

**HERMETIC-Pumpen GmbH**

Refrigeration System with Canned Motor Pumps at ARCON 2026  
By – Sanaulah Khan (Senior Sales Engineer, HERMETIC-Pumps Singapore)

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HERMETIC – A COMPANY WITH ALMOST 160 YEARS OF HISTORY

## 1866-2026

*Pump technology has been our passion and inspiration for 160 years*



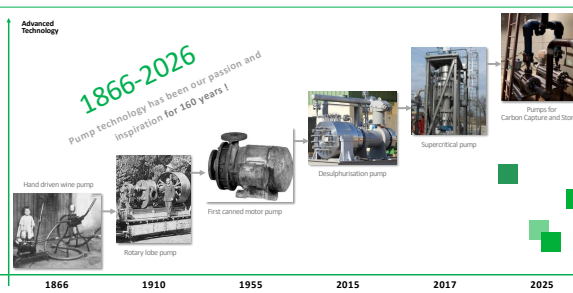
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HERMETIC – CHALLENGE TO KNOWLEDGE

Advanced Technology

1866-2026  
*Pump technology has been our passion and inspiration for 160 years!*



Hand driven wine pump (1866), Rotary lobe pump (1910), First canned motor pump (1955), Desulphurization pump (2015), Supercritical pump (2017), Pumps for Carbon Capture and Storage (2025)

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HERMETIC SUMMARY

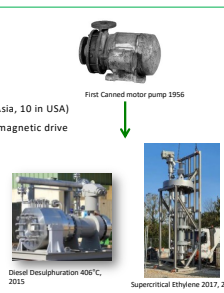
**HERMETIC Pumps:**

- Family-owned pumps manufacturer since 1866:
- Experiences in pumps production for more than 160 years, and in hermetically sealed drives for more than 68 years.
- More than **365,000** pumps delivered worldwide
- 780 employees worldwide (405 in Europe, 305 in China, 15 in South-East-Asia, 10 in USA)
- Leakage-free drive systems of centrifugal pumps with canned motors and magnetic drive used for difficult pumping problems in chemical, petrochemical, nuclear power and refrigeration industries

**Range of Applications:**

- System pressures up to 1200 bar
- Fluid temperatures from -160 °C up to +480 °C
- Shaft powers from 1kW to 690 kW


→ Nearly all delivery problems can be solved with HERMETIC pumps.



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HERMETIC HEADQUARTER GERMANY



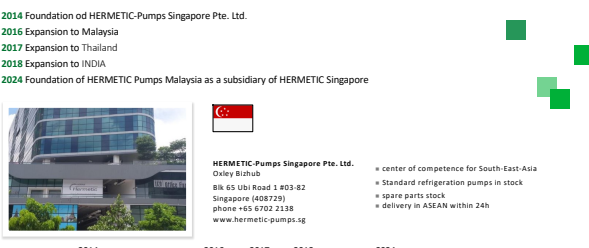
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INTERNATIONALIZATION SOUTH-EAST ASIA

2014 Foundation of HERMETIC-Pumps Singapore Pte. Ltd.  
2016 Expansion to Malaysia  
2017 Expansion to Thailand  
2018 Expansion to INDIA  
2024 Foundation of HERMETIC Pumps Malaysia as a subsidiary of HERMETIC Singapore

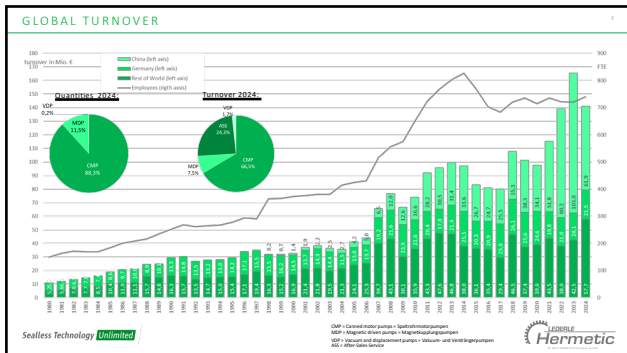


HERMETIC-Pumps Singapore Pte. Ltd.  
Orkney Road  
Bldg 65 Ubi Road 1 #03-82  
Singapore (408729)  
phone +65 6702 2128  
www.hermetic-pumps.sg

- center of competence for South-East-Asia
- Standard refrigeration pumps in stock
- spare parts stock
- delivery in ASEAN within 24h

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### APPLICATIONS AND MARKETS

**Chemical Industry**

Bulk chemicals, commodities, fine chemicals, petrochemicals

**Oil & Gas Industry**

Refineries, Gas-terminals

**Refrigeration Industry**

Refrigeration plant, Cold storages, seafood processing etc.

