

# SOURCEBOOK OF MODERN FURNITURE



Jerryll Habegger • Joseph H. Osman

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Jerryll Habegger  
Joseph H. Osman



VAN NOSTRAND REINHOLD  
New York

To Nancy C. Los, Director of Education, Harrington  
Institute of Interior Design. She has provided an  
environment that nurtures the talents of others.

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# SOURCEBOOK OF MODERN FURNITURE

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## PREFACE

The purpose of this book is to provide a concise reference of the works of industrial designers and architects whose ideas are widely considered to be the most influential in the development of modern furniture and lighting. It is intended to benefit the interior design and architecture professions as a sourcebook for high-quality products applicable to all design areas.

The products presented in this book are truly representative of creative design experimentation within the context of available technology. They reflect the design philosophy that the results of creative purpose and experimentation are superior to those of poor imitation (or kitsch) and misinformed historicism. To that end, this book is a celebration of both the works of dedicated designers and the vision of innovative manufacturers who have translated their works into reality.

The specific pieces in this book were selected on the basis of the integrity of their design philosophy, materials expression, and form content. While these criteria are interrelated, the individual definitions in use are as follows:

*Design Philosophy:* The products illustrated embody a philosophy that conveys values—an attitude attained through critical analysis, creative goals, and experimentation. The results of this design philosophy offer

new experiences, thereby heightening visual responses and provoking thought.

*Materials Expression:* The materials technology and manufacturing methods employed in these products involve both innovative techniques incorporating traditional materials and novel production processes that utilize new materials. The materials detailer anticipates function and interprets it into new form.

*Form Content:* Each product presented has been analyzed for its visual expression (pure form, proportion, and scale) in space, for its direct relationship of shape configuration to human requirements, and for its physical utility and efficient function.

The following data are provided for each entry:

- Model name or number
- Year of design (entries are arranged chronologically)
- Designer(s)
- Manufacturer
- Materials
- Dimensions

The List of Suppliers provides manufacturers' names and addresses. There are three indexes, each listing a different aspect of the product: designer, model name or number, and manufacturer.



# INTRODUCTION

Furniture design and production have undergone more dramatic progress in the twentieth century than at any other time in history. In the last 120 years, a truly modern idea of furniture has evolved. The acceptance of the machine as a positive and creative aesthetic force marked the beginning of the modern era. Resulting new techniques enabled creative designers to go beyond the imitation of historical forms.

In the mid- to late nineteenth century, the technology existed for mass production of objects. Mechanization yielded more economic and effective manufacturing methods. During the first part of the twentieth century, innovative design experimentation had its roots in the concepts of mass production and adaptive reuse of existing materials. It is thus fundamentally ironic that so many significant designs from this period were hand crafted.

Following World War II, new production techniques and industrial materials, such as aluminum alloys, curved plywood, and plastics, were adapted to domestic uses and became the standards. The principal attractions of these materials

were mobility and lightness. The Americans and Italians led in the research and development of these new materials and technologies. Significant materials and components developed were: steel and aluminum frames, tension springs, rubber diaphragms, plastic foam cushioning, semirigid plastic shells, and synthetic resin adhesives. New fabrication techniques included: Fiberglas lay-up, thermal forming, extrusion, injection, and compression molding. In the 1980s the achievements of modern technology have made it possible to shape materials in such a way that an almost complete freedom prevails in the design field. The chronological evolution of materials detailing is evidenced in the descriptions of the selected works included as part of this introduction, and in the captions accompanying the photographs.

The following designs, presented in chronological order, represent the best examples of the modern idiom. The products illustrated range from those that are instructive of function and structure to others that are purely sculptural. Each design is referenced by designer in the book's index and by manufacturer in the list of suppliers.

## INTRODUCTION

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1870 \_\_\_\_\_

### "CORBUSIER" DINING CHAIR

This Gebrüder Thonet-designed chair is the oldest modern chair in production. Because there was little appropriate modern furniture prior to 1925, Le Corbusier used this piece quite extensively in his earlier interiors. Hence, it has become known as the "Corbusier." The tight structural organic curves are achieved through the steam bentwood process, in which a thin, flexible strip of steel is clamped along the outside of the steamed wood. The bentwood process of 1840, developed by Michael Thonet, revolutionized the mass production of furniture. The advantages of steam bending over lamination were that the process required less work and the chairs were more durable. Lamination was not desirable because of the limitation of the glues available at the time. In addition, the elements could be disassembled and shipped knocked down.

