

Company Overview

Ian Girdlestone

Business Development Manager UK Sales

Who We Are

Partner with Performance™

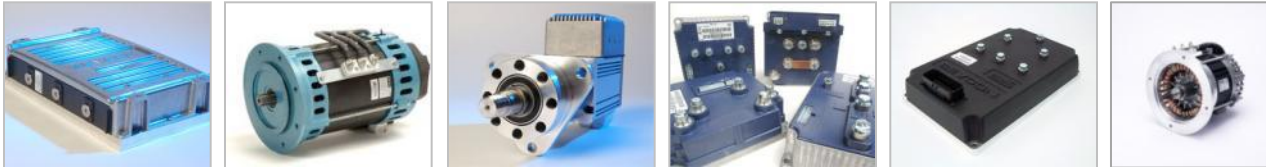
Tech/Ops Sevcon is a US public company
listed on the NASDAQ exchange.

We operate from our headquarters in Newcastle, UK,
and from subsidiaries in
France, Japan, Korea, and the USA.

Our Business

Partner with Performance™

Motor controllers, motors and accessories
for use in battery powered vehicles.

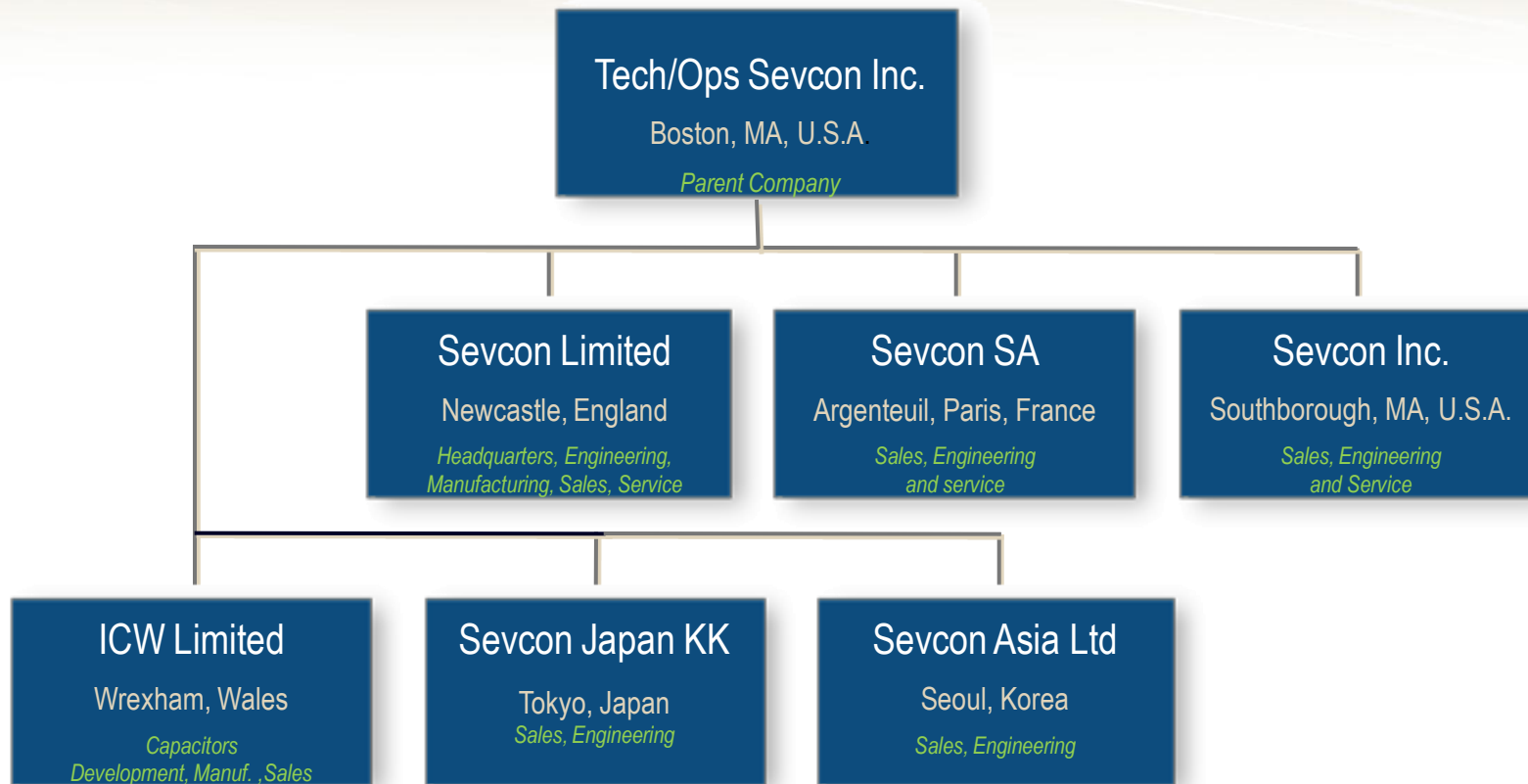


We provide motor control and vehicle applications expertise
and strive to provide optimal value for our customers.



