



GRATZ INDUSTRIES The Great Unknown

By Sandy McLendon



In the cluttered workshop of Gratz Industries in Long Island City, New York, a hulking old machine broods amid sheets of plywood, piles of metal rods, bins of springs and pulleys, a phalanx of industrial sewing machines and a sign that warns "No Goggles, No Work." Its name, emblazoned on its battleship grey flank, is "DoAll." This sums up neatly the creative, can-do philosophy that has earned this metal fabricator its enduring reputation as the "go to" company for industrial design greats like Donald Deskey and Raymond Loewy and, later, for detail-oriented architects and designers like Mies van der Rohe, whose famed *Barcelona* chair achieved its designer's impossible vision for its legs at Gratz: two perfect shining arabesques flowing through each other like water or air.

Gratz manufactured the metal frames for this midcentury modernist classic for many years — including those that still stand in the Four Seasons restaurant at Mies's Seagram Building — as well as the architect's *Brno* and *Tugendhat* chair frames, all three for Knoll (the *Barcelona* and *Brno* are now fabricated for Knoll in Italy; Gratz still makes the *Tugendhat*). They also made Noguchi's *Rocking* stool and designs by Le Corbusier and the Eameses. More recently, designers like Massimo and Lella Vignelli and Richard Meier have brought their designs to Gratz for prototyping and fabrication, and the small company — today it has 20 employees — has also made

many of the large scale sculptures seen in public plazas and major museums for artists like Noguchi, Sol LeWitt, Robert Rauschenberg, Donald Judd, Barnett Newman, Forrest Myers and Walter de Maria. But despite this heady list of clients, the company's name is largely unknown since, like that of a ghost writer, it rarely appears on its products.

Originally known as Treitel-Gratz, Gratz Industries was founded by Frank Gratz, a structural engineer trained at the Massachusetts Institute of Technology, and Edward Treitel in 1929, in the midst of the Art Deco and Streamline Moderne era. They were well located on 32nd Street in Manhattan, where a new breed of industrial designers like Deskey and Loewy was taking metal design to new heights, aesthetically and structurally. "They were the 'smart' metal guys," says David Rosencrans, managing partner and president, and a designer himself, who joined the company almost four years ago. "Frank was a brilliant engineer. People could come with ideas and he could figure out how to make them - the metallurgy, the alloys. He did structural engineering in metal." That technical mastery was supported by the old world skills of Gratz's first employees: metal artisans from Austria, Czechoslovakia and Bavaria. Then, as today, rather than mass production, the company focused on what it did better than others: developing concepts and prototypes for architects and designers and machining parts. Among their early projects were metal elements for Radio City Music Hall for Deskey and prototypes for Loewy, including his pink rolling tea cart, used for serving refreshments at the Lord & Taylor department store, and his iconic Coca-Cola dispenser. The company also supplied the military with chairs and aircraft consoles in the 1930s and '40s. In the 1950s and '60s, Gratz manufactured the designs of William Katavolos, Ross Littell and Douglas Kelley, under the name Laverne Furniture. When that company ceased operations in the late 1960s, Gratz produced the designs under its own name until the 1970s.

There were other metal shops to choose from, but Gratz developed a reputation for figuring out how to bring the most barely conceived ideas to fruition. The company became known for being able to "take a drawing from the back of a napkin and run with it," says Rosencrans, "and offer options in engineering, materials, fabrication techniques

Opposite, top Treitel-Gratz fabricated Mies van der Rohe's Barcelona lounge chairs and ottomans and the glass and steel table for the Four Seasons restaurant in Mies's Seagram Building, 1959.

Opposite, bottom Treitel-Gratz produced Mies's *Tugendhat* chair, designed in 1929, for many years for Knoll. Gratz Industries now produces the chair under the Gratz Archive Collection.

Right, top Donald Gratz, right, and artist Barnett Newman in the Treitel-Gratz workshop during fabrication of Newman's sculpture Here 111, 1966.

Right, bottom Prototype of Raymond Loewy's famous beverage dispenser, c. 1942.

