



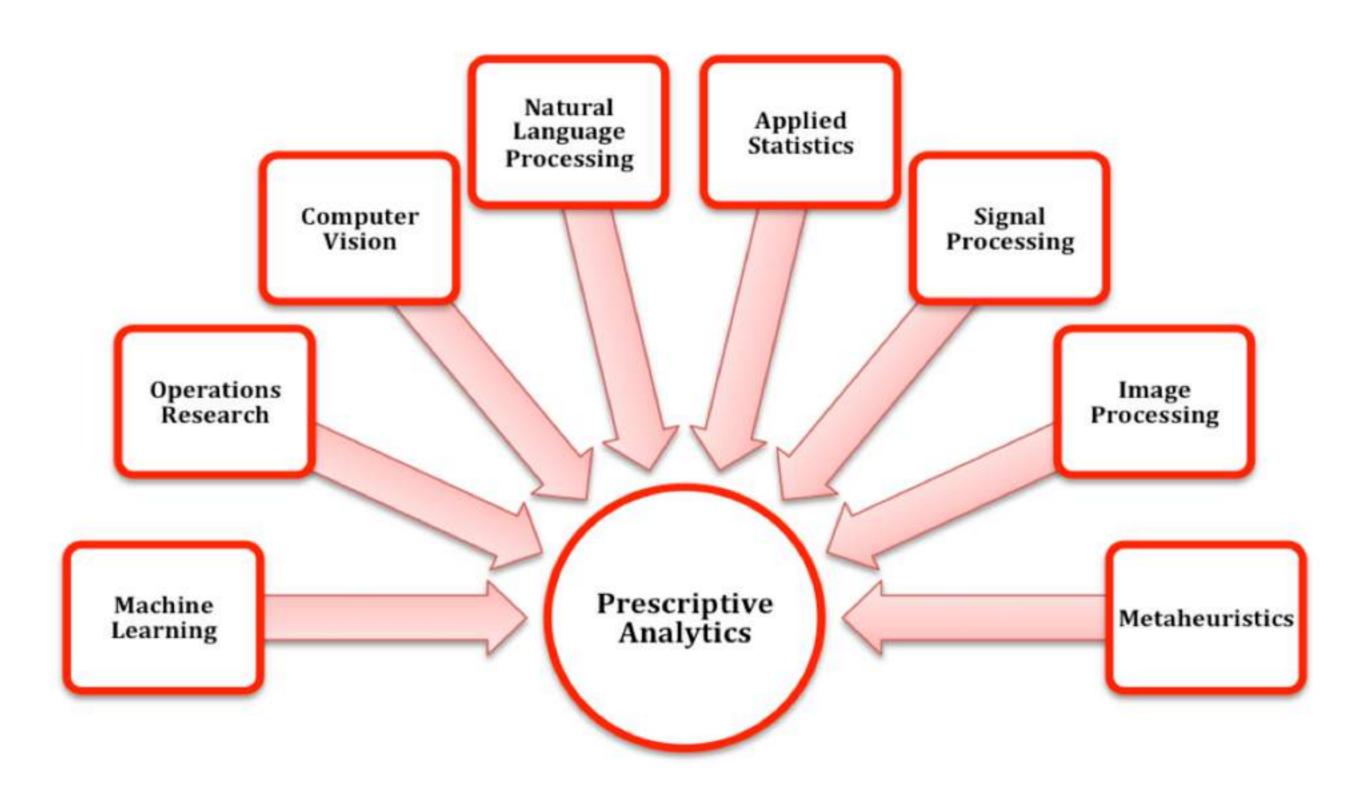


Diagnostics for your reciprocating compressors & engines

Maintenance of reciprocating equipment needs intelligent, reliable and scalable technologies that provide an Holistic maintenance approach to existing programs. HolizTech™ is the 1st reciprocating machinery diagnostic software, hardware & services that deliver actionable intelligence, holistic insights, and prescriptive monitoring for your reciprocating assets.

