

# RADON

## MEDICAL IMAGING



Del Medical OTC18S

[radonmedicalimaging.com](http://radonmedicalimaging.com)

We focus on people, innovative products,  
and service excellence

WV Office 866-723-6698

VA Office 800-722-1991

DEL MEDICAL

# OTC18<sup>S</sup>

OVERHEAD TUBE CRANE SYSTEM  
with Motorized Stitching and  
Synchronized Tracking



# System Overview

## Clinical Performance

Versatile and intuitive, the OTC18S system delivers automated stitching, from wall stand or table, enabled by sophisticated motorization and software, at an economical price point. Workflow is also optimized for all exams thanks to vertical and horizontal tracking functionality. Precisely designed to withstand high-volume throughput in hospital radiology departments, medical imaging centers and large orthopedic facilities with the need to perform a broad range of radiographic studies.

Our overhead tube crane (OTC) features a large LCD touchscreen interface enabling the technologist to view, adjust and control most system settings without leaving the patient's side. In addition, the OTC touchscreen interface guides the technologist through the intuitive automated stitching exam set up procedure. By integrating with a DELWORKS DR System and compatible generator, technologists are given the ability to set up long length examinations and adjust generator technique factors without leaving the patient's side. Its overhead horizontal and transverse ceiling-mounted rails provide technologists with limitless imaging procedure capability, including cross-table laterals and other challenging views.

The system embraces operational efficiency via ergonomically-designed user controls with automated tracking to selected image receptors, and an industry-leading table with a patient weight capacity of 800 lbs (363 kg). Built in the USA, it will deliver many years of continuous use and exceptional user-satisfaction.

## System Includes

- ▶ Overhead Tube Crane with Vertical Tracking and Automated Tube Rotation for Stitching
- ▶ Table Receptor Motorization for Horizontal Tracking
- ▶ Automatic Collimator
- ▶ EV800T Elevating Four-Way Float Top Table
- ▶ VT300T Wall Stand
- ▶ DELWORKS DR System

## Key Highlights



Technologist-Friendly  
LCD Touchscreen



Vertical Tracking to Table and Wall  
Stand to Maintain SID



Electromagnetic  
Braking



Premium Table and Tilting Wall  
Stand with Receptor Tracking



Integrated Workflow



Fixed and Wireless DR  
Detector Options



Dose Management  
Configurations



Automated Motion for  
Stitched Long Length Exams



# System Features

## Intuitive Control and Flexible Positioning

The OTC18S ceiling-mounted tube crane highlights an advanced, technologist-friendly touchscreen interface providing seamless operation of your radiographic system by displaying tube angulation, SID values, and customizable generator controls. Color-coded movement identification buttons provide optimal precision when setting up views. Effortless movements enable fast and secure adjustments of the tube head while electromagnetic braking provides quiet and secure locking. Its five-tier telescoping column delivers exceptional vertical movement of 71 in (180 cm), capable of performing complete head-to-toe radiographic procedures including upright weight-bearing and recumbent tabletop exams.



### Easy to Use

A conveniently placed all-lock release sensor is located just above the bottom section of the tube head handle. This sensor enables rapid manual positioning by allowing the user to grab the bottom handle to unlock the system and make swift adjustments.



### Auto-Collimation

Accelerates patient positioning and reduces radiation exposure by automatically selecting the proper field-of-view for each body part. During stitching studies, the OTC18S with DELWORKS DR software optimizes collimation settings to acquire images with minimal overlap for reduced patient exposure.

## Powerful Integration

The OTC18S System is powered by a compact and robust CMDR generator, available in 40, 50, 65 and 80 kW models. The generator is fully integrated with the DELWORKS DR Workstation, creating a streamlined workflow and enhancing dose efficiency.



Widescreen Display





► **Bi-Directional Vertical Tracking**  
Allows positioning control from the tube or wall stand



## Automated Stitching

Long length exams are automated. With the patient in position, either at the wallstand or on the table, the technologist utilizes the tube head controls to mark the top and bottom of the anatomy to be imaged. The system then calculates the number of exposures needed, and correct image overlaps. With the patient remaining in place, the technologist holds the exposure switch, and the system makes the first exposure, repositions the tube angle and detector, exposes, and continues until the full anatomy is imaged. The system then automatically stitches the images to present an integrated long length image.

