

MAGNAPLATE MAKES HISTORY

American Dream Comes True In Small Hoboken Building



May 16, 1952, Hoboken NJ---Today in Hoboken, Dr. Charles P. Covino announced the establishment of Magnaplate Metal Finishers, a company that is expected to revolutionize Industry's attitude towards metal and metal parts.

At the opening of his new facility, Dr. Covino commented "There is a saying that from small acorns, mighty oaks grow. Magnaplate is here to stay, and we look forward to growing a company which will serve New Jersey, the USA and the World by providing innovative new products for improving the performance of metals."

Charles P. Covino, a young man just out of college but working towards his PhD, has established his fledgling Company in a small facility resembling a garage, here in Hoboken, NJ. He



hopes someday that General Magnaplate will boast a worldwide presence with multiple US plants, and perhaps one located in Canada, along with a network of licensees throughout Europe and Japan. He's convinced that Hoboken will be famous, not just for

being the birthplace of the popular crooner, Frank Sinatra, but also for being the birthplace of an exciting new company!

Although he has only set up a testing laboratory, Covino believes he's sowing the seeds of a singularly unique business in a brand new field of materials science. His first aim will be to establish a research lab to explore the use of metal platings and coatings for use in the Aircraft Industry and to make them an integral part of superior aircraft performance. Covino says he has a

vision that the blossoming National Administration of Space Aircraft (NASA), and industry in general, will become reliant upon his new concepts of surface enhancement of metal — a vision that could someday benefit businesses across the USA and the entire world.

A New Frontier?

Covino, often called "Doc", believes NASA's efforts to put a man in outer space is destined to happen soon. Design Engineers responsible for this effort will surely require new types of coatings, and in particular coatings which exhibit extraordinary dry lubricity. Aluminum, titanium and even high strength steel, he says, will all fail because their surfaces can't provide protection beyond our atmosphere — and all other conventional materials would simply 'boil' away in the vacuum of outer space.

Doc and the team he's assembling at the fledgling General Magnaplate, are dedicated to finding a range of new "synergistic" coatings that will combine the advantages of anodizing, plating and low-friction engineering polymers or other dry lubricants.

If they are successful, the rest, as they say, will be history. Once established in the aerospace industry, General Magnaplate's coatings could go on to be used in thousands of other industrial applications, including food and drug packaging, chemicals, plastics, textiles, gears, hand tools, and even military hardware.

Not only will we use General Magnaplate's products at work, but they may reach out to us at home too. Cookie makers, like the National Biscuit Company, for example, might use a General Magnaplate finish on the molds to make distinctive bone-shaped dog biscuits. Perhaps someone's Aunt Gertrude will use coatings on molds for a new brand of delicious chocolate candy!

Today and Tomorrow

It is predicted that 50 years from now, in 2002, if we take time to look back, Covino's dream of General Magnaplate being able to offer more than a dozen coatings which will be compliant with FDA, NSF, USDA and AgriCanada codes for food and drug contact, may actually come true. Maybe they'll even be given a page in the forefront of technological advances when one of their coatings is honored in the Guinness Book Of World Records for achieving the distinction of being named as the "World's most slippery solid" with the world's lowest coefficient of friction (0.03 inches).

Then, in the flush of success, Doc will perhaps take a step back and proudly keep an eye on General Magnaplate, which he will have placed in the trusty hands of his daughter Candi.

As for the company, General Magnaplate might then employ 125 people or more nationwide — a far cry from the fledgling company being established in Hoboken today. Says Covino, "We expect to remain steadfast in pursuit of our principles; to solve customer's problems with the best fit solution, in the shortest amount of time, with the least amount of fuss".

We trust General Magnaplate will earn itself a reputation as one of the industry's foremost "problem solvers". They'll, no doubt, become known for having the industry's most forward-thinking internal R&D group, and for taking on the most difficult of challenges. They'll never ever turn a customer or a problem away! Time will tell!



1952

Magnaplate Metal Finishers is established in Hoboken, NJ.



1961 Hi-T-LUBE® Invented

Hi-T-LUBE is a dry-film lubricant that solves critical problems of wear, galling and fretting on steel, stainless steel and copper alloys at high and low temperature extremes, even under heavy loads.

1959

Sylvia Covino (Doc's wife) joins the family affair

And acquires Eastern Testing Labs of Long Island, NY.

1962

Doc Covino breaks ground by publishing his famous 'QA Manual' distributed by Industrial Press.

50's

1969 First Man Walks On The Moon

Thanks to General Magnaplate, not only was 'man' able to walk on the moon, he was able to drill into it too. Canadize treatment on both the inside and outside of the titanium core-sample drill tubes used prevented galling at the joints and in the drive shaft. It also eliminated the danger of contamination of the moon rock samples by titanium particles.