This chair consists of only five elements of Carpathian beechwood, overlapped and joined with screws, eliminating complex joints. It expresses an unpretentious simplicity of construction and line in a sculptural, lightweight form (15 pounds/6.8 kilos).

1900 \_\_\_\_\_

### OPAL PENDANT HANGING LAMP

One of the first designs for a lamp employing electric light bulbs was the Opal Pendant. It consists of a chrome-plated tube with an opaque globe.

1903 \_\_\_\_\_

### HILL HOUSE I DINING CHAIR

Charles Rennie Mackintosh's tall, thin ladderback chair of ebonized ashwood is an ornamental and sculptural abstraction weighing 6 pounds (3 kilos).

1904 \_\_\_\_\_

### LARKIN SWIVEL-BASE DESK CHAIR

Frank Lloyd Wright's central-pedestal-base metal desk chair became the prototype for the task chair in the office furniture industry.

1910 \_\_\_\_\_

### D 51/2 SOFA

Walter Gropius's simple, geometrically constructed, 55½-inch-wide sofa with an ashwood frame achieves an open and lightweight feeling.

1918 \_\_\_\_\_

### RED AND BLUE LOUNGE CHAIR

Developed as an abstract sculptural form, Gerrit T. Rietveld's Red and Blue chair liberates the seat planes from the support structure—an aesthetic exercise that functions as an example of unimpeded horizontal, vertical, and diagonal elements.

1924 \_\_\_\_\_

### B 80 DINING CHAIR

Jean Prouvé's folding chair, designed for his sister's wedding, was the first modern experiment in flat sheet steel. The steel was folded and welded into a streamlined support for seating.

### WAGENFELD TABLE LAMP

Wilhelm Wagenfeld's design represents a straightforward use of thick glass. The clear glass on the base and in the stem of the lamp reveals the interior workings.

1925 \_\_\_\_\_

### WASSILY LOUNGE CHAIR

Marcel Breuer designed this first modern lounge chair, constructed of tubular steel with a sled base. The skeletal framework is formed from a continuous line of tubing, providing solidity and visual lightness with intersecting support planes of canvas or leather.

### CASIERS STANDARD STORAGE SYSTEM

Le Corbusier went beyond the idea of furniture as a collection of single items and developed a system of cellular containers with coordinated modular sizes, called the Casiers Standard storage system. The basic system consisted of four containers



based on a 37.5-cm (14¾-inch) module. The Casiers Standard became the first example of a unit storage system, serving as a cabinet and a partition at the same time.

1926

### LACCIO SIDE TABLE

Marcel Breuer's Laccio table/stool, turned on its side, was the inspiration for the cantilever (projection) principle in modern furniture design. It was originally designed as a stool for the cafeteria at the Bauhaus. Mart Stam's S 33 dining chair of the same year is representative of the tubular cantilever principle.

### PH 4 ½-4 HANGING LAMP

Poul Henningsen's PH lamp applies a multishade principle. The size, shape, and position of the shades determine the distribution of the light and the control of direct glare from the lamp source. The color of the light is neutralized by adding color to some of the inner reflectors.

1927

### MR DINING CHAIR

Ludwig Mies van der Rohe's design represents the first *resilient* cantilevered steel-tube chair. The design spreads the tension through a curve rather than a sharp angle, taking advantage of the spring-like quality of tubular steel. Thus, it allows the suspended seat to move freely, up and down. Knoll introduced stainless steel versions of Ludwig Mies van der Rohe's furniture in 1947.

### TUBE LIGHT FLOOR LAMP

Eileen Gray's design is the first floor lamp to use a totally exposed incandescent tube as the light source, providing soft, nonglare general illumination.

1928

### LC/2 GRAND CONFORT LOUNGE CHAIR

Le Corbusier's LC/2 chair is fundamentally different from previous upholstered designs in that the cushions are contained within the tubular framework rather than serving to conceal the structure. The exposed structure consists of a

thick bar, which wraps around the frame and eventually forms the legs, and a thinner bar, which contains the cushions.