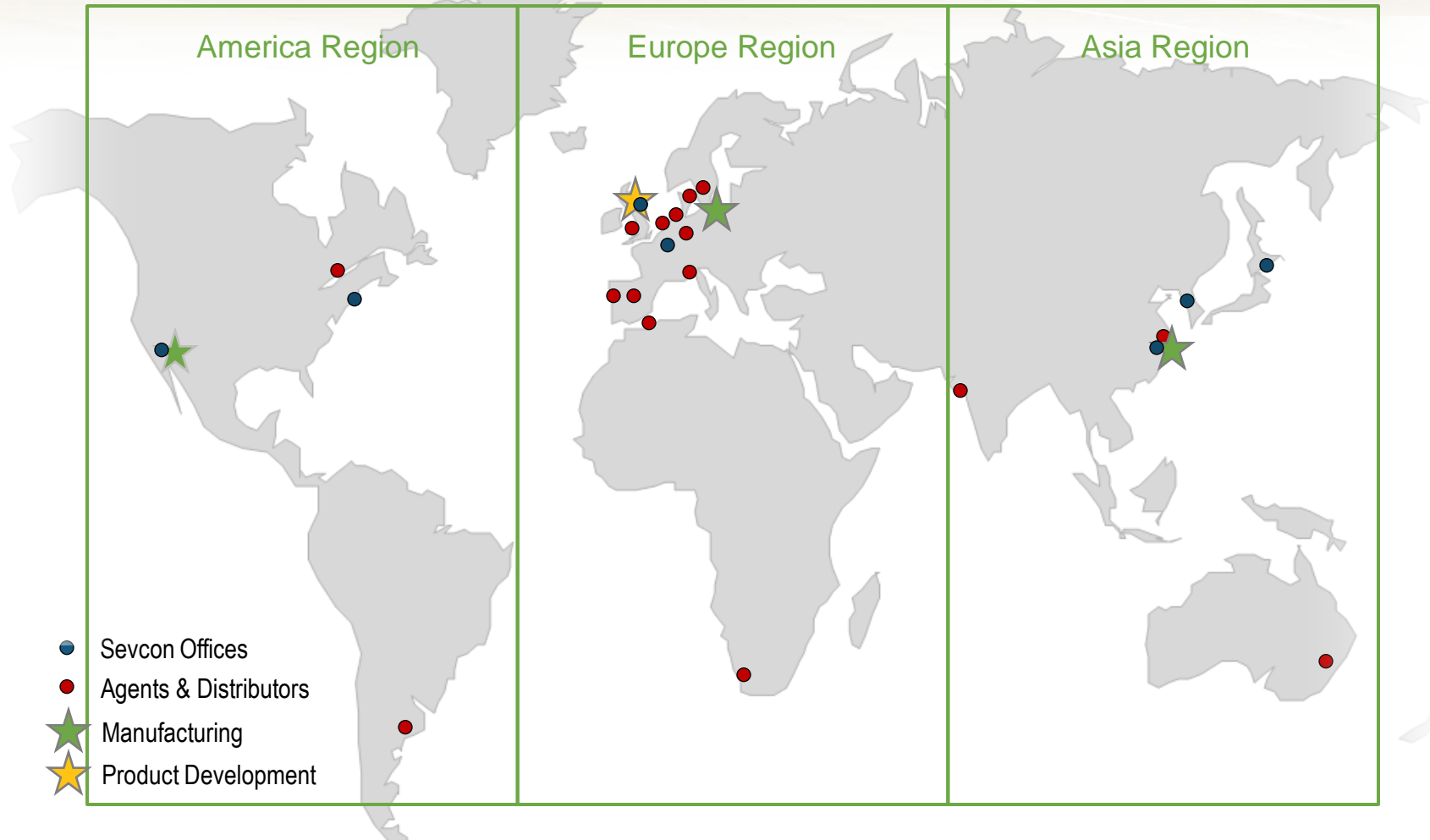
Sevcon Company Structure

Partner with Performance™



Global Presence

Partner with Performance™



Main Markets

Partner with Performance™

- Aerial Lift Equipment
- Airport Ground Support Vehicles
- Buses
- Electric On-road Vehicles
- Electric Scooters
- Floor Care Equipment
- Forklift Trucks
- Hybrid Construction Equipment
- Marine
- Mining Vehicles
- Personal Mobility
- Recreational Vehicles (Golf)
- Turf Equipment
- Utility Vehicles



