

# TRIFECTA® X SERIES



## LASER ASSIST GAS SUPPLY SYSTEM

The Trifecta® X-Series is the preferred solution for reliable and continuous laser assist gases for delivery pressures up to 31 bar and flow rates up to 394 Nm<sup>3</sup>H. Drawing liquid from a standard bulk tank, the Trifecta system boosts the liquid pressure by alternately feeding two liquid cylinders equipped with innovative multi-function pressure building vaporizers. The Trifecta solution has no down-time and minimal losses when compared with other laser assist gas solutions. This convenient solution eliminates high-pressure pumps, compressors, cylinder cradles and surge tanks.

### PRODUCT HIGHLIGHTS

- System utilizes standard low-pressure bulk tank to lower investment and use existing assets
- No downtime – system maintains pressure and flow when bulk tank is filled and eliminates excessive product losses associated with high-pressure bulk tanks
- Cylinders switch by pressure instead of level to further reduce product loss and protect against pressure decay
- Robust design features streamlined all stainless steel piping with only five control valves and one integrated electronic control system (PLC) for increased durability and reliability
- Computer-controlled design simplifies installation, start-up and continuous operation
- Frame assembly features a protective top cover in a compact footprint with an elevated base for improved ventilation
- Available for Nitrogen, Argon or Oxygen\* service

\*Maximum delivery pressure of 24 bar for Oxygen service



Models X140, X280, X400



Visual Indication for Operation Modes



Integrated Bulk Tank Pressure Sensor



Dual Relief Valve Assembly



Two Main Connections Simplify Installation



Innovation. Experience. Performance.®

### Chart Ferox, a.s., a Chart Industries Company

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# TRIFECTA® X SERIES



## LASER ASSIST GAS SUPPLY SYSTEM

**SIMPLIFIED STAINLESS STEEL PLUMBING WITH PROTECTIVE TOP COVER**



MADE IN U.S.A.

### System Requirements

- Power: 220-240 V, 16 A, 50 Hz
- Bulk storage tank with 5 bar minimum pressure
- External vaporizer, minimum 38 bar working pressure, sized for maximum flow rate
- Two piping connections to bulk storage tank (liquid withdrawal & low phase instrument line)
- High-flow pressure regulativ

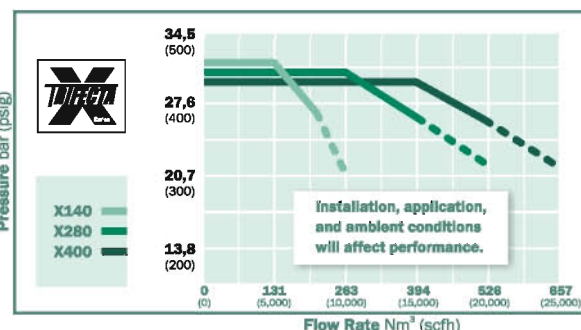
<b>Length</b> .....	<b>1347 mm</b>
<b>Width</b> .....	<b>1400 mm</b>
<b>Height</b> .....	<b>2440 mm</b>
<b>Weight X140</b> .....	<b>770 kg</b>
<b>Weight X280</b> .....	<b>795 kg</b>
<b>Weight X400</b> .....	<b>815 kg</b>

### MODELS

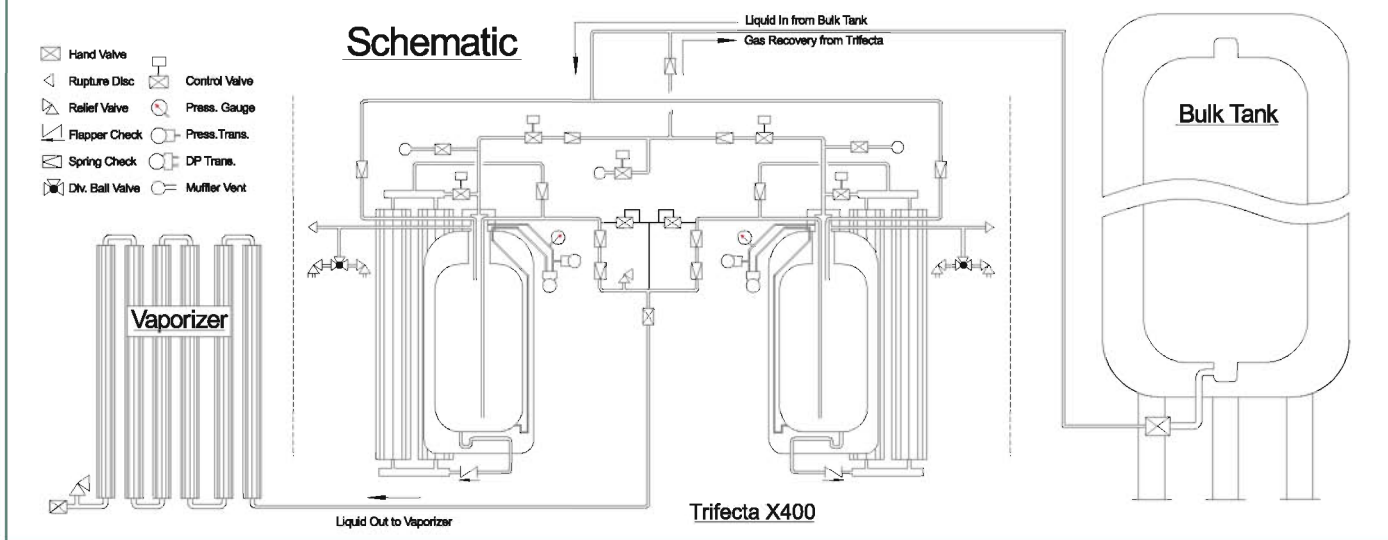
**TRIFECTA X140** Up to 131 Nm<sup>3</sup>H at 31 bar  
**TRIFECTA X280** Up to 263 Nm<sup>3</sup>H at 31 bar

### NEW MODEL TRIFECTA X400

**TRIFECTA X400** Up to 394 Nm<sup>3</sup>H at 31 bar  
 Diagnostics system  
 Utilizes HP<sup>2</sup> Technology



### Schematic



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