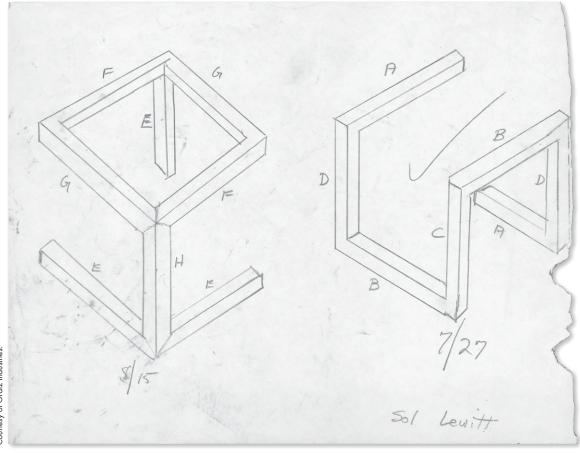




Courtesy of Gratz Industries







Above Treitel-Gratz product line sheets, c. 1962, showing the *TG-10* side chair, designed by William Katavolos, Ross Littell and Douglas Kelley for Laverne Furniture, left, and the Le Corbusier *Sling* chair, right.

Left Diagrammatic drawing by artist Sol LeWitt of a sculpture for fabrication by Treitel-Gratz, 1975.

and aesthetic considerations that the designers may not have considered and that other metal shops will not or cannot take the time to penetrate and finesse." Such expertise could also lead them to turn a designer down. In the 1950s, Frank Lloyd Wright came to Gratz for a chair for the Guggenheim Museum. Frank Gratz told Wright the design wouldn't work and, never one to be intimidated by fame, shrugged off the architect's ire. "Frank Gratz was no shrinking violet," says Rosencrans.

Frank Gratz had an able heir in his son, Donald, born in 1934, who joined the company straight out of college in 1955; he ran it from 1972 until his death in 2003. The younger Gratz learned about the business from his father and from Harold Treitel, the company's salesman. Donald Gratz excelled at finding the most accurate and powerful way to express a designer's intent, and this quality, as well as his deep knowledge of metals and their properties, garnered the trust of modern artists and designers like Maya Lin, whose 1994 Eclipsed Time steel and aluminum clock for New York's Pennsylvania Station was made by the company. The famous "button and needle" sculpture (1996), designed by James Biber of Pentagram Architects for New York's Fashion Center Information Kiosk on Seventh Avenue, is a Gratz fabrication as well, and the company is still called upon by museums and artists' estates to repair sculptures they made years ago. Gratz Industries's work with Noguchi included prototype frames for his Akari lamps, his Trinity and Two Equals One sculptures and his massive Detroit Pylon, a 120-foot-high stainless steel sculpture. While Noguchi also used other fabricators, his relationship with Gratz Industries was long-lasting and warm; Roberta Brandes Gratz, Donald's widow, remembers, "Donald would drop everything when Isamu walked into the shop." In appreciation, Noguchi presented the Gratzes with a sculpted self-portrait in Cor-Ten steel.

Since Donald Gratz's death, Roberta Gratz and Rosencrans have worked hard to maintain the company's enviable reputation for innovation and excellence. Rare today, Gratz is a union shop, as it has been since its founding in a more populist era. In some ways, this works in its favor in New York City, enabling



Above Promotional photo for the Le Corbusier Sling chair, c. 1960. **Below** Treitel-Gratz promotional brochure for the Aluma-Stack chair, designed by Jack Heaney, 1950.



The heavy canvas seat and back may be had in any of four fast colors, as per attached swatches. The canvas is water repellent and mildew resistant Orders for 100 or more chairs may be had in any special color to match auirements



TREITEL - GRATZ

ALUMA-STACK CHAIR









Above Isamu Noguchi, *The Seed*, sculpture in aluminum, fabricated by Treitel-Gratz in 1946.

Left, top Beverage cart designed by Treitel-Gratz, c. 1949.

