

High-tech Ergonomic MicroTech™ Seating Collection

BioFit Engineered Products is very involved in ergonomic comfort. We've developed ways of keeping people comfortable while they sit all day — even in clean room and static control operations. Microtech Seating in this catalog covers all classes of clean rooms, static control operations and combination environments.

Modular construction

Backrests, seats, armrests, bases, cylinders and many kinds of options can be exchanged on virtually every BioFit model.

This means that BioFit chairs can be customized to fit the worker and the task, even months or years after they have been put into service. Easy interchangeability of parts also allows you to upgrade seating as the science of ergonomics is refined.

At a workplace, modification of a seat-height range is the change most often requested. You can easily retrofit the seat-height range in the workplace by changing the pneumatic cylinder and/or chair base. This retains the use of the chair at the job site with only minutes of downtime.

Lumbar support

A standard feature on BioFit chairs is a lumbar support in the backrest. It prevents the spine from flattening into an unhealthy posture.

Chrome plating

Chrome plating is considered the most desirable finish for most high-tech environments. BioFit's chrome plating is a point of pride for the company. The chrome plating is diligently inspected and found flawless before it can leave the factory. It will not crack or peel.

Soft Touch pneumatic

A standard feature on most BioFit seating is the Soft Touch pneumatic seat-height adjustment mechanism, warranted for the life of the chair. It provides easy adjustment of seat height from a seated position.

Foam

Molded foam gives BioFit seating superior density and durability. The foam's skin keeps it from breaking down should the upholstery become torn or cut.

Bumper guards

Internal bumper guards on the seat and external bumper guards on the backrest help guard against upholstery wear and tear, which could compromise the chair's performance.

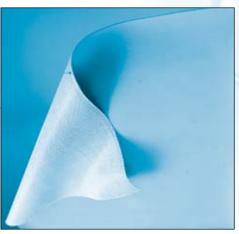
Innovations

We continually refine what we do. Our engineers have invented filters and air exchange systems to keep chairs from contributing to clean room particle counts. We pioneered the use of static dissipative upholstery for clean room use. As our greatest achievement we offer a range of Class 1 seating. We are committed to serving high-tech industries and their people. It's a commitment you can count on.











Preferred Choices in Clean Room Seating.

For companies that specialize in medical devices, semiconductors, biotechnology, pharmaceuticals and other critical technical applications maintaining a contaminant-free manufacturing environment is essential. That's where BioFit for Technology can help. Our clean room chairs feature the right combination of ergonomic and particulate-containment benefits for any task, whether it's urethane-covered chairs for low-level applications, or polypropylene or vinyl upholstered chairs for Class 1 through Class 1,000 environments. Here are just a few of the industries you'll find BioFit for Technology seating at work:

Medical device / Aerospace / Bio-Science / Food processing / Munitions
Nanotechnology / Semiconductor assembly / Pharmaceuticals / Electronics packaging







BioFit Clean Room Seating Features

Class 1 Seating (C1)

Most of our Class 1 styles of seating are constructed like our Class 10 model. They feature our exclusive air exchange system in the seat that allows no air to escape into the clean room surroundings. Assembly, wipe down and packaging of these chairs and stools under a laminar flow clean hood yields a Class 1 chair. The customer does final assembly in a clean setting.



Class 1^{Max} Seating (ASC-C1)

This advanced Class 1 BioFit chair is prepared for assembly like our other Class 1 chairs. In addition, it has an ergonomic seat and backrest tilt. The seat control is covered with a hard plastic pan and sealed with flexible neoprene rubber and double-sided high contact, nonoutgassing tape, covering all areas where particles could be generated.



Class 10 Seating (C10)

Class 10 seating features our exclusive air exchange system in the seat. An integral part of this system is an air reservoir, which is a bag encased in a protective pan attached to the seat. When the worker sits, the air in the seat cushion discharges into the reservoir, not the surroundings. To assure clean room compatibility at the Class 10 level, we assemble, wipe down and package Class 10 chairs under a laminar flow clean hood and the customer does final assembly in a clean staging area.



Budget Clean Room Seating

Hard surfaced chairs and utility stools are useful in clean room environments. They are available in Class 10 (CR10). The BioFit line of budget chairs and utility stools features the Soft Touch pneumatic seat-height adjustment mechanism, five-legged bases of chromeplated tubular steel or cast aluminum, and chromeplated finishes. Legs of budget seating are sealed to keep random particles securely inside. Fixed-height stools are also available for the clean room.



