The Narrow Back Advantage™

SPIRIT 3300
NARROW BACK CHAIRS

Pelton & Crane
Your Image Reflected.
Oral cavity access in ergonomically correct positions decreases the risk of musculoskeletal disease, protecting the long term health of dental clinicians. Discomfort, lower productivity, missed days of work and patient dissatisfaction are all potential issues caused by prolonged improper positioning.

Musculoskeletal Disorders (MSDs) can affect the body’s muscles, joints, tendons, ligaments, bones and nerves, which can result in many health and production issues. As defined in the classification of motion chart below, excessive and repeated physical stress on the musculoskeletal system, including the fingers, wrists, shoulders, neck and back, can all contribute to MSDs.

<table>
<thead>
<tr>
<th>Classification of Motion</th>
<th>Description</th>
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<tbody>
<tr>
<td>Class 1</td>
<td>Fingers only</td>
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<tr>
<td>Class 2</td>
<td>Wrist bending and rotation</td>
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<tr>
<td>Class 3</td>
<td>Rotation of shoulders</td>
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<tr>
<td>Class 4</td>
<td>Elevation of shoulders (damage begins)</td>
</tr>
<tr>
<td>Class 5</td>
<td>Bending and/or rotation of trunk (damage begins)</td>
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Motions can be classified into five categories according to the length of the motion as shown above.

MSD affects over 50% of Dental Professionals and is the leading cause for premature retirement in clinicians under 50°.
Access to the oral cavity defines health for the entire dental team. A wide back dental chair can prevent proper positioning which can result in Class 4 and 5 movements. When a patient is positioned incorrectly, the clinician has to bend at the lower back, and elevate and rotate their shoulders. Having the right equipment is a critical part of maintaining proper positioning. Pelton & Crane’s narrow chair back allows the clinician to gain access to the oral cavity while maintaining an ergonomically correct posture and staying within healthy motion ranges.

**ACCESS DEFINES HEALTH**

**AROUND NOT UNDER**
Proper positioning and access start by placing legs and hips around not under the chair.

**RELAXED NOT RAISED**
Access to the oral cavity can be achieved at a comfortable lap height for relaxed not raised arm positioning.

**STRAIGHT NOT TWISTED**
Optimal focal distance can be achieved, allowing you to sit in a straight not twisted position, protecting your back.

*Risé Lyman, D.D.S., M.B.A. President American Association of Women Dentists
Improper leg positioning affects your health and hinders access to the oral cavity

- The narrow chair back allows more freedom to move around the patient and the ability to position the oral cavity at the proper height.

- A narrow chair back allows a clinician to position their legs around the chair, allowing both the dentist and assistant access to the oral cavity from any position.

- With a wide chair back, the legs are positioned underneath the chair potentially causing circulation issues and raising the oral cavity above a comfortable working height.
Narrow chair backs and headrests allowed best clinician posture and access*

*Compared against A-Dec, Belmont, DentalEZ and Midmark.

[Image of dental chair showing around and under options]
Access to the oral cavity can be achieved at an optimal height, allowing arms to remain in a relaxed position.

- The narrow chair back provides access to the oral cavity without the need of Class 3 and 4 movements, reducing the risk of musculoskeletal damage.

- With a narrow chair back, the oral cavity is at a comfortable height—allowing the clinician to work with arms relaxed and elbows at a 90+ degree position.

- A wide chair back causes the oral cavity to be positioned higher, forcing the clinician to raise their arms and elbows to gain access.

"I love my new Pelton & Crane 3003 Dental chair, it works with me and not against me! My patients tell me that it’s the most comfortable chair they’ve ever sat in."

- Margie Williams, DDS
ARMS: Relaxed not Raised

Relaxed ✓

Raised ✗
A narrow back chair reduces physical barriers, allowing access to the oral cavity without twisting or bending

- The narrow chair back allows the clinician to work around the patient with the oral cavity at a comfortable height, providing access to the oral cavity without twisting the trunk.
- Placing the knees under a wide chair back can require you to bend and rotate the trunk to gain access.
- Proper positioning allows for consistent focal length and working distance without the need for Class 5 movements.
Class 4 and Class 5 movements in particular present the greatest risk for musculoskeletal damage. Often these occur when the patient is positioned incorrectly, preventing proper ergonomic access to the oral cavity. This causes the doctor to bend at the lower back and elevate and rotate shoulders. If repeated continually, these Class 4 and 5 movements can create long-term or permanent MSDs. The leading cause of improper patient positioning is inadequate chairs.

- Dr. Mark Tholen, DDS, MBA
Former CEO at T.H.E. Design
Expert in Ergonomic Office Design
Comfort and Access

Unmatched comfort for your patient, ideal ergonomic access for you

Pelton & Crane’s Narrow Back Advantage™ puts you in the right position without sacrificing patient comfort. The backrest uses a convex design to help shoulders roll open, while keeping patients of all sizes comfortably supported. Slow release foam and Ultraleather upholstery, coupled with the ErgoSoothe massage system, create a relaxing environment. The Spirit 3300’s narrow chair back enables a comfortable experience for both you and your patients.
MAXIMUM ACCESS
The dual articulating headrest has the right pitch and adjustment ability to precisely position your patient so they are comfortable and you have the access you need.

CONVEX BACK
The convex narrow back design allows the shoulders to relax, providing unimpeded access to the oral cavity while keeping patients of any size comfortably supported.

ERGOSOOTHE™ MASSAGE TECHNOLOGY
All Spirit 3300 chairs come equipped with ErgoSoothe technology - the world’s first fully integrated dental massaging system. Bring comfort to your patient.

SLOW RELEASE FOAM
The Spirit 3300 chair features Advanced Comfort upholstery, which was engineered using a combination of slow release and high density foam resulting in luxurious comfort and unsurpassed quality.
THE NARROW BACK ADVANTAGE™

Pelton & Crane’s narrow chair back design enables oral cavity access in an ideal ergonomic position for you, while keeping your patients comfortably supported. Pelton & Crane reflects the quality of care that you strive to deliver. Visit our website at www.pelton.net for more information.

“...It’s a beautiful piece of equipment that contributes to the aesthetics of this practice while at the same time offering great functionality for excellent dentistry.

– Dr. Bradford Picot

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