

Making contacts an exacting business

By Ann Chowdhury
special writer

Every day, local laboratories are transforming insignificant-looking buttons of opaque blue plastic into high-quality contact lenses that will sharpen someone's view of the world.

Art Optical in Redford Township

and Soderberg Optical in Farmington Hills are busy making rigid, gas-permeable contact lenses, which are rapidly replacing the original hard contacts.

They are winning some converts among soft lens wearers because of the crisp vision they provide.

Both labs presently employ nine

people, and say business is increasing.

Art Optical manager Leo Bernwanger said each lens is made exactly to a doctor's prescription. "There's no such thing as stock-piling in this business."

Since the gas-permeable material is considered a drug by the FDA, manufacturing conditions are strictly regulated and work follows stringent guidelines.

THE FIRST step in making a lens is to feed all the information from the doctor into computers, which give the machines specific instructions.

Laboratory technicians then take a half-inch wide, quarter-inch thick button of the gas-permeable material, and start to transform it into a lens.

The first worker uses a tiny lathe to cut in the base curve of the lens

that will conform to the patient's cornea. Blue shaweb-like strands of plastic are shaved away as the lens takes shape.

Next, another lathe cuts in the front curve of the lens and inserts the prescription. The relationship between the inside and outside curve gives the lens its strength.

There is little conversation as workers pass lenses from one work station to another because the ma-

chines, though small, are too noisy to talk over.

After the lenses have been shaped, they are spun on polishing machines and an Inspector scrutinizes them under a microscope. She sends them to the finishing room for the edges to receive a final polish and even more inspections.

"There's no room for error. It's a precision job from start to finish," Bernwanger said.



Don Schoenheide, an Art Optical technician, checks his work through a microscope before sending the lenses on to the next stage of processing.



photos by STEVE FECHT/staff photographer

Optical trade is booming

By Ann Chowdhury
special writer

Business is good again in local optical laboratories, thanks to the development of rigid gas-permeable contact lenses, which allow oxygen to flow through the eye.

A few years ago, the trend was to soft, oxygen-permeable lenses, which local labs are not equipped to make. The conventional hard lenses that these labs made lost popularity, since they blocked the passage of oxygen.

Dr. Ronald Herskowitz, vice president of technical affairs for Polymer Technology, Wilmington, Mass., said two local manufacturers are among only 83 in the United States licensed to make the Boston IV rigid gas-permeable lens for which his company manufactures the plastic.

THEY ARE the Redford branch of Art Optical and Soderberg Optical in Farmington Hills.

"We are very particular about who we allow to make our lens because it has to be manufactured to very exacting tolerances," Herskowitz said during a recent visit to Redford Township.

He said that the Boston IV lens, approved by the FDA in November 1985, is made of a silicone-acrylate and offers the advantages of both the traditional hard, and soft lenses.

"It's a daily-wear lens that gives the crispness and clarity of vision of a hard lens — you get a very crisp vision from only rigid materials — at the same time giving the safety and comfort of a soft lens," he said.

HERSKOWITZ ADDED that the principal drawback in the Boston IV lens is for the doctor. "It requires a lot of precision, exacting tolerances and a lot of understanding of how to fit them."

"A soft lens is more like a sock or a pair of panty hose. There's a wide latitude of what fits," he said.

The doctor said that since the eye gets its oxygen straight from the environment, a contact lens should allow it to breathe.

"If it doesn't, you'll have some long-term health consequences, especially to the endothelium, an important layer of the cornea. When damaged it does not regenerate itself."

Herskowitz said he used to advise wearers of conventional hard contact lenses to continue to use them, if they had no apparent problems. He has changed his mind.

"THE RESEARCH is irrefutable. It shows that it's important to get those pores out of the non-oxygen permeable lenses into the eye so that they get a benefit of the added oxygen to stop any further damage, and keep their corneas as healthy as they can be."

Herskowitz stressed that the new rigid lenses are easier to care for and longer lasting than the soft lenses.



ORCHARD-10 IGA
24065 ORCHARD LAKE RD.

Mon. thru Sat. 8-9; Sun. 9-5

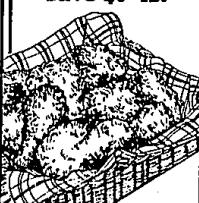
WE Feature Western Beef
QUANTITY RIGHTS LIMITED - NOT RESPONSIBLE FOR ERRORS IN PRINTING

**AT IGA - WE REALLY CARE
PRICE - QUALITY - SERVICE
WE'VE GOT THE GOODS!**

IGA TABLERITE
"FRESH"

**Chicken
Legs**
Backs Attached

39¢
lb.
Save 40¢ lb.



IGA
TABLERITE
"FRESH"

**Chicken
Breast**
Rib Attached & Split

\$1.59
lb.
Save 75¢ lb.

Produce

"First of the Season"
Michigan
Sweet Corn

8/99¢

Cooking
Onions.....
99¢

Golden
Lemons ..
5/99¢

Fresh Limes. 10/99¢

IGA TABLERITE
WESTERN BEEF

**Sirloin
Steaks**
Table Trimmed

\$2.49
lb.
Save 1.00 lb.



IGA TABLERITE
WESTERN BEEF

**T-Bone
or
Porterhouse
Steaks**

\$3.69
lb.
Save 1.00 lb.



Bakery

Oven Fresh Golden
Split Top
Bread

79¢
lb.
Save 1.00 lb.



Open Fresh Golden
Split Top
Bread

79¢

lb.
Save 1.00 lb.

Nutty
Donuts.....
\$1.69



THORNAPPLE VALLEY

**Corned
Beef
Briskets**

Point Cuts
\$1.19
lb.
Save 50¢ lb.



HYGRADE MEAT

Ball Park Franks

\$1.49
lb.
Save 40¢ lb.



HAMBURGER FROM ALL BEEF

Ground Chuck

\$1.39
lb.
or more



Frozen

Beef, Chicken, Turkey or
Meat & Cheese Casseroles

3/\$1

American Turkey or
Banquet Cream Pies
79¢

lb.
Save 1.00 lb.

Banquet
Family Entrées
\$2.99

49¢

lb.
Save 1.00 lb.

Orange
Juice.....
99¢

lb.
Save 1.00 lb.

Baked Cheddar or Macaroni & Cheese
\$1.69

lb.
Save 1.00 lb.

FAME
Cheese.....
\$1.69

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Chiquita
Banquet
Pot Pies
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢

lb.
Save 1.00 lb.

Imperial
Margarine
1 lb. Pkg.

49¢