



BERNHARDT FUDYMA DESIGN GROUP  
Thinking about brands in transition.

## Nano by nature.

How a conventional mining operation transformed its brand into that of a high-tech materials provider.

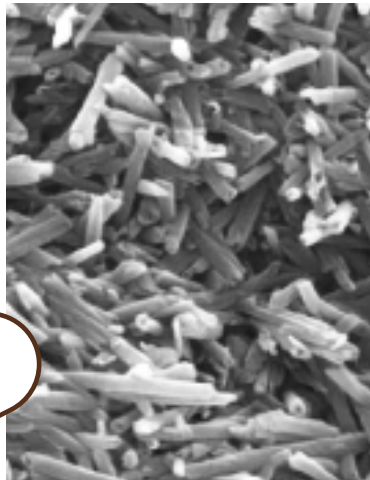
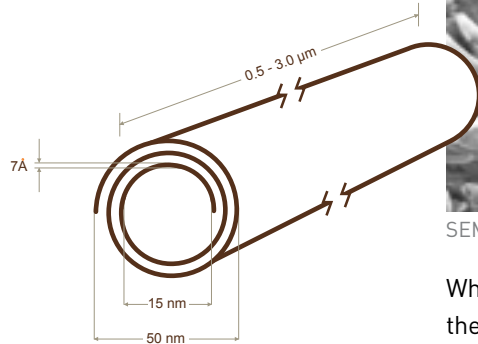
CONTEXT

## THE DRAGON MINE

For centuries artisans have been using Halloysite clay to make porcelain and other fine china. But it wasn't until the 1950's when scientists, armed with high-powered microscopes, discovered that Halloysite particles were tubular in shape. Since the 1990's, when technologies to take advantage of the particle's unique structure emerged, Halloysite has been utilized in numerous nanotechnology applications that range from molecular sieves, composites and electronics to nano-containers for the controlled release of agents in the agricultural, cosmetic and pharmaceutical industries.

Unlike other synthetic nanotubes, Halloysite is a non-toxic, biocompatible and natural product which poses no threat to the environment.

A single layer of Halloysite is generally 7-10 angstroms (1 nanometer) thick. A human hair is 500,000 angstroms in diameter.



SEM image of Halloysite



The Dragon Mine

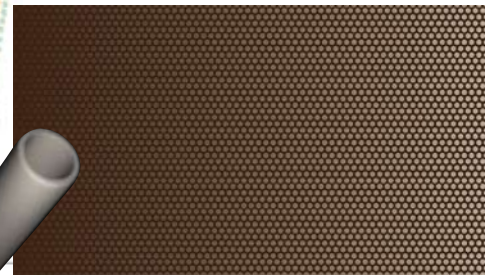
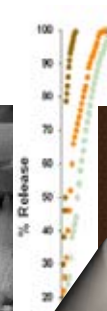
When the Atlas Mining Company and its Dragon Mine in Utah, the only commercially viable source of Halloysite in the western hemisphere, was restructured and renamed Applied Minerals, the new management retained leading experts to create a standard for the characterization and quantification of this unique mineral and developed consistent and high quality product grades for specific material applications. They also retained the services of the Bernhardt Fudyma Design Group and Solution: Design+Marketing Communications llc to create a new brand identity that would help to re-position the company from a 20th century mine operator to a 21st century high-tech materials business.

CONTEXT

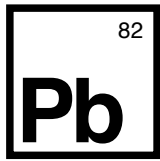
DISCOVERY

## THE VISUAL LANGUAGE

Our initial step was to assemble relevant imagery and iconography that would serve as a touchstone for our thinking in developing the new brand identity.



Natural



Nanotechnology

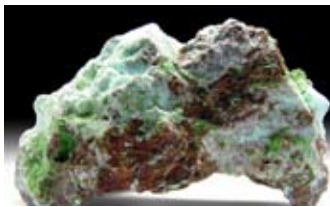
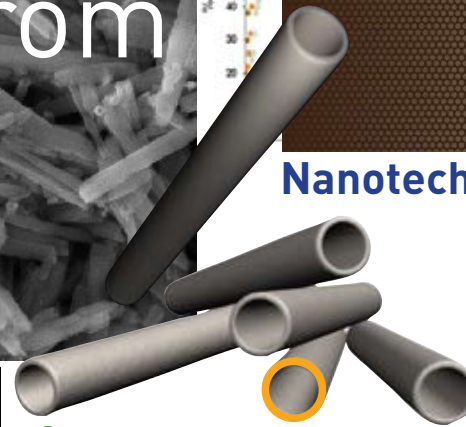


Photo of halloysite ore from the Utah mine



Green

CONTEXT

DISCOVERY

SOLUTION

## OWNING THE ANGSTROM

Discerned during our research, we decided that the scientific symbol for the angstrom unit – a capital A with a circle above – was also the perfect solution for the company's logo. Not only is it the key initial of their name, but the circular element is indicative of a tube structure viewed on end. This new identity, expressed in the natural colors of Halloysite, was applied to their full complement of business papers, presentation and trade show materials.



CONTEXT

DISCOVERY

SOLUTION

APPLICATION

## EXPANDING THE ANGSTROM

The company sub-branded all of their Halloysite products under the Dragonite name, into which we also imbedded their logo.

