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**MA Radiation Control Program
Environmental Radiation Laboratory**

Fax

To: Duncan White	From: Thomas F. O'Connell <i>TFC</i>
Fax: 610.337.5269	Date: January 31, 2001
Phone: 610.337.5042	Pages: 4 Pages, including cover
Re: NRC/NRC Equipment	CC:

As Requested For Review Please Comment Please Reply FYI

•Comments: Duncan,

History of H.C. Starck Company and how National Research Corp. of Cambridge and Newton fits into the mix.

Enjoy.

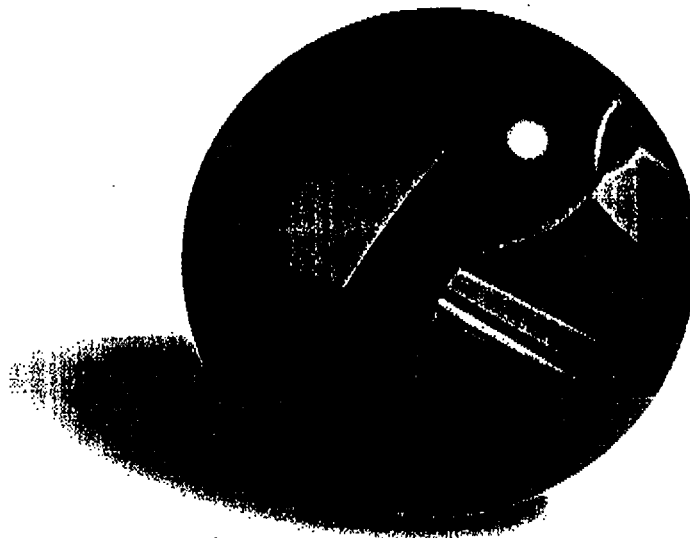
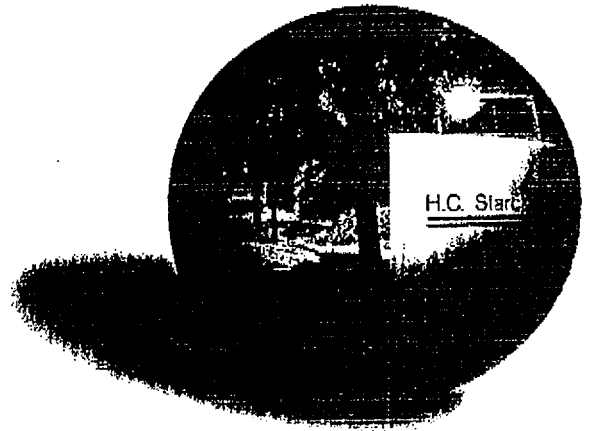
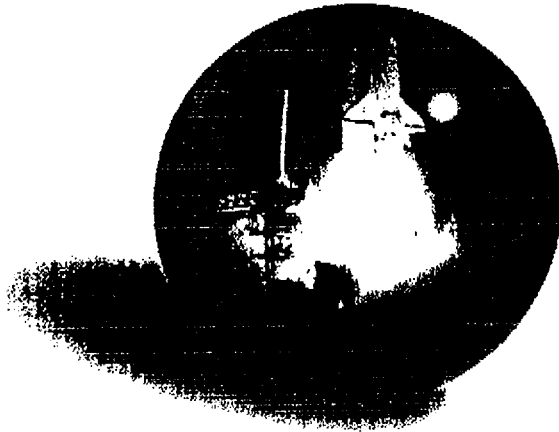
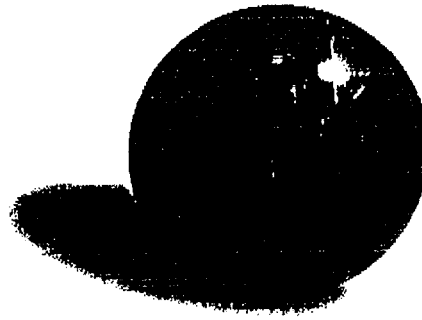
Thank you,

