



Experience Industrial Innovation



OnePlant™

The Best Integration is No Integration

Challenges

What's the problem with packaged PLCs?

They work fine, *maybe...*

*But integrating islands of technology is
challenging for several reasons:*



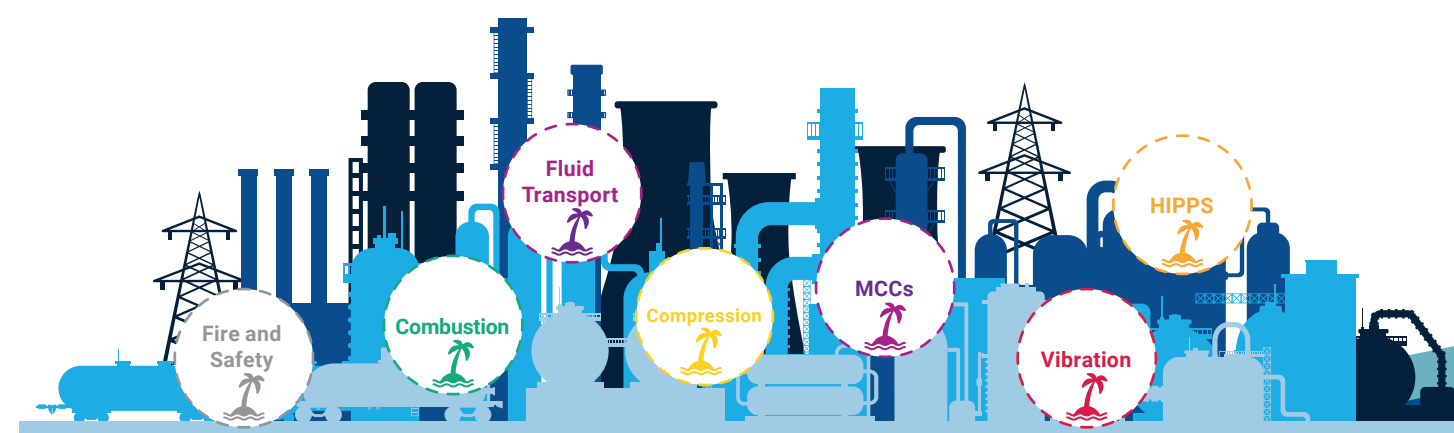
Projects dictate the number and type
of package subsystems purchased.

But Operations live with the integration headache...
until the end of time.

There must be a better way.

And there is...

OnePlant™



OnePlant™

DELTA V™

Imagine operating your entire facility as “One Plant” instead of multiple pieces.

Every tag in the plant, available at every node, no mapping required. This can be achieved with:

- Native alarming and historical data
- AMS asset diagnostics everywhere
- Common operator graphics and control hardware throughout the plant
- The DeltaV PK controller allows modules to be built remotely, then merged to native DeltaV once at site
- DeltaV CHARMs (CHARacterization Modules) provide for flexible assignment of I/O at the fabricator while allowing for late-stage changes during construction or through C&SU
- AMS Diagnostics allow Smart Commissioning and predictive maintenance once operating
- DeltaV has embedded APC applications for optimizing plant operation once turned over to operations

This strategy eliminates islands of automation, reduces late-stage change orders associated with the changes that occur during construction.



Eliminates
“Islands of
Automation”

Reduces Overall
Project Cost

Simplifies
Commissioning
& Start-Up

Increases
Project Certainty

Enables APC
Profitability



When building a new plant or major expansion, modern construction projects typically source different modules or unit operations from different suppliers. They frequently come with stand-alone controls such as PLCs. Integrating them into the plant control system is impossible, as much of the performance data from instruments, sensors, and equipment is stranded within their “islands

of automation”. Managing the different islands becomes a pain point for maintenance. Operations will struggle to realize its fully optimized potential from all of the stranded data. Further, operators will be interfacing with multiple technologies, making their jobs, and training new operators, difficult.

The Best Integration is NO Integration

BEYOND THE CONFIGURATOR: “THINK OUTSIDE THE BUCKET”