# Ergonomic Tube Head Design



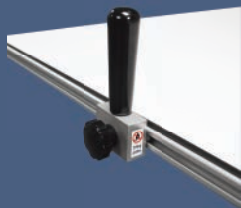
- 1 10.4" Touchscreen Interface**  
Patient side display of system status, SID, tube angle, and collimation. Selectable controls for workstation, generator settings, AEC, and tracking
- 2 Lock Release Buttons, Including Column Rotation**
- 3 All Locks Release Sensor at Main Handle**  
Longitudinal, Transverse, Vertical movement with grab-and-go convenience
- 4 Collimator Light is Automatically Activated**  
With tube, vertical table and wall stand movement, or by pressing any movement button
- 5 Stitching Controls**  
With long length exam selected, technologist selects the top of the anatomy, the bottom, and selects start. Exam is automatically performed, and long length image stitched

## EV800T Elevating Four-way Float Top Table

The motorized receptor of the EV800T enables synchronization and longitudinal tube tracking. The elevating four-way float top table delivers outstanding safety, durability and usability. Featuring an exclusive four-point lift system and exceptionally quiet motor-drive, its smooth, scratch resistant table top lowers to a height of just 22 in (56 cm) to ensure stress-free patient transfers and adjustments. Offering a high patient weight capacity of up to 800 lbs (363 kg), stable continuous movement is possible through conveniently placed recessed foot treadles and table-side controls, suitable for increasing technologist performance and satisfaction.



## Accessories



### ▶ Table-side Handgrips

These sturdy handgrips can be mounted along the entire length of both sides of the tabletop to enhance patient safety.



### ▶ Lateral Cassette Holder

This adjustable holder can be mounted along both sides of the tabletop allowing for access to a variety of cross-table lateral views.

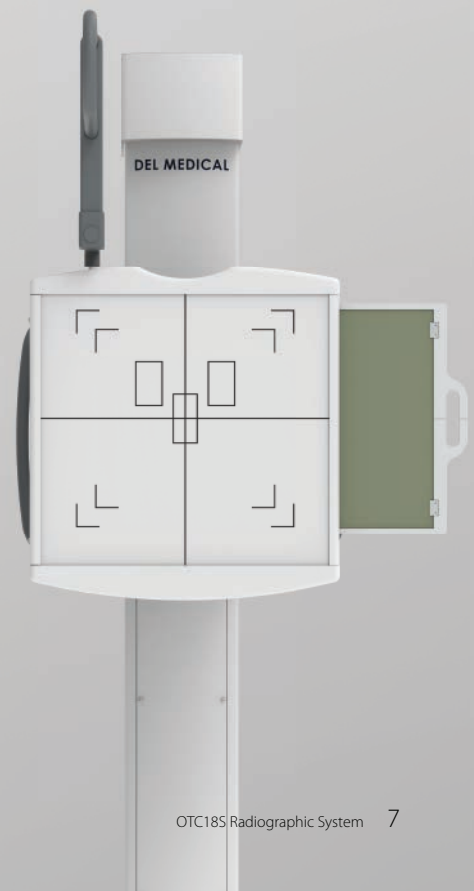


### ▶ Table-side Hand Controls

Convenient tableside hand controls for tabletop float and elevation.

## VT300T Tilting Wall Stand

The motorized receptor of the VT300T enables synchronization and vertical tracking to the x-ray tube and provides quiet and effortless positioning. The wall stand features a tilting image receptor, promoting comfort and precision for standing or seated examinations. This makes the VT300T accommodating to all users regardless of size or strength.