Reciprocating machinery data is one of the most underused and undervalued assets of any organization. There is valuable information hidden in this data. Reciprocating equipment data is valuable because it contains a conclusive record of all the activity and behavior of your compressor or engine. It includes information from many source, data from APIs, process information, change events, the output of diagnostic commands, and sensor data from industrial systems, and PLC's.

The challenge with leveraging reciprocating machine data is that typically companies have many different products installed (and in many cases still have failures). Traditional monitoring and analysis tools weren't designed for the variety, velocity, volume or variability of data that is available today. The Industrial Internet of things is growing. With more and more connected machines, valuable data is being generated. But how do you turn volumes of data from your recip's into actionable insights to improve efficiency, productivity, and ultimately, profitability?



Welcome to HolizTech Recip's.

HolizTech™, combines cutting-edge technology and decades of reciprocating machinery experience into a platform that securely gathers reciprocating machinery data and analyzes it to deliver alerts, quickly. We can tap into the data that has always been at your fingertips and apply it to build a prescriptive & intelligent prescriptive maintenance system.

HolizTech solutions for reciprocating compressors



Many of the condition monitoring systems available to the compressor industry today, are costly to install and maintain and require specialist manpower to collect data, process and analyze. In addition these systems are very complex and in many cases rarely deliver real condition monitoring information due to the complexity and interpretation for example of pressure volume/time (PV/PT) data.

In particular, in the case of a reciprocating compressor, valves are the most critical part of a piston compressor and are key to its availability. Valve problems are reportedly the primary reason for reciprocating compressor shutdowns. More than 76% of unscheduled shutdowns on reciprocating compressors can be associated with cylinder end components. Identifying compressor valve anomalies can pay big dividends in increased reliability and reduced maintenance costs for the operators.

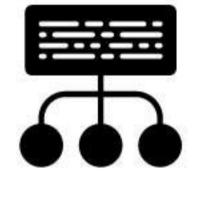


HolizTech Analytics

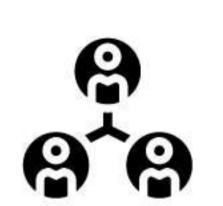
Our approach requires much more than data and machine learning algorithms for predictive analytics, certainly much more to do prescriptive analytics. our holistic approach provides a solution where the software does intense data gathering, data validation, real-time processing, and works with existing operational and maintenance systems to alert for intervention to prevent problems. The technology will deliver measurable values to your maintenance program in terms of:

- CLOSES THE COMPETENCY GAP
- MACHINERY LEARNED BEHAVIORAL PATTERN
- CAUSES OF FAILURE
- ASSET INTEGRITY, RISK
- OPTIMIZED INTRUSIVE MAINTENANCE (REDUCED PM OUTAGES)
- FORWARD PLANNING OF ESSENTIAL MAINTENANCE
- REDUCED RISK OF PRODUCTION INTERRUPTION
- INCREASED CONFIDENCE IN BUSINESS PLAN DELIVERABILITY