Tom

ITEM # 25

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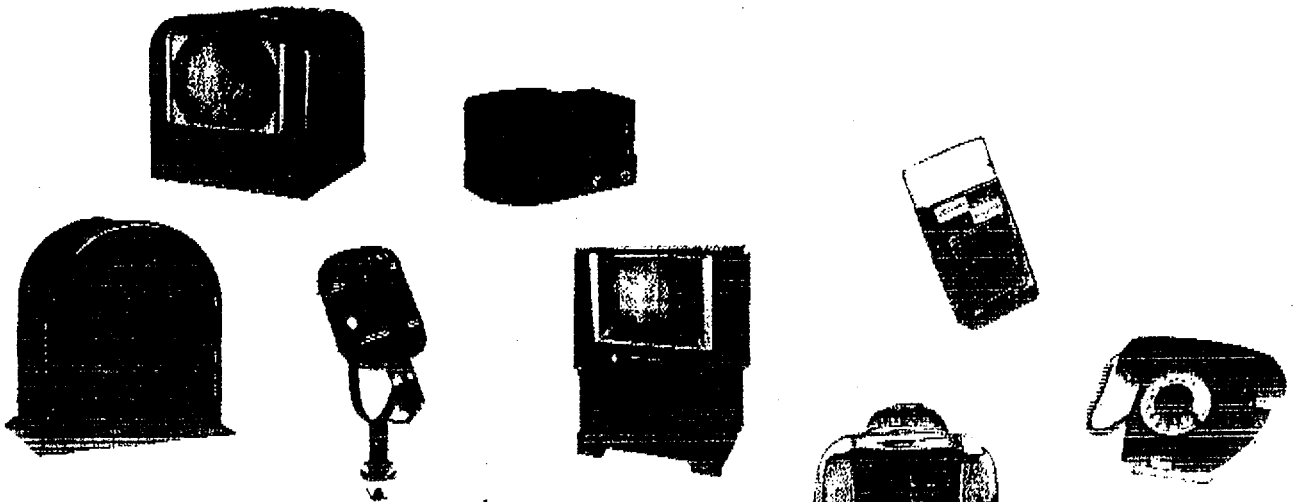
H.C. Starck Inc.
45 Industrial Place
Newton, MA 02461-1951 / USA
Phone: (617) 630-5800
Fax: (617) 630-4888
www.hcstarckus.com

A Bayer  Company



Company History

A look back at our past . . .



1940s

- ▲ National Research Corporation, Cambridge, MA is founded by Richard Morse and William Coolidge. Mission: Commercial development of the use of vacuum as a process tool.

Early products include: lens coatings for periscopes and binoculars; Minute Maid® frozen orange juice concentrate (now owned by the Coca-Cola Company); freeze-dried coffee; vacuum arc melted superalloys.

1950s

- ▲ Vacuum Equipment Division opens in Newton, MA.
- ▲ Processes for producing titanium metal are established.
- ▲ Zirconium plant opens in Pensacola, FL.
- ▲ Pilot work on producing tantalum by sodium reduction and arc melting begins.

- ▲ Tantalum sodium reduction plant is built in Newton, MA.

- ▲ Commercial production of tantalum powder, ingot and foil is started.

