

AGITUS™ chair has been designed to morph to you, to flow, to work, to support, to change, to breathe with you. You could describe its motion as fluid, natural and balanced we think this is a good thing. It should, we believe do all this in a covert way rather than screaming look at me, it should do all this, all day, every day, instinctively.

Agitus has been carefully conceived to provide a complete solution to the acknowledged challenges of seating posed in work environments around the world today. Like many great examples of product design Agitus deliberately shies away from an overt visual aesthetic and seeks to conceal and disguise its inner workings delivering a refined conservative appearance that would be comfortably placed in any work environment. The most striking visual characteristic being its artistically sculptured back frame that through necessity resembles the form it is intended to support, the spine, and from which the intelligence of Agitus is deployed.



AGITUS™



Wolfgang Deisig — studied Industrial Design in Germany and went on to work at the studio of the Swiss-German Designer Luigi Colani. He founded his own design studio in the 70's and today lives and works with his team in Berlin.

Known for innovative design works in office furniture systems and in particular office chairs such as the Vitramat for Vitra and the Sensor-Chair for Steelcase - which went on to become the best selling office chair worldwide.

Working for major European and American companies, Wolfgang has received major design awards in Germany, France, Japan and in the US.



Human beings are not designed to sit, so to do so for long periods is a challenge.

Movement is preferred to a static posture as movement pumps nutrients into the spine and promote good health as the spine has no independent circulatory supply. Maintaining a neutral relaxed posture is key.

Sitting upright holding the 'S' shape of our spines all day long, unsupported, is not possible and in most workers today we see 'C' shaped spinal posture at the end of the day.

Today most seating designs predominate upon orientational support for the Pelvis and provide dimensional adjustment for the Lumbar primarily in terms of height but also to a rigid fixed depth.

Most chairs today seek to cater for 90% but in truth get closer to only 80% of the working population with dimensional options focussed upon the seat, lumbar region and the arms, beyond this it is more often the aesthetic considerations that guide the design of the upper back profile. Historically chairs being constructed utilising structural plastics and moulded foams and more latterly with rigid frames with mesh type materials stretched across them these materials tend to 'hammock' providing little intentional support.

Throughout Northern America and Central Europe the synchronous mechanism in its various guises is widely acknowledged as being the most suitable solution however most users struggle to adjust the tilt tension effectively to balance the chair or ignore this adjustment and revert to locking the action negating the benefits of the synchronous tilt.

Few chairs provide any adjustable specific dimensional support for the Thoracic region of the spine.

Few chairs provide any effective dimensional support for the Cervical spine as most headrests available today serve as status symbols rather than be functionally effective.

Research has shown individuals using VDT prefer to work in a semi reclined posture in a range up to 10° from vertical. Unsupported this causes a flattening of the upper spine and tension in the shoulder and neck muscles.

The build up of heat in the muscles and tissue's surrounding sitting bones (ischial tuberosity) and the muscles surrounding the back leads to discomfort but more importantly restricts the flow of nutrients and causes fatigue and can lead to more long term health issues.



Deisig Design Studio

In late 2002 the Deisig Design Studio began work on new concepts for task seating, primarily focused on finding an alternative solution to the proliferation of mesh back chairs which were becoming more popular and the accepted limitations of traditionally constructed chairs of the last century.

Following discussions and consultations with a senior German ergonomist the potential failure in current prevailing seating design concepts were discussed at length and the need to develop a system of independently adjustable Lumbar and Thorax support systems covered with a flexible upholstery package.



The Solution

The Agitus design focuses upon providing total body support and addressing the challenges posed by sitting for long periods.

By recognising the natural flex and pivot points of the body, and their interrelation in achieving a balanced posture, we deliver effective seated support by focusing upon key areas of the seat, lower back, mid back and upper back - whilst at all times seeking to maintain the flexibility of the spine with active and adjustable support in both the Lumbar and Thoracic regions.

To further enhance this we have paired these areas of support with a new progressive synchronised mechanism to ensure that the total package achieves our goals.

The open aspect dissipates heat and encourages movement.

Ergonomics is not an exact science and it is not a surprise that Ergonomists don't agree on much; however constants are that the spine has four principle curves (cervical, thoracic, lumbar and pelvic) which form the holy grail of the 'S' shaped spine.



Poise



Strength



Black

Grey



Innovative, flexible and responsive adjustments



The Back

The organic form of the flexible structural back frame hosts some of the key innovations of Agitus with two independently adjustable flexible panels supporting both the Lumbar and Thoracic regions of the spine.

These panels are centrally mounted upon spring blades which allow them to pivot and flex as the user moves in the chair.

They are adjustable for height and depth and as such provide an unparalleled level of dimensional flexibility when compared to conventional rigid structures typical in seating design. They act as a form of suspension once set and have the ability to extend and retract which compensates for the way the curvature of the spine changes as we recline, promoting the lordotic curvature of the Lumbar region and supporting the kyphotic curve of the Thoracic region simultaneously.

The upholstery package which covers the panels has been conceived to telegraph these changes and flexibility through to the user.

The contoured moulded foam cushion sits directly onto the panels and is secured to a flexible perimeter frame which facilitates the change in form and alignment to the user, it flexes and the profile changes to correspond to the change in the user as the chair reclines back and forward.

The open aspect of this package allows the upholstery to breathe preventing the accumulation of heat that is typical in traditionally upholstered chairs.

