



RUGGED POWER & CONNECTIVITY

BUILT FOR THE TOUGHEST TERRAIN

Integrated electrical systems engineered for agriculture, construction, mining, heavy transport and electrification.



WHY VOLEX?

As a global leader in mission-critical power and connectivity solutions, Volex delivers vertically integrated manufacturing and system-level reliability tailored to off-highway vehicles and equipment. Our solutions are engineered to perform in environments with constant vibration, high current loads, extreme temperatures, dust, moisture and chemical exposure.

DESIGNED FOR HARSH CONDITIONS



Purpose-built

For demanding off-road platforms including tractors, harvesters, excavators, loaders, mining vehicles, specialty transport, forestry equipment and more.



Engineered

For rugged durability under vibration, heat, moisture and particulate challenges.



Scalable

From prototype to high volume production with localised manufacturing in Europe, Türkiye, India, Asia and the Americas.

STRATEGIC BENEFITS

Single Source Partner

Full end-to-end electrical systems, from harnesses and busbars to ruggedised connectors and distribution modules.

Global Footprint

Manufacturing and engineering centres close to key markets to reduce supply chain risk, mitigate tariff impact, and shorten lead times.

Ruggedisation Expertise

Designed and tested to withstand harsh environmental stressors experienced in off-highway applications.

Accelerated Time-to-Market

Design, prototyping and scalable production through integrated support and testing services.

VOLEX OFF-HIGHWAY APPLICATIONS

Agricultural Machinery
(tractors, harvesters, planters)

Construction Equipment
(excavators, loaders, cranes)

**Mining Vehicles &
Infrastructure**

**Heavy-Duty Trucks &
Specialty Transport**

**Forestry &
Logging Machines**

**Fleet Electrification &
Hybridisation**

**Renewable & Utility
Off-Road Equipment**

**Public Transit &
Rail Systems**

OFF-HIGHWAY PRODUCT & SERVICE OFFERINGS

System Integration & Assemblies

High Level Assembly (HLA)
Complete heavy-duty modules.

Box Builds
Subsystem and vehicle-level assemblies.

Electromechanical & Rugged Components

Electromechanical Assemblies & Systems
Control panels, junction boxes, power modules

Custom Wiring Harnesses & Cable Assembly
Rugged high-voltage harnesses.

Printed Circuit Board Assemblies (PCBA)
Industrial-grade control electronics.

Busbars & Fuse Boxes
Power distribution and protection units.

Embedded Systems
Control units, IoT edge modules.

EV Charging Solutions
Rugged AC/DC charging interfaces and connector assemblies.

HOW WE ENGAGE



Project Definition & Assessment

Evaluate environmental and durability requirements for your application.

Design Collaboration & Prototyping

Custom high-voltage harness, connector and system designs tested for vibration and ingress resistance.

Pilot, Qualification & Production

Endurance and environmental testing, then scalable manufacturing rollout.

Lifecycle Support

Field support, continuous optimisation and aftermarket services.

CONTACT VOLEX

Integrated manufacturing solutions engineered for Off-Highway performance.

Contact us at sales@volex.com
for assistance in finding the right solution for your needs.