

Dynamic Seating – Ergonomic and Functional



Man – the measure of functionality and aesthetics

Many people spend the majority of their lives at work – especially in the production sector. Ergonomics and a healthy posture are especially important for employees working on production systems, machines, or conveyor belts. A good swivel work chair has to enable dynamic seating postures and provide optimum support for the well-being of employees. It needs to be adaptable for individual users and their typical movement sequences while working.



Ergonomics – designed with experience



Whether on a manual production line, in the cleanroom or during the final inspection process: for employees working in a seated position, the associated tasks can involve a wide variety of movements. Poor posture quickly makes itself felt in the form of muscle, spine, or joint pain. With increasing age, proper blood flow to all body regions also becomes more and more important.

You can easily optimize the ergonomics of your workstations with functional swivel work chairs that are specifically adapted to the individual application. They effectively cushion physical strain during recurring movements and provide individual support to help employees maintain a healthy posture throughout their activities. Increase your employees' well-being and productivity in the workplace and minimize sick days caused by musculoskeletal disorders.

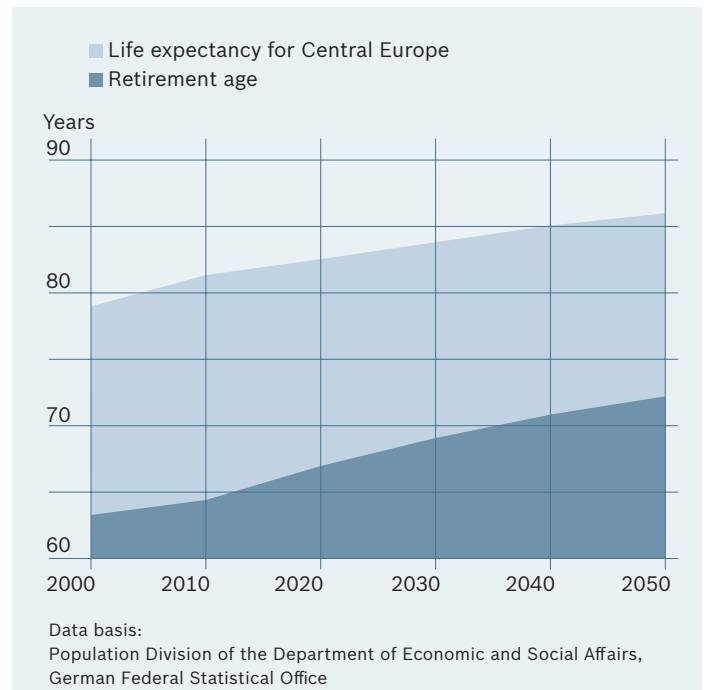
The challenge – demographic change



Developed with care

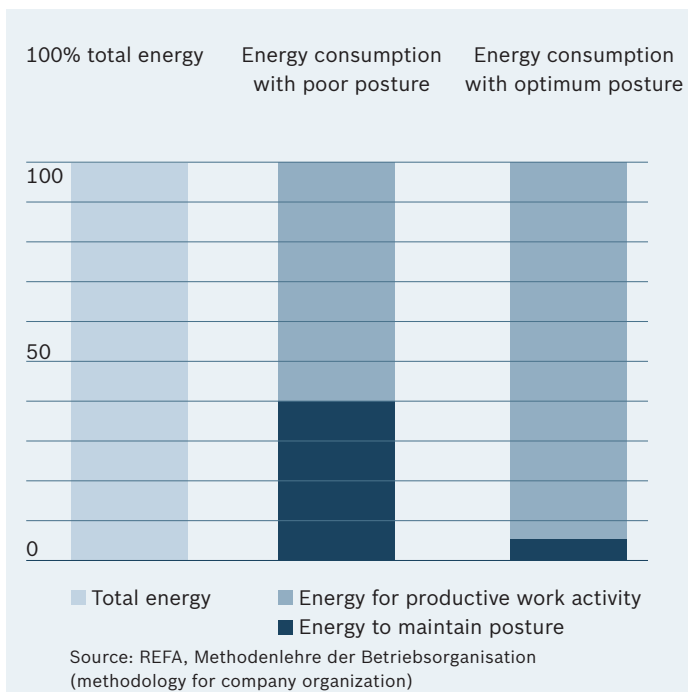
When employees complain of acute or chronic body pain or feel tired and listless, these symptoms are often rooted in an incorrect posture at work. However, this situation can be improved considerably, with minimal effort.

