

VOLTSAFEMARINE

A New Standard in Marine Electrical Safety



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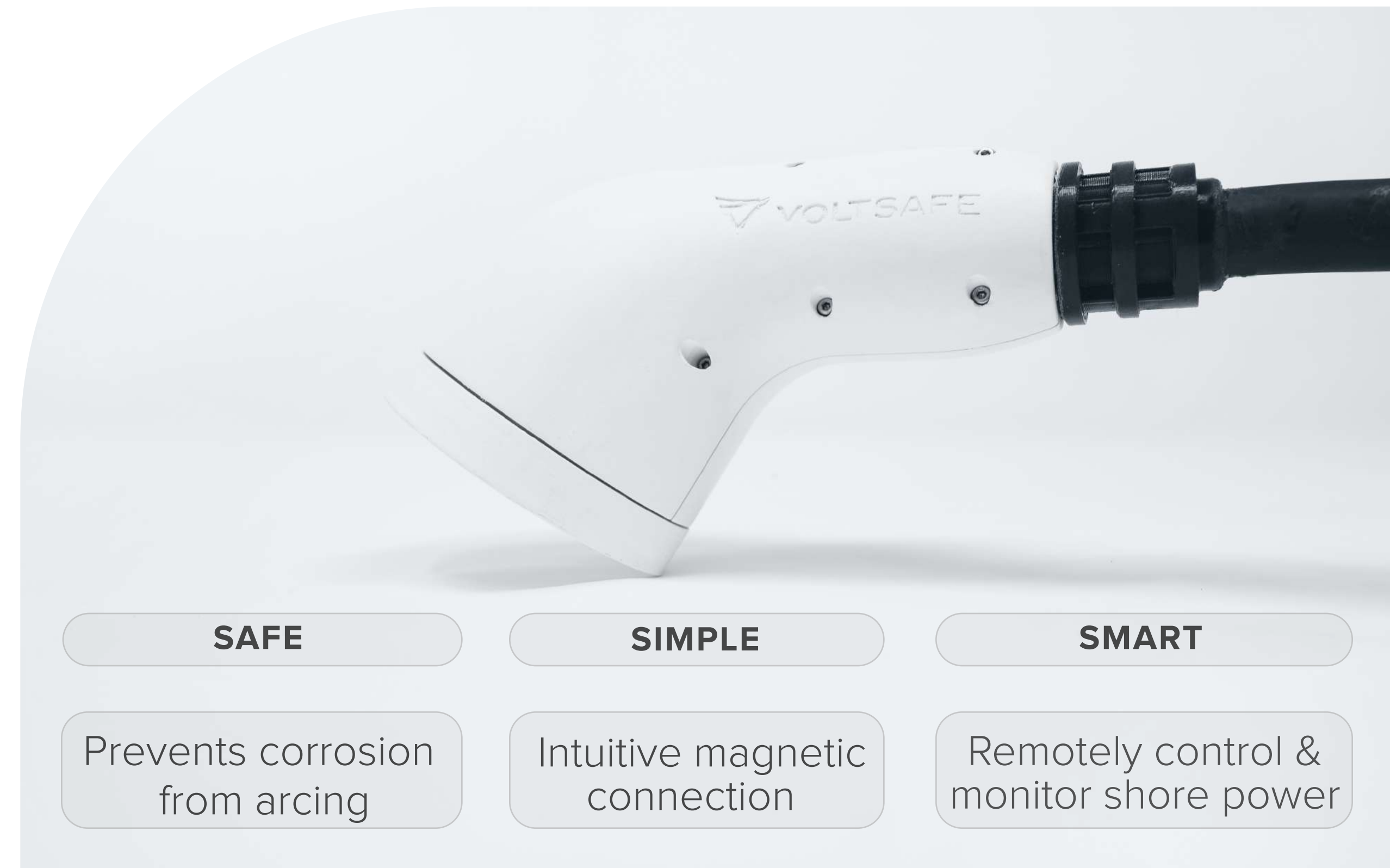


PRONGLESS DESIGN

———— VOLTSAFE TECHNOLOGY DELIVERS ALL POWER LEVELS WITHOUT PRONGS

VoltSafe technology scales from small pleasure craft to commercial and combat vessels.