Motor Controllers

Partner with Performance™

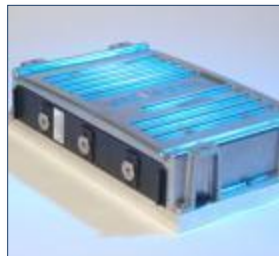
Powerpak™, Millipak™, Micropak™



DC Controllers for Traction & Pump Motor Drives

- Series wound motors.
- Separately excited motors.
- Permanent magnet motors.
- 24, 36, 48, 80 VDC with max. currents ranging from 75 to 600 A.

espAC™



Nano™



Gen4™



AC Controllers (Operating voltages to 116V)

- AC induction & PMAC motors.
- 24, 36, 48, 80, 96 VDC with max. currents ranging from 200 to 700 A_{rms}.

Gpac Controller

Partner with Performance™



○ Applications

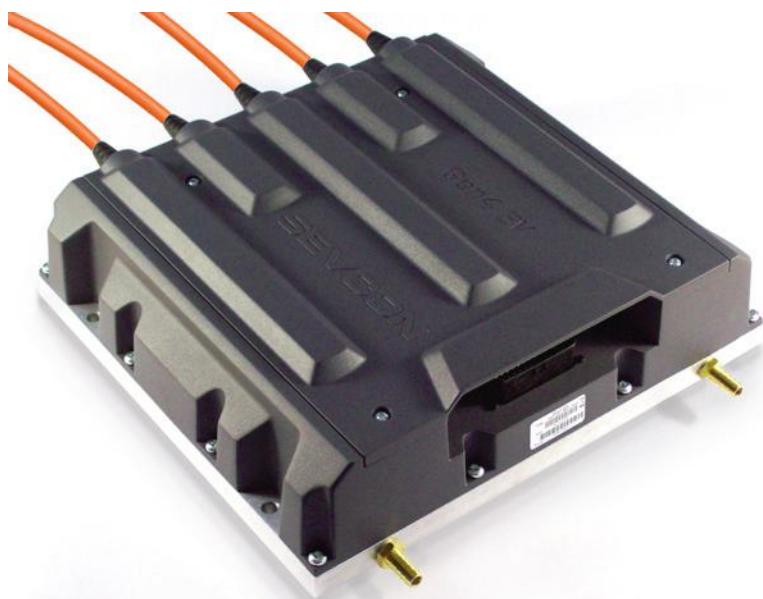


○ Motor Technologies

- AC Induction
- Power
- 90V – 400V
- 200A – 800A

Evolution 5 Controller Platform

Partner with Performance™



○ Applications



○ Motor Type

- AC Induction & PMAC

○ Power

- 80V – 400V
- 300A – 2 min, 200A – 60 min

○ Cooling System

- Liquid, Fan or Conduction

Gen4 Size 2

Partner with Performance™



► Applications



► Motor

- AC Induction or PMAC

► Power

- 24V – 80V
- 180A - 250A

► Cooling system

- Conduction

Electric Motors

Partner with Performance™

FLT

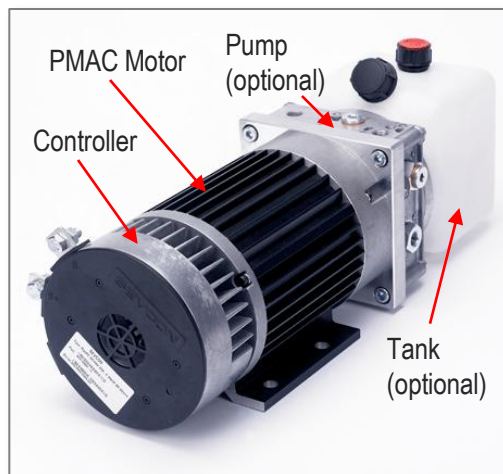


Electric Motors for Traction & Pump Applications

- AC induction motors for traction applications.
- 36 – 80 VDC, 2.6 to 9 kW

- AC induction motors for hydraulic pump applications.
- 36 - 80 VDC, 5.2 to 18 kW