EASY INSTALLATION

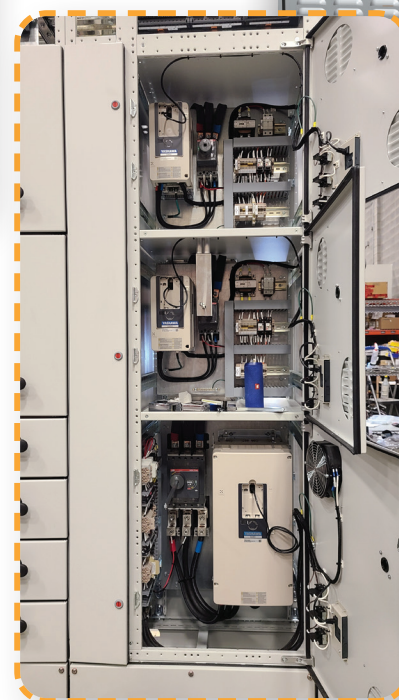
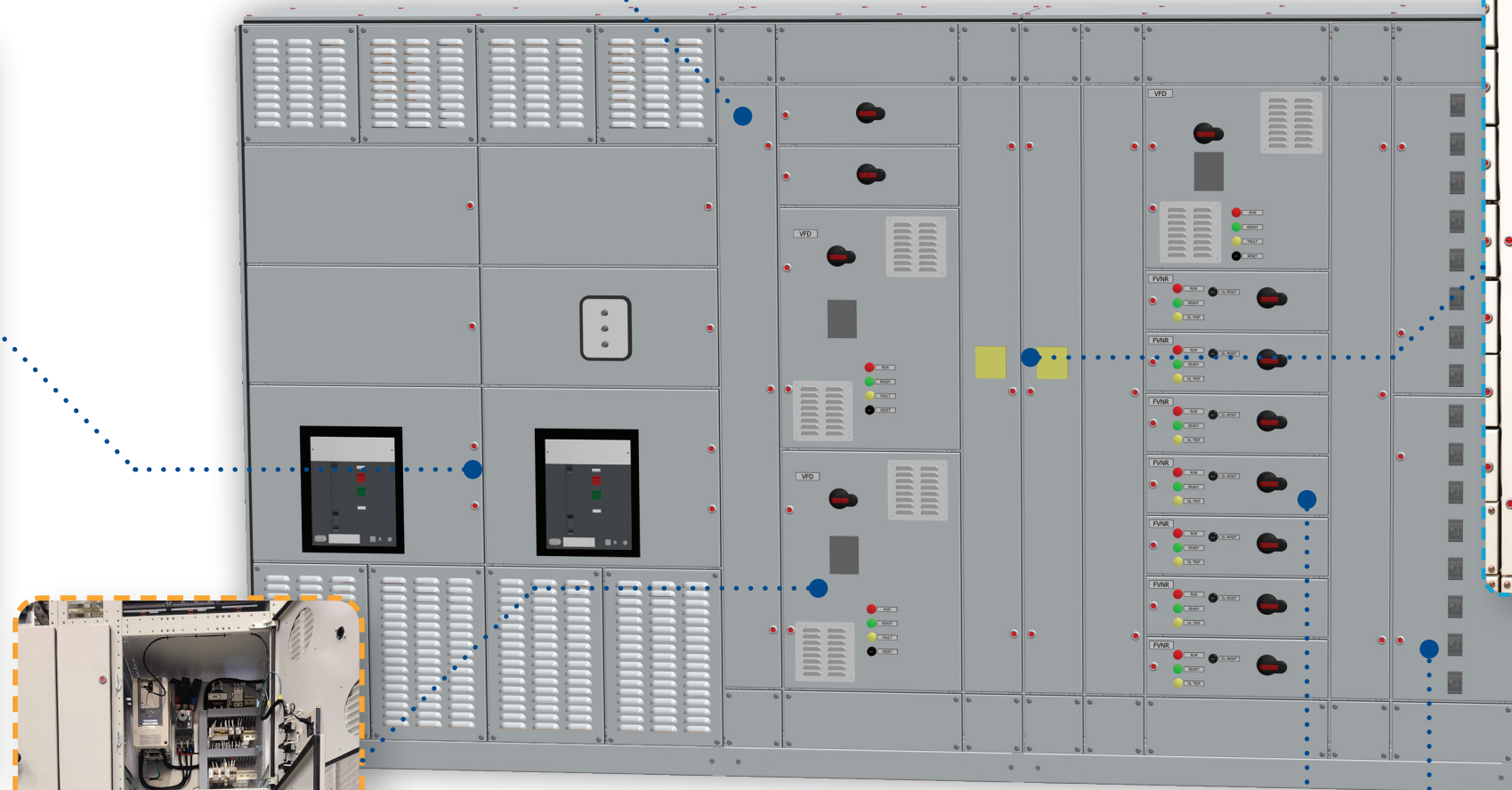
7.5" wireways, gasketed doors, and slide clamp bus bar connections.



POWER OPTIONS

Incoming options such as:

- ATS
- MTS
- Main-Tie-Main
- Main Lug (MLO)
- Smart Breakers
- And more!

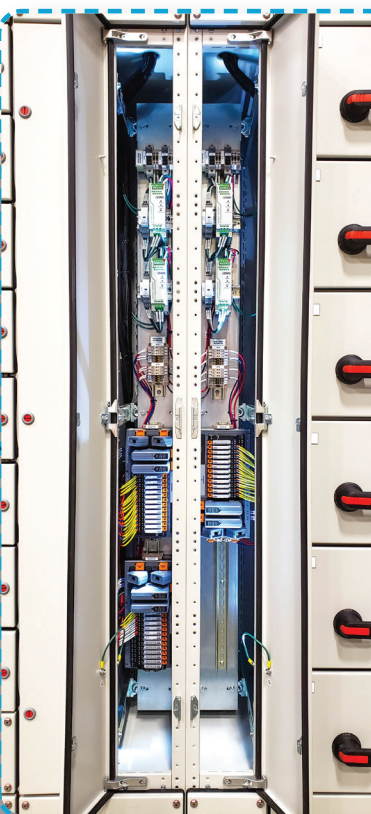


MODULARITY

Save space and money. Incorporate VFDs, Filters, Control, Comms, Aux Panels, Transformers, and more to save on standalone panel wiring and E-house footprint.

FLEXIBILITY

Completely modular form factor allowing for accelerated delivery, even with late-stage changes.