**Energy & Others**

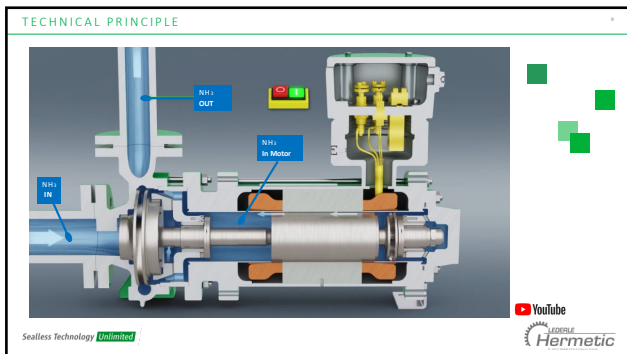
Solar power plants, nuclear power plants

**Services**

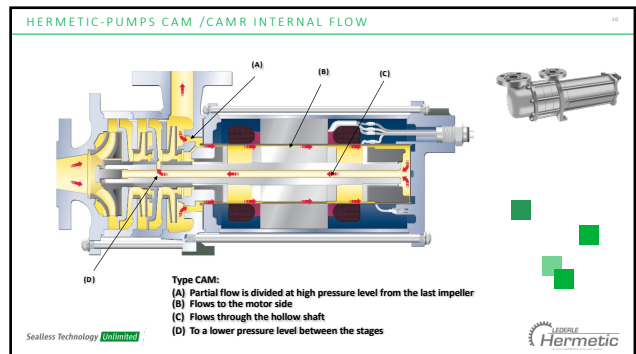
Commissioning, training, repairs, spare parts

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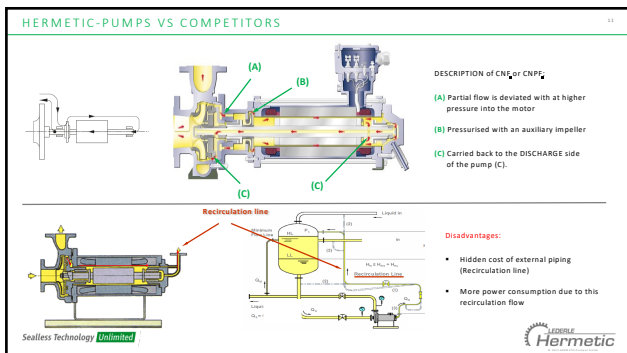
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### TECHNOLOGY EFFECTS

**Pump:** CAMTV 52 / 6+6  
**Motor:** N90-2.2c  
**Power:** 670 kW  
**Liquid:** Liquefied Ethylene  
**Temp.:** -45 ~ -95°C  
**Flow (max):** 140 m³/h  
**Head (max):** 2300 m  
**Length:** app. 4300 mm  
**Weight:** app. 6000 kg

High level customized product

Knowledge & Experience

standardized refrigeration application

**Pump:** CAM 2/3  
**Motor:** AGX 3.0  
**Power:** 3 kW  
**Liquid:** Ammonia (NH<sub>3</sub>)  
**Temp.:** -40°C  
**Flow:** 8 m³/h  
**Head (max):** 30 m  
**Weight:** app. 60kg

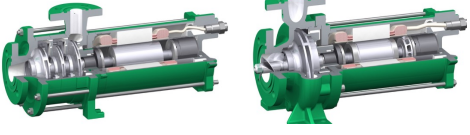
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**REFRIGERATION PUMP**

**Refrigeration pump:**

- „downgraded“ canned motor pump
- design based on chemical / petrochemical pump
- Standardized
- Short delivery time
- No explosion proof

