DEL MEDICAL

OTC18

OVERHEAD TUBE CRANE SYSTEM with Synchronized Tracking



System Overview

Clinical Performance

Versatile and intuitive, the OTC18T system delivers enhanced patient comfort and optimized workflow. 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 features a sophisticated LCD touchscreen console, which supports enhanced capabilities to offer a more genuine patient experience. By integrating with a DELWORKS DR System and compatible generator, technologists are given the ability to adjust generator technique factors without leaving the patient's side. Its overhead horizontal and transverse tracks 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 of 800 lbs (363 kg). The OTC18T system was developed through innovation to produce the highest quality diagnostic images with ease. Built in the USA, it will deliver many years of continuous use and exceptional user-satisfaction.

System Includes

- Overhead Tube Crane with Vertical Tracking
- Automatic Collimator (Manual version available)
- EV800 Four-Way Elevating Float Top Table (RT100 optional)
- VS 300 Wall Stand (VT300 optional)
- DELWORKS DR System

Key Highlights



Technologist-Friendly LCD Touchscreen



Vertical Tracking to Table or Wall Stand



Electromagnetic Braking



Premium Table and Wall Stand



Integrated Workflow



Fixed and Wireless DR **Detector Options**



Dose Management Configurations



System Features

Intuitive Control and Flexible Positioning

The OTC18T ceiling-mounted tube crane highlights an advanced, technologist-friendly touchscreen console 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. Peaceful and effortless movements are controlled by an electromagnetic braking system enabling fast and secure readjustments of the tube head. Its five-tier telescoping column delivers exceptional vertical movement of 71" (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 readjustments.



Auto-Collimation

Accelerates patient positioning and reduces radiation exposure by automatically selecting the proper field-of-view for each body part. This feature is available through the DELWORKS DR acquisition software's pre-programmed APR settings.

Powerful Integration

The OTC18T 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.











Vertical Tracking

Synchronized motorized movement of the tube crane's vertical axis maintains precise centering between the x-ray tube and image receptor. Available functions include vertical tracking to table or wall stand. The result is quick, accurate alignment without the extra time and effort needed to make additional manual adjustments.

Ergonomic Tube Head Design



- 10.4" Touchscreen Display
- Patient side display of system status, SID, tube angle, and collimation. Selectable controls for workstation, generator settings, AEC, and tracking.
- Lock Release Buttons, Including Column Rotation
- All Locks Release Sensor at Main Handle Longitudinal, Transverse, Vertical movement with grab-and-go convenience
- Collimator Light is Automatically Activated with Tube Movement* Or by pressing any movement button

EV800 Elevating Four-way Float Top Table

The durable EV800 elevating four-way float top table delivers outstanding safety and usability. Featuring an exclusive four-point lift system and exceptionally guiet 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.



Table-side Hand Controls

Accessories and Upgrades



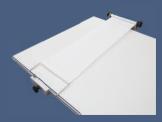
Table Side Handgrips

These sturdy handgrips can be mounted along the



Lateral Cassette Holder

to a variety of cross-table lateral views.



Compression Band

VS300 Wall Stand

The reliable VS300 wall stand utilizes electromagnetic 'fail-safe' locks to maintain operator confidence throughout the imaging procedure. Full receptor movement to the floor, patient-side handgrips and optional overhead handgrips promote efficient upright exams without placing unnecessary strain on the patient.

Designed for convenience, the VS300 technologist handgrip permits relaxed vertical travel by angling with the operator's wrist as the image receptor is raised or lowered.



Optional

RT100 Fixed Height Four-Way Float Top Table

The RT100 table features a 700 lbs (318 kg) patient weight capacity and a stain-resistant floating tabletop which glides freely on a precision roller bearing system. Float top movements are safely controlled by heavy-duty electric locks, activated by a conveniently placed foot treadle release. The standard cassette tray accommodates your choice of 14 x 17 in (35 x 43 cm) or 17 x 17 in (43 x 43 cm) detector with ease. Its all-steel structure and welded base provides maximum strength and reliability. In addition, the RT100's base can be used to store Anthem generator electronics, making it a great space saver for tight room layouts.



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.



VT300 Tilting Wall Stand

The VT300 wall stand features a tilting image receptor, promoting comfort and precision for standing or seated examinations. Every adjustment is precisely counterbalanced to allow smooth operation with light effort applied by the technologist. This makes the VT300 accommodating to all users regardless of size or strength.











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

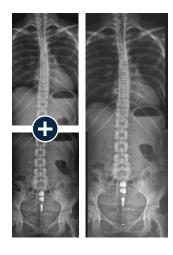


Image Stitching Option

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

- ▶ 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

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



E24Cw

Ultra-light, portable 10 x 12 in (24 x 30 cm) Cesium wireless detector 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



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

OTC18 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 vertic locks Individual membrane lock releases - Roll Lock - Column Rotate - Up (OTC18T) - Down (OTC18T) - Longitudinal - Transverse - Vertical - Vertical / Longitudinal / Transverse
Weight:	~507 lbs (230 kg) with tube & collimator
Power Requirements:	100-240 VAC 50/60 Hz 3.6 A (Maximum input current) 15 A (Circuit breaker suggested)
Options:	 - Manual collimator - DAP (Dose Area Product) - Full system integration (with or without generator control)
Generator	
1-phase:	40 kW
3-phase:	40 / 50 / 65 / 80 kW
X-ray Tube	
Options:	300/400/600 kHU
EV800 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, \pm 19.75 in (50 cm) Transverse, \pm 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)
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)
Power Requirements:	120 VAC or 230/240 VAC, 50/60 Hz, Max current 10 amps

VS300 Ergonomic Wall Stand Height / Vertical Travel: 84 in (213.4 cm) Depth: 13.4 in (34 cm) Receptor Width: 24.6 in (62.5 cm) Receptor Height: 26.5 in (67.3 cm) Front Panel Aluminum Equivalency: 0.4 mm Weight (with Receptor): 200 lbs (91 kg) Power Requirements: 24 V DC at 1.25 Amps RT100 Radiographic Table (Optional)

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Load Capacity:	700 lbs (318 kg)
Table Base Length:	43 in (109 cm)
Table Base Width:	34 in (86 cm)
Tabletop Length:	86.6 in (220 cm)
Tabletop Width:	32 in (81 cm)
Tabletop Movement:	Longitudinal, ±25 in (63.5 cm) Transverse, ±4.9 in (12.4 cm)
Total Bucky Travel:	Longitudinal 11.25 in (28 cm)
Tabletop-to-Film Distance:	3.2 in (8 cm)
Weight:	387 lbs (176 kg)
Power Requirements:	120 / 230-240 VAC 50 / 60 Hz (Max current 0.75 Amps)
Options:	78 in (198 cm) tabletop length / Variety of grid options / Lateral cassette holder / Table-side patient handgrips / Compression band

VT300 Tilting Wall Stand (Optional) Receptor tilt range: +90°/-20° Vertical travel range, vertical receptor: 15.5" (39.4 cm) to 71.1" (180.6 cm) Vertical travel range, +90° receptor: Minimum 25.5" (64.8 cm)

Height: 82.24" (211 cm)

Depth, vertical receptor: 30" (76 cm)

Receptor width: 27.25" (69.2 cm)

Receptor height: 26.5" (67.3 cm)

120/230-240 VAC 50/60 Hz

 Weight:
 765.5 lbs. (347.2 kg)

 Weight, without counterweights:
 368.5 lbs. (167 kg)

Options: 8" (20 cm) extension box / Overhead patient handgrips / Rotating cassette tray



Power requirements: