

Automotive 4.0

Supporting Next-Gen Automotive Manufacturing Processes

Vertiv provides comprehensive, reliable, and effective solutions that support automotive manufacturing. With proven industry expertise backed by global service support, our solutions are aimed at protecting high-value assets in your manufacturing facility, ensuring production continuity to help you meet service-level agreements and delivering the best quality product to your customers. We are committed to partner with you to protect your business.

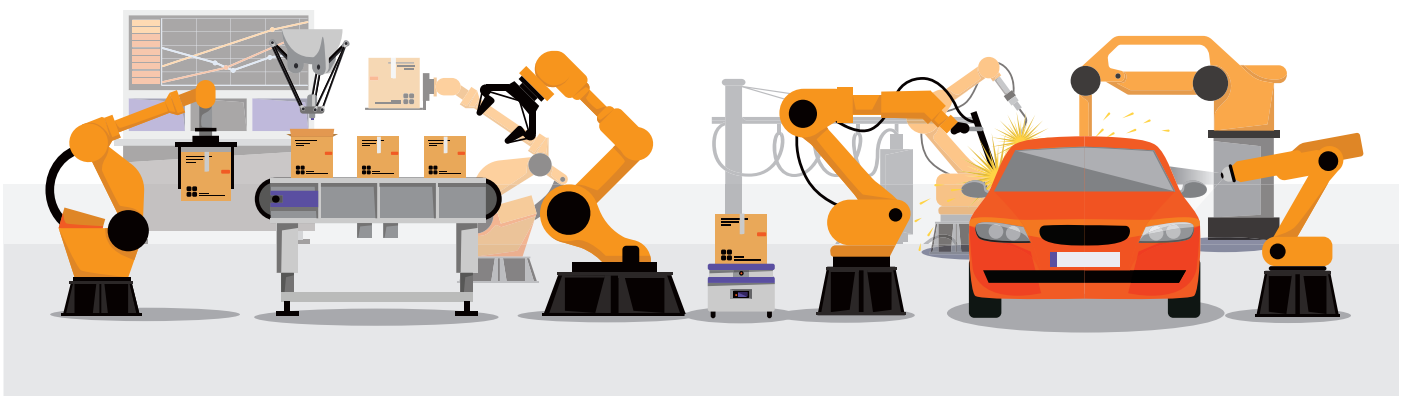
Automotive Manufacturing

Automotive Manufacturers seek seamless production processes to meet increasing and changing demand patterns. Reaching higher levels of productivity and profitability for these companies goes hand-in-hand with the need for continuous improvement and optimization of production systems and equipment. By planning towards system optimization and operational efficiency, you can manage expenses and investments to secure competitive advantage.



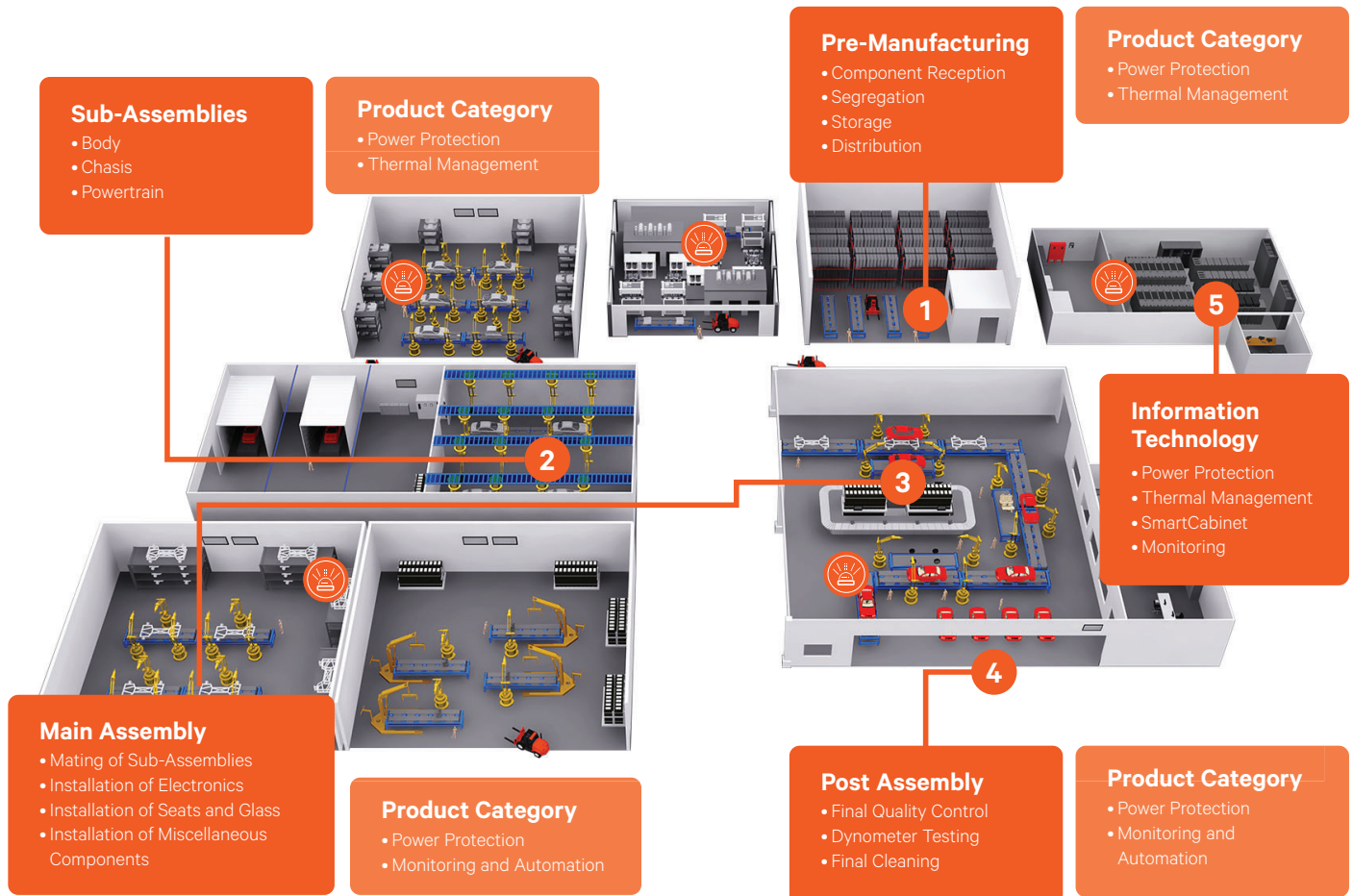
Protection of critical equipment is essential to ensure the availability and continuity of the automotive production process. Automotive manufacturers are vulnerable to power outages as the industry applies just-in-time production. Manufacturers located in US and Europe have fewer problems with consistent and reliable energy supply. However, more and more automotive manufacturing firms are increasingly moving and expanding to developing countries, particularly in Asia, due to lower labor costs. Energy supply in these developing markets is less reliable and manufacturing plants are prone to power interruptions and outages. As such, automobile plants and related facilities should always maintain fully functional industrial strength generators to ensure production continuity in case of power failures.

Automotive manufacturing companies stand to lose thousands of dollars and man-hours in any event of downtime. Vertiv protects automotive manufacturers' operations against lost revenues and productivity by bringing together a wide portfolio of solutions for power quality, power continuity, thermal management, infrastructure management and environmental monitoring. We keep your equipment such as conveyor systems, spray painting controllers and dynamometers running continuously, efficiently and safely. Vertiv's solutions will help ensure that equipment and investment are protected and lives up to see their utmost potential realized.



Critical processes within automotive manufacturing needs to be protected from any uncertainty, such as outages, voltage surges or sags, and power spikes, among others. How can Vertiv support your key processes to ensure production continuity?

AUTOMOTIVE MANUFACTURING PROCESS FLOW



APPLICATIONS IN EMERGENCY SYSTEMS

Should any unforeseen situation arises, emergency systems should be activated to ensure the safety of your staff and your equipment, or to allow for minimal or no disruption to business productivity. Vertiv's world-class power protection solutions can support your emergency lighting, communication and fire control systems, as well as control room operations to allow you to have a full view of your floor activity.



1 Fire Control System
Power rating: 10kW



2 Control Room Operations
Power rating: 10kW



3 Ventilation System
Power rating: 1kW per unit

PRODUCT FOCUS

Liebert® ITA2 5-30 kVA

Compact, Efficient, & Robust UPS for Critical Applications



Features and Benefits

- Eco-Mode provides a superlative efficiency of up to 99%
- Programmable output outlets/terminals with cascade protection to protect key devices during heavy load
- Integrated Ethernet port with HTTP protocol compatibility & streamlined remote monitoring
- Robust structure with cutting edge channelized airflow design
- Dust and moisture resistant

Liebert® Hipulse-U 80-500 kVA

Utmost Reliable Power Solution for Critical Business Applications



Features and Benefits

- Up to 98% operating efficiency in Eco-Mode operation; up to 93% operating efficiency in double conversion mode
- Standard built in LBS function and smart parallel
- REGEN mode of operation
- Strong 0.9 output PF loading capacity
- Compatible to 1+N and N+1 configuration
- Two independent intellislots to achieve multi-channel data highway

Liebert® DM

High Performance Cooling for Small Technological Rooms



Features and Benefits

Energy saving

- High sensible heat ratio and high energy efficiency
- Equipped with Copeland Scroll Compressors
- Provides stable temperature and humidity condition
- Fans for outdoor units feature easy to access full range speed regulation
- Manageable and unique ECO-Mode option
- Energy saving component options

Liebert® LPC

Intelligent, sensible cooling for labs and other special applications



Features and Benefits

- Asia's first standardized constant unit for special application
- Regulation of Sensible Cooling Capacity down to Zero
- Use of variable technology at every steps like compression, distribution & controls
- High quality, perfect harmonized component
- Precise & reliable control system
- Service available throughout Asia Pacific

Liebert® SRC

Small Room Equipment Cooling



Features and Benefits

- Temperature Control
- EC Fan
- Green Refrigerant
- Free Cooling for Optimizing
- High SHR
- Metallic Body
- 24 x 7 Operation
- Load Sharing
- Remote Monitoring
- High Ambient

CASE STUDIES

MERCEDEZ BENZ MALAYSIA



Overview

Vertiv's solution was deemed the best fit for Mercedes Benz's new server room compared to a conventional infrastructure build with its integrated solution combining power, thermal and infrastructure management. Moreover, its compact design enables rapid deployment, meeting the customer's project delivery timeline. Its centralized monitoring feature also enabled the customer to have intelligent insight from its Singapore headquarters, allowing for ease of management.

Vertiv Solution

- SmartRow™

AUTOMOTIVE PARTS HEADQUARTERS, INC.



Overview

Automotive Parts Headquarters, Inc. (APH) is a privately-held, family-owned company with a rich history. Today they operate a central distribution center with a network of over 100 company and 35 independent Auto Value stores located in Minnesota, Wisconsin, North Dakota and Michigan. These stores serve professional service dealers and installers, industrial and agricultural customers, fleets, and retail customers with automotive aftermarket parts and related products.

Vertiv Solution

- Liebert® EXM
- Optimized Maintenance Bypass