The development process for swivel work chairs from Rexroth integrates the latest medical findings, as well as a wide range of experiences in industrial workplace settings. With our system-based ergonomics, we create the ideal conditions for proper seating, good circulation, and pain-free movement in the workplace.



Accounting for different living patterns

Thanks to improved living conditions, healthier nutrition, and excellent medical care, life expectancies continue to rise in the industrial nations of the world. The working population is also retiring considerably later in life. For companies, the higher average age of employees means increased demands in terms of workplace design. In addition to an ideal working and seating height, correct foot placement, and spinal support, optimum blood flow is increasingly important. Accounting for these factors promotes the health and performance of your employees in the long term.

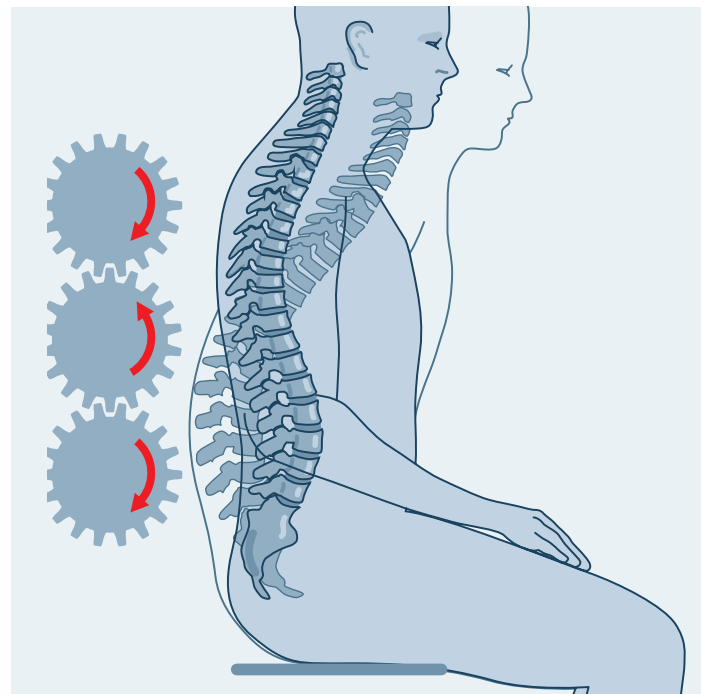
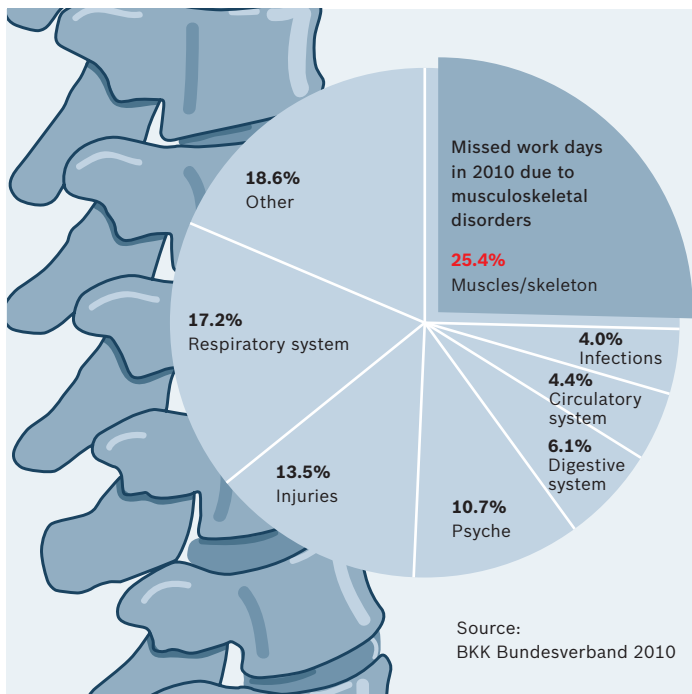


Proper seating for greater efficiency

Medical studies leave no room for doubt: at poorly designed workstations, where work materials may be inconveniently positioned, people tend to adopt constrained postures. The result: muscle tension, as well as imbalanced strain on joints and intervertebral discs. Increased stress on muscles, joints, and the spine have a negative impact on energy balance – fatigue sets in more quickly. The conclusion: correct workstation seating expends less energy and results in far greater efficiency in the long run.

