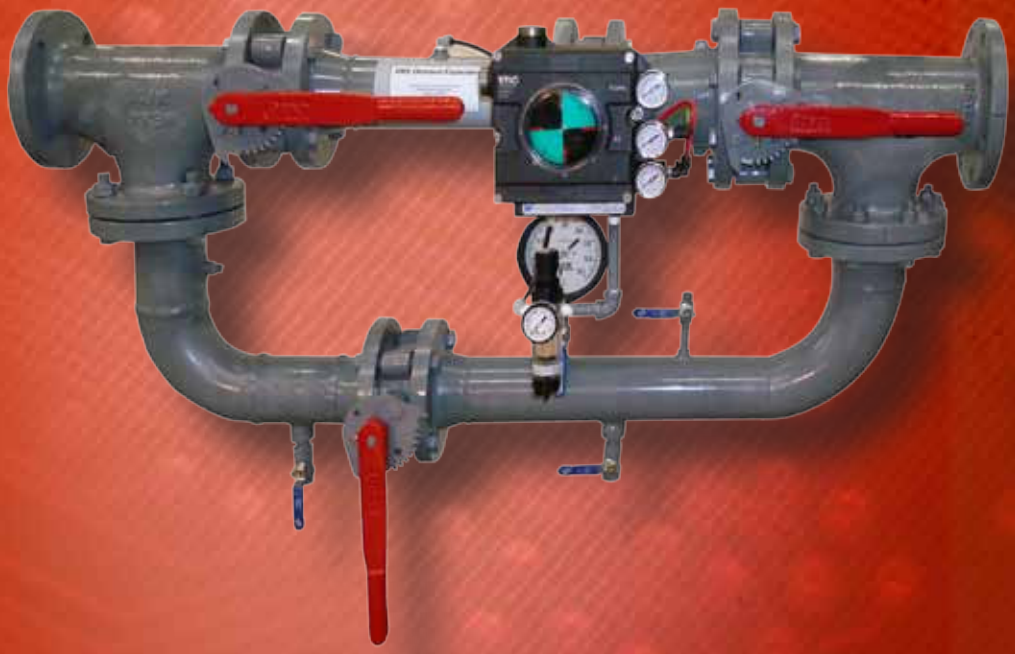
XMX

DEMAND EXPANDER CONTROL SYSTEM



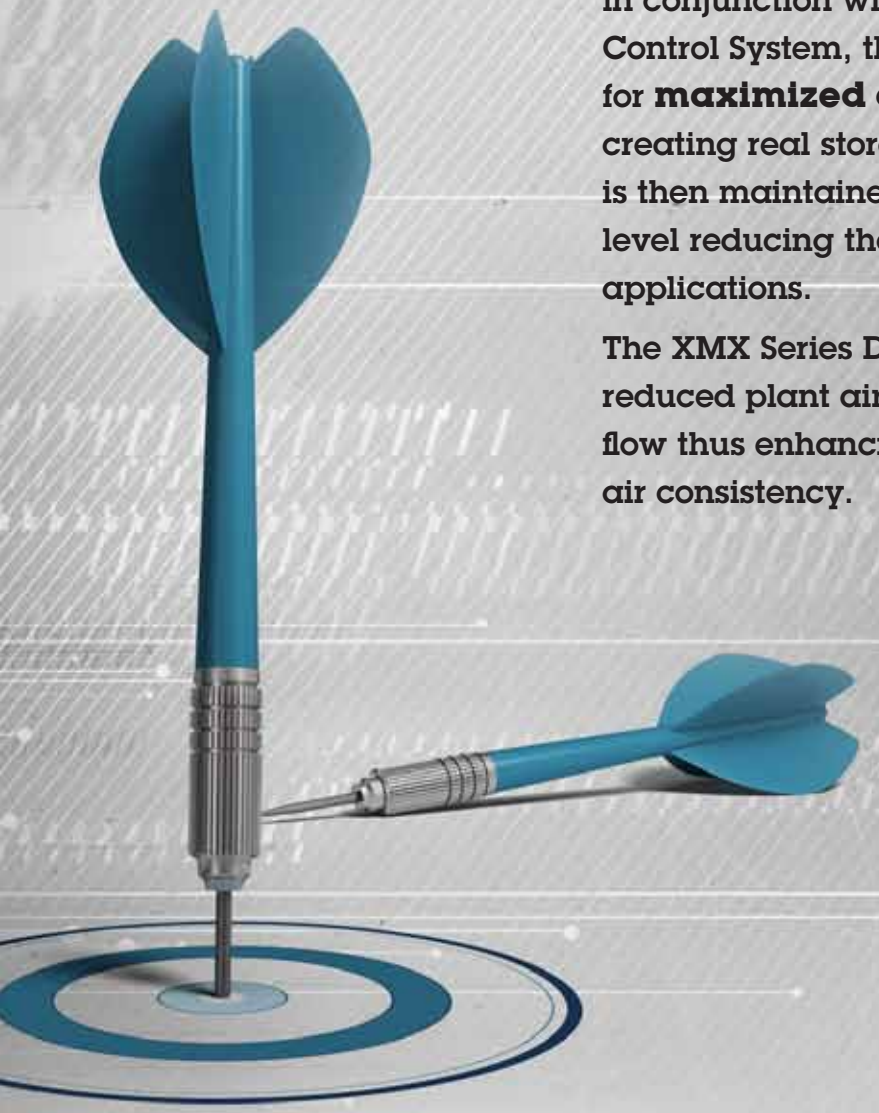
THE FORCE THAT DRIVES
AMERICAN INDUSTRY

GD
GARDNER DENVER

DEMAND CONTROL

The Gardner Denver XMX Series Demand Expander Control provides the benefits of managed compressed air storage and reduced system demand as a result of reduced system pressures. When used in conjunction with an ESP 1000 Air Compressor Control System, the Demand Expander will provide for **maximized air compressor efficiency** by creating real storage in the receiver tanks. The system is then maintained at the lowest tolerable pressure level reducing the flow through leaks and unregulated applications.

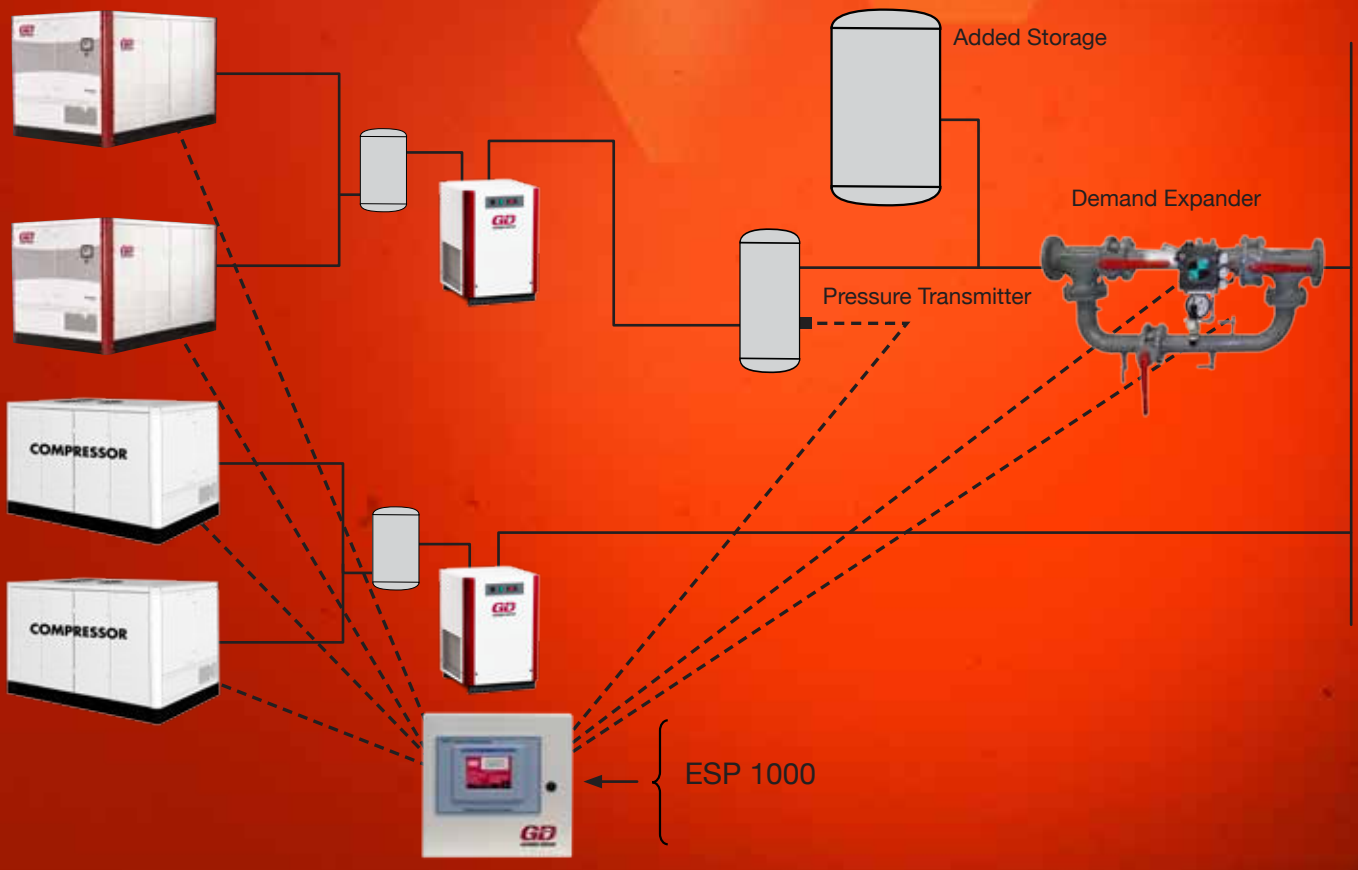
The XMX Series Demand Expander Control will allow reduced plant air pressures, while maintaining air-flow thus enhancing the process through compressed air consistency.



Storage Management

In conventional system designs, the storage (if it exists at all) is merely an extension of the piping and distribution system. When the Supply and the Demand are separated, storage can be reserved to handle instantaneous system events or compressor failures. The compressor automation system control is enhanced with the advantage of real storage when a Demand Expander is added to the system.

Artificial Demand is reduced because lower system pressures equate to lower system flows. Leaks will waste less air volume when pressure is reduced. Leaks will also be slower to expand under lower controlled pressure. Unregulated flows will also consume less air as a result of the Demand Expander.



TAKE CONTROL

System Security

The plant can now operate at pressure never before believed achievable due to the security provided by stored upstream volume in the air receivers. System events are not seen by the process.

System Stability

Most compressed air systems experience pressure fluctuations of 10% to 20%. As compressed air is an ingredient in the plant process, this inconsistency will have a negative impact on production. With Demand Expansion, the process sees only a constant pressure regardless of demand or coincidental system events.

Maximizes Compressor Efficiency

The use of storage provides the compressor control the ability to make a measured response to a fall or rise in the storage receivers. With an ESP 1000 compressor controller, the Rate of Pressure Change in the storage receivers is calculated by the unique Bullseye algorithm and intelligent, energy efficient loading and operational decisions will be made.

The Single Valve Design Provides Superior System Flow Control

// The process quality valve and positioner provides **exact demand** flow control

// Maintains pressure at +/- ½ PSI in most systems

PEAK EFFICIENCY

Fail-Safe Operation

The XMX Series Demand Expander is provided with a fail open valve both electronically and pneumatically. Should the air signal or the control signal fail, the valve will open 100%. A manual three valve by-pass is included on the assembly to provide for continued air flow during valve maintenance periods.

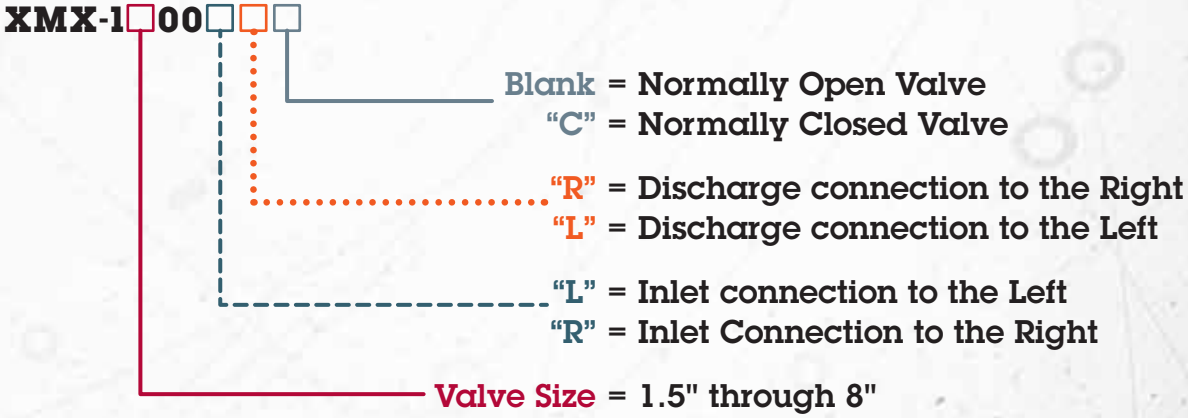
Demand Expander Control

The Demand Expander can receiver its control from the Gardner Denver ESP 1000 Compressed Air Management System or from a **stand-alone electronic controller.** Both methods provide equal control accuracy. Combining both compressor and Demand Expander control through the ESP 1000 provides for the coordination of all setpoints to assure maximum system efficiency.

TECHNICAL DATA

MODEL	CAPACITY psig	INLET CONNECTION	OUTLET CONNECTION	DIMENSIONS L x W x H	WEIGHT pounds
XMX1.500	750	1.5" NPT	2" NPT	34 x 14 x 15	275
XMX1200	1000	2" FLG	3" FLG	44 x 18 x 20	295
XMX1300	2000	3" FLG	4" FLG	51 x 20 x 24	375
XMX1400	3200	4" FLG	6" FLG	57 x 22 x 31	625
XMX1600	6500	6" FLG	8" FLG	65 x 24 x 38	1060
XMX1800	8200	8" FLG	10" FLG	74 x 32 x 60	1550

Part Number Nomenclature



THE FORCE THAT DRIVES AMERICAN INDUSTRY

GardnerDenverProducts.com/compressors

Gardner Denver®

www.GardnerDenverProducts.com

Gardner Denver, Inc.
1800 Gardner Denver Expressway, Quincy, IL 62305
www.contactgd.com/compressors
866.440.6241

ESP-XMX-DECS 1st 4/14
Supercedes ESP-XMX-102 1st 3/09