INTEGRATED NATIVE

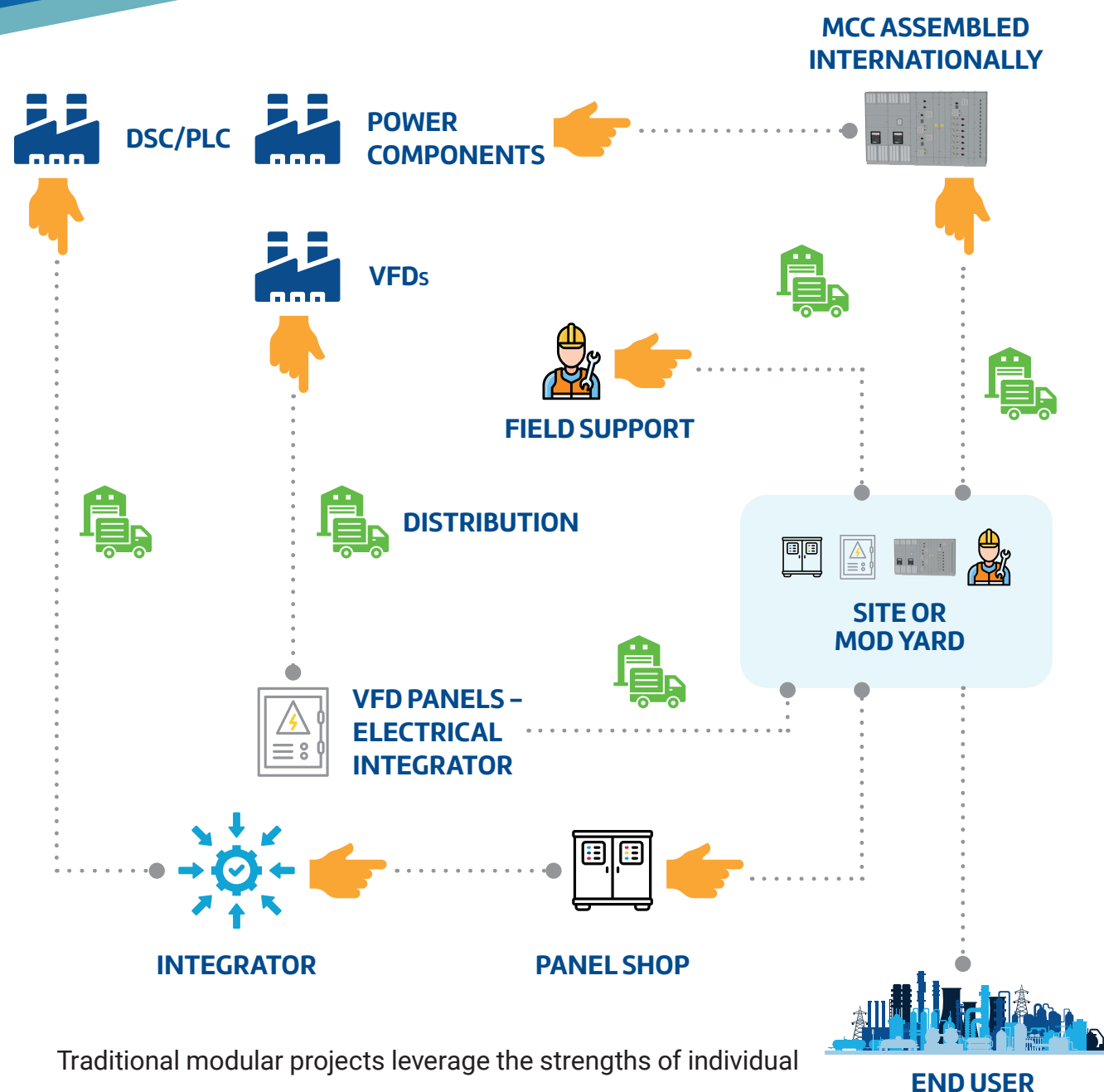
The first ever MCC with native DeltaV built right into the lineup.

- Strategic DeltaV placement reduces wiring, cable runs, and redundant work during testing and commissioning
- Designed, built, and operated as a single unit
- Amplify your benefits from a OnePlant design
- “The best integration, is no integration”

DENSITY

Pack more loads without compromising function. Space-saving options such as panel-mounted breakers.

