenc	R
Courtaulds	R, C	Rogers	R
Dewal Industries	C	Ube Industries	R, F
Du Pont	R, F	Westlake Plastics	F
Ethyl	R		

C=Converted film and film products, F=film, R=Resin

(Markets and Applications for High-Performance Plastic Films, 1992)

<경희대 화학공학과 김성수>