1964 TUFRAM® Invented

Engineers worldwide recognize TUFRAM as the solution to a host of problems faced by aluminum components on all types of manufacturing, processing and packaging equipment. TUFRAM "synergistic" coatings were used to solve critical wear and performance problems plaguing aluminum parts on NASA's space vehicles.

1965

First Japanese licensee appointed.

1973 Moon Rock Displayed In Linden

As a mark of gratitude for his contribution to the space race, NASA presents the 'Doc' with a piece of the "rock" which was displayed at Magnaplate's Linden facility. It was then sent to the Smithsonian for public viewing. *And* first Texas facility opens.



1976 LECTROFLUOR® Invented

LECTROFLUOR provides superior corrosion and chemical resistance and mold release even in extremely hostile environments. Effective at both high and low temperatures it can be applied to mixed metal substrates.

1978

Swedish licensee announced: FFV a government owned facility (now BODYCOTE)



1981 Space Shuttle Columbia Makes First Earth Orbit

Another first for NASA, one of many of its accomplishments which are attributable, directly or indirectly, to Magnaplate's evolution of high technology methods of achieving enhanced performance from primary metals. As NASA entered more advanced phases of its space program, new problems kept cropping up, requiring technological improvements to provide extremely hard, dry-lubricated surfaces to hundreds of aluminum, titanium and steel parts, tools and pieces of equipment.

1980

GM opens California facility.

1985

Ed Aversenti joins General Magnaplate.

70's

60's

1954

Magnaplate moves to Bloomfield, NJ plant.

1958

Magnaplate makes first Public Reg 'A' Offering *And* moves to larger Belleville, NJ plant.



1963

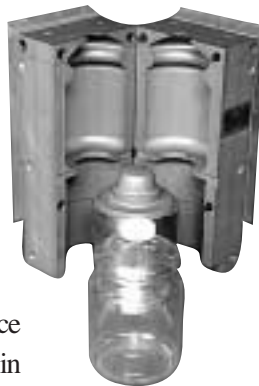
Doc, and a hand-picked team comprising scientific specialists, evaluates all Quality Assurance for NASA and its prime contractors. A report and recommendations was made to the entire NASA staff, including General Von Braun. This helped establish Doc's notoriety as a World leading metallurgist, and played a major part in the Company's success.

1968 CANADIZE® Invented

CANADIZE augments surface hardness and lubricity for titanium and titanium alloys.

1970 NEDOX® Invented

Significantly increasing metals' corrosion resistance and wear life, NEDOX permanently combines the advantages of plating with the controlled infusion of low-friction polymers and dry lubricants.



1967

Tufram, Inc opens in Linden, NJ to produce cookware ranked No. 1 in the US 2 years in a row by Consumer Reports.



80's

1982

Texas facility upgrades to current Arlington location *And* Candida Covino joins company.

1983 MAGNAPLATE HMF® & MAGNAGOLD® Invented

MAGNAPLATE HMF creates an extremely hard, mirror-smooth, highly reflective micro-finish on the surface of ferrous metal, copper or aluminum alloy components. MAGNAGOLD, on the other hand, is an enhanced PVD titanium nitride coating for high strength alloys.

1975 MAGNADIZE® Invented

Increasing the surface hardness and lubricity of magnesium, MAGNADIZE improves the metal's resistance to corrosion and oxidation, and prevents abrasion and galling.

1988
MAGNAPLATE
HCR®
Invented

HCR increases atmospheric corrosion protection beyond all known methods of aluminum treatment while also providing excellent wear resistance.

And First UK licensee announced: Poeton UK.

And First Dutch licensee announced: Mifa BGT OPPER-VLAKTE-TECHNIEKEN.

1990
GM Canada
Formed and
Wisconsin
Established

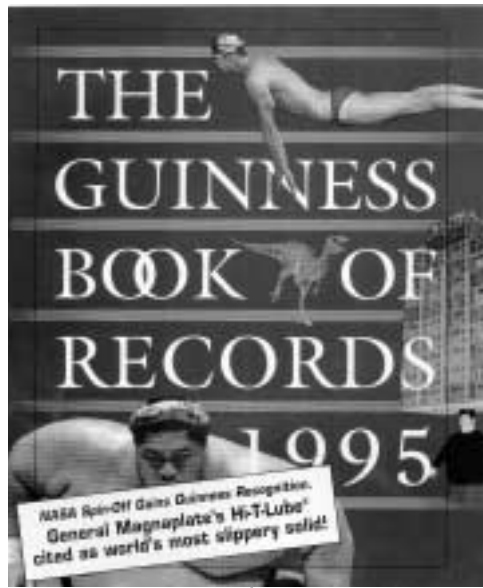
GM Canada, Ltd. in Ajax, Ontario

And GM Wisconsin opens in Racine.

And DYNALOY™, a hard, super-thin selectively deposited chromium coating is invented and applied by GM Canada, Ltd.