### LC/4 CHAISE LONGUE

Le Corbusier differentiated strongly here between the cradle and the base support through the use of different materials and detailing to express distinct functions. The seat frame (cradle), which is totally adjustable, is raised on two gliding arcs of tubular steel. The sitter's body is supported by reinforced elastic straps. The cradle may also be used separately as a rocker. The cradle is supported on rubber-covered stretchers that are welded to the painted steel base.

### LC/6 DINING TABLE

Once again, Le Corbusier differentiated between supported and supporting elements by giving the table top a floating quality. The supports and stretchers consist of oval metal sections with mitered and welded joints.

### S 35 LOUNGE CHAIR

In this chair, made of one continuous piece of steel, Marcel Breuer achieved a double cantilever; that is, both the arms and the seat cantilever from the same bent tubular frame. Thus, the seat moves separately from the arms.

1929

### BARCELONA LOUNGE CHAIR

Ludwig Mies van der Rohe's Barcelona chair, with a base of welded flat spring steel, flows from the floor plane, establishing structural clarity. The chair is one square meter in plan, is generous in scale, and weighs 84 pounds (38 kilos). Although the chair appears to be machine-made, it is manufactured almost entirely by hand.

### "BARCELONA" COFFEE TABLE

Ludwig Mies van der Rohe's low table eliminates a sense of heaviness and achieves a simplicity of aesthetic and technological organization. Although the table was originally designed for the Tugendhat House, it has been erroneously labeled the "Barcelona" table because it is so frequently used with the Barcelona chair.

### LIRA LOUNGE CHAIR

Piero Bottoni's curiosity is a double-cantilevered structure. It

## INTRODUCTION

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consists of a cantilevered seat suspended by nylon threads from a larger cantilevered support structure.

### 1930

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#### D 61 DINING CHAIR

El Lissitzky's design was originally executed in wood. In 1971 the Plexiglas version was introduced by Tecta Möbel.

#### BRNO (255) DINING CHAIR

By incorporating a noncontinuous flat steel frame, Ludwig Mies van der Rohe reduced the chair structure to two runners and a crossbar. The relationship of the seat thickness and the bar-stock width creates a harmonious proportion.

### 1931

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#### CHAISE LONGUE (241)

Ludwig Mies van der Rohe's extended version of the MR lounge chair incorporates channeled foam cushions. The full lounge support moves freely up and down.

### 1932

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#### PAIMIO (41) LOUNGE CHAIR

The arms and base of Alvar Aalto's chair are of laminated birchwood bent into a closed curve. Within the seat, strength is achieved through the varying thickness of the wood lamination. Added resilience is achieved in the scroll-shaped 3-mm plywood seat. This chair was designed for the Paimio Sanatorium in Finland.

### 1933

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#### MULTI-SECTIONAL (4-905) DINING TABLE

Alvar Aalto's use of two semicircular and two rectangular table sections allows for versatility in arrangement. The sections incorporate the *bent-knee leg*. This leg is constructed by taking a solid piece of birch and sawing grooves in the end in the direction of the fibers. Thin pieces of wood are glued into these grooves, reinforcing the bend at its greatest point of stress. The wood is then bent to the desired angle.

The foot of the leg is left solid so that it does not splinter with age.

#### AALTO WING (401) LOUNGE CHAIR

This adaptation of the laminated cantilever principle in wood was developed by Alvar Aalto in 1931–32. The compressive spring of seven birch laminations provides precisely the right balance of flexibility and resilience.

#### BREUER SEATING COLLECTION LOUNGE CHAIR

In this early experiment in aluminum, Marcel Breuer incorporated grooved-out flat bands of aluminum to form the double U supports, one for the leg and seat, the other for the arm.

### 1934

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#### EVA LOUNGE CHAIR

This design is the result of Bruno Mathsson's experimentation with basic anthropometric requirements in lounge seating. The laminated beech is shaped to the human body in a light and totally organic and harmonious form. The separation of the contoured lounge from the legs allows for compact stacking and hence, economical shipping and storage.

#### ZIG-ZAG DINING CHAIR

This stackable chair by Gerrit T. Rietveld had a revolutionary new structure. The diagonal cantilever incorporated a simple dovetailed and glued triangular joint.

### 1936

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#### LARIANA DINING CHAIR AND SANT'ELIA LOUNGE CHAIR

Giuseppe Terragni used the reverse (double) cantilever in a truly graceful and lyrical manner.

