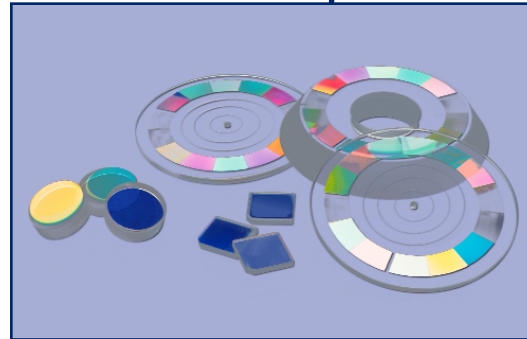


BEAT THE HEAT

**NEW
for 2003!
Expanded
Replication Services!
See Back for Details.**

Rising production costs got you hot under the collar? Holographix can offer you a way to beat the heat.

Holographix' cold-forming replication process delivers superior quality optics and gratings in a fraction of the time and at a fraction of the cost.



The speed of Holographix' replication process is due to the curing.

Rather than using thermal or two-part epoxies which can take

hours to cure,

Holographix uses photopolymers which cure instantaneously.

This rapid processing comes with no loss of flexibility or quality. Replicated optics and gratings can be produced in a variety of shapes and sizes

(including curved surfaces) and on an assortment of substrates;

metals, glass, plastics, or composites. The substrate can even integrate alignment and mounting surfaces allowing for easy system installation.



High-fidelity replication

Before placing your next order, contact Holographix, and let us show you how our cool process can heat up your profits.

A Full-Service Replication Company

Holographix offers...

Grating design...

Holographix has over 25 years of experience in designing and building holographic systems. This helps us optimize your grating-based optical system for performance and manufacturability. In association with Optical Research Associates and their Code V[®] software, we properly design gratings to meet your system's optical requirements.

Grating mastering...

Holographic mastering can be frustrating, time-consuming, and expensive. If you are interested in outsourcing your holographic lithography, Holographix' state-of-the-art labs offer a full level of holographic master capabilities.

Grating replication...

For OEMs using gratings in their products, Holographix offers you the choice of using replicated gratings rather than costly grating masters. Our replication labs can produce deep structures that are tough, durable, and much less expensive than the original. Cold-form replication is an inexpensive alternative to producing your diffractive optics individually by ruling, holography, e-beam lithography, or photolithography. The inherent repeatability of the replication process also eliminates the inconsistency of mastering each grating.

Mirrors and lenses...

Holographix produces mirrors and lenses designed for direct system integration. Surfaces ranging from flat to aspheric can be produced on your choice of substrates with mounting tabs and shoulders built in. This unique capability allows components to be delivered directly to the production line.

Hybrid optics...

Our capabilities are not limited to conventional optics. Hybrid optics are available through replication as well. Grisms, DOE's, motheys, and lens arrays are just a few examples. At Holographix, features ranging from sub-micron to millimeters in size are routinely replicated with high fidelity. If you have an application that might be suited for replication, give us a call and we will be happy to discuss the possibilities.

Production capabilities...

We specialize in production quantities. The inherent speed of our cold-forming process allows us to offer economically priced high volume production optics without the associated high tooling costs. Whether your production volume is 100 or 1,000,000 we can offer you an attractive alternative for your production optic needs.

General replicated surface properties:

Surface irregularity:	Better than $\lambda/10$
Temperature range:	up to 200° C
Humidity range:	0 to 95% continuous
Transmission:	>99% from 420 nm to 2.2 μ m
Resistant to chemical attack	

Please contact us via phone, fax or e-mail with any inquiries you may have regarding our services and we will be happy to assist you.

www.hgraphix.com

For a more comprehensive overview of Holographix and our technology, please visit our website at www.hgraphix.com.

HOLOGRAPHIX[®] LLC
Creating a Spectrum of Optical Solutions[™]