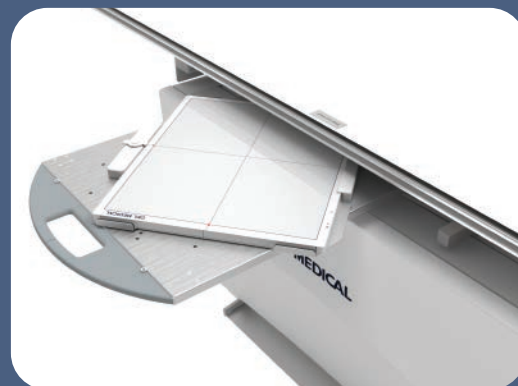




# Optional

## Rotating Tray \* optional upgrade

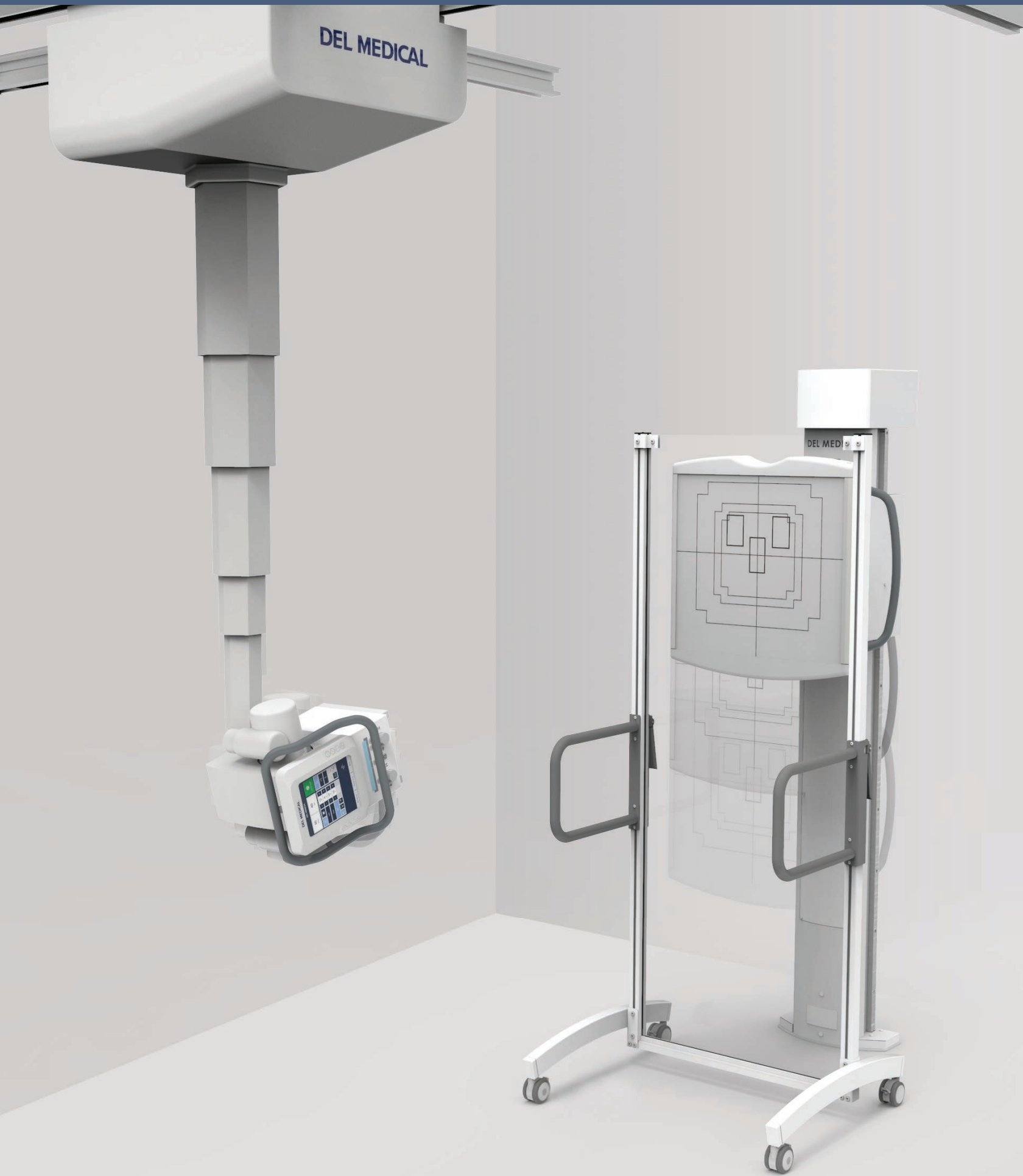
The easy-to-use rotating tray enables manual rotation of the DR detector for use inside both table and wall stand. The stable one-handed operation supports fast portrait-to-landscape positioning without ever removing the detector from the tray. Fully extended steel slides activate locking mechanisms to assure detector protection when loading and unloading. Designed to accommodate a wide array of ISO 14 x 17 in (35 x 43 cm) cassette-sized detectors.



## Mobile Universal Positioning and Alignment Stand

The DEL MEDICAL patient stitching stand's simple and sleek design improves efficiencies and outcomes at an affordable price. The stand helps keep the patient immobile during multiple or single exposures. With four 360° lockable swivel casters, height adjustable handles and slim lightweight design, this immobilization device can be easily placed in position and removed for storage. The patient stitching stand also may be equipped with a radiopaque ruler to help verify stitching accuracy.





