

TABLES AND SUPPORTS

- **Stainless Steel or CarbonBlack table top**
- **Revolutionary highly dampening Normalex core**
- **Four grades: HiSpec, Research, Lite-Line and Breadboards**
- **Laboratory and clean room workstations**
- **Round legs and frame supports with choice of HiSpec Rolling diaphragm 1Hz, Cushion 3Hz or Buffer 9Hz isolators**
- ***Options including self-levelling, laser ports, non-magnetic and many more.***



Optical tables provide the base on which precision optical and laser work is performed. **Speirs Robertson** optical tables are made in four grades to suit most applications. HiSpec ,Research , LiteLine and Breadboard. Table performance increases with increased table and skin thickness. For the maximum performance the HiSpec series features 1/4”(6mm) skins and a 12”(300mm core. For smaller area , non-critical applications where cost may also be a consideration our 2”(50mm) thick Breadboards provide a good solution.

While our standard range of table goes from 1 x 1ft Breadboards up to jointed table of 12 x 12 ft we can produce custom table based on customers requirements including vacuum table and tables with special hole patterns at very little extra cost.

SELECTING A TABLE

We make tables to customer size on request and various options include: laserports, laser shelves, support bars, jointing of tables and screens. To select a table you must first decide on the size of working surface you require and then the sensitivity of the experiment to vibrations; from this you can determine the table thickness required. As a rough guide the static deflection of a table increases as a cube of length and decreases roughly as a square of thickness. Thus for a comparable performance the larger a table is, the thicker it needs to be.

Hi-SPEC TABLES (HS SERIES)

These tables offer the ultimate in performance, with 1/4"(6mm) top skins and 12" (300mm) thickness. They are suitable for the most demanding experiments, such as holography, laser interferometry and spectroscopy

Hi-Spec Tables (HS SERIES)



RESEARCH TABLES(RS SERIES)

Our Research Series are suited for the widest range of applications where a stiff working surface is essential and vibrations need to be kept to a minimum. They feature 1/5"(5mm) ferromagnetic top skins and are made in both 8"(200mm) and 12"(300mm) thickness (recommended for the largest tables).

Research Series (RS-SERIES)



LITE-LINE TABLES (LL SERIES)

For less critical applications where internal tuned dampening is unnecessary these tables offer the advantage of less bulk and lower cost while still providing a very stiff surface on which to work.

Lite-Line Tables (LL SERIES)



BREADBOARDS (BB SERIES)

Breadboards are ideal for applications that do not require large working surfaces or in quiet environments where vibrations are not a concern

Breadboards (BB SERIES)



SELECTING A SUPPORT SYSTEMS

In choosing an isolation system it is important to bear in mind that generally isolation will improve as load increases and to ascertain the level of disturbance that needs to be isolated away.

ROUND LEG SUPPORTS

Normally used for tables 6 x 4ft and over and purchased in sets of 4, however additional legs may be used for very large tables or high loads. Standard heights are 24"/600mm and 28"/700mm, however we can supply to almost any height required.

**Self Levelling
Round Legs**



FRAME SUPPORTS

Frames are ideal for small tables, breadboards and workstation applications. Stainless steel versions are available for cleanroom use. Specify if non-standard working heights is required.

9Hz C-frame



LABORATORY WORKSTATION

Our range of laboratory workstations provide a stable base for sensitive instruments. They comprise C-frames with a choice of Hi-Spec, Cushion or Buffer isolators and worktops in electro finished stainless, white laminate or black finish. Options include self levelling, arm rests, sliding shelves and castor/levelling feet. Fixed hole patterns to order as required

**Basic
Laboratory
Workstation**



CLEAN ROOM SERIES

For clean environment applications we manufacture our table tops and supports in electro finished stainless under controlled conditions. Products are thoroughly cleaned and double wrapped so they can be introduced into clean environments without rear of contamination.

**Laboratory
Workstation
With white
Laminate top**



SPECIFICATIONS

Tables & Breadboards

	HiSpec	Research	LiteLine	Breadboard
Standard Sizes(ft)	6 x 4 to 12 x 5	6 x 3 to 12 x 5	2 x 3 to 12 x 5	1 x 2 to 5 x 10
Table Thickness(“/mm)	12”/300mm	8”/200 or 12”/300mm	4”/100mm	2 1/4”/56mm
Top Skin (inches/mm)	1/4”/6mm	1/5”/5mm	1/5”/5mm	2 1/4”/56mm
Flatness over 1sq metre(mm/in.)	+/-0.15mm/0.006”	+/-0.15mm/0.006”	+/-0.15mm/0.006”	+/-0.2mm/0.007”
Core	Mult-layer NORMALEX		Mono-layer NORMALEX	
Threaded Holes	Metric M6 on 25 or 50mm centres. Imperial 1/4-20UNC on 1” or 2” centres			
Hole Type	Double Sealed			
Weight kg/cm sq	0.01	0.1	0.01	0.01
Static Deflection um/100kg	0.1	0.1	0.15	0.2
Ordering Details: Specify Table Series– Size(L x W x H) Metric or Imperial—Hole Spacings				

Support & Vibration Isolation

	Round Legs			C-Frame		
	HiSpec	Cushion	Buffer	HiSpec	Cushion	Buffer
Isolation Type	Rollong Diaphragm	Air	Rubber	Rolling Diaphragm	Air	Rubber
Natural Frequency (Hz)	1	3	9	1	3	9
Light Duty Load (lbs/kg)*	264lb/120kg	300lb/136kg	220lb/100kg	264lb/120kg	300lb/136kg	220lb/100kg
Heavy Duty Load (lbs/kg)**	693lb/315kg	598lb/272kg	484lb/315kg	693lb/315kg	598lb/272kg	484lb/315kg
Air Pressure (bar)	5.5 typical - 7.0 maximum					
Height Adjustment Range (in/mm)	2/3”/15mm	1/2”/12mm	1”/25mm	1 1/5”/30mm	1 1/5”/30mm	1 1/5”/30mm
Self-Levelling	Yes	No	No	Yes	No	No
Castors	No	No	No	Yes	Yes	Yes
Support Shape (in/mm)	10 3/4”/273mm diameter			4 3/4 x 4 3/4” 120 x 120mm sq leg		
Ordering Information: Specify Support Type, Isolator Type, Table Size & Load and Working Height						