

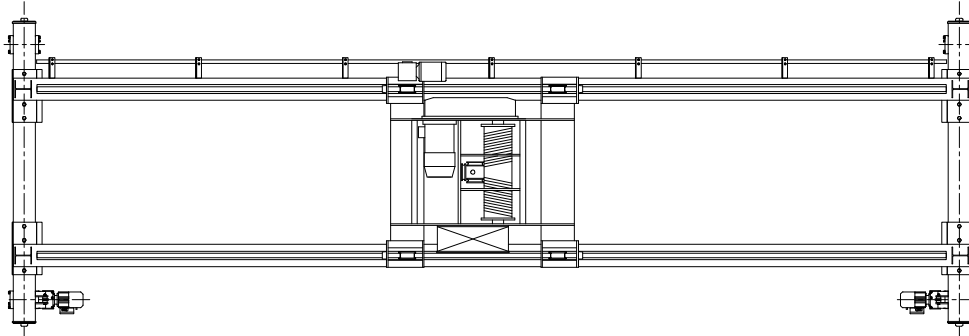


# CRANE SPECIFICATIONS – TDR40 Series

## Spans to 100' – Capacities to 30 –Ton

### Top Riding – Double Girder

1/19/11



1. CraneVeyor TDR40 cranes are designed for Class A through D heavy service with motorized operation, and are designed in compliance with Crane Manufacturer's Association of America (CMAA) Specification No. 70.
2. Maximum girder deflection is 1/888. Girders are wide flange beams with reinforcement as required. Longer span girders may be welded plate box sections with reinforcing plate diaphragms. ASCE rail or high strength steel square bar trolley rails are attached to the girder top flange.
3. End truck frames are fabricated from rectangular steel tube sections and machine line bored for alignment of the bearing/axle assemblies. Rail sweeps, safety lugs and shock absorbing rubber bumpers are provided at truck ends. The truck end assemblies can be easily removed to allow easy replacement of the wheels.
4. Wheels are 15" diameter, rolled C-1040 steel, double flanged, machined to CMAA 70 tolerances. The axles for drive wheels are pressed and keyed to the wheels. Drive wheel axles are supported by MCB type bearing housings that are mounted in the machined truck frame end. Idler wheels have fixed axles with lifetime lubricated and sealed ball bearings that are selected to withstand the radial and thrust loads. When appropriate for the application or specifications, direct drive idler wheels and re-lubrication fittings for the bearings can be provided. Standard wheels operate on 30#, 40# or 60# ASCE rails, but can be machined to operate on other rail sections, as specified.
5. Drive gear boxes oil bath enclosed helical/spur gear reducers that are mounted and keyed to the drive wheel axles, and torque arm mounted to the truck frame for direct drive. All gearing is in an oil bath, with no exposed/open gearing. Single drive motor with drive shaft supported by intermediate bearing units, is provided on shorter span cranes. Dual drives are provided on longer span cranes. When appropriate for the application or specifications, a hollow shaft worm gear reducer will be provided.
6. Bridge motors are squirrel cage induction type, TEFC, continuous duty, NEMA design B, low slip, suitable for inverter use. Motors are designed for operation in  $-5^{\circ}$  to  $+40^{\circ}$  ambient temperature with Class B insulation. For operation in high ambient temperatures or severe environment areas, special motors and insulation can be provided. Motors are NEMAC flange type direct mounted to the gearbox for easy replacement.
7. Standard bridge speed is 60 or 90 FPM, 2-speed with adjustable frequency control. Optional speeds are 50, 75, 125 or 150 FPM. Other speeds are available on application.
8. A manual disconnect is provided between the runway conductors and the controls. The disconnect is fused if there are multiple cranes on the runway. Standard motor control is adjustable frequency drive with dynamic braking, motor overload/over current protection, magnetic mainline contactor, branch fusing, and 115V control transformer in a NEMA 3R enclosure. The AFD control is provided for single, 2-speed or 2-step infinitely variable control, and has programmable acceleration/deceleration, and other advanced features. Controls are for 208/230/460-3-60 power. Specify the power requirement. Other controls, enclosures and voltages are available on application.
9. The bridge steel structure is blast cleaned and provided a primer and a finish safety yellow top coat
10. Available options include: Full length maintenance walkway along the drive girder; partial or full length walkways along the rear girder; crossover platforms between the front and rear walkways; under the crane work lights; Operator Cabs – either skeleton or full type; Travel limit switches; Hazardous or corrosive environments; spark resistance; air operation; special painting systems.
11. Bridge conductors are festooned flat cable with trolleys on C track. Push button control is furnished when the hoist/trolley is ordered with the crane. As options, an independent traveling C track/flat cable pendent system or radio remote control is available.