#### TEA TROLLEY (98) SERVING CART

Alvar Aalto's service cart has a sled base of molded, laminated birch and very large, graphic wheels. The wheels are of painted wood and are banded with rubber to deaden the noise from movement.



1937

## 2633 COFFEE TABLE

This table represents Pietro Chiesa's contribution to the development of bent plate glass.

JOHNSON WAX DESK AND  
ADJUSTABLE DESK CHAIR

Both structures, designed by Frank Lloyd Wright, are constructed of cast aluminum and magnesite soldered rod. The chair has a self-adjusting and rotating back support and a three-point leg support. The casters and bronze feet are interchangeable. The desk has multiriered levels to keep the main cantilevered surface free for writing. The drawers are hinged and swing on pivots.

## L1 TABLE LAMP

This Jac. Jacobsen design consists of a bell-shaped shade and a spring-balanced, 45-inch arm, which is totally adjustable. This was an altered design of an English lamp called the Anglepoise, for which Jacobsen secured patent rights.

## CT SERIES COFFEE TABLE

William Armbruster's table consists of a thin (1-inch) angled steel (L-profile) frame with radius reinforcements at the corners.

1938

## "WORK CHAIR" DINING CHAIR

This chair of spring steel is completely movable and was designed by Herman A. Sperlich for use with an ironing machine.

## SPARTANA DINING CHAIR

Hans Coray's design was developed when "steel-hard" aluminum alloys were first becoming available. The Spartana seat shell is formed from a single piece of aluminum sheer that is stamped by a large drop press, then punched with holes. The frame is tempered by heat. Its discoloration is then removed, exposing a soft crystalline surface finish that is impervious to weather and cool in the sun. The use of stamped, welded, and spray-painted sheer metal components

is the result of borrowing from the automobile industry. The chair weighs 6 pounds (2.7 kilos).

## BUTTERFLY LOUNGE CHAIR

The Butterfly chair was designed by the Argentinian architects Jorge Hardy, Antonio Bonet, and Juan Kurchan. The shape of this chair is based on an idea borrowed from a folding wooden chair used by British officers during the nineteenth century. The design is a continuous metal frame on which a fabric or leather seat is slung. Following World War II, the steel rod became the basis of many important design elements, placed within dynamic and organically conceived spaces.

1940

## 80 D DESK

Franco Albini achieved a lightness and simplicity for the desk function in his metal truss structure, which supports the glass top and the drawer unit.

1944

## CHINESE DINING CHAIR (4283)

Until 1943, Hans Wegner was employed by Arne Jacobsen's design office in Århus, where he designed the furniture for the Århus City Hall. Simultaneously, he designed an interpretation of a Chinese chair, incorporating a steam-bent top rail in wood. This was Wegner's first chair for mass production, and it established the high standards of hand woodworking typical of modern Scandinavian design.

1946

## LCM LOUNGE CHAIR

Charles Eames achieved both a thin structural frame in metal rod and a continuous body support of 5/16-inch, five-ply, laminated wood, subtly molded into two directional compound curves. The parts are attached to a rubber shock mount system, electronically welded to the wood. The design represents a major advance in the compound molding and bonding of materials.

## INTRODUCTION

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1947

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### VAN KEPPEL-GREEN CHAISE LONGUE

Hendrik van Keppel and Taylor Green pioneered in the area of modern outdoor furniture with this early experiment in cord-wrapped tubular structures.

### NOGUCHI COFFEE TABLE

The sculptor Isamu Noguchi used a triangular plate-glass top to reveal a biomorphic pivoting base. The soft angular configuration of the top makes it very versatile for space planning.

### Y 805 COFFEE TABLE

Alvar Aalto originally made the *Y leg* by sawing the bent-knee leg into two parts. The two 90-degree laminated bends were then mitered at their juncture.

### 406 LOUNGE CHAIR

In this chair, Alvar Aalto incorporated the principles of the laminated birch curve and the flexible, resilient cantilevered structure, developed in 1931.

### "THE CLASSIC CHAIR"

#### (JH 501) DINING CHAIR

Hans Wegner's "Classic Chair" achieves a spare, unified form in which all parts flow into each other. The visually light chair has simple sawtoothed joinery executed in solid wood.