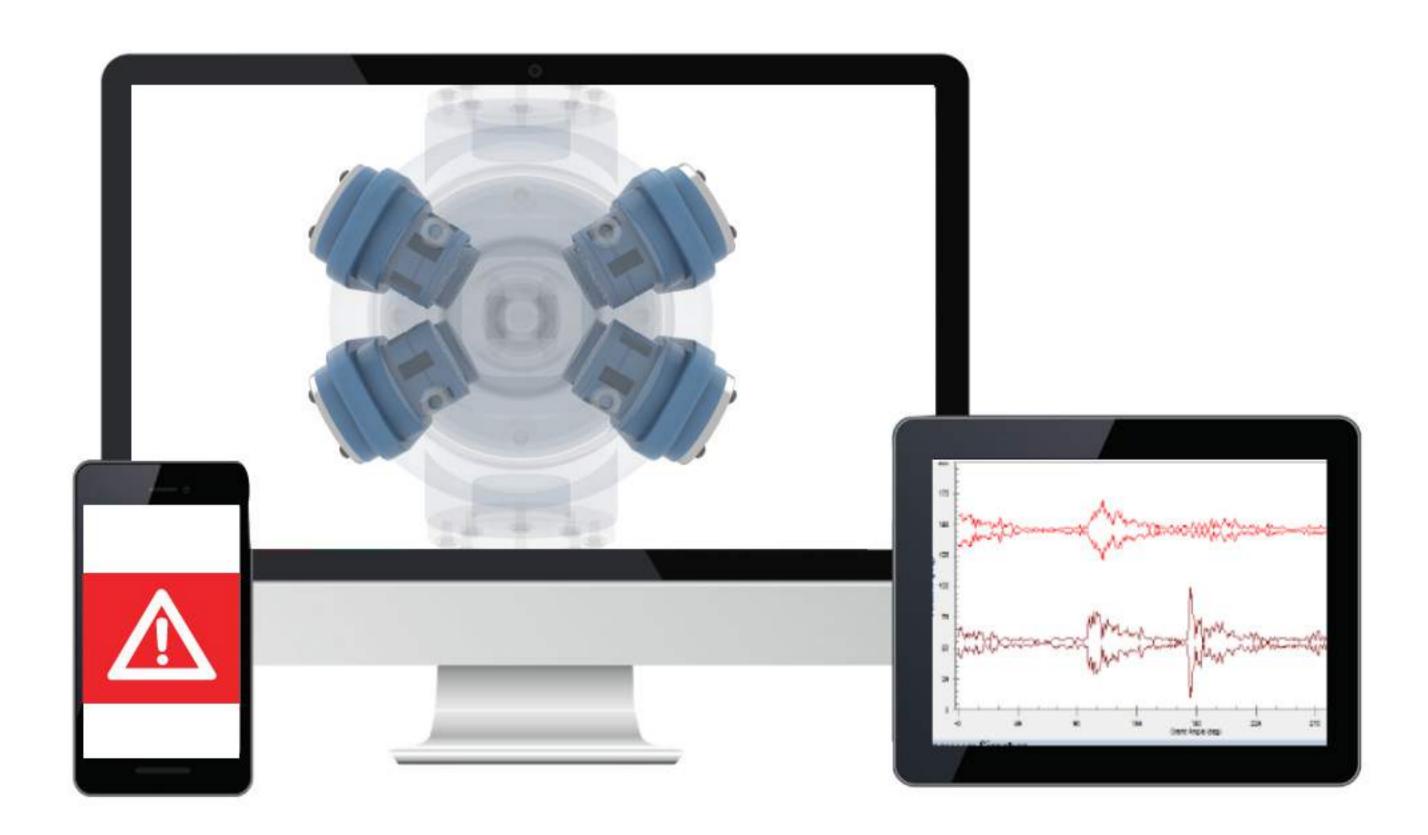


MANAGEMENT

ANALYTICS DE

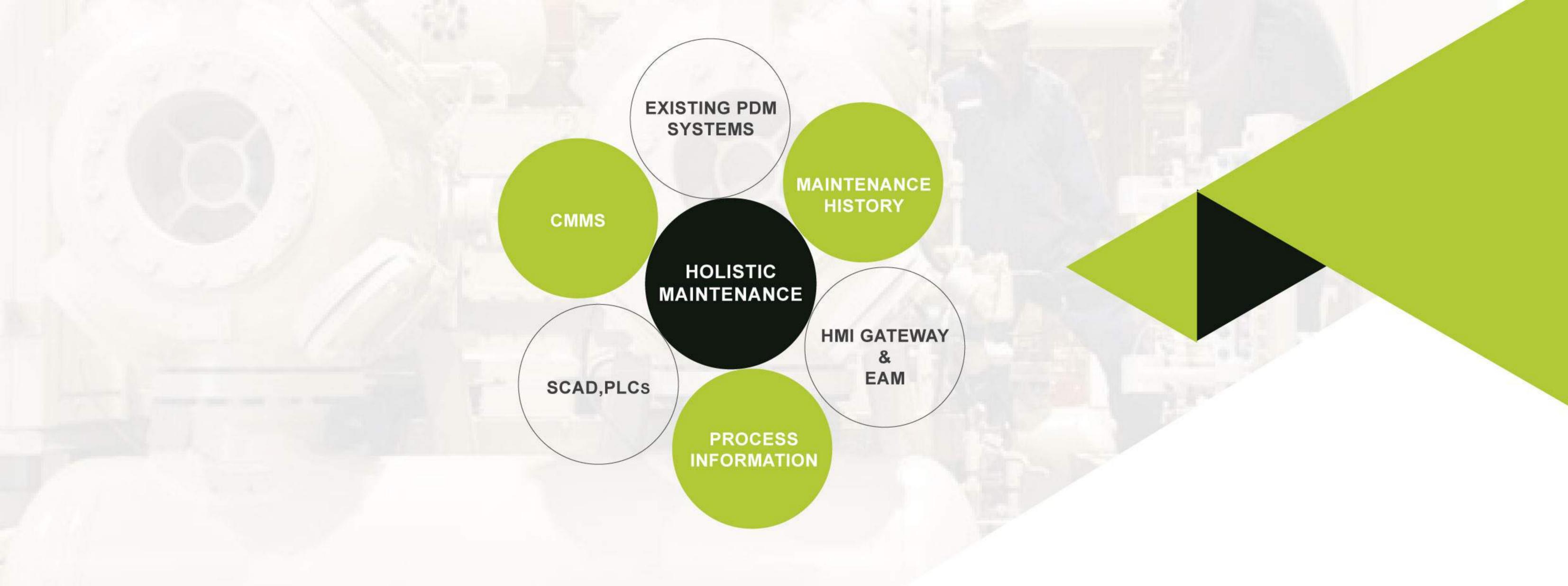
DEVELOPMENT SE

SECURITY



RECIP PRESCRIPTIVE ANALYTICS

Analysis of pressure time & pressure volume data (PT/PV) is complex and requires a trained analyst. In many cases we see operators of on-line systems either taking off the pressure sensors or shutting the technology down because they are unable to analyze the complex information. If you have any of these online system installed and still unable to catch compressor valve and other component failures, then you need HolizTech™. Our reciprocating prescriptive analytics software will help you to manage your reciprocating equipment.