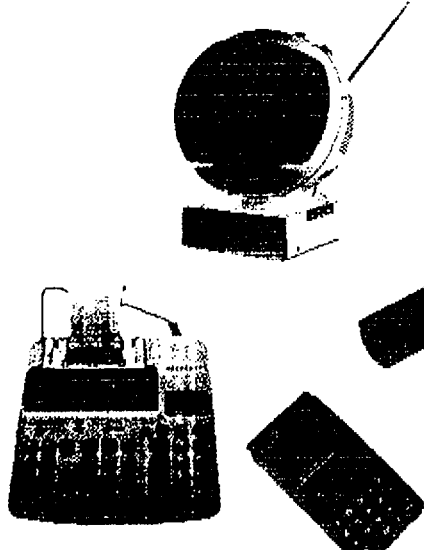
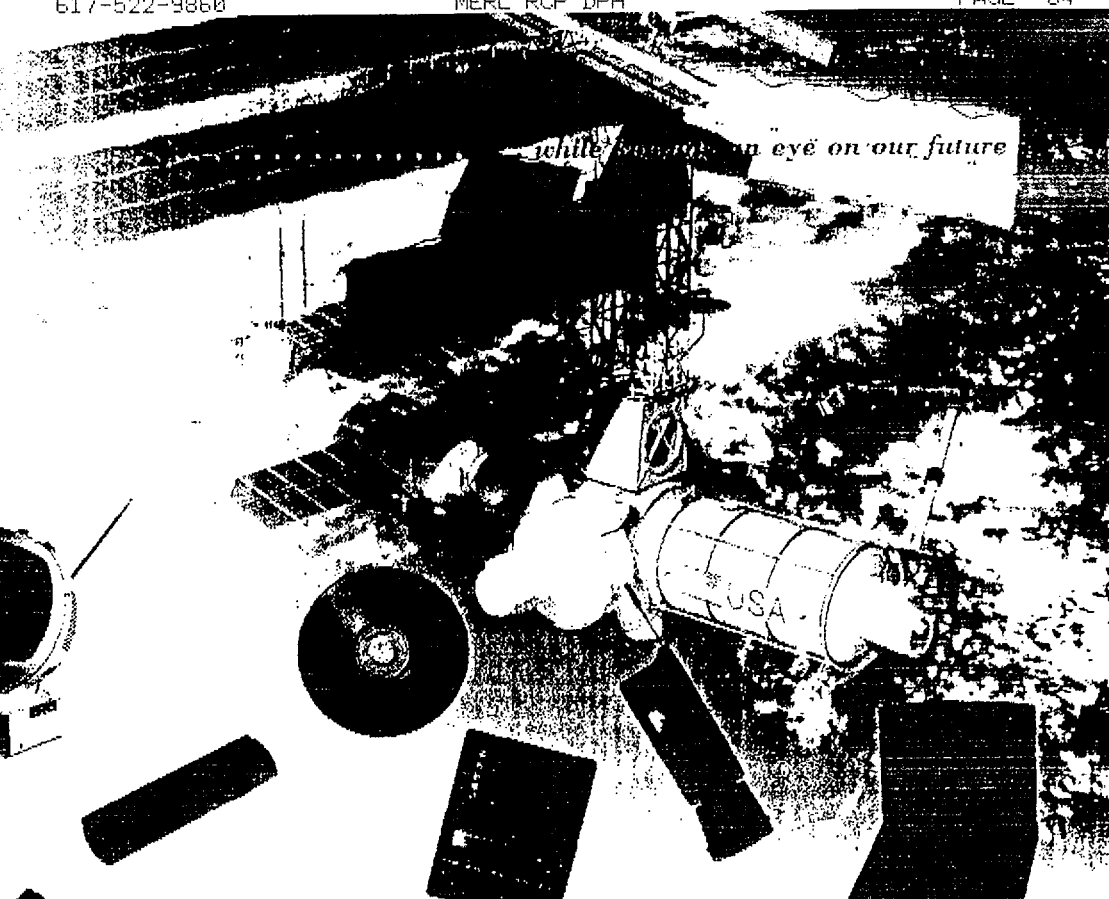
- ▲ Metals Division for tantalum applications established as a separate business.

- ▲ Tantalum reduced capacitor and tantalum powders, SGN and SP are produced.

- ▲ First metal tantalum powders, SGN and SP are produced.

1960s

- ▲ US patent issued for sodium reduction in stirred reactors, which became the basis for all tantalum powders produced worldwide.
- ▲ European sales office established in Switzerland.
- ▲ Metals Division headquarters, arc melting and labs are moved from Cambridge, MA to Newton, MA.
- ▲ National Research Corp. is purchased by Norton Company, Worcester, MA.
- ▲ Mill products and fabricated parts business are developed.
- ▲ Vacuum Metallurgical Corp. is established as the Japanese distributor for tantalum powder.



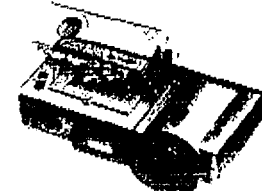
1970s

- ▲ Narton Company sells Metals Division to 50/50 partnership of H.C. Starck GmbH & Co. and Samincorp, Inc. New company is called NRC, Inc.
- ▲ Mill products and fabricated parts operations expanded.
- ▲ Doped powders developed.



1980s

- ▲ H.C. Starck is purchased by Bayer AG.
- ▲ NRC, Inc. becomes a wholly owned subsidiary of H.C. Starck.
- ▲ Deoxidized powders are developed.
- ▲ New series of higher-capacitance powders are developed.
- ▲ Starck acquires equipment and technology from Fansteel, Inc. and expands wire operations.
- ▲ V TECH becomes Japanese partner.
- ▲ Metallurgical processing capabilities improved with electron beam furnace, rolling mill and world's first commercial plasma arc furnace for melting refractory metals.



1990s

- ▲ Thai Tantalum is acquired by Starck Group.
- ▲ NRC, Inc. changes its name to H.C. Starck Inc.
- ▲ H.C. Starck, Sarnia, Canada is opened.
- ▲ H.C. Starck Inc. receives its ISO 9001 certification.
- ▲ Newton operations are expanded and modernized.
- ▲ Greater than 100,000CV/g tantalum and niobium powders developed.

History
 Responsible Care
 Continuous Improvement
 We Affect Your Life
 Products
 Global Vision