- **SHORE POWER CORDS:**
Recreational (30A - 100A), Industrial (100A+)
- **SHORE POWER PEDESTALS:**
Marinas (15A - 100A), Ports (100A+)
- **MARINE EV-CHARGING:** Level 1, 2 & 3
- **AUTONOMOUS EV-CHARGING**
- **DEFENSE + INDUSTRIAL SOLUTIONS**





SAFE

A NEW STANDARD IN MARINE ELECTRICAL SAFETY

- No arcing
- IP68 - water immersible
- No moving parts
- Safety that rivals aerospace
- Proprietary contact design
- Reverse-polarity protection
- Over-voltage protection
- Surge protection
- UV resistant
- Safety certified technology



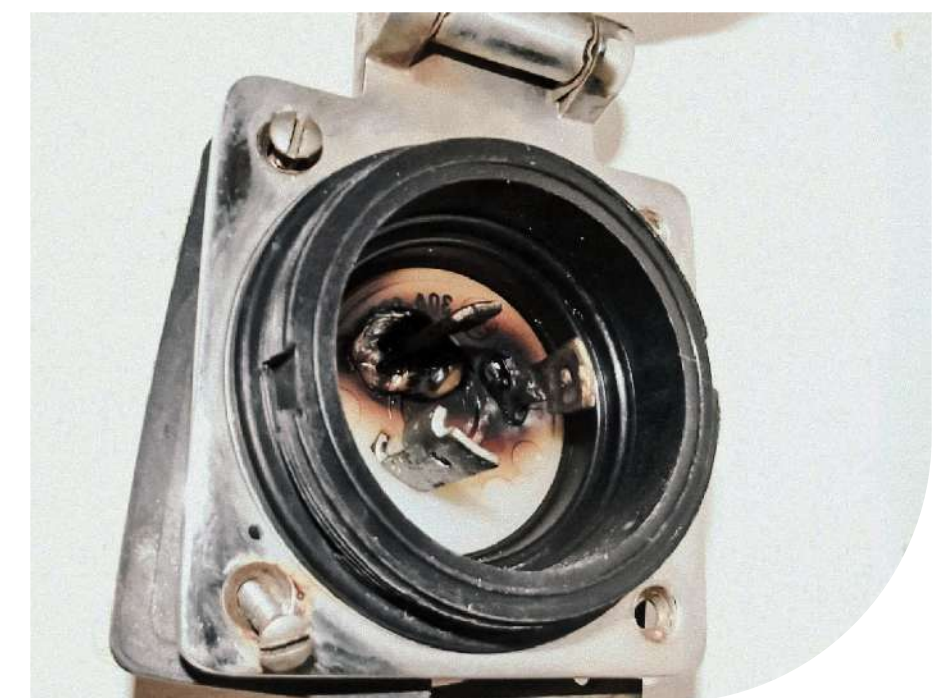
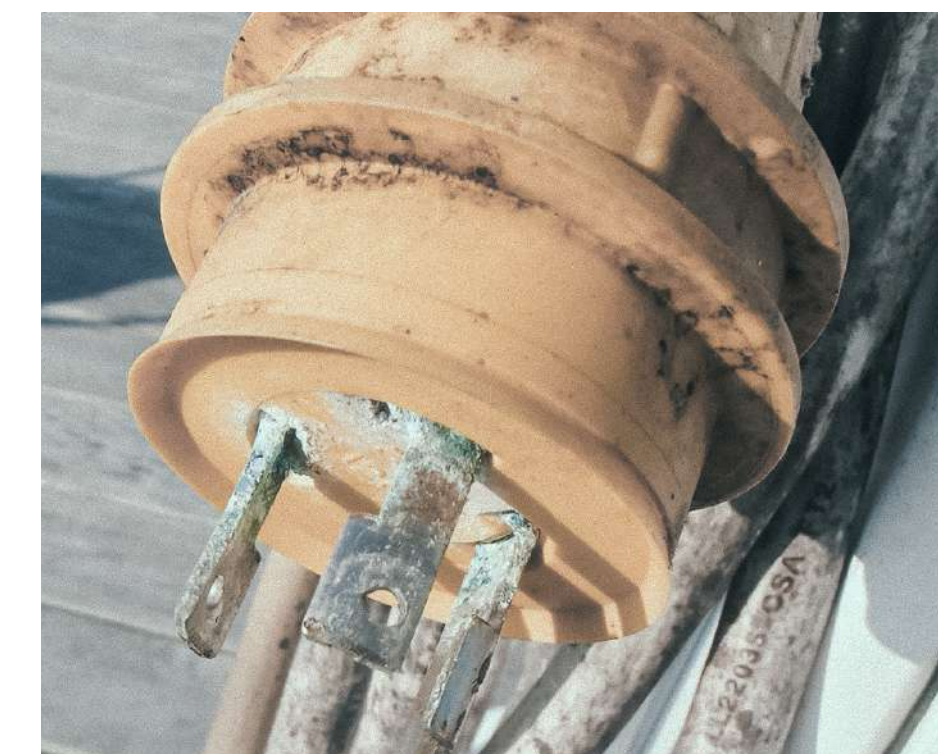
SIMPLE

