

# MODEL – DC25 12.5 TON



VFD Driven – PLC Controlled



***A Full Line Derrick Manufacturer***

**“Designed By Riggers For Riggers”**



WEST81 ENGINEERING INC

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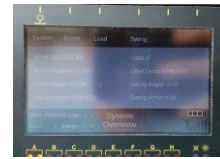
## FEATURES AND BENEFITS

- ✓ Modular design for ease of transport, components are designed to fit within a 6'-6" x 3'-6" x 8' elevator system with 2500 lbs. capacity
- ✓ Boom and Legs are of lattice construction reducing weight while increasing strength
- ✓ Incremental Boom Length (60 ft min. to 80 ft max.)
- ✓ Mast and Sills are bolted tube construction
- ✓ Adjustable Legs and Sills (15 ft to 30 ft)
- ✓ Variable Sill Spread Angles (45° to 110°)
- ✓ Mast Height (26' ½") equipped with a 4-piece 12 ft Diameter Swinger Bullgear
- ✓ Integrated Load Monitoring system with Boom and Swing Angle, Overload, Overspeed, Digital Anti-Two Block, End-of-Travel Swing and Boom, Integrated Zone Control (A thru H), Load Chart Management and Storage



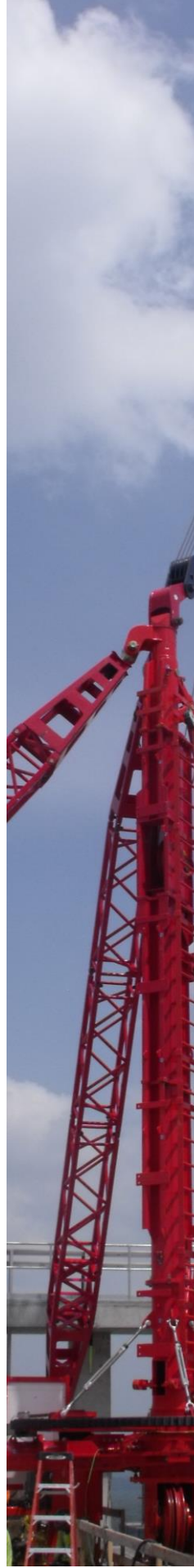
## CONTROL SYSTEM

- ✓ Safety PLC monitors and controls all three machinery axes: load, luff, and slew
- ✓ HMI station with remote monitoring and accessibility
- ✓ Radio Remote control with multiple speed ranges for fine positioning and load placement
- ✓ Digital control for smooth acceleration and deceleration of all axes, minimizing dynamic loading
- ✓ Easy to install quick-connect cables for rapid field deployment and set up



## SWINGER SYSTEM

- ✓ Pinion and Bull-gear arrangement
- ✓ Sill Mounted (460V) VFD swinger drive
- ✓ Sill-mounted swinger drive for ease of installation





