Improve cooling efficiency

ntainm

- Separate hot and cold air streams
- Configured to meet density requirements

- Suitable for commercial and SCEC endorsed cabinets
- Available for retrofit to SRA and other branded cabinets
- Standard models available or customised to suit site specific requirements
- PROUDLY AUSTRALIAN Available in hot or cold aisle containment configurations

www.server-racks-australia.com.au

Overview

SRA's retrofitable Containment System can be used to drastically reduce cooling costs in both brownfield and greenfield data centres. Separating the hot and cold air streams in a data centre gives much greater control over air temperatures and makes your cooling infrastructure work more effectively and efficiently. This means that CRAC units can be run with higher return temperatures resulting in lower power usage. Introducing air containment is possibly the most effective way to improve Power Usage Effectiveness (PUE) in an existing brownfield data centre.

Other vendors' Containment Systems are built with a one size fits all mentality resulting in gaps and ineffective sealing. Every gap in the Containment System means a higher operating cost in the data centre. SRA's Containment System uses the same design and installation methods proven in the iPAMM Cell product which are air tight and contain gaseous fire suppressants.

With complete control over the design and manufacture, we can fit a containment system to any room to suit any racking configuration. Our Containment System can fit to racks of different widths, heights and depths, non-SRA cabinets and we can accommodate any aisle width. SRA's flexible Containment Systems can be integrated with new or existing In-Row, perimeter or overhead ducted cooling systems.

Features

Doors

Available as sliding or hinged doors. A choice of window panels in clear, tinted, frosted or solid 6mm toughened glass. Hinged doors are available in double and single door configurations with custom left and right door sizes. The toughened glass doors provide the ability to install common access control systems and are fitted with auto closers on both swing and sliding models.

Security

A choice of locks or electronic access are available. Please contact our specialist sales team to discuss integration with your existing access control systems.

Construction

The SRA Containment System is a robust aluminium extrusion construction that allows flexibility when used in customised solutions. It provides exceptional strength and support whilst minimising weight. The profile and construction are aesthetically appealing, and the standard system can easily accommodate all types and sizes of cabinets.

Size

The SRA Containment System is manufactured to be modular to allow for quick and easy expansion when necessary. Ideal for your growing data centre.









Colour

SRA's Containment System is available in any of the standard Dulux Powder Coat colours which allows for the containment to be a feature of the data centre. Consider red for hot aisle containment or blue for cold aisle containment or corporate colours.

Roof

Clear panels mean no extra lighting is required. Available with fixed or sliding panels. Fixed panels can have building services installed such as fire detection and suppression or security sensors. SRA's Containment System can utilise a riser panel to provide extra head room in the contained aisle allowing doors to be lifted off hinges when required.

Columns

Columns are a common problem in data centres. By using customised bypass and infill panels SRA can ensure that the integrity of Containment Systems is not compromised by the positioning of structural columns.

Bypass Plenums

Bypass plenum are another item to assist in accommodating obstacles in the data centre such as columns. Sometimes in high density secure installations where it is critical to keep closely coupled cooling providing air directly to adjacent cabinets bypass plenums are used to ensure the air is kept contained.

Infill Panels

It is becoming increasingly more common for facilities to make provisions for future expansion. In the case where an In Row cooler or a cabinet may be deployed at a later date SRA suggest that an infill panel be installed until such time. Infill panels can also be used to assist with realignment of racks onto the floor grid after accommodating a special rack or cooling requirement. Containing rows of cabinets that are different length can be achieved with the use of infill panels.

Cabinet Chimney

SRA also has a range of cabinets that are designed and capable of being fitted with a hot air exhaust chimney to achieve 'hot air containment'. Chimney cabinets are regarded as the most contained solution, and they offer a different set of advantages compared with the inrow solution. Ducting the equipment's exhaust is a much simpler way to capture the return air compared with enclosing the entire row.

Other Features

SRA's Containment System allows for many other data centre services to be integrated. These services include: access control systems, lighting, security cameras, status switches, environmental monitoring sensors, VESDA, fire systems, evacuation signs and exit points.











Retrofittable containment solutions are available to turn your data centre from this...



Before

- Air is largely uncontained Hot and cold air mixing around
- the ends and over cabinets
- Little to no control of air
- temperatures



- Hot and cold air completely contained
- No mixing of hot and cold air
- Complete control of air temperatures

Example installations



Cold Aisle containment utilising existing underfloor cooling.



Hot Aisle containment with In Row Coolers (IRC).



More Information

Fire System Accommodation

Older generation data centres make up a large population of the data centres in need of implementation of solutions that offer better efficiency. Containing your hot and cold aisles is one of the most common practices in revitalising these data centres. This however is not always a simple process there are many factors of the DC design that need to be considered before deploying containment into a data centre. One of the most difficult things to accommodate is existing fire systems that are not designed and certified for use in conjunction with containment systems. SRA has developed a system that will offer the ability to deploy containment into these area's without compromising the fire systems effectiveness if an event was to occur. The system is a simple drop away panel that can be triggered by either the fire control panel or an environmental trigger. SRA continue to work closely with Wormald Australia's most trusted fire system providers to ensure data centre operators can combat these types of challenges.





Hot Aisle Containment

Hot aisle containment is less common than cold aisle containment, however it can offer higher efficiency from the cooling system. SRA has provided hot air containment solutions for data centre's using both traditional CRAC and CRAH designs and smaller more defined solutions where IRC is common.

Custom Designs

Small data centres that are placed in less than ideal environments are another common area in need of solutions that provide efficiency gains. These data centres are generally candidates for customised solutions. SRA use products such as cool room curtain, acrylic panels and custom metal work to assist in re-directing air streams in difficult circumstances. There is always something that can be done to assist in these areas.

Accessories

Cable Management
Power Distribution Units
Shelving Solutions
Blanking Panels
Fan Trays

A range of accessories are available to suit all rack sizes For more information please see the accessories brochures or contact our sales department Server Racks Australia ABN: 61 079 229 897

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