



## Table Transporter Series Specifications

### **PART 1 - GENERAL**

Summary: The following specification is written to provide the level of design expectation of the owner and architect in regards to the quality/functionality of the product and installation for the table systems.

#### 1.1 SECTION INCLUDES

- A. Free standing tables.

#### 1.2 RELATED SECTIONS

- A. Division 11 Section 53 00, "Laboratory Equipment"

#### 1.3 SYSTEM DESCRIPTION

- A. The Table Transporter consists of a laboratory grade cart that aids in the height adjustment of manual height table systems by lifting the table for you and has a second purpose of helping to move a complete workstation for re-arranging your workspace or Laboratory. The fixed height version is used with powered Laboratory table systems and the electronic height adjustable version is used with manual height adjustment Laboratory table systems. All available options are listed and shown in the CiF Solutions product catalog.

#### 1.4 SUBMITTALS

- A. Shop Drawings:
  - 1. Comply with Division 1
  - 2. Submit a PDF file of 11x17 shop drawings consisting of:
    - a. Finish, hardware, construction options selection sheet
    - b. Small scale floor plan showing casework in relation to the building.
    - c. Large scale elevations and plan views.
    - d. Cross-sections; service runs; locations of blocking within walls (blocking is done by others); rough-in requirements and, sink centerlines.
  - 3. Drawings should include data and details for construction of the laboratory casework as well as information regarding the name, quantity, type and construction of materials (such as hardware, gauges, etc.), that will be used to complete the project.
- B. The manufacture or purchaser of any equipment prior to approval by the owner's representative will be undertaken at the manufacturer's risk.
- C. Field Measurements: In instances in which casework is indicated to fit to other construction,

#### 1.5 QUALITY ASSURANCE

- A. Qualification of Bidder/Manufacturer: The following list of information should be provided to the Architect at least ten (10) days prior to the bid opening:
  - 1. List of manufacturing facilities
  - 2. A list of five (5) installations of comparable stature completed within the past 3 years
- B. Source Limitations: All table systems, including countertops, service fittings and accessories, should be obtained from a single source to ensure consistency in project delivery.



- C. Area mockups shall be as indicated on the shop drawings. Mockup areas must be priced for disassembly and reassembly and used within the project.

#### 1.6 DELIVERY, STORAGE AND HANDLING

- A. Packaging, Shipping, Handling and Unloading Packaging: Products should have packaging adequate enough to protect finished surfaces from soiling or damage during shipping, delivery and installation.
- B. Handling: Care, such as the use of proper moving equipment, experienced movers, etc., should be used at all times to avoid damaging the tables. Until installation takes place, any wrapping, insulation or other method of protection applied to products from the factory should be left in place to avoid accidental damage.
- C. Acceptance at Site: Table systems will not be delivered or installed until the conditions specified under Part 3, Installation section of this document have been met.
- D. Storage: table systems should be stored in the area of installation. If, prior to installation, it is necessary for table systems to be temporarily stored in an area other than the installation area, the environmental conditions shall meet the environmental requirements specified under the Project Site Conditions article of this section.
- E. Waste Management and Disposal: The installer of the table systems is responsible for removing any waste or refuse resulting from the installation of, or work pertaining to the table systems; thereby leaving the project site clean and free of debris. Trash container/s to be provided by others.

#### 1.7 PROJECT SITE CONDITIONS

- A. Building must be enclosed (windows and doors sealed and weather-tight).
- B. An operational HVAC system that maintains temperature and humidity at occupancy levels must be in place; Relative humidity must be regulated and stable between 25% and 55% per AWI standards before products are brought on site, throughout project completion and with the site moving forward while the building is in use by the owner.
- C. Ceiling, overhead ductwork and lighting must be installed; prior to the delivery and installation of the table systems.
- D. Site must be free of any further construction such as "wet work."

#### 1.8 WARRANTY

- A. Furnish a written warranty that Work performed under this Section shall remain free from defects as to materials and workmanship for a period of two (2) years from date of acceptance. Defects in materials and workmanship that may develop within this time are to be replaced without cost or expense to the Owner.
  - 1. Defects include, but are not limited to: Discoloration or lack of finish integrity, cracking or peeling finish, weld or structural failure and failure of hardware.
  - 2. The warranty specifically does not cover any product or hardware, which has been incorrectly installed, including poor climate conditions, exposed to excessive loads or abuse.
  - 3. The warranty is in effect while the product is being used as it was intended and owned by the original purchaser of the products and services covered.
  - 4. The purchaser shall notify CiF Lab Solutions immediately of any defective products. CiF Lab Solutions shall be given a reasonable opportunity to inspect the product prior to its return. No product shall be returned to CiF Lab Solutions until written shipping instructions are received by purchaser. Repair or replacement of the non-conforming products or their parts, or refund of the purchase price shall be at CiF Lab Solutions sole



option. CiF Lab Solutions shall not be liable for any incidental or consequential damages, expenses or losses whether incurred in connection with injury to persons or property.