Breathable Class 10 Seating (N10)

BioFit is one of the few chair manufacturers to offer a Class 10 chair in a breathable fabric. Called the N10 chair, it provides nonstick comfort because it is completely covered in a high-tech nylon called NYTEK®. NYTEK® nylon is laid down in a three-directional axis similar to the natural structure found in leather. It is comfortable to sit on and has superior durability.

Beyond the comfort of leather and the durability of nylon, NYTEK® also cleans easily with soap and water, is non-outgassing and nonshedding. NYTEK® nylon is backed with filter media that achieve Class 10 performance. Air that escapes to the surroundings is filtered through the media.

To assure clean room compatibility at the Class 10 level, we assemble, wipe down and package Class 10 chairs under a laminar flow clean hood and the customer does final assembly in a clean staging area.

Class 100 Seating (VUV)

BioFit Class 100 seating is constructed much like the Class 10 chairs. However, in Class 100 seating, BioFit uses a filtration system within the seat. The system traps particulates while allowing the seat to conform to body shape. The filter allows unrestricted air flow with a filter permeability of 230 CFM/Ft.2 The polypropylene filter media trap particles 0.1 microns and larger.

Class 1000 Seating (1000)

Class 1000 clean room seating is available for less stringent applications. Featuring plugged tubular chrome-plated or cast aluminum bases and chrome-plated metal parts, these chairs are built on the same frame as all other BioFit clean room chairs. There is no seat filter or air exchange system. The vinyl underwrap under the seat matches the vinyl upholstery and covers the baseboard of the seat. The seat and backrest are not sealed, though the same filter material used in Class 100 BioFit chairs covers the exhaust ports in the seat and serves as a rough filter.





*NYTEK® is a registered trademark of Majilite Corporation,



Technical Data on BioFit Clean Room Chairs

BioFit offers Class 1, Class 1Max, Class 10, Class 100 and Class 1000 chairs and stools for clean room use in industries such as semiconductor, aerospace, bio-science, pharmaceutical, medical equipment, computers, electronics, food processing and munitions. Clean rooms are controlled environments that meet Federal Standard 209E / ISO Standard 14644-1. Though the standard does not apply to equipment and supplies used in the clean room, BioFit has always maintained that seating used in the clean room must meet or exceed particulate cleanliness goals of Federal Standard 209E / ISO Standard 14644-1.

Testing

BioFit seating is tested following a test method jointly developed with an independent testing laboratory. The test is designed to evaluate particulate cleanliness of clean room chairs by means of particle analysis during seat and backrest compression. The testing isolates and counts the particles generated by a clean room chair and emitted from its seat and backrest.

Chairs are first cleaned to remove loose surface debris and then enclosed in ultra clean plastic bags. Clean air is flowed through the bags. Particles are monitored while the seat is compressed by a person sitting on it and simultaneously leaning against the backrest.

During a 30-minute period, the individual rises and sits on the tested chair six different times. Air passing through the bag takes the particles into a sophisticated particle counter. Particulate count samples are drawn from under the test chair seat.

The testing of BioFit clean room chairs verifies the chairs' suitability for the various types of clean rooms.

Combination Seating

Some engineers prefer clean room seating with an ESD option. Some engineers want ESD seating with a clean room option. Seating by either name is what BioFit calls combination seating. BioFit offers the best of its seating lines in combination seating. Examine the clean room and static control seating information, then consult individual chair model information before making your decision.

