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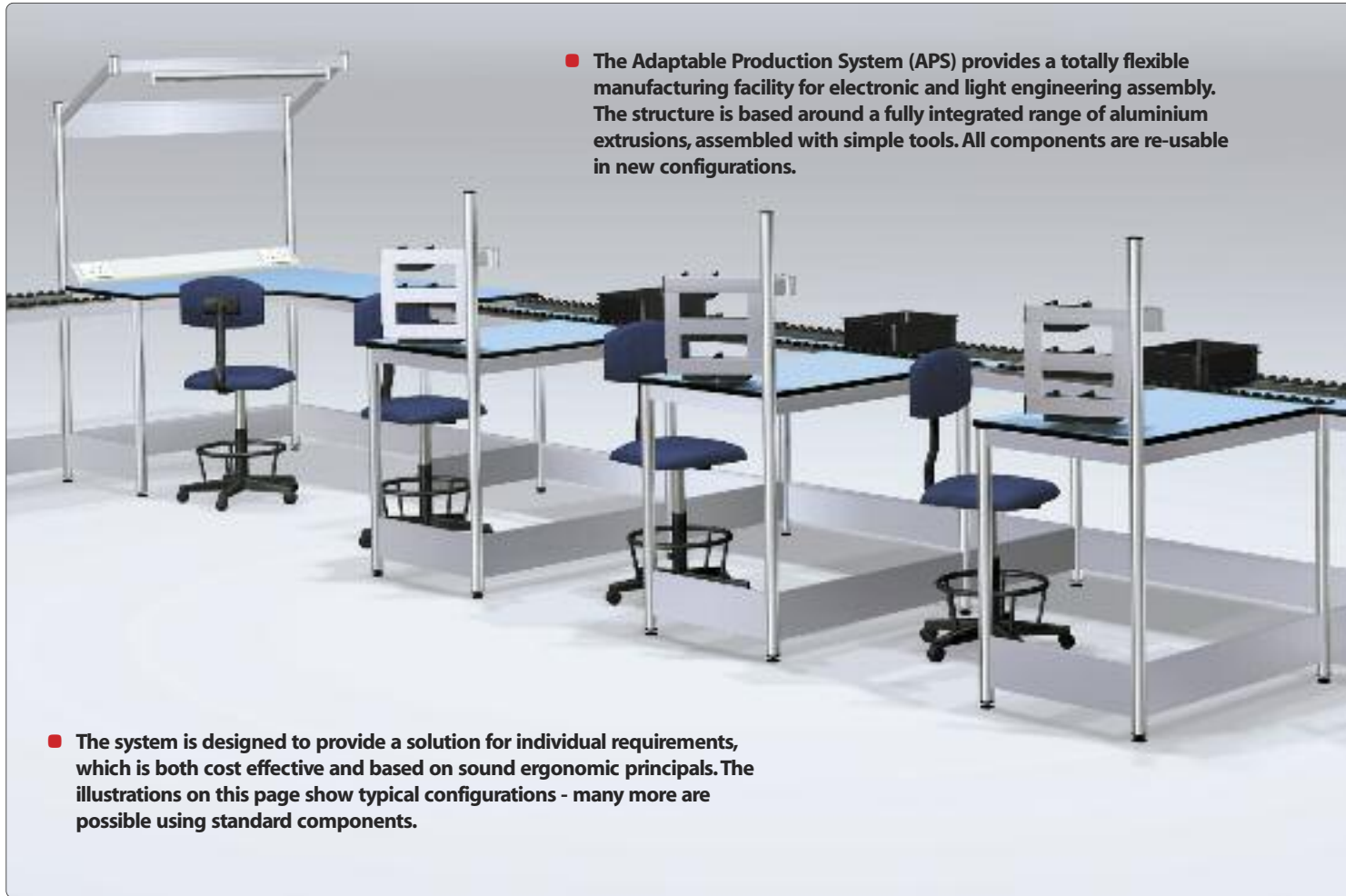
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- The Adaptable Production System (APS) provides a totally flexible manufacturing facility for electronic and light engineering assembly. The structure is based around a fully integrated range of aluminium extrusions, assembled with simple tools. All components are re-usable in new configurations.

- The system is designed to provide a solution for individual requirements, which is both cost effective and based on sound ergonomic principals. The illustrations on this page show typical configurations - many more are possible using standard components.

## Typical Configurations

Workstation with Conveyor Track



Vertical posts with a multiple channel profile provide adjustment for setting the height of major components and accessories, using only a hexagon key.

Test Cell Configuration



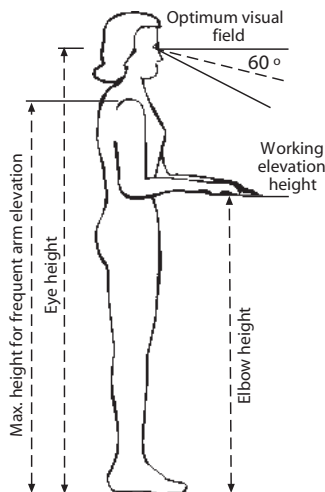
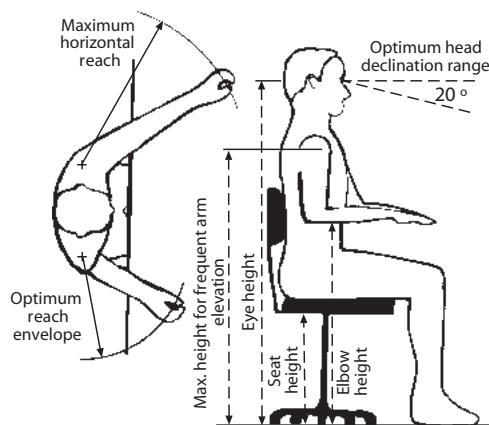
Panels can be fitted in a range of materials to provide segregation or protection.



## Ergonomics

To maximise productivity and eliminate discomfort and potential repetitive strain injury, it is essential to design workstations using sound ergonomic principles. This includes the optimum positioning of work-related equipment and components, choice of seating and lighting levels.

In situations where more than one operative needs to use a location, consideration must be given to easily adjustable settings to accommodate individual needs (eg. gas lift chairs, adjustable foot rests etc).



Workstation with Solid Worktop



Working Dimensions (mm)	Person's Height (m)				
	1.57	1.63	1.68	1.75	1.83
Maximum horizontal reach	688	683	706	752	790
Optimum reach envelope	315	328	340	361	378
<b>SITTING</b>					
Frequent arm elevation height	899	932	973	1039	1090
Eye height	1080	1118	1158	1232	1288
Elbow height	566	584	620	686	719
Seat height-feet on floor	368	386	404	434	460
<b>STANDING</b>					
Frequent arm elevation height	1285	1323	1367	1443	1509
Eye height	1463	1509	1554	1636	1702
Elbow height	960	986	1019	1080	1123

Swivel posts incorporate short independent sections fitted over a centre spindle to allow accessories to be positioned anywhere around the post and then clamped securely in place.

Horizontal members can be supplied to any length required and have a continuous channel profile on both edges. These channels provide the facility to fit cross members and other components using sliding nuts.

- A range of standard modules manufactured from silver-anodised aluminium extrusions, assembled using hand tools and offering total flexibility of layout and design.
- Tops are covered with tough Neostat C2 static dissipative rubber in blue or grey (see page 12).
- All modules are supplied with wrist strap and worktop bonding points.
- The standard height is 840mm – alternative heights are available.
- The system is based around initial modules with two leg frames and extension modules with one leg frame, making complex layouts economical, with the minimum number of legs.

## Basic Worktop Module

Standard rectangular worktop.



Dims. (mm)	Order Code
<b>Single sided initial unit</b>	
1000 x 600	APS-BIS-1006
1200 x 600	APS-BIS-1206
1500 x 600	APS-BIS-1506
1800 x 600	APS-BIS-1806
1000 x 750	APS-BIS-1007
1200 x 750	APS-BIS-1207
1500 x 750	APS-BIS-1507
1800 x 750	APS-BIS-1807
<b>Single sided extension unit</b>	
1000 x 600	APS-BXS-1006
1200 x 600	APS-BXS-1206
1500 x 600	APS-BXS-1506
1800 x 600	APS-BXS-1806
1000 x 750	APS-BXS-1007
1200 x 750	APS-BXS-1207
1500 x 750	APS-BXS-1507
1800 x 750	APS-BXS-1807

Dims. (mm)	Order Code
<b>Double sided initial unit</b>	
1000 x 1200	APS-BID-1012
1200 x 1200	APS-BID-1212
1500 x 1200	APS-BID-1512
1800 x 1200	APS-BID-1812
1000 x 1500	APS-BID-1015
1200 x 1500	APS-BID-1215
1500 x 1500	APS-BID-1515
1800 x 1500	APS-BID-1815
<b>Double sided extension unit</b>	
1000 x 1200	APS-BXD-1012
1200 x 1200	APS-BXD-1212
1500 x 1200	APS-BXD-1512
1800 x 1200	APS-BXD-1812
1000 x 1500	APS-BXD-1015
1200 x 1500	APS-BXD-1215
1500 x 1500	APS-BXD-1515
1800 x 1500	APS-BXD-1815

## Recessed Worktop Module

Front of worktop recessed to improve ergonomics on repetitive assembly operations.



Dims. (mm)	Order Code
<b>Single sided initial unit</b>	
1000 x 600	APS-RIS-1006
1200 x 600	APS-RIS-1206
1500 x 600	APS-RIS-1506
1800 x 600	APS-RIS-1806
1000 x 750	APS-RIS-1007
1200 x 750	APS-RIS-1207
1500 x 750	APS-RIS-1507
1800 x 750	APS-RIS-1807
<b>Single sided extension unit</b>	
1000 x 600	APS-RXS-1006
1200 x 600	APS-RXS-1206
1500 x 600	APS-RXS-1506
1800 x 600	APS-RXS-1806
1000 x 750	APS-RXS-1007
1200 x 750	APS-RXS-1207
1500 x 750	APS-RXS-1507
1800 x 750	APS-RXS-1807

Dims. (mm)	Order Code
<b>Double sided initial unit</b>	
1000 x 1200	APS-RID-1012
1200 x 1200	APS-RID-1212
1500 x 1200	APS-RID-1512
1800 x 1200	APS-RID-1812
1000 x 1500	APS-RID-1015
1200 x 1500	APS-RID-1215
1500 x 1500	APS-RID-1515
1800 x 1500	APS-RID-1815
<b>Double sided extension unit</b>	
1000 x 1200	APS-RXD-1012
1200 x 1200	APS-RXD-1212
1500 x 1200	APS-RXD-1512
1800 x 1200	APS-RXD-1812
1000 x 1500	APS-RXD-1015
1200 x 1500	APS-RXD-1215
1500 x 1500	APS-RXD-1515
1800 x 1500	APS-RXD-1815



Module illustrated is 1500 x 1200 with right hand leg APS-R77-1512

## Corner Module

Allows the effective use of corners and a large individual work area. Specify side leg as left or right.

Dims. (mm)		Order Code	
Main leg (mm)	Side leg (mm)	Side leg on left	Side leg on right
1200 x 600	1200 x 600	APS-L66-1212	APS-R66-1212
1500 x 600	1200 x 600	APS-L66-1512	APS-R66-1512
1800 x 600	1200 x 600	APS-L66-1812	APS-R66-1812
1200 x 750	1200 x 600	APS-L76-1212	APS-R76-1212
1500 x 750	1200 x 600	APS-L76-1512	APS-R76-1512
1800 x 750	1200 x 600	APS-L76-1812	APS-R76-1812
1500 x 600	1200 x 750	APS-L67-1512	APS-R67-1512
1800 x 600	1200 x 750	APS-L67-1812	APS-R67-1812
1200 x 750	1200 x 750	APS-L77-1212	APS-R77-1212
1500 x 750	1200 x 750	APS-L77-1512	APS-R77-1512
1800 x 750	1200 x 750	APS-L77-1812	APS-R77-1812

## Conveyor Track Module

Used for work transfer and buffer storage between operations.

Dims. (mm)	Order Code
<b>Single sided initial unit</b>	
1000 x 600	APS-CIS-1006
1200 x 600	APS-CIS-1206
1500 x 600	APS-CIS-1506
1800 x 600	APS-CIS-1806
1000 x 750	APS-CIS-1007
1200 x 750	APS-CIS-1207
1500 x 750	APS-CIS-1507
1800 x 750	APS-CIS-1807
<b>Single sided extension unit</b>	
1000 x 600	APS-CXS-1006
1200 x 600	APS-CXS-1206
1500 x 600	APS-CXS-1506
1800 x 600	APS-CXS-1806
1000 x 750	APS-CXS-1007
1200 x 750	APS-CXS-1207
1500 x 750	APS-CXS-1507
1800 x 750	APS-CXS-1807

Dims. (mm)	Order Code
<b>Double sided initial unit</b>	
1000 x 1200	APS-CID-1012
1200 x 1200	APS-CID-1212
1500 x 1200	APS-CID-1512
1800 x 1200	APS-CID-1812
1000 x 1500	APS-CID-1015
1200 x 1500	APS-CID-1215
1500 x 1500	APS-CID-1515
1800 x 1500	APS-CID-1815
<b>Double sided extension unit</b>	
1000 x 1200	APS-CXD-1012
1200 x 1200	APS-CXD-1212
1500 x 1200	APS-CXD-1512
1800 x 1200	APS-CXD-1812
1000 x 1500	APS-CXD-1015
1200 x 1500	APS-CXD-1215
1500 x 1500	APS-CXD-1515
1800 x 1500	APS-CXD-1815



## Design a layout, tailored to the process using Standard Modules and Accessories



## Worktops

Neostat C2 static dissipative work surface in grey or blue; manufactured from either solid core laminate or with an MDF core and laminate balancer. Static dissipative laminate is available on request.