- B. All non-casework items supplied, but not manufactured at CiF Lab Solutions shall be covered under the original manufacturer's warranty.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Basis-of-Design Product: CiF Lab Solutions 53 Courtland Avenue, Vaughan, ON, Canada L4K3T2
- B. Substitution Limitations:
- C. Substitutions will be considered only when other manufacturers submit substitution requests in accordance with procurement substitution and/or substitution procedures, or provide a comparable product with the following support information detailed below:
- D. Written documentation stating specification compliance regarding construction, materials, and standard of quality and manufacturing techniques.
- E. Note all deviations to the drawings and/or specifications in writing.
- F. The owner, or its designated representative, reserves the right to reject any proposal that in his opinion fails to meet the criteria established by this specification. Such a decision shall be final.

NOTE: Manufacturer's that are listed as basis of design or approved are still obligated to hold ALL specification requirements as called out in this document. There will be NO EXCEPTIONS in materials or fabrication permitted that have not been requested in writing and responded to with approval, during an RFI period prior to bid.

### 2.2 MATERIALS

- A. Steel:
  - 1. Sheet steel: High quality cold rolled mild steel meeting the requirements of ASTM A1008 CS Type B in 18ga and 14ga U.S. Standard (cold rolled CR). High quality hot rolled pickled & oiled (HRP&O) steel meeting the requirements of ASTM A1011 CS Type B in 11ga and 7ga U.S. Standard.
  - 2. Tube steel: High quality square tube meeting the requirements of ASTM A500 for 2" square and ASTM A513 for 1.5" And 1.25" with various wall thicknesses for all. High quality round tube meeting the requirements of ASTM 513 for .75" diameter in 11 gauge wall thickness.
- B. Hardware:
  - 1. Casters:
    - a. 5" swivel caster, 4" diameter wheel
      - i. Shall be 5.3" nominal height with 4" diameter wheel.
      - ii. All casters are swivel without brake system.
      - iii. Shall have a minimum load rating of 400 lbs per caster.
      - iv. Have a 1/2"-13 threaded stem for mounting.
  - 2. Lift system:
    - a. Linear actuator
      - i. Model #LA31 series linear actuator.
      - ii. 24-V DC permanent magnet motor with 3.9amp maximum draw on 4000n lift capacity unit.



- iii. Synchronization feature on each actuator for accurate control of height range and balance between both actuators.
- iv. Travel length of 350mm (13.78").
- v. Built-in brake to hold position.
- vi. Noise level of 45 dB (A); measuring method DSIEN ISO 3746, actuator not loaded.
- vii. Duty cycle of 5% or 1 minute continuous use followed by 19 minutes of not in use time.
- viii. Built in limit switches (non-adjustable).
- ix. Color is black.
- b. Desk Panel (up/down switch)
  - i. Model number #DP1E.
  - ii. Two button plastic housed switch with imprinted arrows indicating the up and down directions.
  - iii. Color is black.
- c. Power Transformer/ control box
  - i. Model #CB06.
  - ii. Input voltage of 120v and output voltage of 24v.
  - iii. Color is gray.
- d. Junction box
  - i. Model #DJB.
  - ii. Color is gray.
- e. Battery Pack
  - i. Rated capacity of 1.3 Ah 24 volts.
  - ii. Color is black.
- 3. Anti-slip material is black self-adhesive .060" thick.
- 4. Locating blocks are Delrin Acetal Resin material .25" thick and white in color.

## 2.3 FABRICATION

- A. Table frame – Powered version
  - 1. Flat steel parts are laser cut ensuring a high quality edge, component fit and finish.
  - 2. Joints are tight fitting and welded construction.
  - 3. All exterior and exposed surfaces are finished in a powder-coated finish.
  - 4. Top deck, feet assemblies and leg assemblies are mechanically bolted together.
  - 5. Leg assemblies
    - a. The outer leg sections are formed from 18 & 14 gauge CR steel into a 2.63" x 10.75" rectangular shape and welded together. A 7 gauge HRP & O steel base plate is also welded at the bottom on the inside of the leg.
    - b. The inner telescoping leg sections are formed from 14ga CR steel into a rigid 2.00" x 7.00" shape with 11 gauge HRP & O steel welded in inner top and bottom plates
    - c. Inner telescoping legs utilize plastic guide blocks at the top and bottom of the outer leg to guide and stabilize the movement.
    - d. Height adjustment is accomplished using a two synchronized linear actuators that are mounted in front of the outer leg assemblies. Total range of adjustment is 13.78".
    - e. Cart height range is a nominal 25.44" to 39.22".
  - 6. Table feet
    - a. Each foot assembly consists of a 1.50" x 3.25" structural outer decorative shell formed from 14 gauge CR steel and an inner structural channel shape formed from 11 gauge HRP & O steel. Two flat 11 gauge HRP & O side plates extend down and have a 7 gauge HRP & O bottom plate. A 7 gauge HRP & O