1948

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### WOMB LOUNGE CHAIR

Eero Saarinen's chair is very deep and wide, with ample room for changing seating positions. The thin-profile seat shell is molded from a Fiberglas, plastic, and wood particle mix and covered with foam padding. The seat shell is supported by bent steel rod.

1950

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### ROCKER LOUNGE CHAIR

The introduction of economical molded plastic chairs began

with Charles and Ray Eames's one-piece, glass-reinforced polyester shell. It represents the first successful application of this material for furniture. The shell can be used with numerous other bases. The split-pedestal base was added in 1961 with the introduction of the "La Fonda" version.

### NOGUCHI SIDE TABLE

Innovative technology and materials inspired many designers to a new level of enthusiasm resulting in creative yet straightforward pieces. An example of this is Isamu Noguchi's floating-top table. It is made up of a cast-iron base supporting a steel-wire column structure for the plastic laminate top.

### TUBINO TABLE LAMP

With this design, Achille and Pier Giacomo Castiglioni introduced organic shapes to table lamps.

1951

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### ETR COFFEE TABLE

This long, low coffee table, with a surfboard-shaped top supported on wire bases, was first used in Charles and Ray Eames's 1950 LTR design.

### CANAAN DESK

Marcel Breuer's wood desk, composed of a central square opening and cantilevered storage drawers, expresses a pleasing 1:2 proportional relationship.

### PK 25 LOUNGE CHAIR

This chair was originally designed by Poul Kjaerholm as a master's thesis assignment given by Hans J. Wegner, while Kjaerholm was a student at the furniture department of the School of Arts and Crafts in Denmark. The chair frame was developed from one piece of spring steel, which was cut and bent to form the continuous linear structure.

1952

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### BUBBLE (CC 727) HANGING LAMP

George Nelson's hanging lamp represented a revolutionary application of a translucent self-webbing vinyl over metal ribs.



**HIGH-BACK (423) LOUNGE CHAIR**

Sculptor Harry Bertoia used steel rod here, hand shaped in a wooden mold and welded into a cellular structure. The high-back design is an open mesh in the shape of a bird.

**1952–53** 

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**NEW YORK SEATING (161.000.0) DINING CHAIR; NEW YORK SOFA; NEW YORK CONFERENCE DINING TABLE**

These three pieces, designed by Ross Littell, William Karavolos, and Douglas Kelley, and originally manufactured by Laverne, express a strong clarity of structure and dimensions that fall within "The Modulor" proportions (dimension multiplied by .618) of Le Corbusier. Both the New York Sofa and the New York Conference dining table employ the cantilever. All the elements of the New York Seating dining chair are in a T formation. The scroll-shaped connection between the leather sling and the frame is achieved by wrapping and screwing the leather around the halved rods of the frame.

**1954** 

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**FAN-LEGGED (X800) DINING TABLE**

Alvar Aalto's fan-shaped leg is made by sawing a bent-knee leg into five parts and doweling them into the table top.

**SOFA COMPACT**

Charles and Ray Eames's application of human engineering is evident in the profile of this thin, two-part, sectioned, high-back sofa. It weighs only 140 pounds (64 kilos) and folds flat for shipping. With this design, the Eameses established the standard for the "modern" sofa.

**A 805 FLOOR LAMP**

The strong organic contour of this floor lamp by Alvar Aalto filters the light while maintaining a unity of form.

**1955** 

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**SERIE 7 DINING CHAIR**

Arne Jacobsen's laminated-wood-veneer stacking chair pro-

vides good upper back support and flexibility through the freeform shape of the contoured shell.

**COCONUT LOUNGE CHAIR**

In George Nelson's sculptured design, the three points within the conical seat shell and the three support points come together to create a visual unity.

**P 40 LOUNGE CHAIR**

Osvaldo Borsani's versatile design, which incorporates totally adjustable elements, can take up to 486 distinct positions. The chair also features retractable and flexible rubber arms.

**1956** 

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**PEDESTAL (151) DINING CHAIR**

Eero Saarinen's chair fused four legs into one organically unified form.

**1957** 

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**SUPERLEGGERA DINING CHAIR**

Gio Ponti's chair is derived from the vernacular "Chiavari" chair. It weighs in at 4 pounds (1.85 kilos), probably the lightest of all modern chairs.