Static Dissipative Clean Room Upholstery

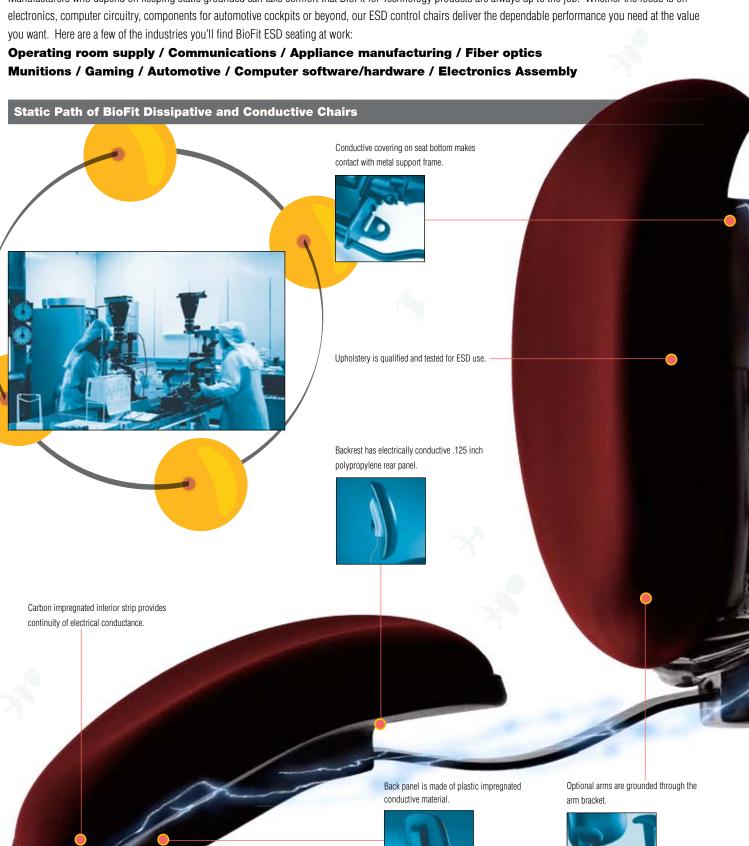
BioFit pioneers the availability of conductive/static dissipative vinyl upholstery material for any of its clean room chairs. It has lower surface resistivity than other fabrics available for use in clean rooms. There is no exposed carbon in the vinyl.

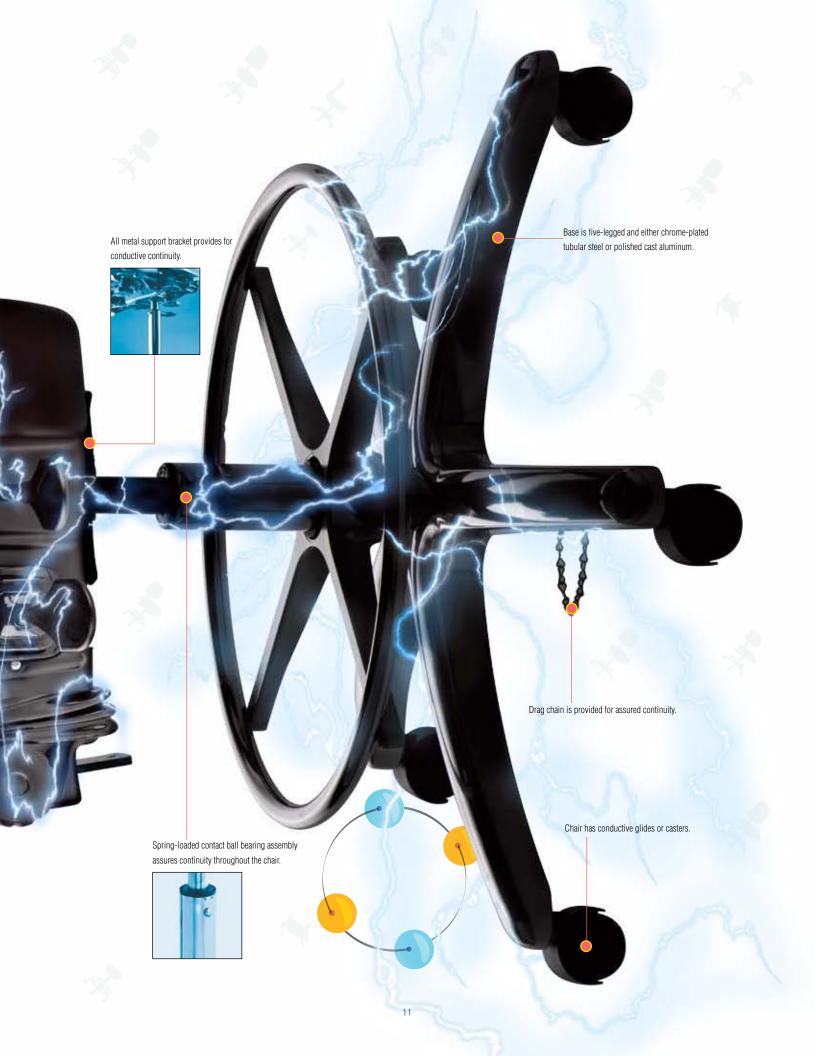




ESD seating that stops static in its tracks.