# Software and Detector Options

## Outstanding Image Quality and Reduced Patient Dose

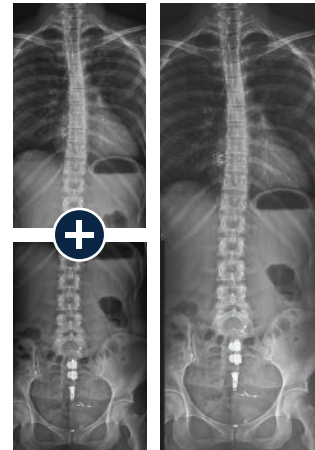
### DELWORKS

DELWORKS is a powerful image acquisition and processing software featuring a user-friendly interface that provides sophisticated and speedy medical imaging. Designed with complex system automation, DELWORKS aims to simplify the examination process by making the difficult decisions for you.

Advanced anatomical programming and image processing algorithms help optimize technologist productivity. DELWORKS strives to minimize human error and unwanted repeat exams to give technologists the highest quality image and lowest dose, with every exposure.

### Software Features

- ▶ Pre-exposure display of patient and procedure information, x-ray generator exposure factors, status and control functions integrated in a single display screen
- ▶ Positioning guide: queues proper positioning for each view
- ▶ Deviation Index (DI): standard reporting to assist in dose minimization
- ▶ Exam-specific image processing algorithms automatically optimize images based on selected patient anatomy
- ▶ Automatically Programmed Radiography (APR) specific default values with manual adjustment
- ▶ Image rotation in 90° steps, horizontal mirroring, automatic and manual image cropping to collimated area
- ▶ Easy verification and correction of image laterality and patient orientation
- ▶ Intuitively add orientation markers and text comments directly to acquired images (pre-defined or text free)
- ▶ PICC tool applies enhanced processing to images for better visualization of leads, lines or tubes
- ▶ Effective management, analysis, and reporting of rejected images
- ▶ Detailed histograms of pixel density
- ▶ User selection of modified LUT (Look-Up Table) based on various exam types
- ▶ Manual adjustment of the LUT, window and level
- ▶ Full array of measurement tools



### Image Stitching

The image stitching application automatically or manually combines multiple images into one, for accurate and effortless full-length spine or leg length images.

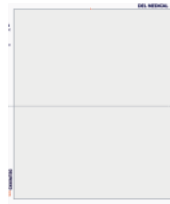
## Premium Detectors Available in Single, Dual, or Multi-Detector Applications



### E14Cw

Ultra-light, portable  
14 x 17 in (35 x 43 cm)  
Cesium wireless  
detector for  
outstanding image  
quality and flexibility

(Automated Stitching  
Available)



### E24Cw

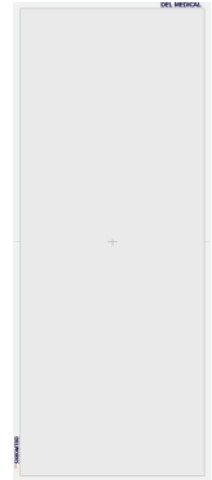
Ultra-light, portable  
10 x 12 in (24 x 30 cm)  
Cesium wireless detec-  
tor for pediatric or  
imaging of smaller body  
parts



### E17C

Large format 17 x 17 in  
(43 x 43 cm) detector,  
fixed in the vertical wall  
stand or table providing  
the maximum imaging  
area with fast, wired  
image transfer

(Automated Stitching  
Available)



### LLI

Monolithic (one piece),  
17 x 42 in (43 x 107 cm),  
wireless and portable  
detector designed for full  
spine and leg imaging in  
a single exposure

## EasyConnect

DELWORKS wireless detectors feature EasyConnect — an Auto Exposure Detection (AED) technology that keeps the detector in a standby mode, awaiting exposure from any x-ray source. Once an exposure is detected it instantly captures the x-ray image and transmits it wirelessly to the system workstation.

## EasyShare

Detectors can be shared between multiple DELWORKS workstations, enhancing workflow, equipment utilization and economic feasibility.

Some examples for reference:

- Sharing an E14Cw detector between the MDR mobile and OTC or FMT Radiographic Suite
- Sharing an E14Cw and an E24Cw detector between any DELWORKS in-room workstation and a DELWORKS FIT mobile workstation for imaging on the go

## CyberSecurity

To provide exceptional patient care without interruption, it is critical for health care providers to have a secure environment, protected against cyberthreats such as viruses or ransomware. UMG/DEL MEDICAL takes our partnership in this seriously and is committed to providing safe, reliable, and secure systems. We deliver product security that helps you achieve compliance with Health Insurance Portability and Accountability Act (HIPAA). Together, we can increase security and privacy.