**PK 22 LOUNGE CHAIR**

Poul Kjaerholm's chair has neither a front rail nor a top bar. Stability is ensured by means of the clamp below the seat and the cross sewing of the upholstery. The attachment with raised Allen-head screws was innovative.

**1958** 

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**ALUMINUM GROUP DESK CHAIR**

Charles and Ray Eames originally conceived this as an outdoor chair. The chair's thin profile consists of one continuous seat and back plane suspended between structural ribs of polished die-cast aluminum. The "sandwich" sling consists of front and back layers of textile or vinyl and a reinforcement of vinyl-coated nylon with a 1/4-inch-thick layer of foam. The materials of the sling are welded together at 1 7/8-inch intervals through pressure and high-frequency current.



## INTRODUCTION

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1959

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### SWAN LOUNGE CHAIR

Arne Jacobsen's soft and mature sculptural form expresses both comfort and stability.

### CSS STORAGE

Based on the adjustable pole systems developed by Angelo Mangiarotti and Franco Albini in 1952, George Nelson's CSS (Comprehensive Storage System) consists of wooden components suspended on brackets between aluminum poles. The components can be adjusted to any height. As director of design at Herman Miller, George Nelson established the systems approach for corporate application.

1960

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### PANTON STACKING DINING CHAIR

Verner Panton's chair is made of rigid polyurethane foam, injection molded in one piece. It is the first one-piece chair made of plastic and manufactured entirely by machine. New developments in the plastics industry made many of the rounded and molded forms possible. It was not put into production until 1967, as no suitable materials were available in 1960.

### AJ VISOR FLOOR AND TABLE LAMP

These lamps are two of the objects designed by Arne Jacobsen for the SAS Royal Hotel in Copenhagen. Each lamp has a strong profile, an angled base, and a support stalk. Each base contains a void and reflects the shape of the shade.

1961

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### OVAL (2481) DESK

This desk, designed by Florence Knoll, consists of a canted base structure and a beveled-edge oval top, which provides a significant savings of circulation space around the perimeter.

### HALLER FURNITURE SYSTEM STORAGE

A variation on the Abstracta display system designed by Poul Cadovius in 1960, the Fritz Haller System employs a

19-mm steel tube (Abstracta uses 13- and 19-mm steel tubes). The corner connector is a 25-mm ball with six threaded openings.

1962

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### TOIO FLOOR LAMP

Achille Castiglioni's fixture, with its upward-directed light (actually an automobile headlight), introduced the ad hoc or ready-made methodology to design. The novelty of this design is not so much in the way it looks but in the way it is put together.

### COLOMBO TABLE LAMP

The popularity of shiny surfaces during the 1960s was influenced by advances in the synthetic plastics industry. Joe Colombo, attracted by the technological aspects of futuristic design, chose a thick acrylic (Perspex) to transfer light throughout the form from its fluorescent source in the base of the lamp.

### TACCIA TABLE LAMP

Achille Castiglioni's design consists of an extruded aluminum base, which houses the bulb and acts as a heatsink, allowing heat dispersion. An enameled spun aluminum concave reflector rests on a clear handblown glass bowl, both of which tilt to various angles, creating diffused indirect light.

### TANDEM MODULAR SEATING

Charles and Ray Eames's Tandem Seating was designed for C.F. Murphy's O'Hare Airport in Chicago. The repeated component combines a soft, padded arm and interchangeable seat/back pads. The easily removable pads are sandwiches of heat-sealed vinyl materials with welts diagonally placed to increase strength. The seats are secured to a single, continuous steel T-beam and are strong enough to permit long spans (twelve components back to back) with minimum floor contact.

1963

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### CATENARY LOUNGE CHAIR

The frame of George Nelson's Catenary chair is made of steel-rod and flar-bar stock bonded with epoxy. The seat and back, made up of eight individual cushions, contain

two rubber-coated steel cables, which hang from the frame in a catenary (suspended) curve.

## 1964

### DJINN CHAISE LONGUE

This Olivier Mourgue piece was the first to use flowing forms incorporating melted urethane foam over a tubular steel frame. The furniture is upholstered in brightly colored stretch jersey. The lounge chair (Low Fireside Chair Djinn), designed in 1965, was used in the interior of the Space Hilton in the 1968 movie *2001: A Space Odyssey*.