Manufacturers who depend on keeping static grounded can take comfort that BioFit for Technology products are always up to the job. Whether the focus is on





BioFit Static Control Products

BioFit static control chairs and stools can be either conductive or dissipative, depending on the upholstery chosen. There is a wide variety to choose from in static control products and seating including ergonomic chairs, office chairs, task chairs, laboratory chairs, stools, and footrests.

To assure continuity in its chairs, BioFit goes beyond the basics. Virtually every part of a BioFit static control chair is grounded to the base. Additionally, every chair has a drag chain and conductive glides or casters. The reason? Dirt is an insulator and can disrupt continuity. BioFit provides an extra path to ground in case of dirt build-up on any single path.

A spring-loaded contact ball bearing assembly in the pneumatic seat-height adjustment mechanism is unique to BioFit. This ball bearing rides against the inner cylinder of the pneumatic mechanism thereby assuring continuity from the top of the backrest and seat through the pneumatic cylinder to the base.

Options for Static Control Seating

BioFit sales representatives and dealers are available to help determine the type of seating and the various options needed in a specific facility.

Performance options enhance the effectiveness of static control seating. Here are some options it may be important to consider:

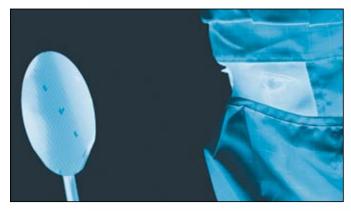
An armrest upholstered with dissipative or conductive material will assure
continuity in static control settings. The chair arms are grounded to the bottom of the chair through the arm bracket. This is an important consideration
if a worker leaves his/her workstation and the charged chair accidentally
turns so that the arms and backrest are near the work surface. Static can
easily disrupt work on the work surface.

Ergomomic options should be considered to enhance employee performance. Minimal ergonomic features of lumbar support and a pneumatic seat-height adjustment mechanism are standard on BioFit chairs. Other options are detailed with each chair line description. Here are some options it may be important to consider:

- An adjustable upholstered armrest is available as an ergonomic option.
- Various types of ergonomic backrests, seats and seat controls can enhance employee performance by providing proper support and comfort.
- Footrings can relieve pressure from behind the knee and improve circulation to the lower legs and feet. An adjustable 20" diameter footring (ATF) is another ergonomic option to consider.

Casters/glides Recommendations

Carbon-impregnated casters are standard on most models of static control seating. Also available are the LKRO, LKRU, and STR casters. The LKRO caster is a dual-wheel soft caster that locks when the seat is occupied. The LKRU caster is a dual-wheel soft caster that resists movement when the seat is not occupied. The STR caster is a conductive caster with a polyurethane wheel. This caster is appropriate for clean room chairs that also must function as static control chairs.



Upholstery Fabrics

BioFit offers a variety of ESD fabrics that are qualified and tested as dissipating static. Fabrics such as wool or nylon are woven with carbon-impregnated yarn or woven stainless steel strands. Vinyl upholsteries either have a carbon layer beneath the surface of the vinyl or are carbon loaded at the surface.

Combination Seating

Some engineers prefer ESD seating with a clean room option. Some engineers want clean room seating with an ESD option. Seating by either name is what BioFit calls combination seating. BioFit offers the best of its seating lines in combination seating.

Note: Most BioFit Static Control chairs are part of our Ship Now! program. Easy ordering! Call your local authorized BioFit Dealer or get detailed quotes with Get-A-Quote online. For more details on our Technology seating or other information visit us at **www.biofit.com**.



BioFit Clean Room and Static Control Product Locator

BioFit offers a wide range of upholstered and non-upholstered chairs and stools for critical environment needs. **The product locator shown below refers to the pages in our BioFit Seating Catalog.** With so many series available, we invite you to visit our website at biofit.com for more information on our complete line of seating products as well as our footrest options for the high tech market.

While you are there, utilize our Build Your Own Chair configurator (BYOC) which will allow you to "build" and see

the chairs available on our Ship Now! program. Performance packages on chairs up to and including Class 100/ESD can be ready to ship in 48 hours. After your new chair is configured online, email the result to BioFit for a price quote.

BioFit's commitment to quality is ensured by an industry-leading 13-year warranty on nearly every product. In addition, BioFit's friendly, attentive and highly knowledgeable customer support team is second to none.