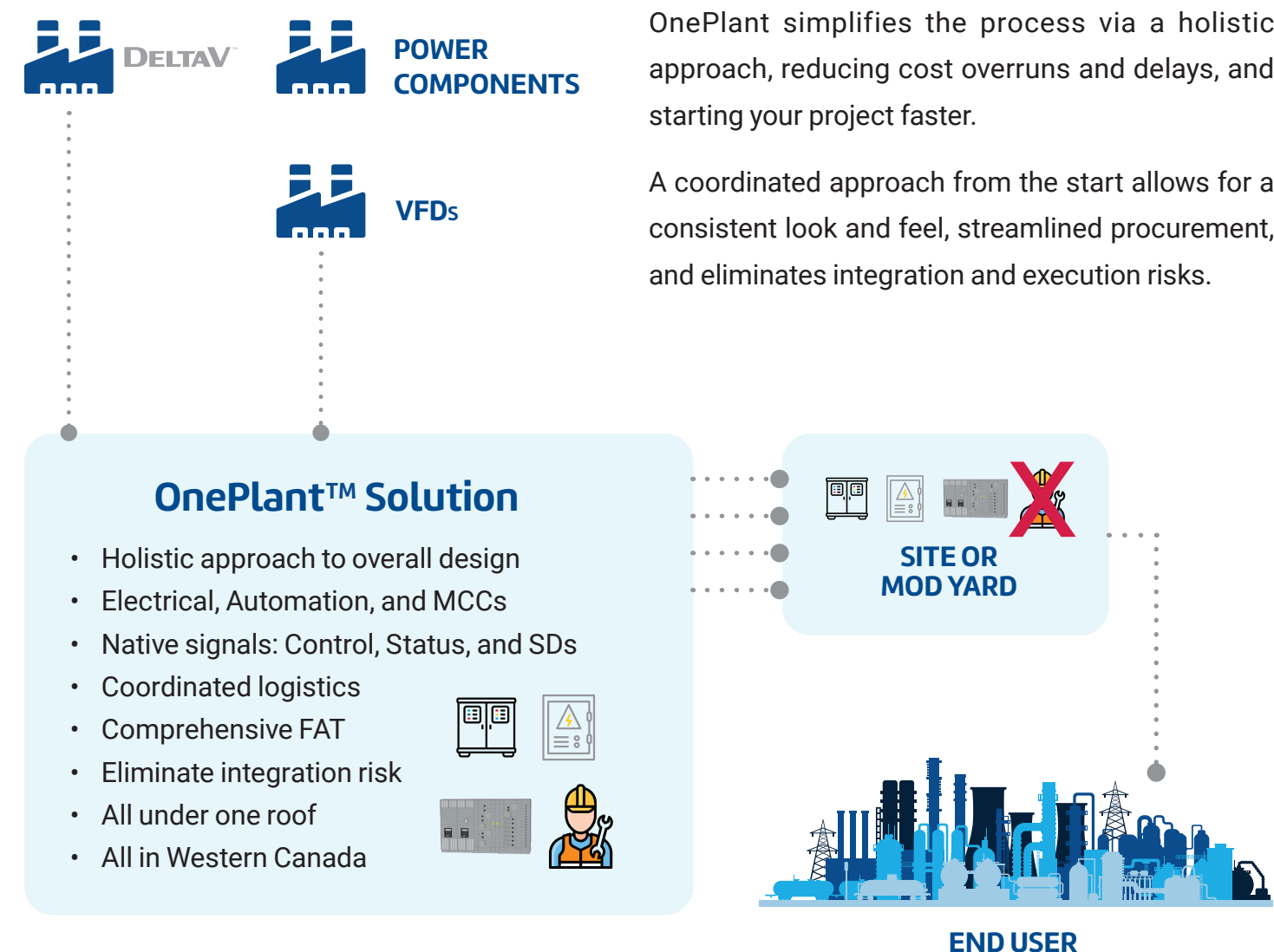
Traditional Execution



Traditional modular projects leverage the strengths of individual parties, but quickly become cumbersome at the site or mod yard when coordinating and integrating the different pieces together.

THIS DOESN'T HAVE TO BE THE ONLY WAY.

OnePlant™ Strategy



OnePlant simplifies the process via a holistic approach, reducing cost overruns and delays, and starting your project faster.

A coordinated approach from the start allows for a consistent look and feel, streamlined procurement, and eliminates integration and execution risks.

**No more COMPROMISING BETWEEN
COST and LONG-TERM OPERATION**

Combustion Management

BMS NATIVE TO DELTAV: ELIMINATE "ISLANDS"

Safe, Operability, Reliability, Compliance

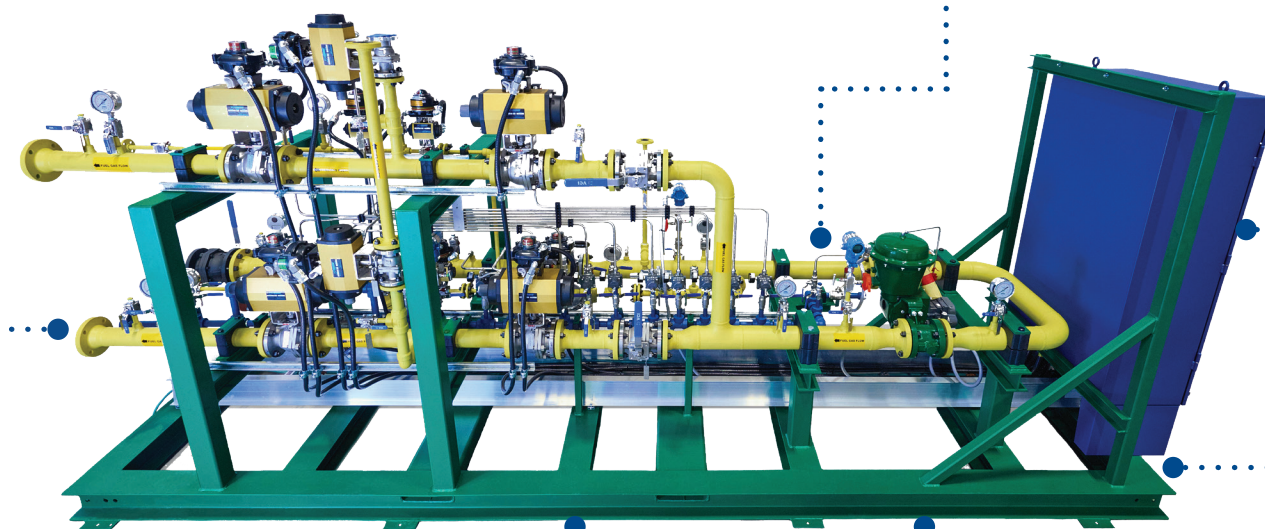
OPERATIONAL AWARENESS

- Automatic first-outs, trip indicators, resets
- Start/Stop sequence control
- Native device diagnostics



EXPERTISE

- CSA B149.3 / NFPA approved, in-house certification of custom assemblies
- Dedicated team of experts and best-in-class products for combustion solutions



BURNER MANAGEMENT

FLAMEVue - Spartan Engineered, pre-configured BMS panel with proven design and operation

- Engineered to safely operate and manage fired equipment
- Modular Hardware with configurable I/O
- Safety through layers of protection – SIL, SIS, and safety requirement (SRS) specifications



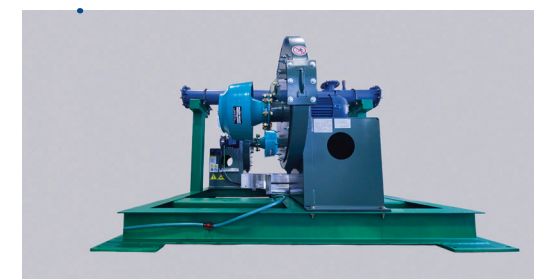
PROVEN IN USE

Proven around the world, Emerson products bring you certified, tested components that you can trust.