INTUITIVE (MAGNETIC) CONNECTION

- Prongless, magnetic interface that connects securely
- Easy twist-to-release design
- LED flashlight for night-time docking
- LED power indicator light
- Simple retrofit for conventional shore power

INSTALLATION & COMPATIBILITY

- Easy, DIY retrofit of boat-side inlet (< 10min)
- Replaces legacy L5-30 and L5-50 marine connectors (i.e. “yellow Marincos cord”)





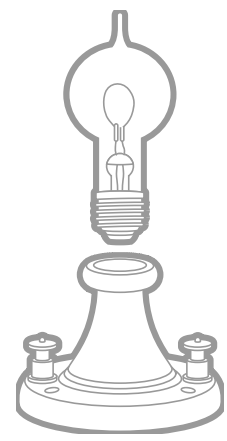
SMART

FOR BOAT OWNERS:

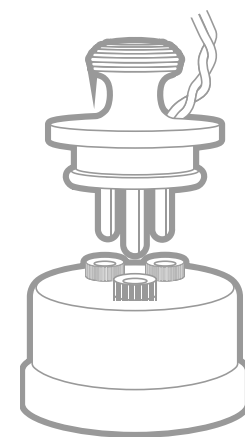
- Bluetooth, WiFi, or LTE connectivity (optional)
- Remotely control & monitor your boat from your phone

FOR MARINA OPERATORS:

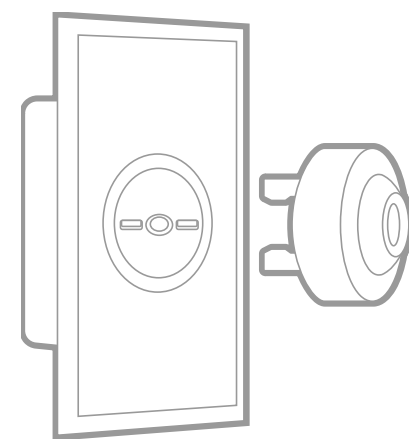
- Power metering for precise moorage billing
- WiFi mesh network improves marina user experience



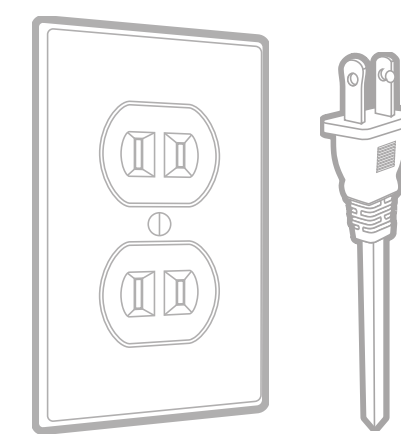
1800s



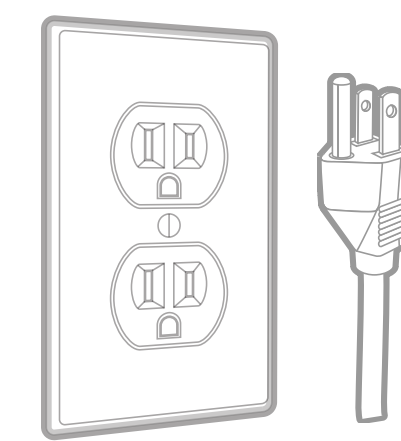
1900s



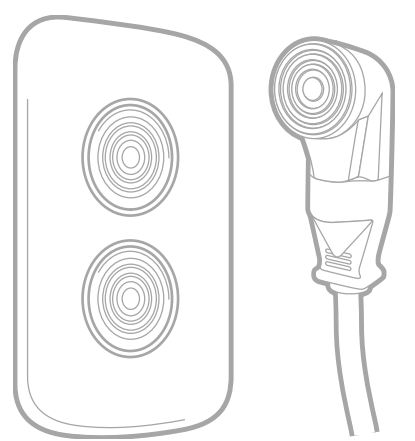
1920s



1950s



1970s



2021



HOW IT WORKS

For over **140 years**, the world has been living with an inherently flawed design: the pronged electrical plug.

VoltSafe technology brings electrical plug design into the 21st century, creating the transformational power to unlock previously unreachable economic value and safety.



HOW IT WORKS

VoltSafe's patented **plug technology** unites HARDWARE and SOFTWARE to make plugging into electricity safe, simple and smart.

