

Ergonomic Assessment

By Andrew Wilson - Osteopath & Ergonomist

buro

Buro Elan

Chair

2 November 2022

Seat Profile: 8.5 (10)

The Buro Elan has a moderate density foam seat 500mm x 500mm, with a foam thickness of around 60mm. It has a moderately restrained dishing from side to side of around 15mm. It has a slight reverse tilt with a front waterfall edge of around 20% (10cms of length), of its surface area. It is a comfortable seat with no pressure points. It allows good forward tilt of the thigh angle up to 20 degrees.

Back Rest Profile: 19.5 (20)

A high translucent mesh back 600mm high by 420mm wide. It is slightly waisted giving an interesting profile. The frame has a built-in convexity peaking about 80mm at the lumbar region. Combined with the high tensile mesh it gives excellent lumbar support continuing to the mid thoracic region with no pressure points. There is an additional focal adjustable lumbar support easily adjustable from the lower lumbar to the upper lumbar spine. It provides additional support without being obtrusive.

Configuration of Seat and Backrest:

Forward Tilt: 9.5 (10)

A nice profile seat with a generous waterfall edge. A nicely shaped backrest with optimum configuration between the two. It allows an optimum forward tilt posture with no pressure points.

Centre: 9.5 (10)

A horizontal thigh angle throws a little more weight onto the backrest. It copes admirably with excellent lumbar and thoracic support, nice mesh tension and an easily adjustable and unobtrusive lumbar support.

Reclined: 9.5 (10)

The synchro mechanism provides easy access to the reclined posture. There is a good range while maintaining good stability throughout the range. There is no tugging on clothing while accessing the full range of reclination. The high and very comfortable back rest provides very good support throughout the range.

Ease of Adjustability: 18.5 (20)

The synchro mechanism makes this a very easy chair to use. On the right is a single lever in easy reach that provides a good range of height adjustment. This lever allows the mechanism to lock throughout its range of movement in 4 different positions. Just behind the left lever is an additional lever that allows for a seat slide. It is very easy to use and glides very easily. None of the levers have markings. The lumbar support is easily reached with two hands and has a nice easy-to-access range of adjustment. The armrests provided with the chair are adjustable for height (using a knob on the outside of each arm), and for width and depth. All adjustments are easy to use.

Anthropometric Range: 19.0 (20)

This chair suits a wide range of users. It has a good range of gas lift adjustment (about 100mm). Its seat slider and high backrest allows it to comfortably accommodate the taller user. It has sufficient seat and backrest width to accommodate larger users.

Total: 94 (100)

Summary:

A very comfortable seat with an excellent back support. It is designed to allow optimum postures, and combined with the synchro mechanism, provides an excellent degree of usability for a wide range of users.