SCALABLE

- Natural and forced draft systems. Single or multi-burner or fuel designs.
- Full system support from 100,000 BTH/hr to 100 million+ BTU/hr



COMBUSTION SOLUTIONS

Supporting a variety of applications such as Once-through steam generators (OTSG), heat recovery steam boiler (HRSB), boilers, reforming/cracking furnaces, cement kilns, process heaters, line heaters, Sulfur Furnaces, and more.

Compression on DeltaV™

COMPRESSOR CONTROL SYSTEMS

The Best Integration is NO Integration

NATIVE COMPRESSOR CONTROL IN DELTA V

No need to integrate or interface your Compressor Control Panel, your Compressor Control is native in DeltaV.

REDUNDANCY BUILT-IN

Inherently fault-tolerant with no single point of failure: protect your asset and make equipment upgrades easier.

REDUCE WIRING

Reduce cost and complexity: No need to wire your compressor control panel to your MCC building.

ASSET MANAGEMENT SYSTEM (AMS)

Diagnostics from the Instruments wired to the compressor are available to the AMS.



Patented technology that utilizes vented hydrocarbons as a supplementary fuel source for natural gas engines.



Optimizing your Operations

Reduce your Capital Cost

Shorten C&SU

Backed by 60+ Years of Experience

COMPLETE PLANT VISIBILITY

Operations can have access to the whole plant from the compressor HMI.

NATIVE ALARMING

Compressor Alarms are timestamped at the controller level and synchronized across the entire plant alarm system.

TRENDING

Compressor Alarms and process data are available together in Process History View.

CHARMs

Compression on DeltaV uses CHARM technology which allows for late design changes and single loop integrity.

TruckVue™ and RailVue™

TRUCK & RAIL LOADING NATIVE TO DELTAV™

Truck & Rail Measurement Without the Challenges of Data Integration

MEASUREMENT

Advanced patented water cut technology and best-in-class flow metering to ensure accurate and reliable measurement over a wide range of products and water cut ranges; Accuracy = No lost profits.

FLEXIBLE AND SCALABLE

A system can accommodate 1 – 14 transfer points in a single panel. If required, the system can be further scaled up to a large distributed system with additional panels to increase the total number of transfer points managed.

DATA MANAGEMENT CAPABILITIES

Providing data management integration with various ERP business systems, production accounting software, web services, FTP servers, and external databases.

FIELD COMMISSIONING, START UP SERVICES & TRAINING

Complete projects with service support based out of multiple Western Canada locations and Central United States. In-house or on-site training for E&I and Operations.

DELTAV™
Inside



Accurately manage, measure, record, and report loading and unloading transactions at truck/rail terminals or transfer points.

Backed by 30+ Years of Experience

NO INTERFACE REQUIRED

Load-in, load-out, ticketing, record-keeping, etc., directly on your DeltaV plant-wide control system. No interfaced PLC required.

PROVEN TRACK RECORD

Over 350+ TruckVue systems have been deployed worldwide, comprising our installed base.

RAIL SPECIFIC FEATURES

Our system conforms to API RP 3000 for classifying and loading crude oil into rail cars. It boasts rail-specific interface screens, a web service interface to external rail logistics software, and optional on-board master meter proving functionality.

REGULATORY COMPLIANCE

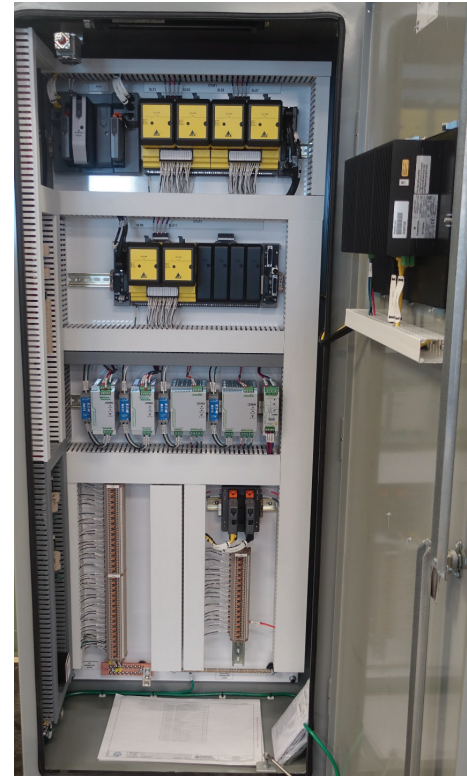
Compliant with local regulatory bodies and can integrate with Measurement Canada custody transfer applications.