“I used to be completely unaware of the importance of a healthy seating posture at work. I had chronic back pain and my right arm always ached from over-exertion. Then a specialist came in and helped me adjust my new work chair to fit my body. Now the pain is gone and I have much more energy.”

Your back – only the best will do

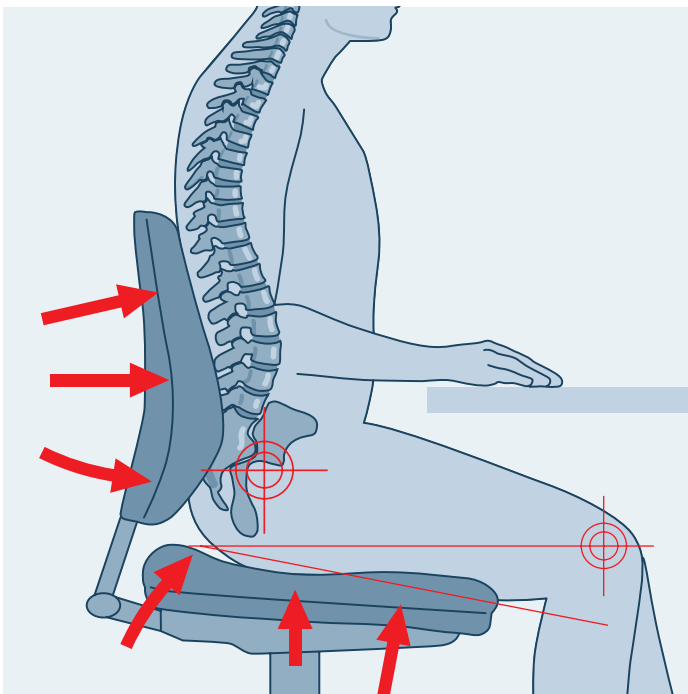


A complex apparatus – vulnerable and sensitive

According to a 2010 statistic from the German federal association of company health insurers (Bundesverband BKK), over 25 percent of work days missed by company employees can be attributed to musculoskeletal disorders. An incorrect seating posture is often the cause – sitting with a “rounded” back, for example, places significantly greater stress on the spine and muscles than an upright posture. This points to a need for swivel work chairs with a wide variety of adjustment options for the individual user in order to support an active and upright working posture.

The back – bundled stress potential

The cervical, thoracic, and lumbar vertebrae, as well as the hip flexors, interlock like clock wheels. Turning one wheel has an effect on all the rest. Tipping the pelvis forward, causes the entire spine to align itself in an upright position. Tipping the pelvis back results in a rounded or “hunched” back, which places a heavy strain on the lumbar discs. During extended periods of sitting, the muscles try to provide additional support to the spine. An incorrect posture therefore often causes painful muscle tension.



Sophisticated technology – optimized seating design

Our focus in designing the MPS swivel work chair series is the health and performance of your employees. This is why our swivel work chairs are geared towards an active, upright posture and working position from the very beginning. A depth-adjustable, ergonomically designed seat surface provides excellent pelvic support and the adjustable backrest maintains permanent, stabilizing contact with the spine. With an individually adjustable seat height and inclination, users can achieve the perfect angle between the upper and lower leg. This ensures optimum blood circulation in every working situation.

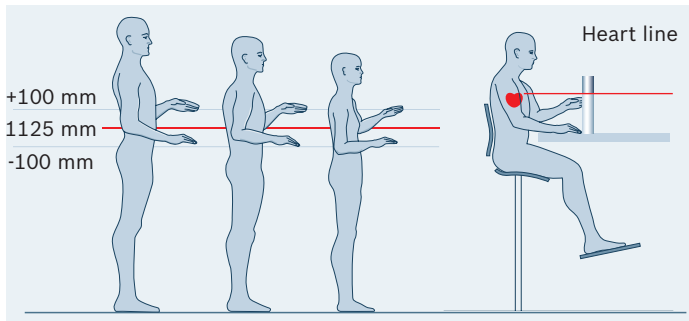


“Every person has a slightly different build, so every work chair needs to be individually adjusted for the specific user. It is important that the chair helps to support typical movements at the workstation and that it enables dynamic seating – even when different employees share the same workstation.”