# Technical Specifications

## OTC18S Tube Crane

Room Height (Standard):	105 - 119 in (267 - 302 cm)
Room Height (with Optional Telescopic Extension)	105 - 127 in (267 - 322 cm)
Vertical Telescopic Travel Range:	70.8 in (180 cm) with minimum 32.7 in (83 cm) focal spot to ceiling distance 15.5 in (39.4 cm) focal spot to floor distance with a 9' ceiling height
Longitudinal Travel Range:	14 ft rail (standard): 136 in (346 cm) Rail extensions (optional): 220 in (558.5 cm)
Transverse Travel Range:	10 ft (3 m) track (standard): 86.6 in (220 cm) 13 ft (4 m) track (optional): 140 in (355 cm)
Longitudinal Detent Positions:	Configurable during installation
Tube Rotation Range (Horizontal Axis):	-120°, +120°, detent positions at -90°, 0°, +90°
Tube Rotation Range (Vertical Axis):	-182°, +154°, detent positions at -180°, -90°, 0°, +90°
Locks:	All Lock Release sensor on bottom handle to release transverse, longitudinal, and vertical locks Individual membrane lock releases <ul style="list-style-type: none"> <li>- Roll Lock</li> <li>- Column Rotate</li> <li>- Up</li> <li>- Down</li> <li>- Longitudinal</li> <li>- Transverse</li> <li>- Vertical</li> <li>- Vertical / Longitudinal / Transverse</li> </ul>
Weight:	~507 lbs (230 kg) with tube & collimator
Options:	- DAP (Dose Area Product)

## Generator

1-phase:	40 kW
3-phase:	40 / 50 / 65 / 80 kW

## X-ray Tube

Options:	300 / 400 / 600 kHU
----------	---------------------

## EV800T Elevating Table

Load Capacity (Dynamic):	800 lbs (363 kg)
Table Base Length:	53 in (135 cm)
Table Base Width:	25 in (64 cm)
Tabletop Movement:	Longitudinal, ± 19.75 in (50 cm) Transverse, ± 6.5 in (16.5 cm)
Variable Height:	22.25 in (56.5 cm) to 34.25 in (87 cm)
Bucky Travel:	± 8.5 in (22 cm) motorized
Tabletop-to-Film Distance:	3.2 in (8 cm), upper position for special applications 2.7 in (6.9 cm)
Tabletop Beam Attenuation:	Standard table (<0.7 mm aluminum) Carbon fiber (<0.4 mm aluminum)
Tabletop Length:	78 in (198 cm) / 86.5 in (220 cm)
Tabletop Width:	32 in (81 cm) / 36 in (91 cm)
Weight:	563 lbs (256 kg)



## VT300T Tilting Wall Stand

Receptor tilt range:	+90° / -20°
Vertical travel range, vertical receptor:	15.5 - 71.1 in (39.4 - 180.6 cm) motorized
Vertical travel range, +90° receptor:	25.5 in (64.8 cm) minimum
Height:	86.5 in (208.9 cm)
Depth, vertical receptor:	30 in (76 cm)
Receptor width:	27.25 in (69.2 cm)
Receptor height:	26.5 in (67.3 cm)
Weight:	765.5 lbs (347.2 kg)
Weight, without counterweights:	368.5 lbs (167 kg)
Options:	8 in (20 cm) extension box / Overhead patient handgrips / Rotating cassette tray

## Mobile Universal Positioning and Alignment Stand

Handrail Height (Lowest):	21 in (53.3 cm)
Handrail Height (Highest):	76 in (193 cm)
Dimensions:	30 x 29 x 79 in (76.2 x 73.6 x 200.7 cm)
Weight:	58 lbs (26.31 kg)
Options:	Radiopaque ruler

## Power Requirements

System ( DM-PSI):	115 / 230 - 240 VAC, 50 / 60 Hz, 15A
Tube Crane:	24 VDC 8A (supplied by the DM-PSI)
Table:	120 / 230 / 240 VAC, 50 / 60 Hz, 10A (supplied by the DM-PSI)
Wallstand:	24 VDC 1.2A (supplied by the DM-PSI)
Generator:	Generator specific (see 8000-DMOTC18S-OP for further details)

**DEL MEDICAL**



#9000-OTC18S 01.22 Rev. C

### New York

28 Calvert Street  
Harrison, NY 10528  
(Tel) 800.261.9808  
(Fax) 914.835.6111

### Illinois

241 Covington Drive  
Bloomington, IL 60108  
(Tel) 800.800.6006  
(Fax) 847.288.7011

[www.delmedical.com](http://www.delmedical.com)