### Rear Accessory Frame

Used to support overhead accessories. Available in two heights; use 1200mm high for Light/Tool Rail.

Dims. (mm)		Order Code	
Module length	Height above worktop	Initial Module (2 posts)	Extension Module (1 post)
1000	800	APS-RAF-1008	APS-RAX-1008
1200	800	APS-RAF-1208	APS-RAX-1208
1500	800	APS-RAF-1508	APS-RAX-1508
1800	800	APS-RAF-1808	APS-RAX-1808
1000	1200	APS-RAF-1012	APS-RAX-1012
1200	1200	APS-RAF-1212	APS-RAX-1212
1500	1200	APS-RAF-1512	APS-RAX-1512
1800	1200	APS-RAF-1812	APS-RAX-1812



### Light/Tool Rail

Used for high-level accessories such as light units, tool hangers and ionisers.

Dims. (mm)		Order Code	
Module length		Initial Module (2 brackets)	Extension Module (1 bracket)
1000		APS-LTR-1000	APS-LTX-1008
1200		APS-LTR-1200	APS-LTX-1208
1500		APS-LTR-1500	APS-LTX-1508
1800		APS-LTR-1800	APS-LTX-1808



### Upper shelf

Cantilever shelves which can be set at any height above the worktop.

For loads above 30kg support struts are available.

All shelves are fitted with a central 80mm diameter cable port; additional ports fitted during manufacture to order.

Length (mm)	Depth (mm)	Order Code
1000	300	APS-S30-1000
1200	300	APS-S30-1200
1500	300	APS-S30-1500
1800	300	APS-S30-1800
1000	350	APS-S35-1000
1200	350	APS-S35-1200
1500	350	APS-S35-1500
1800	350	APS-S35-1800
1000	400	APS-S40-1000
1200	400	APS-S40-1200
1500	400	APS-S40-1500
1800	400	APS-S40-1800



### Lower Shelf

For additional storage or the siting of equipment, these shelves can be set at any height. All shelves are fitted with a central 80mm diameter cable port; additional ports fitted during manufacture to order.

Length (mm)	Depth (mm)	Order Code
1000	300	APS-L30-1000
1200	300	APS-L30-1200
1500	300	APS-L30-1500
1800	300	APS-L30-1800
1000	350	APS-L35-1000
1200	350	APS-L35-1200
1500	350	APS-L35-1500
1800	350	APS-L35-1800
1000	400	APS-L40-1000
1200	400	APS-L40-1200
1500	400	APS-L40-1500
1800	400	APS-L40-1800

## Light Unit

Twin tube fluorescent fitting with Category II reflector to eliminate low-angle glare.



## Overhead Ioniser

Refer to page 116 for the range of ionisers.



Length (mm)	Use with module	Order Code
600	1000 and 1200mm	APS-FLU-06
1200	1500	APS-FLU-12
1500	1800	APS-FLU-15

## Louved Panel Units

Provide a grounded location for parts bins. Require rear accessory frames to be fitted (see page 58).

### Fixed

Fixed frame for positioning along the rear of standard modules.



Dims. (mm)	Order Code
450 x 450	APS-LPF-0505
600 x 600	APS-LPF-0606

### Pivoted

Pivoted mounting, either left or right handed to improve ergonomics in repetitive assembly operations. Fitted with adjustable locking stay.



Order Code
450 x 450 APS-LPP-0505
600 x 600 APS-LPP-0606

## Parts Bin Rail

An alternative to Louved Panel Units for single rows of bins. Requires Rear Accessory Frame to be fitted (see page 58).



Dims. (mm)	Order Code
Single Rail	
450	APS-PBR-05
600	APS-PBR-06
1000	APS-PBR-10

## Document Holder

Available in A4 landscape and portrait versions, mounted on a swivel bracket with angle adjustment.



Order Code
Landscape A4 APS-DHL-A4
Portrait A4 APS-DHP-A4

## Cable Ports

80mm diameter with a push-out lid, fitted in worktops to customer requirements. Colour: black



Order Code
Cable Ports CAB-08-BLK

## Tool Hanger

Used to suspend small power tools from the Light/Tool Rail (see page 58), available in fixed and sliding versions.