Ergonomics – parameters for our efficiency

Science for people

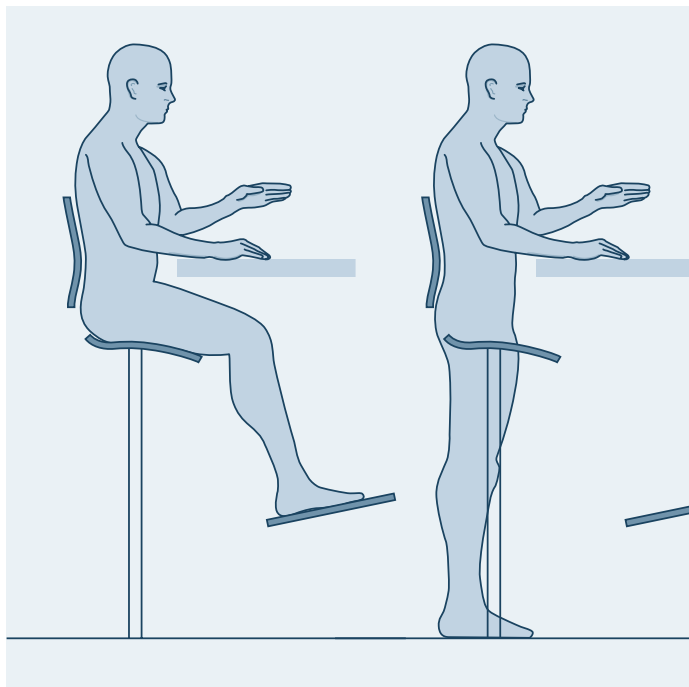
When the health, motivation, and efficiency of your employees is at stake, you turn to well-designed solutions that meet all your requirements. At Rexroth, we develop such solutions in close cooperation with occupational health physicians and ergonomics experts who have in-depth knowledge of employee work situations in a wide variety of industries. We also have decades of varied



experiences in industrial production. This makes it possible to align medical research findings with specific workplace conditions and create the ideal prerequisites for healthy employees.

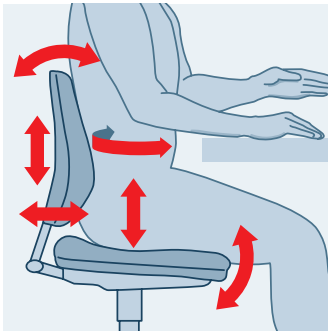
Optimum working heights – from XL to XS

Ideal working heights can vary considerably depending on body height. Sitting too low in relation to the working surface can cause muscle tension; sitting too high places strain on spinal discs. Working heights should always be below the heart in order to ensure an optimum blood flow and prevent fatigue.



Variety for greater efficiency

A correct sitting posture is always linked to movement. This is the only way to prevent constrained postures and muscle tension in the long term. Ergonomic work chairs need to enable dynamic seating with varying postures – for instance via simultaneous adjustment of the backrest and seat (synchronous technology) while maintaining permanent contact to the worker's buttocks and spine. Additional freedom for the arms and shoulders is provided by a height-adjustable backrest, which is tapered at the top. Regular intervals of standing provide healthy variety for the body.



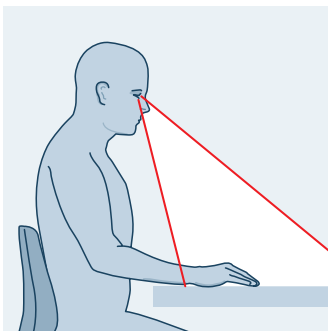
Function

Good usability, maximum variety of adjustment options, functional versatility, and safety are the factors that make MPS swivel work chairs especially ergonomic.



