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**A-dec 511 Dental Chair (Project 04-22) (6-05)**

The A-dec 511 Dental Chair is a cantilever-based hydraulic dental chair engineered around a cast-iron frame. The slim profile headrest and anatomical ultra-thin backrest is said to provide more legroom under the chair for the provider. Coupled with a streamlined seat cushion, the chair reportedly reduces patient pressure points while providing exceptional support. A gliding double-articulating headrest automatically adjusts with the patient when the chair is raised or lowered. Additionally, a convenient lever on the headrest allows for quick one-handed adjustments. The chair's multi-position armrests rotate out of the way, or can be removed for easy patient entrance and exit. There is a power on/off button located at the base of the chair. Chair operation is via a standard touchpad attached to the delivery unit and assistants instrumentation arm. An electronic programmable eight-position foot-switch and deluxe-touchpad are optional upgrades. The chair has a 60-degree rotational swivel feature with a positive-lock brake. A cantilever safety plate automatically stops the chair from lowering if resistance is encountered. The seat height adjusts between 14-30 inches from the floor. The upholstery is available in 24 colors (seamless or sewn). The chair is available in 120-240 volt, 50/60-hertz configurations. This evaluation took place concurrently with the A-dec 532 (Traditional) and 533 (Continental) Delivery Units along with the 571 Dental Light. All A-dec products feature a one-year warranty from date of delivery.



**Manufacturer:**

A-dec Inc.  
2601 Crestview Drive  
Newberg, Oregon 97132 USA  
(800) 547-1883  
(503) 538-7478  
(503) 538-0276 FAX  
[www.a-dec.com](http://www.a-dec.com)

**Suggested Retail Price:**

511 Dental Chair  
\$8,850.00

Footswitch (part # 62-0163-00)  
\$335.00

**Government Price:**

511 Dental Chair  
\$4,753.42

Footswitch (part # 62-0163-00)  
\$162.78

**ADVANTAGES:**

- + Ergonomically-friendly, ultra-thin (i.e., reduced thickness) anatomical backrest enhances provider access
- + Double articulating headrest includes one-handed adjustment mechanism
- + Headrest glides with patient
- + Provides smooth movement to all positions
- + Stable in all operating positions
- + Patients found the chair comfortable
- + Rotating armrest provides easy access for patients
- + Easy left-to-right conversion
- + Meets most military specifications for dental patient chairs

- + Straightforward assembly
- + Well-written, easy to use instruction manual

**DISADVANTAGES:**

- Some evaluators felt backrest was too wide, hindering access to patient
- Curved arm support design makes it impractical for obtaining intravenous access
- Gap between backrest and armrest minimizes arm support
- More expensive than other dental chairs on federal government contract
- Footswitch is an optional accessory
- Factory pre-set timing recline is non-adjustable

**SUMMARY AND CONCLUSIONS:**

The A-dec 511 Dental Chair includes an ergonomically-designed anatomical backrest, gliding double-articulating headrest, curved armrests, and ultra-thin seamless upholstery. It met all electrical safety requirements and satisfactorily passed the standards of the Medical Procurement Item Description #2 checklist. The chair was easy to assemble and the documentation was clear and complete. While the chair generally functioned well during testing the anatomical backrest may be too wide for some providers, and the curved armrests may not provide ample elbow support for some patients. Still, a majority of evaluators recommended its purchase for their clinic appreciating its ergonomics and stated it performed admirably during the evaluation period. The **A-dec 511 Dental Chair** is rated **Excellent** for use in US Air Force dental facilities.