

## HYSTORSYS PROUDLY PRESENTS THE NEW METAL HYDRIDE COMPRESSOR HYMEHC-04 Expandable

### SIMPLE AND RELIABLE

The compressor is based on an advanced metal hydride (MH) technology with a clear-cut design. The setup is made minimal in order to keep the purchase price down, the maintenance cost low and to reduce possible error sources.

The standard compressor is based on an expandable design. Thus, if a higher capacity is required, more compression chambers can be added.

### USE HEAT INSTEAD OF GETTING HEAT

The conventional compressor use a mechanical force to compress a media, the energy demand converts into approx. 10% compressed media and 90% heat.

HYSTORSYS turned it around, the HYMEHC compressors use hot and cold water for the compression cycle. A perfect match for this compressor is to top up a hydrogen storage together with an electrolyser from solar energy – or whenever spare heat is present, e.g., from a wide range of cooling water outlets.

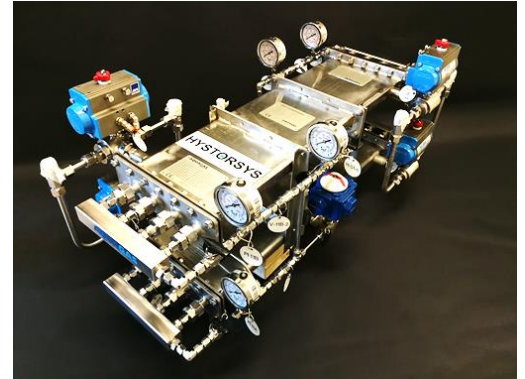
### NO MOVING PARTS

Thanks to the MH-technology no moving parts are compressing the hydrogen resulting in a more reliable compressor. All parts used in the compressor are well-known products and spare parts are always available in stock for direct delivery.

### HYSTORSYS GOAL

To provide customers with an improved compressor quality with:

- Lower failure rates
- High hydrogen purity
- Lower operational cost



2-stage 1 Nm<sup>3</sup>/h hydrogen compressor. © 2018  
Inlet pressure 20 bar, outlet pressure 200 bar.

### ABOUT METAL HYDRIDES

Metal hydrides have the unique feature of adsorbing hydrogen when they are cooled and releasing hydrogen when they are heated.

Moreover, the gas quality might actually improve during this process. HYSTORSYS is using these features in its new hydrogen compressor design – the HYMEHC.

### INDUSTRIAL HYDROGEN APPLICATIONS

A principle drawing of an industrial on-site hydrogen production / backup solution based on a HYMEHC compressor from HYSTORSYS is shown on the flip side.

### ACCEPTANCES AND CERTIFICATIONS

The MH-compressors are manufactures in compliance with standards and directives applicable in Europe:

- |                                |            |
|--------------------------------|------------|
| - Directive for Machinery      | 2006/42/EU |
| - Pressure Equipment Directive | 2014/68/EU |
| - ATEX Directive               | 2014/34/EU |
| - Low Voltage Directive        | 2014/35/EU |

Model	Capacity <sup>1</sup>	Inlet pressure	Compression ratio	Max. pressure	Heating (90°C)/cooling (20°C) water flow rate
HYMEHC-04	4 Nm <sup>3</sup> /h	2...30	1:10	250 bar	26 L/min
HYMEHC-08	8 Nm <sup>3</sup> /h	2...30	1:10	250 bar	52 L/min
HYMEHC-12	12 Nm <sup>3</sup> /h	2...30	1:10	250 bar	78 L/min

<sup>1</sup> Higher capacities available on request.

### HYSTORSYS AS

Postal: P.O. Box 45, NO-2027 Kjeller, Norway  
 Email: post@hystorsys.no  
 URL: www.hystorsys.no  
 VAT: NO-989 001 841 MVA

