



HELPING MAKE PRODUCTS BETTER™

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**BASF** 

# FURNITURE WORKSPACE





# An industry so focused on its customers deserves suppliers as focused on them.

"Cognitive ergonomics."

"Human-centered design."

"User-centered space planning."

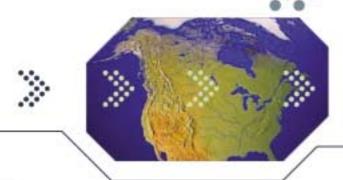
"Community-based planning."

"Design for environment."

The very way furniture manufacturers speak demonstrates how focused they are on the needs of their customers. Logic links furniture to what people accomplish in their workspace. Furniture affects the body. Body affects mind. Mind affects performance. Therefore: furniture affects performance.

There are furniture systems that bring people together for team-building, communication and collaboration. Systems for privacy and productivity. Systems that integrate technology and facilitate change.









At BASF, we believe that an industry so focused on the needs of its customers certainly deserves suppliers who are just as focused on its needs.

BASF has that focus — in-depth.

We're bringing out new and better grades of our performance-proven plastics: Ultramid® nylon 6, Petra® PET and Nypel® recycled nylon 6. New grades that can provide your unique designs with improved flexural modulus, fatigue resistance and impact strength. We're developing new and better modes of testing to accurately predict part performance in dynamic new designs. We're continuously refining our materials and processes to make them better for you, your customers, the workspace and the environment.

We've developed new, more open and responsive ways of working with furniture manufacturers — implementing electronic processes and file transfer capabilities, sharing our knowledge to support your development of new workspace solutions.

There's a new focus on furniture at BASF, a focus in-depth.







#### A feeling for design.

An engineering group to make designs work.

We've assembled a formidable collection of talent, technology and resources to achieve that end. Experienced design engineers and in depth capabilities enable us to assist you in any or all phases of the product development cycle, and the earlier the better:

Ideation

- Concept Development
- Industrial Design
- Material Selection
- Product Engineering
- Tooling Development

Validation

Production





### Design Tools For Plastics in the Workspace

Our prime purpose is to move your furniture from concept to production, rapidly, smoothly and efficiently.

Our engineers' use of sophisticated CAE (Computer-Aided Engineering) and FEA (Finite Element Analysis) tools helps them work the details in-depth to optimize both process and design for your furniture. From the project's earliest stages, our engineers can build in performance, take out time and costs.







Working from your CAD (Computer-Aided Design) files, we can produce rapid 3D prototypes in a stereo lithographic apparatus (SLA) providing a quick proof of concept. Prototype review enables earlier decisions by giving you, your designers, manufacturing engineers, toolmaker and molder a feel for the component, its aesthetics and ergonomics, tolerances, fit and finish.

In-depth analytical, mechanical, standard and customized testing capabilities support and confirm our work at every step. We gear our efforts so that your finished products exceed BIFMA standards. We can also support your program by performing ISO, ASTM and Underwriters Laboratories flame testing. If a standard test for your required performance doesn't exist, we will help develop one.

The earlier and more in-depth our group becomes involved with your furniture program, the greater the value we can deliver.





#### We make plastics.

And we make plastics work.

Our processing support and technical service engineers apply their resources and in-depth know-how to make sure our resins work for you and for your customers.

- Processing
- · Data Banks
- Troubleshooting
- Software





A proactive approach to processing helps us get it right, right from the start. Our engineers perform mold fill analyses and draw on one of the industry's most in-depth data banks correlating material and design data with actual molding and part performance results. In-depth familiarity with all molding and extrusion processes ensures selection to the most efficient process for your program.







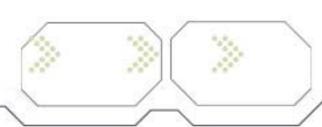
If you have trouble with a part — even if you're not using a BASF material — we can troubleshoot, performing root cause investigation and analytical testing to arrive at a solution.

BASF has assembled a comprehensive portfolio of molding process software to test for the manufacturability of a part and assist with mold design before the tool is ever cut. The software helps us eliminate guesswork, reduce mold costs, cycle time and secondary operations. The programs can also improve the appearance and aesthetics of your furniture's molded components.

BASF won't sell you a material and leave. We stand behind our products. And we stand by our customers — on-site and in-depth.









## You'll get more from our plastics because we get more from our plastics.

BASF's resins have been pulling their weight in innovative furniture designs for years.

- Ultramid® nylon
- Petra® PET
- Nypel® recycled nylon

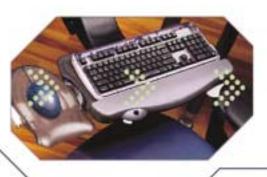




### High Performing Resins for Workspace Applications

Our scientists and engineers work exclusively with nylon and PET. We know these materials in-depth and unlock every capability that lies within their versatile molecules. We explore the limits and nuances of performance and have extended the capabilities of Ultramid nylon 6, Petra PET and Nypel recycled nylon with more than 500 grades of resin ready to perform for you. Our range of nylon and PET products offers you your choice of properties: strength, stiffness, flex, aesthetics, paintfree, scuff-resistant, economy or environmental accountability.







