



The SmartSeatPro: making life better for people with complex care needs.

CareFlex makes specialist chairs for children and adults with limited mobility. The right chair can increase a person's quality of life exponentially, reducing complications such as muscle wastage and pressure sores. CareFlex provides chairs for use in nursing homes, specialist hospital wards and intensive therapy units, as well as for domestic use.

Innovative technology

CareFlex's latest model is the SmartSeatPro – a chair specially designed for disabled or injured people who need to remain seated for long periods of time, many of whom have postural challenges.

The SmartSeatPro can be adjusted in numerous ways, from the angle of the recline, to the depth and width of the seat. With its innovative nine-section back, it can be easily positioned to suit a user's size and build, and to relieve pressure. This makes it ideal for people with severe limited mobility, such as those with Multiple Sclerosis, Muscular Dystrophy, Motor Neurone Disease or Cerebral Palsy. The chair can also provide comfortable support to people with head or spinal cord injuries.

A 20 year relationship

We have been working with CareFlex since it was founded 20 years ago. Over that time we have manufactured components for several of CareFlex's chairs and built up a strong working relationship.

So when CareFlex began work on the SmartSeatPro back in 2013, Aldermans was the obvious choice to manufacture several of the metal components, including folded brackets and struts, welded tube and laser-cut parts, which were all to be powder coated. Discussions commenced between CareFlex and our Technical Engineer & Estimator, Paul Weeks.

The SmartSeatPro by
CareFlex provides a
superior level of comfort
for children and adults
with limited mobility. We
have created parts for
CareFlex for many years
– so we were the natural
choice to help with their
new development.





SmartSeat**Pro**[™]

Taking specialist seating to the next level



A tight deadline

CareFlex rated our "supportive and helpful approach" as one of the key reasons for partnering with us, along with the versatility of our Plymouth factory. They also put their faith in us because of our history of pulling out all of the stops in order to deliver – which proved vital on this project.

One hundred sets were required, but there was a very tight deadline for the first batch of ten – just three weeks, on a component which had not been made before. We were able to meet the deadline, providing a consistent and repeatable product by utilising custom-built welding jigs to facilitate the tight tolerance requirements of the SmartSeatPro.

Multiple in-house processes

Being able to undertake so many of the production processes in our own factory saves time, and helps us ensure the highest quality is maintained and controlled. We started by creating the prototype for CareFlex to approve. Each part was then laser cut, using our Amada C1 punch-laser combination, which offers superb precision.

The profiles were then taken to our fabrication shop for folding. With our range of press brakes and power presses, we are able to bend and form metal sheets and coils between 0.6mm and 6mm, and tubes and bars between 5mm and 50mm.

Once folded, the parts were welded, before being powder-coated and undergoing rigorous quality testing. The SmartSeatPro comes with a five year warranty and is likely to be adjusted several times a day, so each component needs to be robust and highly durable.

With the first batch of ten sets completed, the remaining 90 were put into production.

Easy inventory management

CareFlex have a call-off arrangement in place, whereby we store the components for them and can quickly supply when needed. Our inventory management system means that CareFlex can easily check how many components are in stock and make an informed decision about when to order more to be put into production.

The SmartSeatPro enjoyed a high-profile launch in 2015 and its revolutionary design is already making a real difference to people's lives. We are proud to have played our part in its creation and look forward to the next challenge that CareFlex presents us with.







"We consider Aldermans to be a reliable supplier. No enquiry is too much trouble. They are competitively priced and are able to flex lead-times to aid project development. Generally all products we receive are exactly what we expect, delivered on-time. When we have a problem, it is dealt with quickly, professionally and with minimal fuss."

Chris Northcott,
Senior Design Engineer, CareFlex