HIPPS

ONEPLANT™ HIPPS SOLUTION

Key Benefits of OnePlant™ HIPPS

- SIL3 safety-critical protection from over-pressure events
- Native alarming and automatic first-out indications with no integration required
- Enhanced safety and availability through native proof-testing and partial stroke testing
- Eliminate or reduce the frequency and volume of release events, thereby reducing CO2e emissions and the environmental impact of pressure venting

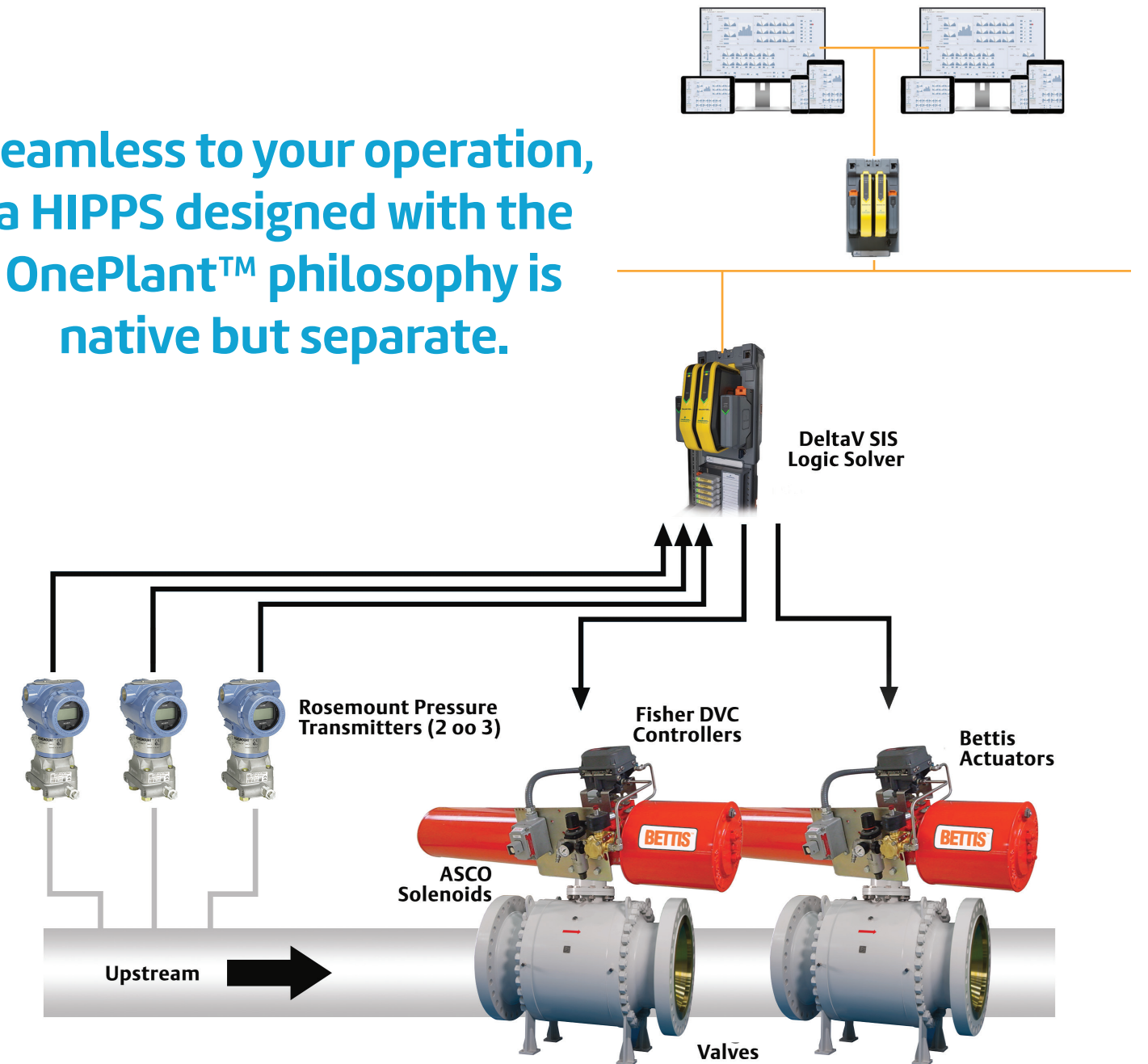


Ease of Maintenance

- Same software, same tools, same skill-sets
- No black boxes
- Maintained from your any DeltaV engineering station. No need for additional software



Seamless to your operation,
a HIPPS designed with the
OnePlant™ philosophy is
native but separate.



OnePlant™

Fire & Gas Systems (FGS)

NATIVE TO DELTAV

WHY ONEPLANT™ FGS?

- A unified system for fire and gas detection, unit alarming, and plant evacuation
- Simplified architecture that reduces the complexity of multiple emergency systems
- Lower capital costs by eliminating redundant systems, duplicate hardware, and associated engineering, installation, and maintenance costs
- Utilizes your existing plant investment in DeltaV to provide comprehensive FGS health awareness, calibration and maintenance tracking, trending, historization, and operator training