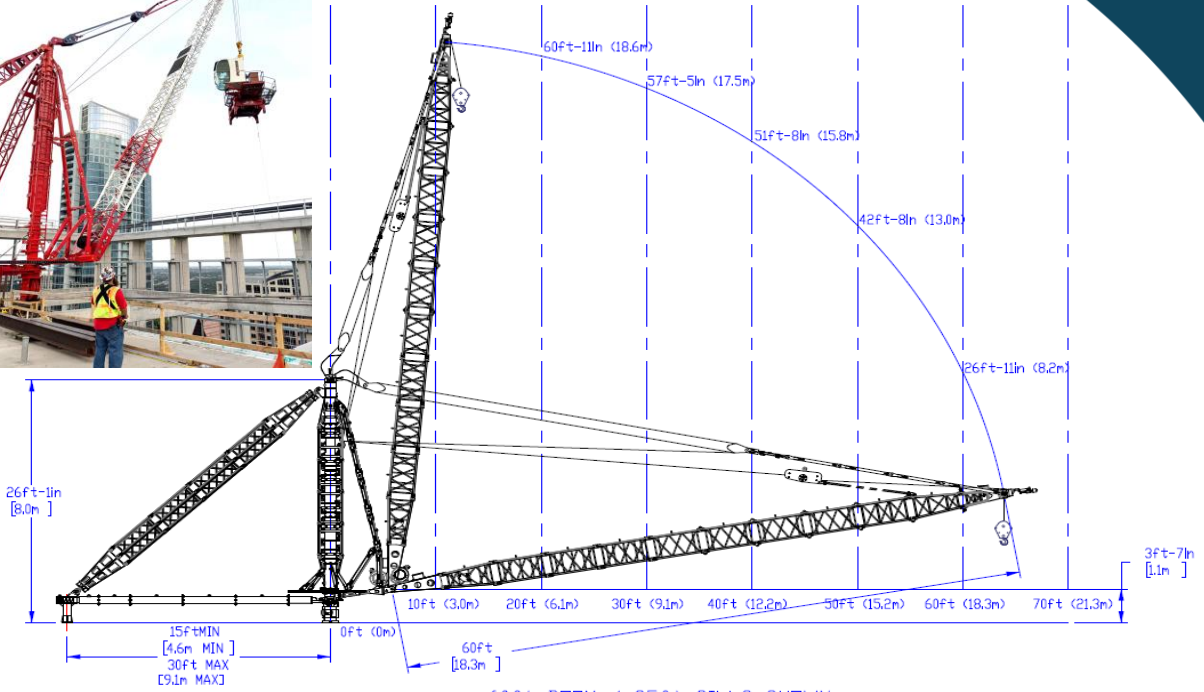
## HOISTS

- ✓ H880 Load Line with 8,800 lbs. linepull, 3-part line reeving, allows 25,000lbs at boom tip, 900 feet working lift height,
- ✓ H1000 Boom Line with 10,000 lbs. linepull, 6-part line reeving, allows full luffing capability at max capacity
- ✓ Designed for 9/16" diameter wire rope
- ✓ Manual Dog and Pawl locking system
- ✓ Includes Drive Line Brake

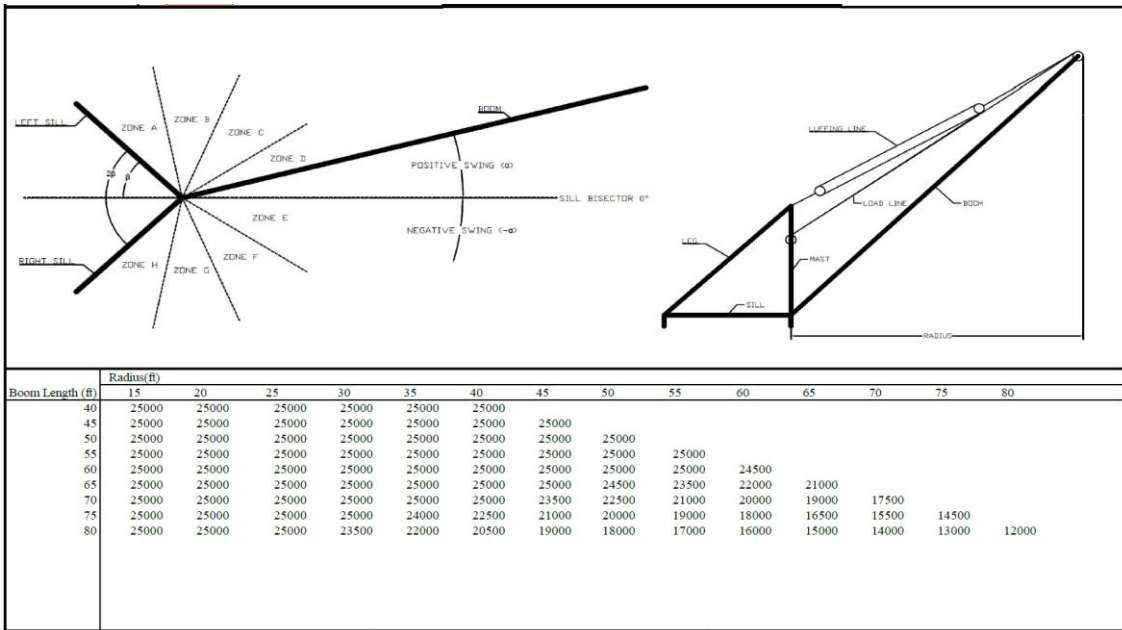


## OPTIONAL

- ✓ Boom Sections
- ✓ Hoists can be fitted with an optional parallel half-pitched grooved shell for enhanced spooling
- ✓ Hoist Disc Drive Line Brakes
- ✓ Cable Reels
- ✓ Aircraft beacon light
- ✓ Overhaul & Hook Blocks



60ft BOOM / 25ft SILLS SHOWN



Actual Chart Reactions	
Max Mast Compression	-113507 lbf
Max Mast Tension	2549 lbf
Max Left Sill Compression	-53908 lbf
Max Left Sill Tension	52015 lbf
Max Right Sill Compression	-53908 lbf
Max Right Sill Tension	52015 lbf

Equipment Max Reaction	
Max Mast Compression	-155000 lbf
Max Mast Tension	15000 lbf
Max Mast Shear	3000 lbf
Max Left Sill Compression	-80000 lbf
Max Left Sill Tension	80000 lbf
Max Left Sill Shear	3000 lbf
Max Right Sill Compression	-80000 lbf
Max Right Sill Tension	80000 lbf
Max Right Sill Shear	3000 lbf
Max Swinger Compression	3300 lbf
Max Swinger Tension	450 lbf
Max Swinger Shear	3100 lbf

To aid in job planning and quotation activities the DC25 Derrick comes complete with its own load chart calculator program. Using this calculator, the customer can insert the job specific derrick configuration parameters and generate a project specific load chart including induced reactions. West81 must be consulted for the development of final certified load charts.