

# CROSSED ROLLER TABLES

Low Profile Crossed Roller Tables Crossed Roller Slide Tables (Aluminum) Anti-Creep Crossed Roller Slide Tables (Aluminum) Crossed Roller Slide Tables (Steel)

## LOW PROFILE CROSSED ROLLER TABLES

| SERIES                                   | LOAD<br>CAPACITY, LB.     | TRAVEL      | LENGTH      | ACCURACY  |
|--|---------------------------|-------------|-------------|-----------|
| LPT-1025-3205<br>(21 MODELS) Stainless s | 50-825<br>teel available. | 0.473-5.118 | 0.984-8.070 | 0.0001″/″ |

Del-Tron® LPT slides are low profile, high accuracy slide tables featuring easily adjustable preload and light weight aluminum carriage. Standard inch type threaded and counterbored holes allow easy mounting and installation. The bearing base consists of a two sided single inner rail flanked by two precision V grooved outer rails. High precision rollers captive in a stainless steel cage and positive internal travel stops assure smooth accurate reciprocating motion.

400 series Stainless steel models (ss) offer aluminum carriage with stainless steel rails, rollers, cages and fasteners. LPT slides are ideal anywhere low friction reciprocating mechanisms are used in automated equipment.

## **CROSSED ROLLER SLIDE TABLES (ALUMINUM)**

| SERIES                                      | LOAD<br>CAPACITY, LB. | TRAVEL              | LENGTH                     | ACCURACY               |
|---|-----------------------|---------------------|----------------------------|------------------------|
| MINI NBT-1A<br>NBT-2A-NBT-6A<br>(72 MODELS) | 95-197<br>66-2032     | 1.0-3.0<br>0.71-9.0 | 1.969-4.921<br>1.378-14.17 | 0.0001″/″<br>0.0001″/″ |

Stainless steel available.

Our Gold Motion Series crossed roller slide tables offer low cost and lightweight aluminum body construction to support heavy loads with low friction and precision linear motion. Select from over 45 standard sizes for use in a wide range of applications - precision instruments, office and communications equipment, surface grinders, tool grinders, and assembly fixtures, as examples.

Factory assembled and ready to install, each positioning table consists of an aluminum base and an aluminum carriage, both precision milled, and a pair of hardened steel linear bearings. Counterbored clearance holes, in base, permit easy mounting. Threaded holes, closely spaced in carriage, permit attaching your components without additional machining. Factory preloaded bearings eliminate side play. Internal stops, in the form of projecting screw heads between the underside of the carriage and base, protect bearings from over travel during handling.

Mount on flat surfaces to provide full support to the base. Loads stated, may be applied in any direction. Load values are calculated for weights evenly distributed on your positioning table. For full life of tables, we recommend careful calculation of moments and cantilevered loads.

### ANTI-CREEP CROSSED ROLLER SLIDE TABLES (ALUMINUM)

| SERIES   | LOAD<br>CAPACITY, LB. | TRAVEL              | LENGTH                     | ACCURACY               |
|--|-----------------------|---------------------|----------------------------|------------------------|
| MINI NBT1-AC<br>NBT2A-AC/NBT6A-AC<br>(31 MODELS) | 96-198<br>66-2032     | 98-2.75<br>0.71-9.0 | 1.969-4.921<br>1.378-14.17 | 0.0001″/″<br>0.0001″/″ |

The Anti-Creep crossed roller slide tables utilize our Anti-Creep crossed roller rail systems to prevent roller cage slippage during operation. This system allows you to mount the table in any orientation while maintaining direct roller contact to the rail surface eliminating roller cage creep. These tables are ideal for vertical applications and where high acceleration and deceleration forces are present.

Factory assembled and ready to install, each positioning table consists of an aluminum base and an aluminum carriage, both precision milled, and a pair of hardened steel linear bearings. Counterbored clearance holes, in base, permit easy mounting. Threaded holes, closely spaced in carriage, permit attaching your components without additional machining. Factory preloaded bearings eliminate side play. Internal stops, in the form of projecting screw heads between the underside of the carriage and base, protect bearings from over travel during handling.

Mount on flat surfaces to provide full support to the base. Loads stated, may be applied in any direction. Load values are calculated for weights evenly distributed on your positioning table. For full life of tables, we recommend careful calculation of moments and cantilevered loads.

| SERIES                                   | LOAD<br>CAPACITY, LB. | TRAVEL | LENGTH                     | ACCURACY                  |
|--|-----------------------|--------|----------------------------|---------------------------|
| MINI NBT-1<br>NBT-2-NBT-6<br>(41 MODELS) | 26-88<br>88-2640      |        | 0.984-3.346<br>1.378-12.80 | 0.000080"<br>0.000080" to |

## CROSSED ROLLER SLIDE TABLES (STEEL)

Crossed Roller Slide Tables are factory assembled, and ready to install. They use Del-Tron® crossed roller bearings to provide very precise linear motion with low friction and high support stiffness for the load. A selection of more than 40 standard sizes is available for applications including precision instruments, office and communications equipment, surface grinders, tool grinders, assembly fixtures, and anywhere precise linear positioning is required.

## Construction

Each slide table consists of a one piece base, a one piece carriage, and a pair of linear bearings. The bearings are factory preloaded to eliminate side play.

Counterbored clearance holes in the base permit easy mounting in your structure. Threaded holes in the carriage are closely spaced to permit attaching your components without additional machining in most cases.

Standard material for base and carriage is cold rolled steel, with black oxide finish.

## **CROSSED ROLLER SLIDE TABLES (STEEL)** continued

#### Application

Mount on a flat surface to provide full support to the base.

Although it is seldom needed, the carriage surface can be machined or additional mounting holes can be added if the following precautions are observed:

1. Do not disassemble the table since reassembly and readjustment of the preloading require special procedures.

2. Protect the ways against entry of chips and debris.

3. Drill only blind holes through the carriage to avoid depositing chips inside the unit.

4. Avoid intersection with internal mounting or preloading screws.

5. Avoid clamping forces in excess of the rated load capacity.

Internal stops, in the form of projecting screw heads between the under side of the carriage and the base, are intended only to protect the bearings from over travel during handling. Provide separate stops appropriate for your load if needed.

The ends of the carriage contain tapped holes that permit easy attachment of way covers, bellows, or other shields to exclude dust and keep the ways clean.

For more information on Del-Tron's Crossed Roller Tables, <u>click here</u>.



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