# APPLIED MINERALS DRAGONITE™



The circle also became a visual device which linked their logo to the display of various applications and compounds in a molecular-like expression.

CONTEXT

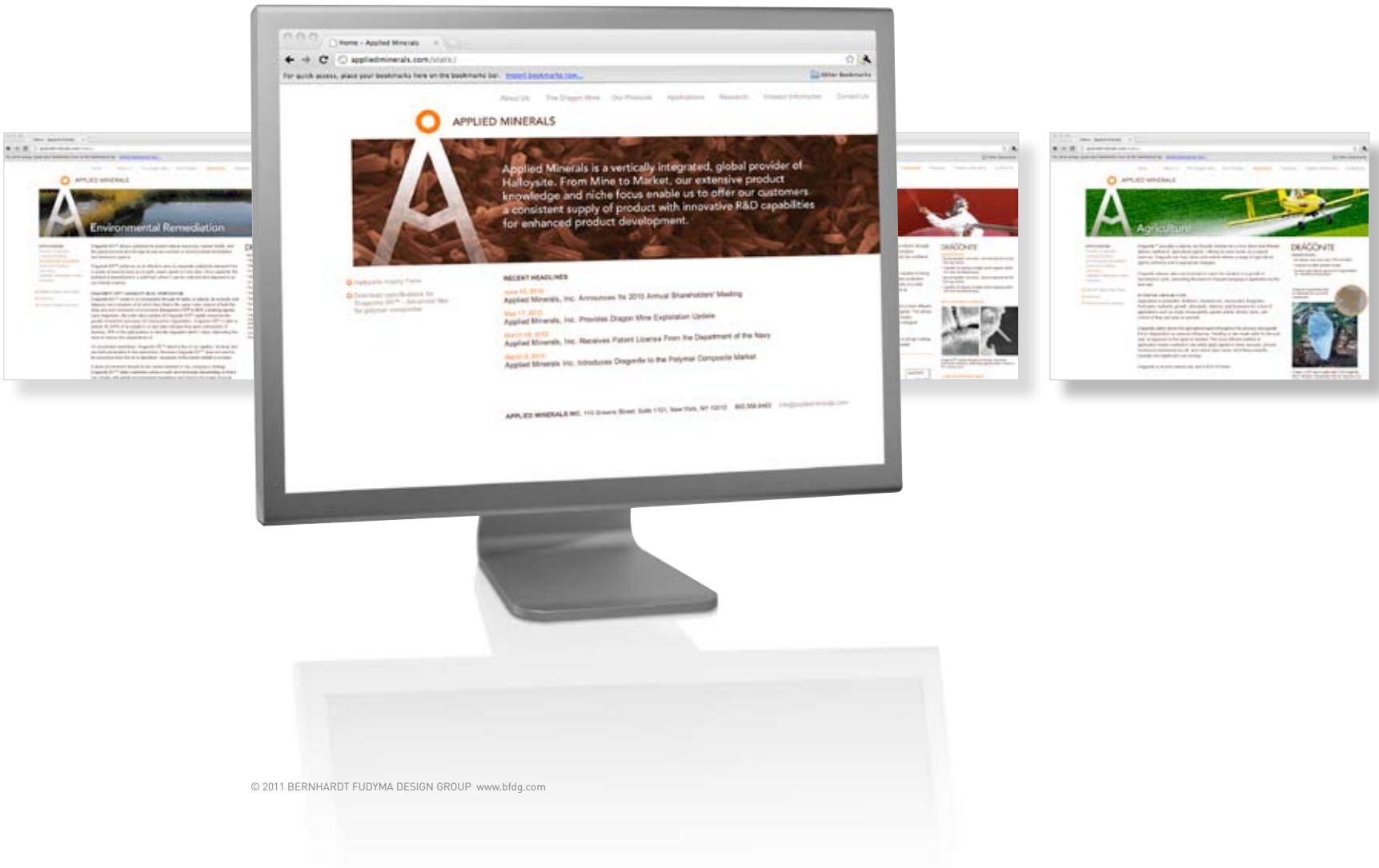
DISCOVERY

SOLUTION

APPLICATION

## FROM ATOMS TO BITS

We created a corresponding web presence where potential customers could find out about Halloysite's capabilities and the many research studies being conducted on new utilizations and applications.









## THE RESULT

“Bernhardt Fudyma’s ability to understand our new strategic direction and message was integral in creating the right image to convey to our customers. They have helped us communicate with and attract the interest of a wide variety of new industries, markets and technologies, and create a foundation for the brand to be recognized as the authority and only practical source for Halloysite nanotubes.”

Andre M. Zeitoun  
PRESIDENT AND CEO



## WHAT ABOUT YOU

The Bernhardt Fudyma Design Group creates strategic branding and design solutions for organizations in transition – whether due to acquisitions or mergers, expansion into new markets, or the need for increased visibility or differentiation in existing markets. Each project we've encountered has inspired the client to move beyond business as usual and the results can be invigorating.

We look forward to helping you do the same.

To learn more about this and other brand identity systems created by Bernhardt Fudyma, contact Craig Bernhardt or Janice Fudyma:

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