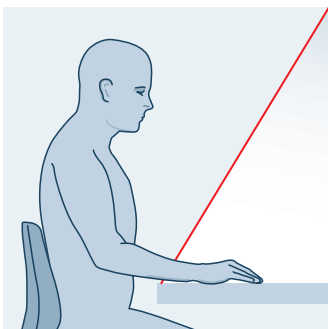
Reach zone

The reach zone is comprised of the work area within direct reach of the seated employee, the large reach zone, and the extended one-hand zone at the periphery. Good accessibility prevents poor arm positions.



Range of vision

The proper viewing distance is strongly dependent on the activity being performed and the employee's eyesight. The viewing distance to the working area can be varied with height-adjustable seating.



Lighting

Proper illumination and optimum lighting prevent fatigue, improve concentration, and reduce the risk of errors.



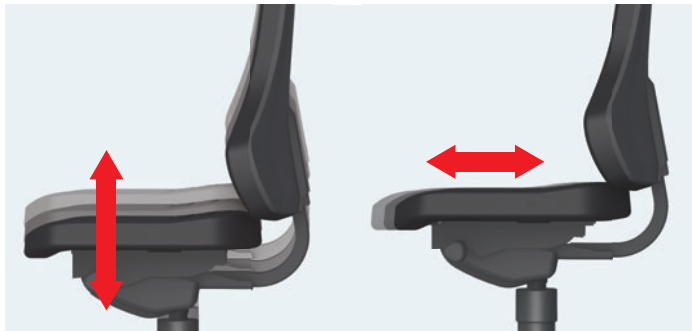
“It’s important to choose the right work chair. A cleanroom has different requirements than a test stand or a station on the production line. However, one thing is universal: a work chair needs to offer quick, precise adjustment options for individual employee needs. A good deal of flexibility is also required to provide equally good support for a variety of dynamic seating postures and different working situations.”

Healthy seating – well-designed from the very start

Settings as individual as users

A work chair doesn't need to reveal at first glance how much sophisticated technology and medical expertise it contains. But it does need to perform the impressive feat of providing optimum seating comfort for every employee – whether slender or athletic, tall or short, light or heavy, young or old, fit or frail.

A variety of sophisticated details come together so that users can adjust the work chairs to meet their individual needs – from the foot support to the seat with multiple adjustment options, a backrest with lumbar support, and synchronous technology with weight regulation. MPS work chairs from Rexroth promote ergonomic workstation seating, increase efficiency, and reduce illness-related absences.



Seat height and depth adjustment

- ▶ Adjustment of seat height to employee height for good posture and circulation
- ▶ Setting an optimum seating position for a leg angle of 90 degrees
- ▶ Adjusting the chair to the leg length by changing the seat depth



Backrest height and seat angle adjustment

- ▶ Optimum support function provided by individual backrest adjustment for different user body types
- ▶ Adjustable seat angle – for excellent pelvic support
- ▶ Support of an active, upright seating and working posture



Lumbar support

- ▶ Backrest with integrated lumbar support to relieve the extensor muscles in the lumbar region
- ▶ Upright seating for a relaxed posture

Dynamic seating – technology for the highest demands

Seated postures can only be healthy and ergonomic when coupled with movement. A good work chair supports these dynamics through innovative movement mechanisms. One key factor is switching between the front, center, and rear seating positions. MPS swivel work chairs from Rexroth are equipped with a special synchronous technology that



enables these posture changes, without any sacrifices in terms of the stabilizing backrest function. This provides optimum support and relief to the torso during all dynamic movement sequences while seated.

Synchronous technology with permanent contact

- ▶ Permanent contact between back and backrest for efficient back muscle support
- ▶ Adaptation to movement sequences contained in posture changes through effective synchronized mechanisms
- ▶ Synchronized movement of backrest and seat for an optimum interplay of the hip and knee joints



Weight adjustment

- ▶ Integrated weight regulation for individual adaptation to body weight
- ▶ Adjusting the resistance of the backrest via mechanical handles
- ▶ Effective cushioning of vertebral strain when switching between forward or reclining positions

Technology – well-planned to the last detail



Tapered backrest

Movement is healthy: the tapered backrest offers maximum freedom for arms and shoulders – strain and tension are avoided.