Order Code
Fixed Tool Hanger APS-THF-F
Sliding Tool Hanger APS-THF-S



## Drawer and Cupboard Units

A range of lockable cabinets to provide drawer and cupboard storage, fitted to the underside of the worktop using brackets and screws provided.

Type	Dims.(mm)	Order code
Single drawer	460dx370wx140h	APS-TUD-4601
Double drawer	460dx370wx245h	APS-TUD-4602
4 drawer	460dx370wx455h	APS-TUD-4604
Drawer/Cupboard	460dx370wx455h	APS-TUD-4601C

## LCD Monitor Mounting

This unit provides a fully adjustable mounting for flat screen monitors and incorporates a standard VESA fixing plate. Adjustments include angle, height and distance. For more details, see page 77.



**Order Code**  
SMM-100

## Computer Support Cradle

This unit fits to the side or rear of modules to accommodate computers and other equipment. The design allows for adjustment in dimensions to suit specific needs.



**Dims. (mm)**      **Order Code**  
250w x 500d      APS-CSC-25

## Conductive Skate Wheel Track

The track consists of a lightweight galvanised U-channel fitted with conductive polypropylene skate-wheels, either in plain or flanged versions.

Applications include:

- GRAVITY FEED LIVE STORAGE RACKS
- GRAVITY FEED LIVE STORAGE TROLLEYS
- PRODUCTION LINE BUFFER TRACK
- WORKSTATION FEED/PASS-THROUGH TRACK

Dimensions: 3000mm lengths with wheels on 50mm centres.  
Wheel diameter 28mm. Channel 38 wide x 27mm.



Description	Order Code
3000 (Plain)	APS-CSW-3050-P
3000 (Flanged)	APS-CSW-3050-F

## Live Storage Racks

These racks incorporate the conductive skate-wheel track shown left and are designed for use with the Adaptable Production System illustrated on pages 54-59.

Alternatively, racks can be supplied for use with existing workstations, to customer requirements.



PLEASE ASK FOR A QUOTATION FOR THIS PRODUCT. WE REQUIRE A SKETCH OF THE PROPOSED CONFIGURATION, WITH DETAILS OF THE LOAD DIMENSIONS AND WEIGHT.

## Trunking Modules

Each module is fitted with standard twin switched 13A sockets and has a single aperture at one end; supplied with a blanking plate, 13A fused spur, or a 13A RCD trip.



## Bench Mounted Trunking

Angled anodized aluminium bench trunking for fitting to the rear of the worktop, to provide mains and data services. Supplied as standard modules, **unwired** (or pre-wired – see below). Trunking dims. 100x100mm



Length	Twin Sockets	Blank Plate	Order Code Fused Spur	RCD
250	1	BT1-02-B	BT1-02-F	BT1-02-R
600	2	BT2-06-B	BT2-06-F	BT2-06-R
1000	3	BT3-10-B	BT3-10-F	BT3-10-R
1200	3	BT3-12-B	BT3-12-F	BT3-12-R
1500	4	BT3-15-B	BT3-15-F	BT3-15-R
1800	4	BT3-18-B	BT3-18-F	BT3-18-R

Insulating strip (required when fitted to ESD worktops) to avoid random earthing of ESD protective elements.

Length	Order Code
250	INS-02
600	INS-06
1000	INS-10
1200	INS-12
1500	INS-15
1800	INS-18



## Rail Mounted Trunking

Rectangular plastic trunking for fitting to an upper rail or to the wall, to provide mains and data services. Supplied as standard modules, **unwired** (or pre-wired – see below). Trunking dims. 100x60mm



Length	Twin Sockets	Blank Plate	Order Code Fused Spur	RCD
250	1	RT1-02-B	RT1-02-F	RT1-02-R
600	2	RT2-06-B	RT2-06-F	RT2-06-R
1000	3	RT3-10-B	RT3-10-F	RT3-10-R
1200	3	RT3-12-B	RT3-12-F	RT3-12-R
1500	4	RT3-15-B	RT3-15-F	RT3-15-R
1800	4	RT3-18-B	RT3-18-F	RT3-18-R



## Additional Accessories and Pre-Wiring

Extra accessories fitted to trunking to customer requirements.

Item	Order Code
Extra twin switched 13A sockets	SOC-13
Extra fused spurs for overhead lights (3A)	SPU-03
Pre-wiring with 2m flying lead and plug	PRE-W
Data Outlets – RJ45 x 2 in single plate	DAT-02
Pre-wiring of Data Outlet with 2 x 2m CAT5 cables with RJ45 plugs	PRE-DAT



## Custom Trunking Modules

Supplied to customer requirements, with any combination of accessories. Please ask for a quotation.