### ACTION OFFICE DESK

As a component of the Action Office I system, created by George Nelson and Robert Propst, the Action Office desk incorporates integral top-loaded filing for easy access and provides a roll-top to cover up clutter. The 42-inch-high work surface offers a stand-up work option.

### PERCH DESK CHAIR

The Perch chair was designed by Robert Propst to be used with the 42-inch-high Action Office desk. It was a new concept in seating, offering a stand-up position of 30 to 33 inches.

### TULIP DESK CHAIR

The Tulip desk chair, designed by Jørgen Kastholm and Preben Fabricius, consists of a flexible Fiberglas frame clad in a seamless hide of leather, over which a padded leather jacket is placed. The extremely thin seat is supported on a steel tripod base.

### 40/4 DINING CHAIR

David Rowland solved the problem of efficient stacking by providing a design that nested closely. The frame is a thin ( $\frac{7}{16}$ -inch diameter), high-strength steel rod. The seat and back are made of hard, vinyl-coated, rolled-edge sheet metal. Forty chairs may be stacked within 4 feet. Flanges in the back of the structural frame incorporate male and female connectors. Four interlocked chairs may be gang-stacked for fast clearance.

### KARUSELLI LOUNGE CHAIR

This Yrjö Kukkapuro design employs a glass-reinforced,

molded polyester swivel base and seat shell, which is thinly padded with leather. The shape of the shell was determined through the use of flexible steel mesh formed to the human anatomy.

### SLING SOFA

The frame of George Nelson's Sling sofa is chrome-plated, nonwelded (epoxy-glued) tubular steel. It is sprung on the back with fabric-reinforced rubber webbing and across the seat area with neoprene platforms. Multiple elements can be fastened together with epoxy glue to achieve sofas of various lengths.

### LANDMARK SERIES (1074) DINING CHAIR (c. 1964)

The Landmark Series chair by Ward Bennett has a contained sculptural quality, expressed through the exposed wood frame. The top rail flows into the arms and legs in one sweeping, uninterrupted line. The chair is joined entirely with concealed dowel joints.

## 1965

### PK 24 CHAISE LONGUE

Poul Kjaerholm's design utilizes the flexibility of stainless steel to its utmost, expressing the limitations of the material. The seat/back element may be adjusted to the angle of individual preference.

### 5/4867 DINING CHAIR

This stacking chair, designed by Joe Colombo, has flush sides for butting during installation. Originally, legs of different heights could be interchanged for use by adults or children. (The chair is currently available in an adult height only.) The curves and contours add to the strength of the chair.

## 1966

### 3714 COFFEE TABLE

The table base, designed by Warren Platner, is gracefully formed in steel rods, electrically welded to horizontal tubes, and finished in bright nickel.



## INTRODUCTION

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### 1U WV FLOOR LAMP

Cedric Hartman's design consists of a triangular (tent) shade reflector supported by a tubular stem, which is integrated into the rectangular bar-stock base.

### PRATONE LOUNGE CHAIR

Designed by Giorgio Cevetti, Piero Derossi, and Ricardo Rosso, the Pratone chair is a key work within the philosophy of Pop Art. The scale of the object is greatly enlarged, and the lounge-chair function is not evident from its form: the form conceals the function. This design was executed in self-skinning polyurethane foam, a finishing technique usually used for car dashboards. The piece comes ready-finished from the mold. This finished surface is derived from a polyurethane film that is put on the sides of the mold before the foaming process.

### 40 SN STORAGE

The 40 SN has become the standard side-panel storage system in the industry, both in dimensions and detailing. Walter Muller's design was greatly influenced by the 1959 "INwand" system by Herbert Hirche for Christian Holzäpfel of Germany. The design of the system components allowed unlimited expansion.

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1967

### 932 LOUNGE CHAIR

Mario Bellini's design incorporates leather-covered, injection-molded polyurethane foam components, which can be belted together to form a chair or extended into a two- or three-seat sofa. Structure and padding have become one and the same form.

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1968

### MODULO 3 DESK

The Modulo 3 desk was designed by Bob Noorda and Franco Mirenzi as a knockdown desk, and consists of three panels and a stretcher. The panels are joined along the 45-degree mitered edge with an aluminum extrusion.