CODE COMPLIANCE

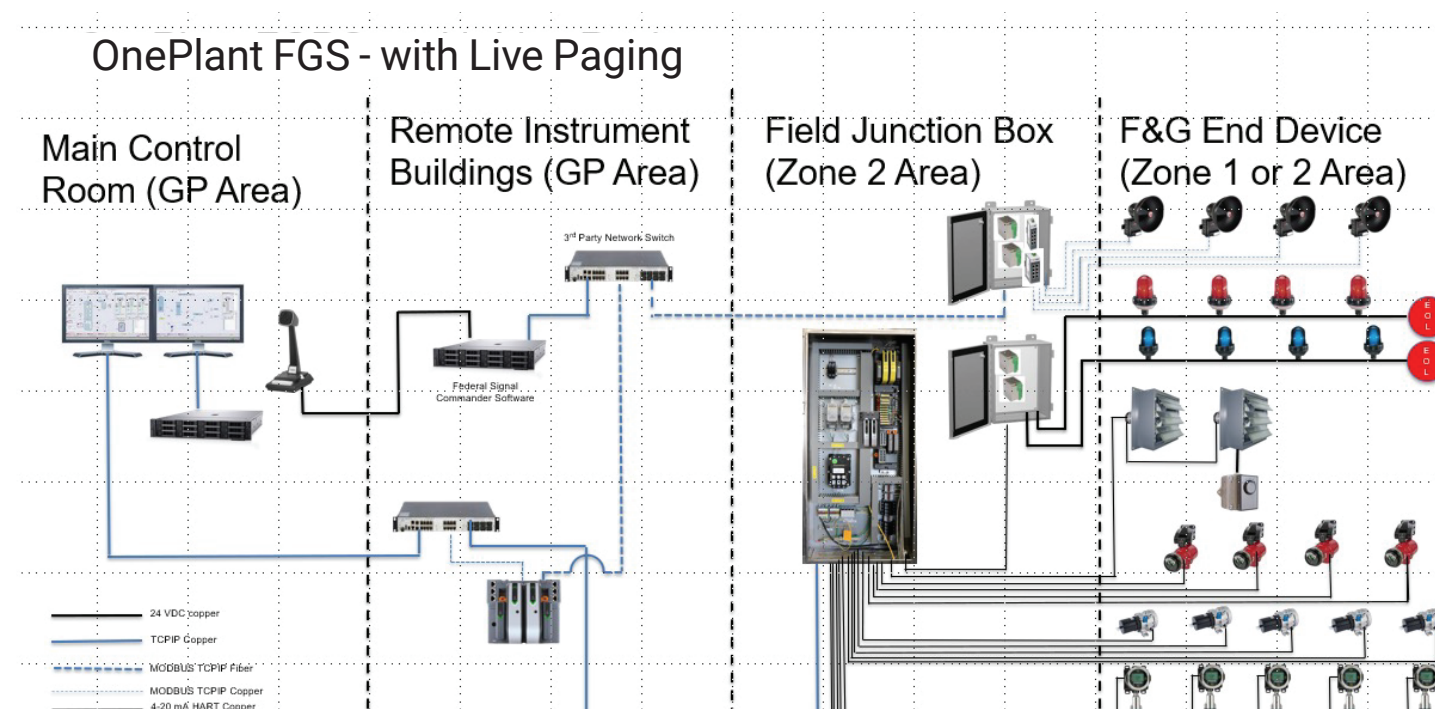
- Meets the requirements for industrial fire and gas detection in process facilities set out in the Building Code, Fire Code, OHS and other relevant legislation

ADVANCED PROJECT AND FIELD SERVICE CAPABILITIES

- Plant FGS Audit
- Air Current Testing
- Complete project
- Commissioning and Start-up services
- Training in all aspects of Fire & Gas Detection



Backed by 20+ Years of Experience



OnePlant™

Born Digital

EXTENDING ONEPLANT™ FOR ENTERPRISE
OT DATA

Infrastructure to support your OT data needs

Exploit the latest OT infrastructure to eliminate data silos.

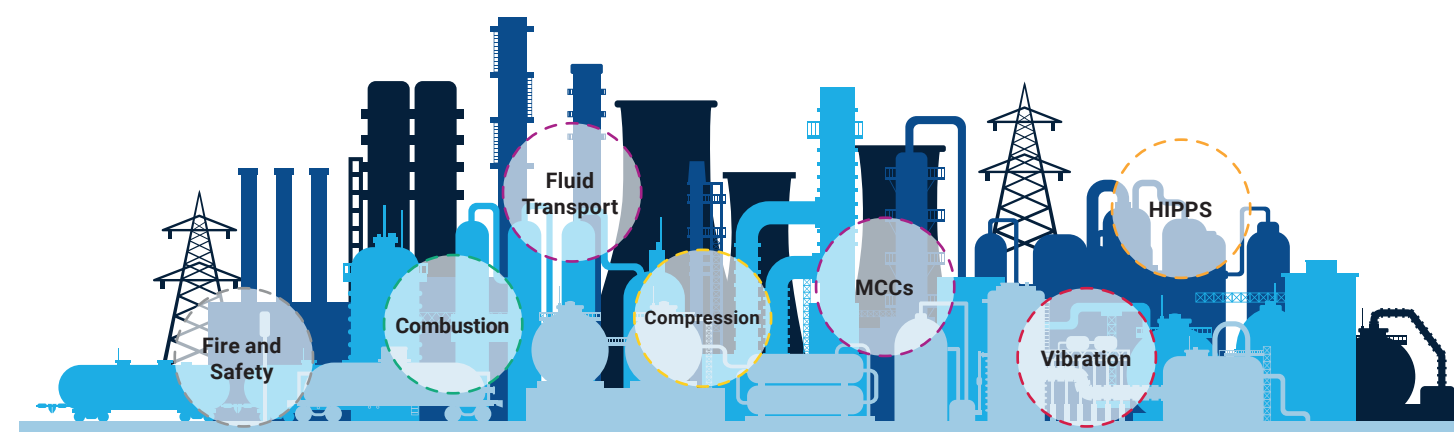
This includes:

- Smart sensors and devices
- Data gateways that provide access to the complete namespace of systems at the OT Edge
- Utilization of Operational Data Hubs to facilitate the exchange of diverse industrial data between OT and IT networks
- Enable data egress to host systems at any network level beyond the operation including cloud environments

Modern Operations
are '**BORN DIGITAL**'
rather than Digitally
Transformed later.