1995
HI-T-LUBE®
Makes
GUINNESS
BOOK OF
RECORDS

HI-T-LUBE is recognized by the GUINNESS BOOK OF RECORDS as the solid with the lowest COF in the world. It replaced Dupont's Teflon, the previous record holder.



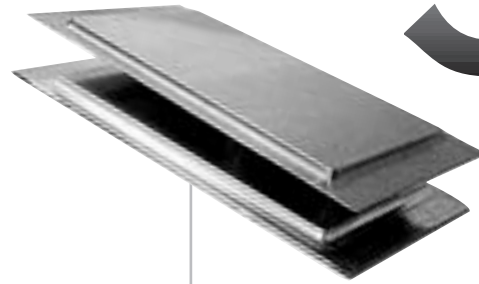
1997
MAGNAPLATE
HTR®
Invented

MAGNAPLATE HTR increases the release efficiency of molds and dies made of steel, copper, brass, aluminum and other metals exposed to high temperatures (1500°F).

1998
MAGNAPLATE
CMPT®
Process
Invented

CMPT is a breakthrough development by General Magnaplate in layup molding technology to save time and money for fabricators of parts constructed of composite materials. CMPT process reduces the total time needed to make large layup molds (tool faces) for complex reinforced composites from the current 6 to 12 months to as little as 6 weeks, while slashing costs by one-third!

And GM Canada upgrades to new larger Ajax location.



2000
Magnaplate's
Linden Facility
Receives VPP
"Star Site"
Designation
From OSHA

General Magnaplate Corporation is designated a "Star Site" by the US Department of Labor's Occupational Safety and Health Administration (OSHA). This is the highest designation given by OSHA, and makes General Magnaplate one of only four "small" companies in the United States to receive this honor.

GENERAL
MAGNAPLATE



2002

90's

1986

Candida Aversenti becomes President

And MAGNAPLATE SNS™ invented.

1989
PLASMADIZE®
Invented

PLASMADIZE combines the advantages of thermal spraying with the controlled infusion of polymers, dry lubricants or other materials to provide an entirely new composite with improved properties.



1991

GM Wisconsin expands to new larger Racine facility.

And Doc inducted into New Jersey Inventors Congress and Hall of Fame.

1992

GM receives the Lyndon B. Johnson Space Center Award for its contribution to the 'space program'.

1995
MAGNAPLATE
TNS®
Invented

MAGNAPLATE TNS coatings solve the "sticky substance" problems encountered so often in all segments of the adhesive industry — adhesive formulating, label printing, tape manufacturing, and converting.

And GM is a semi-finalist for New Jersey Family Business of the Year Award.

1996
Magnaplate.com
Goes
Live

General Magnaplate grasps the cyber age firmly and offers customers a wealth of information about its products, and their applications, on www.magnaplate.com.



GOLDENEDGE®
Invented

GOLDENEDGE is an ultra-hard, micro-thin coating for use on the cutting edges of blades, knives, slicers and other sharp-edged devices.

1999

CMPT wins New Jersey Research & Design Council Patent of Year Award.

And first German licensee appointed: Nussbaum BODYCOTE.

And Hank Levin retires from Board Of Directors after 40 years of service.

And GM Corp. voted into NJ's Inventor's Hall of Fame.

And Doc Covino retires as CEO.



2001
18 Coatings
Earn NSF
Approval

18 coatings produced at all five General Magnaplate facilities are certified to the new ANSI/NSF/3-A Standard 14159-1-2000. The standard, entitled, "Hygiene Requirements for the Design of Meat and Poultry Processing Equipment," encompasses materials, design and construction requirements of equipment used in meat and poultry processing. Not only is General Magnaplate the first coating company to achieve this status, but its coatings are certified for use on processing equipment where direct food contact exists.

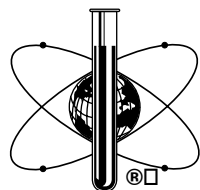
The Faces Behind 50 Years of Magnaplate



Row 1: Doc, Sylvia & Candi Covino; Hank Levin & Nicholas Partenope; Ruth Richards & Doc; Candi Aversenti; Ed Aversenti
Row 2: Vince Meringolo; Wayne Cromwell; Cathy Geddis
Row 3: Martin Chadwick; Tom Aitken; Corey Wesnitzer
Row 4: Tom Templin & Gaylon Pleasant; Michael Hartstein
 Tim Martinson; Larry Campbell, Val Corigliano & Susan Neri; Walter Alina
Row 5: Joe Franklin; Joe Mauriello; Joe Dietz
Not pictured: James Wallwork



General Magnaplate Corp.



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Licensees in: Japan - ULVAC, INC. ■ Sweden - BODYCOTE YTBEHANDLING AB ■ United Kingdom - POETON INDUSTRIES, LTD.

■ Germany - BODYCOTE SURFACE ENGINEERING ■ The Netherlands - AHC OPPERVLAKTECHNIEKEN