Meticulous selection of the materials which form the back structure, deliberately provide dynamic flexibility without sacrificing any strength.



The Seat

When we sit, good posture begins with a correctly orientated pelvis. To achieve this Agitus works on several levels simultaneously.

The seat is linked to the mechanism via a die-cast aluminium frame. This delivers a solid foundation and enables the under seat area to have an open aspect.

A structural seat membrane is mounted to the frame which has been developed to be flexible and promote correct positioning on the seat. The deliberate human pattern provides fantastic comfort irrespective of the proportions of the user and also enables the seat to breathe and enhances the dissipation of heat from within the seat.

Dual density moulded foams further enhance the posture of the pelvis throughout the recline motion. Where needed the selectable negative tilt can be used to accentuate the positive rotation of the pelvis. Dimensional positioning is provided with seat depth adjustment fore and aft that can be easily achieved from a seated position.



The Headrest

Unlike most other headrests available today which offer more to status than performance, the headrest of Agitus provides fantastic reliable functional adjustment. Its purpose being to effectively support the cervical spine whilst the user reclines thus cradling the head enabling the correct orientation towards the VDT and eradicating stress in the shoulder and neck muscles.

The headrest is manually adjusted for height and depth whilst its spring mounted upholstered panel automatically orientates to the user and flexes in use.



The Arms

Key to effective relaxed support of the upper body are the design, positioning and function of the arm rests.

The arms of Agitus are securely mounted directly to the aluminium under seat frame. This provides phenomenal rigidity and also ensures that the arms retain their dimensional integrity in relation to the back of the chair irrespective of how the seat depth is adjusted, and by virtue of their interrelation to the seat, alignment to the desk surface is maintained throughout the recline motion.

Height adjustment comes as standard with the option of an innovative multifunctional arm pad, whose activation trigger is concealed within the inside of the pad design itself. This affords both width and depth adjustment simultaneously and will lock in the users preferred position.

The generously proportioned soft arm pad is a fitting resolution to such a superb arm design.



The Mechanism

The engine which drives the chair. It's progressive synchronised action featuring a 2.6:1 ratio between the back and seat tilt action respects the natural pivoting motion of the human form to give a truly harmonious synchronised action.

The symmetry of the control stalks have been intuitively designed with the trilobal design intended to provide ease of use.

Each control has a unique purpose which is clearly identified with pictograms indicating its intended function.

The Agitus mechanism features a four stage travel limiter with an upright lock and 3 preset recline ranges of 8°, 16°, and 26°. The inclusion of this function is designed to encourage perpetual synchronised movement as opposed to a fixed tilt lock. This function is further enhanced by the provision of a high geared tension adjustment which delivers its total range of adjustment in just 9 full revolutions.

To further enhance postural support the inclusion of a selectable 3° negative tilt is standard.

Headrest Adjustment

The headrest is manually adjusted for height by lifting or lowering the whole headrest. On the underside of the support arm there is a small button that when depressed allows the depth of the headrest panel to be adjusted. The panel should ideally sit just at the back of your head against your neck. The spring mounted upholstered panel automatically orientates to the user and flexes in use.



Thoracic Panel Adjustment

The Thoracic panel can be adjusted for position and performance. Using the lower controls either side of the back frame you can adjust the height of the thoracic panel to reflect the corresponding region of your back. The depth and tension of the panel can then be tuned to suit your needs using the smaller control that is situated directly behind the upper back panel.



Lumbar Panel Adjustment

The Lumbar panel can be adjusted for position and performance. Using the lower control in the centre of the back frame you can adjust the height of the lumbar panel to reflect the corresponding region of your back. The depth and tension of the panel can then be tuned to suit your needs using the smaller control directly above the height adjustment control.



Seat Depth

Adjust depth of seat by lifting the lever on the right hand side just under the seat. With back in contact with the backrest allow at least three fingers distance the front of the seat to the back of the legs.



Height Adjustable Arms (HA & MF Models)

Arm height may be adjusted using the trigger situated under the front of the arm pad. Set the arm height so that your elbows rest gently on the pad and your shoulders are relaxed.



Progressive Pelvic Support.

When fitted this requires no adjustment and will apply progressive support to the back of the pelvis to maintain proper alignment as the user reclines.

Multi Functional Arm Pad (MF Models)

When fitted, a button situated in the inner side of the arm pad is depressed and held in to allow you to adjust the width of the arms or forwards and backwards to allow the user to get closer to the desk releasing the button locks the position of the arm pad in the desired position.

Mechanism Movement

The chair features a four stage travel limiter that has preset ranges of recline using trilobal control on the left hand side of the chair you can select upright lock and 3 preset recline ranges of 8°, 16°, and 26°.



Negative Seat Tilt

To achieve three degree negative tilt of the seat and back, lift the lever in front of the backrest angle adjustment lever recline in the chair and the mechanism sets to a negative tilt position, reverse to return to standard position.

Seat Height

Adjust the seat height using the lever under the seat on the right. The hips should be slightly higher than the knees with feet flat on the floor.

Mechanism Tension

1 Pressure of the backrest can be varied to suit the user by using the trilobal control located next to the height adjustment lever on the right hand.
2 The control is pulled out and then can be wound clockwise or anti-clockwise to increase or reduce pressure.



Progressive



Beauty



Sculptural

Simplicity



What's inside counts

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