The **BEST**
integration is
NO integration

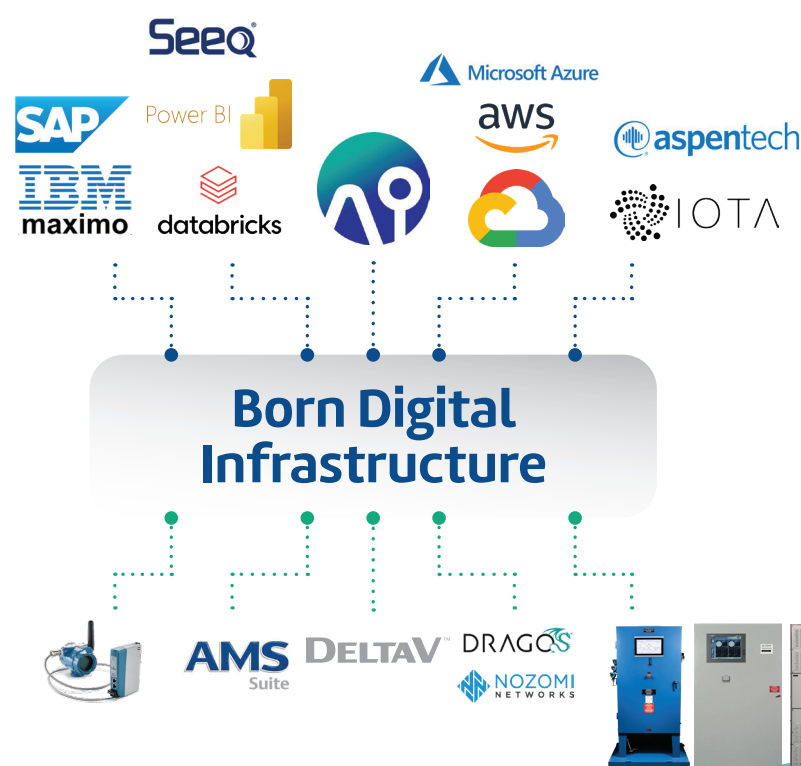
OnePlant™ philosophy removes isolated "Islands of Automation" throughout the facility, which significantly limit the amount of information available to the plant operator. Using OnePlant approach to design the facility control system ensures the facility operates with the highest level of reliability and maximum plant operation uptime.



BORN DIGITAL USING YOUR RICH OT DATA

Aspentech Inmation and/or DeltaV Edge are Born Digital technologies that help libertate, contextualize and expose your OT-generated date across your plant and facilities.

The "Single Source of Truth" data is available to integrate with your ERP, CMMS, cloud, analytics, visualization tools, and other applications.



"Designing our facilities with the OnePlant™ philosophy removes isolated 'Islands of Automation' throughout the facility which drastically limits the amount of information available to the plant operator Using OnePlan approach to design the facility control system ensures the facility operates with the highest level of reliability and the highest plant operation uptime."

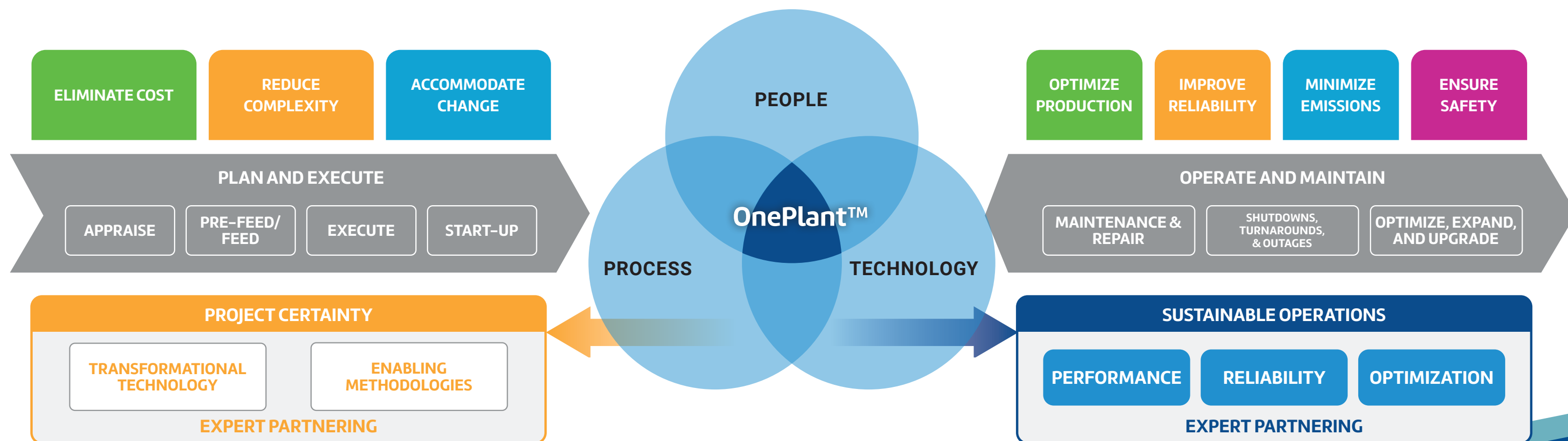
Chad Alexander, Automation Lead
Expander Energy Inc.

OnePlant™

When It All Comes Together

Capital Efficiency 1 to 5 years

Operational Efficiency 5 to 40 years



OnePlant™



Call us or request a quote online 24/7

+1 (877) 278-6404 | +1 (403) 207-0700 | info@spartancontrols.com



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