Ergonomic seat

The ergonomically designed seat provides optimum pelvic support. Its depth and angle are adjustable so users can easily find the best seating position.



Safe operation

Usability doesn't get any better than this: the operating elements are arranged for optimum accessibility – without any unnecessary curves or angles. All adjustments can be performed with ease: whenever required, users can simply pull out the operating elements for a simple adjustment.





Secure footing

All MPS work chairs from Rexroth are equipped with a stable, five-arm star chair base. Lower chairs are delivered with rollers, higher models with sliders.



Optional armrests

For even greater ergonomics: the optionally available, height-adjustable armrests provide supportive contact to the lower arms to reduce strain on the neck and shoulder muscles.



Materials for seating comfort

Seat and backrest materials should always offer comfort, durability, and easy care. However, every working environment has its own additional material requirements. Whether you need breathable, conductive, easy cleaning, or highly durable materials, MPS swivel work chairs offer the perfect solutions for all industries and applications.

All tested in line with standards and TÜV

Certified quality and safety should be primary concerns, especially at the workplace. MPS swivel work chairs from Rexroth are TÜV-tested and carry the GS mark for tested safety. They fulfill safety specifications and ergonomic requirements for work chairs in production contained in DIN 68877. This standard specifies:

- ▶ An anti-slip foot support is required for swivel work chairs with an adjustable seat height above 650 mm.
- ▶ Rollers are only permissible for chairs with adjustable seat heights no higher than 650 mm.



Versatile applications thanks to additional accessories

MPS swivel work chairs are designed for optimum ergonomics – right from the start. You also have the option to equip your chair with multi-adjusting armrests and a height-adjustable foot support or circular footrest.

One chair range – ideal for any application



Assembly and production workstations

In industrial production, employees need to be able to switch between different working postures at any time, and to perform some activities while standing.

MPS swivel work chairs for industrial production provide:

- ▶ Maximum freedom of movement for arms and shoulders
- ▶ Optimum support for dynamic seating
- ▶ Height-adjustable backrest with integrated lumbar support
- ▶ Ergonomically designed seat with adjustable depth and inclination



ESD workstations

When working on ultra-sensitive technical devices or control stations with a high electronics content, it is essential to avoid electrostatic charges, which can lead to malfunctions.

MPS swivel work chairs for ESD settings provide:

- ▶ All the ergonomics of MPS swivel work chairs
- ▶ Robust cushions with breathable, highly conductive covers. Excellent conductivity is achieved with stainless steel fibers woven into the fabric.





Cleanroom assembly

The manufacture of electronic devices and work in the pharmaceutical industry often require an atmosphere with a low microbe and particle level.

MPS swivel work chairs for cleanroom environments provide:

- ▶ All the ergonomics of MPS swivel work chairs
- ▶ Smooth, conductive, and easy-to-clean materials, specially designed for use in class 4 cleanrooms (DIN ISO 14644-1)
- ▶ Concealed mechanical components
- ▶ Sealed cushions covered with smooth, conductive synthetic leather, emissions-free



Standing support

Certain time-intensive activities cannot be performed while seated. To promote a healthy posture while maximizing freedom of movement in these work situations, standing aids are a good choice for dynamic standing while reducing musculoskeletal strain.

MPS standing aids for production areas and workshops provide:

- ▶ Ergonomically designed saddle seats with individual angle adjustment for optimum support during standing
- ▶ Ergonomic seats made of durable PU foam for “sitting while standing”

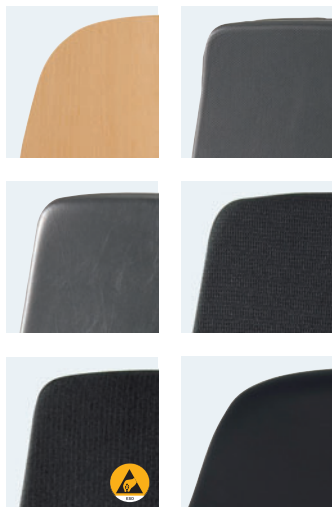


The right work chair for every application

We provide quality from the start

Ergonomics, optimum preventative health care, and excellent performance on the one hand. Top quality, durability and a long service life on the other. These are the key factors that you can definitely expect from a modern high-quality work chair.