Where the demands of new designs drive new performance requirements, our scientists and engineers can direct the development of new grades to meet your needs. For example, Petra 7030 is a unique grade of PET with excellent surface aesthetics, engineered to meet one furniture manufacturer's need for high modulus stiffness in a flex-stressed section of a seat back.

BASF is committed to environmental stewardship and recycling. We are developing friendlier material chemistries and processes. Our recycled grades of Petra PET and Nypel nylon are manufactured utilizing select post-consumer or post-industrial feedstocks.

BASF is North America's largest supplier of nylon 6. Our sharp focus on nylon and PET provides you extraordinary, in-depth knowledge and expertise that translates to predictable, reliable performance in your designs.



North America's largest supplier of nylon 6









#### Performance people.



Just as we strive so that our materials perform well in your furniture, we also strive so that our organization performs well for yours.

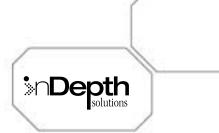
Seminars

- Realtime Support
- On-line Education
- · Dedicated Customer Care

Our Furniture Team considers your extended organization and gladly works with your toolmakers, molders and designers, improving communication, work and process flow. BASF can arrange plastics educational seminars and perform Six Sigma quality audits. Our digitization initiatives provide online tools to help with material selection, electronic education, processing guidelines, tips and troubleshooting. In addition to our furniture-industry-dedicated Application Engineer, BASF's Online Answer Center makes engineering staff members available daily to answer design, processing and material selection queries. Our Customer Care Center can assist with all order, tracking and other logistical issues.



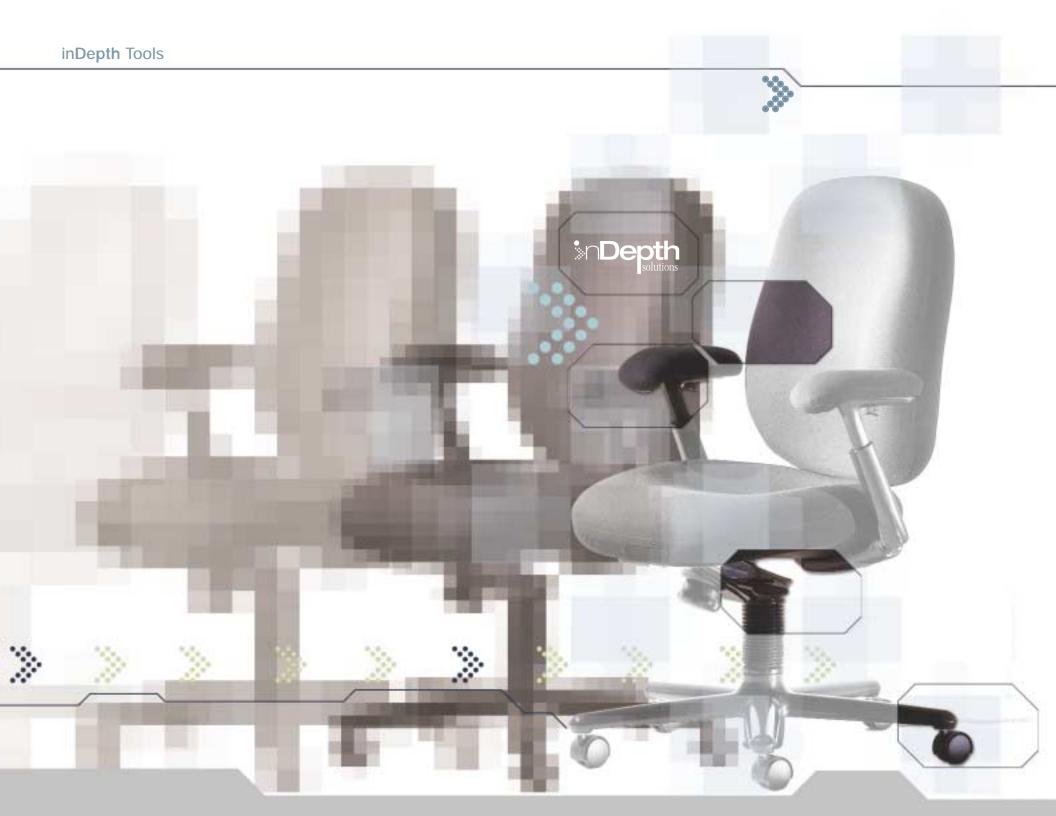
BASF has a deep appreciation of the role design plays in furniture. Our creative approach to engineering and in-depth support ensures that traditional process limitations don't deter the development of innovative new concepts. At BASF, it's not just the products, it's the people, the plastics, furniture design and an in-depth approach that lead to performance.











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