

# SIEMENS

*Ingenuity for life*



## Dresser-Rand 7-ESH Reciprocating Process Compressor

[siemens.com/reciprocating-compressors](http://siemens.com/reciprocating-compressors)

The Siemens ESH reciprocating process compressor provides an economical solution where limited space and continuous, low-volume service is a requirement. Its proven performance, versatile design, and wide range of cylinder selections make the ESH an obvious choice for a variety of applications.

### Versatility and Performance

Our 7-inch (178 mm) stroke ESH singlethrow, reciprocating compressor is designed for long-term, process gas service. Built in accordance with API-618 specifications.

Whether direct-connected or belt-driven, the ESH can handle a variety of drivers up to 70 hp (52 kW) and can be fitted with either lubricated or non-lubricated cylinders from 1.625 to 19 inches (41 to 483 mm) in bore diameter. The ESH is also available in a vertical arrangement that greatly reduces the foundation size and area. In its vertical configuration, the "ESV" provides significant advantage where space may be limited.

### Designed and Built with Precision

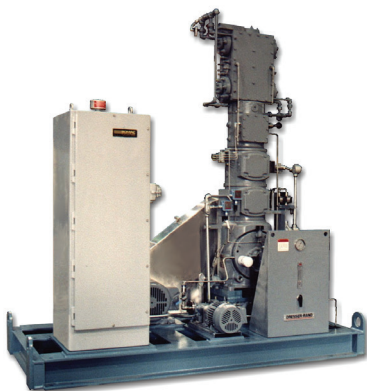
With its fine-grain, cast iron frame, the ESH is engineered to provide the required support for the running gear and related components. The rigid frame design and counterweighted crankshaft minimize vibration and provide for low moments and minimal foundation requirements. Forged from high tensile strength alloy steel, the crankshaft is fully stress relieved and heat-treated. The bearing journals and crankpin

are ground with precision and polished to meet exacting tolerances.

Rugged, precision-machined aluminum main and crankpin bearings are generously sized for best run-in and long-lasting service. All bearings are force-lubricated per API-618 specifications. Connecting rods are die-forged steel with rifle-drilled passages for positive lubrication of the crosshead pin and bushing. A shoeless aluminum crosshead is standard and requires no adjustment.

### Outstanding Cylinder Design and Selection

With experience in virtually every type of service, our cylinders provide outstanding service and reliability. Our engineering expertise ensures that each cylinder provides maximum performance and reliability with minimum maintenance cost. Cylinder materials include cast iron, nodular iron, cast steel, fabricated carbon or stainless steel, and forged steel. Most cylinders are available for either lubricated or non-lubricated service.



## Experience That Counts

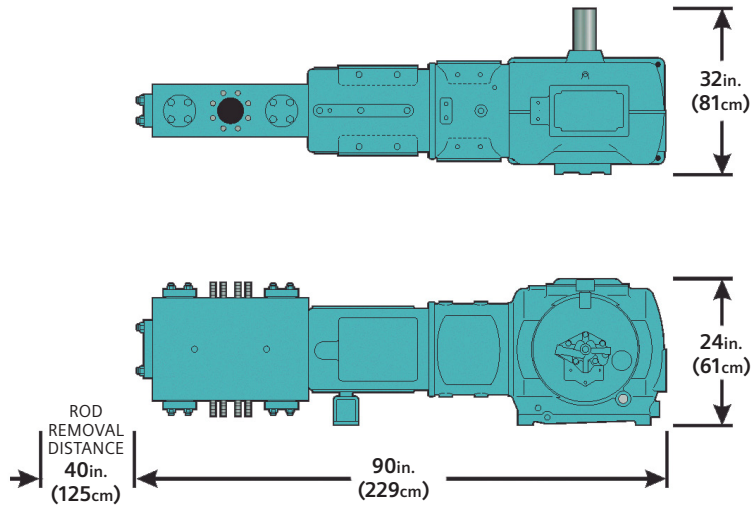
The ESH compressor is world renowned for its dependable service and steadfast reliability in a wide variety of process applications. With more than 1,300 units shipped for use in various applications around the world, the ESH process compressor is an excellent choice where low volume requirements demand reliable operation.

## Dimensions

Dimensions provided are typical, and are basis API Type B distance pieces. For API Types C & D distance pieces, add 13.75 inches (35 cm) to both the width dimension, and the rod removal distance.

### Specifications

Maximum HP	70 (52 kW)
Standard strokes	7 inch (178 mm)
Number of throws	1
Cylinder bore range	1.625 to 19 inches (41 to 483 mm)



**Note:** For the ESV, the height becomes 90 inches (229cm) and the width becomes 23 inches (59cm).

### 7-ESH Typical Dimension - Inches (Centimeters)

Model	R	W	H	L
ESH	40 (125)	90 (229)	24 (61)	32 (81)
ESV	40 (125)	23 (59)	90 (229)	32 (81)

Published by  
Siemens Gas and Power. 2019

Reciprocating Compressor Engineering  
Center of Excellence  
100 Chemung Street  
Painted Post, NY 14870 USA  
Tel: (Int'l +1) 607-937-2011  
Fax: (Int'l +1) 607-937-2905

Siemens Energy, Inc.  
Houston, TX 77079 USA  
Tel: (Int'l +1) 281-509-8000

For more information, please contact  
our Customer Support Center.  
Phone: +49 180 524 70 00  
Fax: +49 180 524 24 71  
(Charges depending on provider)  
E-mail: support.energy@siemens.com

Article-No. GPOG-B10005-00-7600

Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.