### SUPERELLIPS DINING TABLE

The Superellips (a modified ellipse) combines the advantages

of the square and circular table top. This configuration accommodates easy movement around the table. In addition, the legs spread apart and click into rectangular fittings without the use of tools. The Superellips shape evolved from Piet Hein's solution for a traffic circle for a new square (Sergels Plaza) in Stockholm.

### GYRO LOUNGE CHAIR

Eero Aarnio's Gyro chair is a circular bubble with a scooped seat that is molded in two halves. The organic form can be used to float on water or slide on snow.

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1969

### CARRERA MODULAR SEATING

This gently contoured modular component system, designed by Jonathan De Pas, Donato D'Urbino, and Paolo Lomazzi, is capable of forming single chair units, straight-line conditions, and many totally undulating configurations.

### UP 5 LOUNGE CHAIR

Gaetano Pesce's Up series was shipped by the manufacturer compressed in a thermosealed vacuum container. (Polyurethane foam can be compressed so that it requires 90 percent less storage space.) When unsealed, the foam expanded back to its original size and gained full form one hour after the seal was broken.

### BOCCA (MARILYN) SOFA

This sofa design by Studio 65 is upholstered in the form of a pair of voluptuous lips (Marilyn Monroe's) and covered in a red knitted textile. It was inspired by Salvador Dalí's "Mae West Lips" sofa of 1936 and injects a sense of surrealistic humor into the furniture industry.

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1970

### PRIMATE KNEELING STOOL

Achille Castiglioni's design represented a new approach to the act of sitting. By kneeling, one reduces stress from the lumbar area of the back by partially redistributing weight to the legs. A later development was the wood version, called Balans, manufactured by the Norwegian firm of Håg.

**BOALUM TABLE LAMP**

Livio Castiglioni and Gianfranco Frattini designed this soft, totally flexible, luminescent, sculptural lamp of polyvinyl chloride (PVC), reinforced with a segmented coiled spring.

1971

**DODONA 300 STORAGE**

Ernesto Gismondi was the first to apply the extruded plastic manufacturing process in the furniture industry. A hidden angular linking device is pushed from above into the slots of the side panels.

**607 TABLE LAMP**

Gino Sarfatti's design was the first lamp on the market with a 12-volt halogen bulb.

1972

**SEGMENTED-BASE DINING TABLE**

This table was a solution by Charles and Ray Eames for variable-sized conference table configurations. The component table-base system interchanges a hub, a hub/stringer connector, a stringer, and legs to form a continuous structure that accommodates large ellipsoidal tops.

**CONTOUR ROCKER LOUNGE CHAIR**

Frank Gehry's design is achieved by a technique of laminating corrugated cardboard sheets, with each layer running in opposite directions. The result is a very strong but inexpensive material that can be cut into many shapes.

**TIZIO TABLE LAMP**

Richard Sapper's Tizio lamp has a concentrated, 55-watt halogen light source and a small reflector. A safety fuse transformer enclosed in the base reduces power from 110 volts to 12 volts, permitting the metal arms to conduct power to the reflector. A counterweight system and a swiveling base make the lamp adjustable to nearly any angle.

1973

**FREEFORM DINING TABLE**

Jerryll Habegger's organic design provides a variety of sizes of top surfaces to accommodate different-sized objects. The shape of the top allows people to be seated in diverse directions.

**WADDELL (713) COFFEE TABLE**

The Theodore Waddell table is a "tensegrity" structure: a geometric cable network in which overall tension is imposed by stretching cables in one direction against pulls induced in the opposite direction.

**AEO LOUNGE CHAIR**

Archizoom Associati are the designers of this piece, which may be used individually or connected in tandem. Strong expression is divided between the distinctively diverse materials of the plastic base, the enameled steel frame, and the upholstery sleeves.

1974

**EKC 13 DINING CHAIR**

This is Poul Kjaerholm's daring version of Ludwig Mies van der Rohe's Brno chair, in which the back and cantilevered seat structure form a rigid connecting element, thereby eliminating the need for any crossbracing.

**SERVOMUTO SIDE TABLE**

Achille Castiglioni's design employs a support system consisting of a conical ABS plastic base with a central stem. A table top is placed on the stem to form the service table. Other accessories turn the support system into an umbrella stand, an ashtray, and a display system.

1975

**54-102 DINING CHAIR**

The concept for this Gae Aulenti chair starts with a bundle of triangular tubes that branch off to form frames, crossbars, and armrests.