

64-20 Heliodent DS Mobile X-ray Unit (Project 00-33) (12/01)

The Heliodent DS mobile intraoral x-ray unit consists of a tubehead, position-indicating device (i.e., cone), extension arm, and control panel that are mounted vertically to a framed wheelbase. This configuration is designed to allow dental workers to maneuver the unit between operatories. The Heliodent DS is said to contain a multiphase generator that produces direct current (DC) electron flow, which the manufacturer claims reduces patient radiation by 20 percent and ensures sharp contours and fine detail. The device is described as a 60-kV, 7-mA unit with a 0.7-mm focal point. The standard position-indicating device is 8-inches long, but an optional 12-inch length is also available. The flexible extension arm is also available in two lengths: 60 inches and 71 inches. The exposure settings are selected with the aid of a multifunctional control knob that features patient/tooth icons. Exposure times can be individually selected to suit all standard commercially available film speed categories, and is purported to be compatible with digital technology. The unit is available for 100-125V/11A or 208-230V/4.6A power lines, and is UL and CSA approved. The Heliodent DS and mobile stand have a three-year and one-year warranty, respectively.

Manufacturer:

Sirona USA
1200-A Westinghouse Blvd
Charlotte, NC 28273
(800) 659-5977
(704) 587-0453
(704) 588-4460 FAX
www.sirona.com

Suggested Retail Price: \$7,000.00
\$300.00 for installation and training (optional)

Government Price: \$4,550.00
\$300.00 for installation and training (optional)

ADVANTAGES:

- + Performed reliably.
- + Easy to operate.
- + Extension arm was stable, easy to position, and provided a wide operating radius.
- + Time settings were easy to read and use.
- + Cone length is appropriate.
- + Has lightweight, low-profile tubehead.
- + Easy to aim tubehead/cone.
- + Rectangular collimator reduces patient radiation exposure.
- + Unit is very stable which prevents tipping.
- + Cord length of remote button was satisfactory.
- + Produced radiographs of acceptable quality.
- + Is compatible for use with digital sensors.
- + Has user-friendly instructions.

DISADVANTAGES:

- Unit was difficult to maneuver around the dental chair because the base is heavy and bulky.
- Difficult to correctly position rectangular collimator for long bitewings.

SUMMARY AND CONCLUSIONS:

The Heliodent DS Mobile X-ray Unit functioned reliably during the evaluation and produced radiographs of acceptable quality. Its extension arm was easy to position and provided stable positioning for the tubehead. No reports of the unit tipping were received during the evaluation. The product's main disadvantages were the size and weight of the base, which made the unit difficult to maneuver around the dental chair. **The Heliodent DS Mobile X-ray Unit** is rated **Acceptable** for use by the federal dental services.