HypAC™

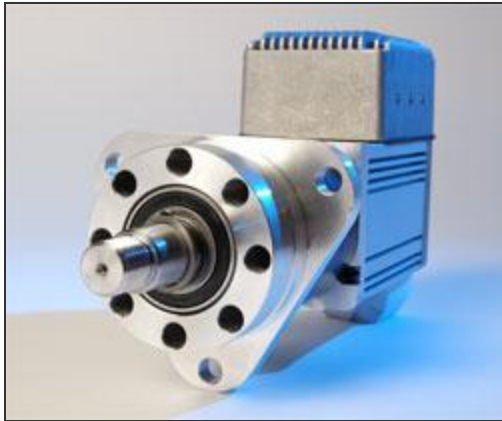


AC Pump Motor for Hydraulic Steering Applications

- PMAC motor
- Built-in Controller
- 24 - 80 VDC, 2.4 and 3.6 kW peak

Electric Steering Systems

Partner with Performance™



PST Series Electric Steering (“Steer-by-wire”)

- Brushless design.
- Completely integrated solution (motor, gear, controller).
- Fully CAN-open compliant.
- Position, speed or torque control.
- 24 and 36/48 VDC, models with torques ranging from 35 to 265 Nm.

PST Power Steering



Accessories

Partner with Performance™

DC/DC Converters

- The industry's most reliable converter
- 180 and 300 W models
- 24/36, 36/48, 72/80 VDC with 12 & 24 output voltage
- Fully isolated
- IP67 protection
- Short circuit and overload protected



High Frequency On-Board Battery Chargers

- For 90-260 VAC input
- 24 V, 25 A (720W) output
- Charge from 0 V
- Compact size



Gauges and Displays

Partner with Performance™

SmartView™



CAN Display

- 10 Segment LED Bar Graph
- LCD Hours Count
- Fault Code Indication
- Programmable Discharge Algorithm

Battery Discharge Gauge

- 10 Segment LED Bar Graph
- LCD Hours Count
- Discharge Curve Selection

PowerGauge™



Graphic Displays and Calibrators

Partner with Performance™

Color Graphics Display

- High resolution (360 x 240 px) graphics display
- Customer configurable
- Programmable
- CANopen



Handheld Calibrator

- High resolution graphics display
- Customer configurable
- CANopen



ClearView™



High Power AC Controllers

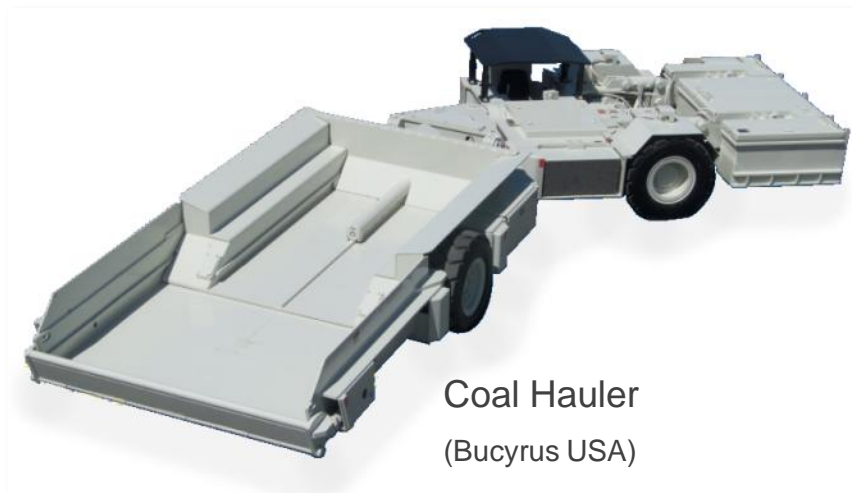
Partner with Performance™

GpAC™



Sevcon High Power Traction Controllers

- For AC induction or PM AC motors.
- Mining, large tow tractor, large lift truck applications.
- CAN-open bus and integral I/O.
- 120 to 350 VDC, max. current from 200 to 800 A_{rms}.



Coal Hauler
 (Bucyrus USA)

Some of our Applications

Partner with Performance™



Electric Motorcycle
(USA)



Aixam Mega "E-City"
(France)



CTNT "e-ZONE"
(South Korea)



Tender "Scarlette"
(France)



Polaris "EV Ranger"
(USA)



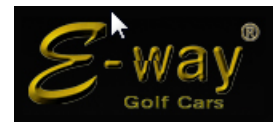
High Performance Scooter
(USA)

Some of our Customers

Partner with Performance™



TOYOTA



RAYMOND



Thank you for your attention

Ian Girdlestone

March 2010