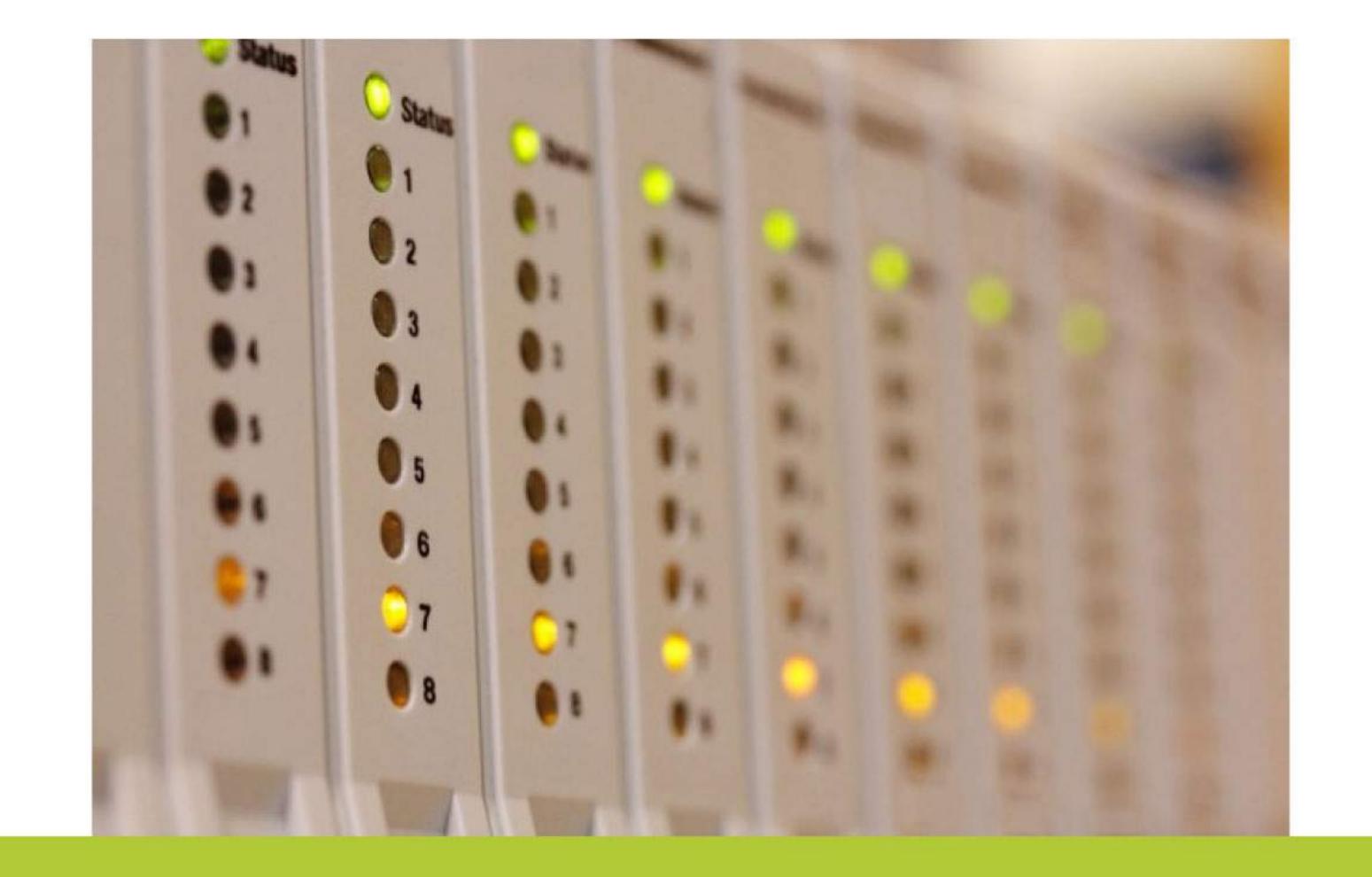
"Holistic Maintenance" the whole parts of your asset management systems are intimately interconnected and explicable only by reference to the whole.

DATA/COMMUNICATIONS:

- Consolidating data originating from many sites & different systems
- Uses GSM, CDMA, Satellite, WiFi, Radio
- Obsigned to recover from network & power-outage without loss of data
- Supports Modbus TCP, RTU (RS232/485) & all other industry standards

CONTROL PANEL/DCS, SCADA: (OPC)

- SCADA/DCS to pick-up all process and engine/compressorr data
- interfaces with Modbus TCP
- (Ethernet), Modbus RTU (RS232/485), CAN
- (CAN Open, J1939, ...), Profibus.
- Web Monitoring through any web-browser



PT Consulting & Trouble Shooting:

Online & Portable Reciprocating Compressor Performance Analysis & Condition Monitoring Services.

Compressor/Engine Optimization

Compressor Valve Optimization

Engine Balancing Services

Compressor Performance Optimization

Cloud based diagnostic services 24/7 from anywhere in the world!

COMPRESSOR & ENGINE ANALYSIS TRAINING

We have a number of training packages available, please contact us to discuss further.