VoltSafe's "prongless" plug technology can be adapted to any power level (worldwide) and only allows power to flow once both plug and outlet are fully connected.

Our technology utilizes unique electrical fingerprints to allow electricity to flow. This process occurs in a span of micro-seconds, effectively **eliminating arcing** (seen in pronged plugs).

VoltSafe technology is successfully safety certified (in accordance with UL and CSA standards) making it **the world's first high-power prongless (magnetic) connector**. VoltSafe is the only prongless technology in the world that delivers lightning-fast charges without power loss (like pronged plugs) and is not to be confused with inductive charging technology.

IMPROVEMENTS OVER LEGACY SHORE POWER CONNECTORS



CORROSION & ARCING

- No more hidden corrosion (known to start boat fires)
- Proprietary contact coating and alloy composition prevents corrosion
- Visible contacts are easy to clean, preventing corrosion build-up
- Marine technicians and surveyors agree that every marina has cords that are ticking time-bombs and well beyond replacement
- VoltSafe technology eliminates arcing altogether

REVERSE POLARITY DETECTION

TRIPPED ELECTRICAL BREAKERS

- Over-voltage detection
- Over-current detection
- Contacts de-energized when not connected



IMPROVEMENTS OVER LEGACY SHORE POWER CONNECTORS

STRAY CURRENT

- Current flow is deactivated when plug disconnects, preventing stray current (even if plug is dropped in water)

NO WATER INGRESS

- Designed to IP68 standards
- Simply dry the contacts & reconnect

BREAKAWAY

- Disconnects when pulled on with force, protecting dockside infrastructure

CONNECTING IN THE DARK

- LED flashlight
- Magnetic quick-connect
- LED indicator confirms proper connection

MARINA POWER PEDESTALS

SOLVE YOUR HEADACHES & IMPROVE THE MARINA USER EXPERIENCE

- **POWER-METERING** for precise, transparent monthly billing (potential revenue booster)
- Create a **WiFi MESH NETWORK** using pedestals as a WiFi booster/node. Potential for WiFi-metering (data revenue)
- Remotely govern power availability at each berth. **TOGGLE BETWEEN 20A, 30A, 50A** from your phone/desktop
- **RESET PEDESTAL CIRCUIT BREAKERS** from your phone/desktop
- **DOCK LIGHTING** and other add-ons (optional)



Note that this product is at the concept-stage. It can be designed to retrofit or as a new power pedestal.



MARINA POWER PEDESTALS

PROTECT & FUTURE-PROOF YOUR INFRASTRUCTURE

- **MAGNETIC BREAKAWAY** at shore power outlet if pulled on with force
- **OVERHEATING DETECTION** shutdown and alert to prevent electrical fires
- Marina-wide power management lays the foundation for **EV (PLEASURE CRAFT) ADOPTION**

Note that this product is at the concept-stage. It can be designed as a retrofit or all-new power pedestal.

MARINE EV-CHARGING

VoltSafe is working with stakeholders across Europe and North America to develop the new **marine-specific standard for charging infrastructure.**

USING CAR CHARGERS IN DYNAMIC, SALTWATER ENVIRONMENTS IS A RECIPE FOR DISASTER:

- Recessed electrical contacts → can't detect corrosion
- Corrosion + high power → high risk of fires
- Short cords + wide vessels + waves → torn cords + damaged chargers

VoltSafe tech can be scaled to Level 3 Fast-Charging and can incorporate communications pins.

CURRENT PARTNERS INCLUDE:

- Charge point providers
- EV-boat manufacturers
- Cord manufacturers
- Military/Navy
- Industry Standards Committees
- EV-fleet operators



INDUSTRIAL + DEFENSE

VOLTSAFE TECH CAN BE SCALED TO MEET ADVANCED TECHNICAL REQUIREMENTS

- **Voltage** - up to 690V
- **Amperage** - up to 1500A
- **AC or DC** from the same outlet, automatically adjusting based on what is plugged in
- **Multi-phase power**
- **Unique frequencies**, e.g. 480Hz
- **Autonomous plug ejection** (electromagnets)

POTENTIAL APPLICATIONS:

- Hotel power for commercial vessels (container ships, cruise ships, etc.)
- Hybrid-electric tug boats
- Casualty power operations
- Autonomous and submersible vessels





THANK YOU



VoltSafe Inc.

Suite 410 - 1444 Alberni Street, Vancouver BC

☎ +1 (833) 999-6960 ext.4

✉ sales@voltsafe.com

voltsafe.com