Factoring in decades of experience in production settings and demanding work environments lets you set the bar even higher. Throw in flexible application options and increased efficiency and what you get is the perfect result.



Materials

Regardless of whether in production halls, workshops, or special areas, the requirements are clear: materials need to be robust and equally resistant to flying sparks as well as lubricants and dirt.

Available in wood, PU foam, synthetic leather, or textile versions, MPS swivel work chairs can adapt to any environment.

	Model
	Basic swivel work chair
	Basic swivel work chair
	Standing aid
	Dynamic PU swivel work chair
	Dynamic PU swivel work chair
	Dynamic Synthetic Leather swivel work chair
	Dynamic Synthetic Leather swivel work chair
	Dynamic Textile swivel work chair
	Dynamic Textile swivel work chair
	Dynamic ESD swivel work chair
	Dynamic ESD swivel work chair
	Dynamic Clean swivel work chair
	Dynamic Clean swivel work chair

Accessories

Access aid
 ESD access aid
 Circular footrest
 Armrest (pair)

No.	Height (mm)	Use		Material						Adjustment options							Version			Material Star chair base		
		Standard	ESD	Cleanroom	PU foam	Synthetic leather	Textile	Textile ESD	Conductive leather	Plywood, molded	Seat height	Seat depth	Seat angle	Backrest height	Backrest locking mechanism	Synchronous technology	Weight regulation	Roller	Slider	Rounded base	Plastic	Steel
3842546760	400 – 560	•								•	•			•						•		
3842546761	560 – 810	•								•	•			•							•	
3842546776	580 – 860	•			•							•							•			•
3842546762	460 – 610	•			•					•	•	•	•	•	•	•	•					•
3842546763	580 – 820	•			•					•	•	•	•	•	•	•		•				•
3842546764	460 – 610	•				•				•	•	•	•	•	•	•	•					•
3842546765	580 – 820	•				•				•	•	•	•	•	•	•		•				•
3842546766	460 – 610	•					•			•	•	•	•	•	•	•	•					•
3842546767	580 – 820	•					•			•	•	•	•	•	•	•		•				•
3842546768	460 – 610		•					•		•	•	•	•	•	•	•	•					•
3842546769	580 – 820		•					•		•	•	•	•	•	•	•		•				•
3842527161	460 – 610			•					•	•		•	•	•	•	•	•					•
3842527162	580 – 820			•					•	•		•	•	•	•	•		•				•

3842546772
3842546775
3842546773
3842546774



Access aid
Safe, height-adjustable access aid with anti-slip surface
No. 3842546772

ESD access aid
No. 3842546775



Circular footrest
For safe, convenient access to sit down/stand up workstations (height-adjustable).
No. 3842546773



Armrest
Adjustable height, distance and angle to seat for optimum support of arm and shoulder muscles
No. 3842546774

Efficient workstation design – with MPS integrated solutions



In an increasingly competitive environment, you need minimal costs and investments that quickly pay off. With our comprehensive experience in manual workstation design, we offer advanced solutions strictly developed in accordance with lean production principles. Rather than just focusing on individual elements, this requires an integrated system with a uniform concept. Based on the three pillars of workstations, supply of materials, and links, you can create workstations as well as entire production lines that can be quickly adapted to your work content and executed in an extremely efficient manner.

Trust in our decades of experience.



Further information at:
www.boschrexroth.com/workchairs



Manual Production Systems catalog

Complete overview of comprehensive options for efficient workstation design



MTpro planning software

Sophisticated software to support your planning – from selection to configuration and ordering.

Your advantages

- ✓ Promote health
- ✓ Enhance ergonomics
- ✓ Minimize absences
- ✓ Optimize functions
- ✓ Boost productivity
- ✓ Expand application options



Clever solutions, healthy,
functional seating } Exactly

Bosch Rexroth AG

P.O. Box 30 02 07

D-70442 Stuttgart, Germany

Phone +49 711 811-30698

Fax +49 711 811-30364

www.boschrexroth.com

Local contact information can be found at:

www.boschrexroth.com/adresses

The data specified only serve to describe the product.

As our products are constantly being further developed, no statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.