Left, bottom Isamu Noguchi, *Rocking* stool, 1960, in chromed steel with wood seat and base. Treitel-Gratz prototyped and fabricated the stool.

Opposite, top Recreation by Gratz Industries of Edward Durell Stone's 1964 brass-disc auditorium ceiling, 2008, at the Museum of Arts and Design (formerly the "Lollipop" building) at Columbus Circle in New York City.

Opposite, bottom Treitel-Gratz fabricated the Raymond Loewy-designed globe in 1950 for the lobby of the Lever Brothers Building, in Cambridge, Massachusetts. A Treitel-Gratz worker puts on finishing touches, left; promotional photograph, right.

it to work on projects like the 15-by-15-foot stainless steel and glass sculpture of the Bank of America logo, which hangs in the lobby of One Bryant Park. But competition from offshore manufacturing has made the cost of union labor for most production prohibitively expensive, so the shop focuses on protoyping except for art projects and one-off pieces, like a glass and metal-rod wall feature that Rosencrans designed for the Thompson LES Hotel in lower Manhattan recently or the reproduction of the swooping suspended ceiling of gold-anodized aluminum discs for the auditorium at 2 Columbus Circle, originally designed by Edward Durell Stone, now extensively remodeled as the home of the Museum of Arts and Design. It does have a quirky financial mainstay, however: Gratz is one of the principal manufacturers of Pilates exercise equipment. The only company to have worked with Joseph Pilates, founder of the exercise program that bears his name, Gratz has sold the precisely crafted steel-and-wood apparatus all over the world since the 1960s.

The company recently renewed its relationship with William Katavolos and is again producing historic Laverne designs, such as the leather sling *T* chair from 1952 (now called the *TG-10*), under its own Gratz Archive brand. Gratz Archive also offers new Katavolos pieces based on Laverne designs that were never produced.

Designers and architects like Diane Lewis still rely on Gratz's perfectionist ethic. Lewis, an architect who formerly worked with Richard Meier











Above Maya Lin, *Eclipsed Time*, 1994, Pennsylvania Station, MTA Long Island Rail Road. Ceiling mounted timepiece in sandblasted glass, aluminum and fiber optics. Commissioned and owned by Metropolitan Transportation Authority Arts for Transit. Fabricated by Treitel-Gratz.

Left Gratz Industries employees work on a prototype of a chair by Eva Zeisel, 2009.

and I.M. Pei and has been principal of her own firm, Diane Lewis Architect, since 1982, describes her 25 years of working with Gratz as a "Renaissance relationship." She sees the company as the modern-day equivalent of a craft guild, whose arcane, yet practical, knowledge of metals and their fabrication frees designers to create instead of worrying about how something can be made. "They go the extra mile with crazy, interesting details," she says. The shop succeeds by relying on the old ways, cutting, bending and polishing metal with World War II-era milling machines and lathes, making every piece by hand.

On a recent Friday, Junior Adams, metal cutter at Gratz for 24 years and originally from the island of St. Vincent, was working in the dusty mid-afternoon light that streamed through the high windows. Adams came

to the company as a 20 year old, fresh from doing automotive body work, and was trained by Donald Gratz. "He was a professional," he says reverentially. "He could estimate how much material to order. There was no waste. He paid a lot of attention. He was a very thoughtful, intelligent guy."

Adams might well have been speaking of the company as a whole: paying attention, thoughtful, intelligent - it's what generations of great designers and artists have appreciated about this small, oldfashioned shop. Gratz Industries may never be a household name, but to those who depend on it, its services are irreplaceable.

Right Gratz Industries fabricated the "button and needle" sculpture at the Fashion Center Information Kiosk, designed by James Biber of Pentagram Architects, at 39th Street and 7th Avenue in New York City in 1996.

Below David Rosencrans of Gratz industries designed this blown-glass and aluminum feature wall in 2008 for the Thompson LES Hotel in New York, commissioned by Dodd Mitchell Design of Los Angeles. The glass vessels were made by Nouvel Glass Studio in Mexico City and the attachment system engineered by TriPyramid Structures of Westford, Mass.