- actuator mounting tab is located on the bottom plate. All are welded together to make a rigid foot assembly.
    - b. Caster attachment is done using a hex nut, which is welded to the inner “U” section. Casters have a threaded stem for mounting to the foot. Drive-in type leveling glide inserts are not allowed.
    - c. The left and right foot assemblies are joined together by a 2.00” x 10.50” formed 11 gauge HRP & O steel channel that is welded to the feet.
  - 7. Top deck frame
    - a. Constructed of two side channels and a front tray assembly with integral handle for cart movement. The top deck frame is a fully welded assembly.
    - b. Each 2.00” x 3.00” side channel is formed from 11 gauge HRP & O steel and has a welded in 7 gauge HRP & O actuator mounting tab.
    - c. The 4.00” x 6.5” front tray is formed from 14 gauge CR steel and has 14 gauge CR steel welded in end plates. The top front edge has a welded on .75” diameter steel round tube handle running the length of the tray to aid in cart movement.
    - d. The front tray holds all cart actuator controls and battery pack. There is a formed 18 gauge CR steel decorative cover that fits within the front tray to cover all of the controls and is screw mounted for easy access.
    - e. The front area of the top deck has notched Delrin plastic location/position blocks attached to properly position the mating workstation and hold it in place.
- B. Table frame – Fixed Height Version
  - 1. Flat steel parts are laser cut ensuring a high quality edge, component fit and finish.
  - 2. Joints are tight fitting and welded construction.
  - 3. All exterior and exposed surfaces are finished in a powder-coated finish.
  - 4. Complete frame is constructed from 1.50”-11 gauge square tubing with two vertical legs on each side and a top and bottom tube. The bottom tubes have .375” thick HRP & O steel caster mounting discs which have threaded holes to accept the caster threaded stem.
  - 5. Cross tubes run side to side with two lower and one upper rear tube that tie the side frames together. The rear vertical/horizontal tube intersections have 6.00” x 6.00” 11 gauge HRP & O corner gussets welded in to form a rigid structure. The top front cross tube is .75” diameter round tube to act as a movement handle.
  - 6. The top tubes are covered with a 1” wide strip of black anti-slip protective material to prevent marring the finish on mating table when transporting a workstation.
  - 7. The front area of the top tubes have a notched Delrin plastic location/position block attached to properly position the mating workstation and hold it in place.

## 2.4 METAL FINISHES

- A. Powder coating
  - 1. Preparation: Spray parts to clean with a heated cleaner/phosphate solution, rinse with water, spray to pretreat with phosphate solution, rinse with water on two steps to finish. Dry immediately in temperature controlled heated oven.
  - 2. Application: Electrostatically apply powder coat of selected color and immediately bake in temperature controlled oven to assure a smooth, hard finish. Surfaces to have a chemical resistant, high grade furniture finish.
  - 3. Exposed finish thickness to be between 2.0 mil & 3.0 mil.



## PART 3 - EXECUTION

### 3.1 INSTALLERS

- A. Installer Qualifications: For installation and maintenance of units, an authorized representative of the manufacturer required for this project.

### 3.2 EXAMINATION

- A. Site Verification of Conditions: Casework will not be delivered or installed until the following conditions have been met:
  1. Building must be enclosed (windows and doors sealed and weather-tight).
  2. An operational HVAC system that maintains temperature and humidity at occupancy levels must be in place; Relative humidity must be regulated and stable between 25% and 55% per AWI standards before products are brought on site, throughout project completion and with the site moving forward while the building is in use by the owner.
  3. Ceiling, overhead ductwork and lighting must be installed.
  4. Site must be free of any further construction such as "wet work."

NOTE: In the event that any of the specified requirements for installation are not present at the time of requested delivery, the general contractor or owner must provide the casework manufacturer with a letter of deviation that releases the manufacturer from any responsibility or liability from any damage to the products resulting from the unfavorable building conditions.

### 3.3 INSTALLATION

- A. Table Transporter:
  1. No actual installation of the Table Transporter is required. The powered unit should be plugged into a 110v standard outlet to charge the system battery for 24 hours before the first use. There are no leveling adjustments required.
- B. Cleaning
  1. Wipe all surfaces down with a mild general purpose cleaner. Do not wash down or immerse any part of the table with liquid or water for cleaning purposes, but rather use a damp cloth.
  2. Countertops and any shelving should be cleaned and free of grease or streaks.
- C. Weight rating & system loading
  1. The load rating listed below is for static loads that are evenly distributed over the entire area of the cart system.
    - a. Load rating not to exceed 1400 lbs (635 kg).

END OF SECTION

Revision Schedule

**Date Revised**   **Items Revised**

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