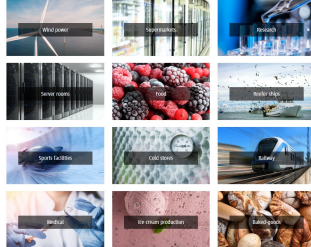


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**REFRIGERATION PUMPS MARKETS AND PRODUCTS**

HERMETIC pumps in the refrigeration industry – Areas of application



Single-stage canned motor pump type CNF

Multi-stage canned motor pump type CAM


Single-stage canned motor pump type LC

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**REFRIGERATION PUMPS MARKETS AND PRODUCTS**

Canned Motor Pumps for High Pressure CO<sub>2</sub> systems

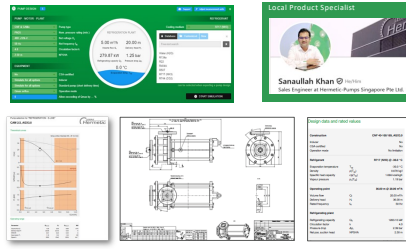


	CAMh	CNF	CAM(R)
Delivery rate:	max. 14 m <sup>3</sup> /h	max. 80 m <sup>3</sup> /h	max. 40 m <sup>3</sup> /h
Pumping head:	max. 120 m	max. 70 m	max. 180 m <sup>3</sup> /h
Pressure rating:	PN52	PN25 and PN40	PN25 and PN40
Operating temperature:	-50 °C to +5 °C	-50 °C to +30 °C	-50 °C to +30 °C
Speed:	2800 to 3500 rpm	2800 to 3500 rpm	2800 to 3500 rpm
Viscosity:	max. 20 mm <sup>2</sup> /s	max. 20 mm <sup>2</sup> /s	max. 20 mm <sup>2</sup> /s
	<a href="#">Learn more</a>	<a href="#">Learn more</a>	<a href="#">Learn more</a>

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**SOFTWARE ASSISTED SELECTION**



Modern pump Selection Software Input:

- Flow & Head
- Liquid & Temperature
- Refrigeration Capacity

Software Calculation Output:

- Data sheets
- GA drawing
- Sectional drawing

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**STANDARDIZED HIGH QUALITY PRODUCTION**



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**AMMONIA PLANT**



Recently supplied ammonia pumps to a facility located in U.P.

5 canned motor pumps of the type CNF 50-200, AGX 8.5

- Flow rate: 23.05 m<sup>3</sup>/h
- Head: 45m
- Temp.: -37°C

4 pieces canned motor pumps type CAM 2/5, AGX 3.0


- Flow rate: 7.25 m<sup>3</sup>/h
- Head: 45m
- Temp.: -30°C

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HERMETIC-PUMPS RELIABILITY

**In maintenance-free operation since 1994!**



Model : CAM 2/3  
Temp. : -40 °C  
Location: India  
Application: Ammonia (NH3)

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EXTENDED WARRANTY ON ALL PUMPS FROM 24 TO 30 MONTHS

Standard Warranty for all new pumps:

**30 Months  
After Delivery**

TRUST



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SUMMARY

- Experience over 365,000 canned motor pump
- Yearly about 5,000 pumps for refrigeration applications
- Over 60 years of experience in the field of pumps and ammonia
- Standardized high quality safe and reliable solution.
- Warranty of 30 months
- For circulation of refrigerants, our hermetic centrifugal pumps are used worldwide because of their leakage and maintenance reliability.
- They are characterized by compactness, ease of installation and above all by lower life cycle costs and high reliability.
- Low TCO – total cost of ownership / global spare part demand at our refrigeration pumps < 3%

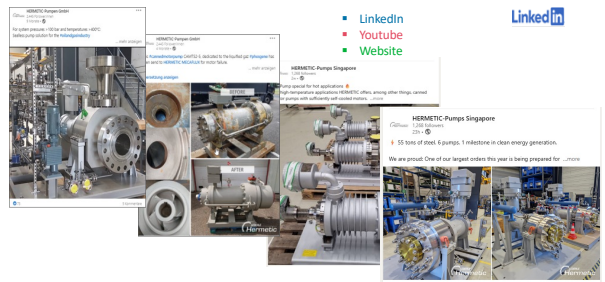
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HERMETIC-PUMPS DIGITAL MEDIA

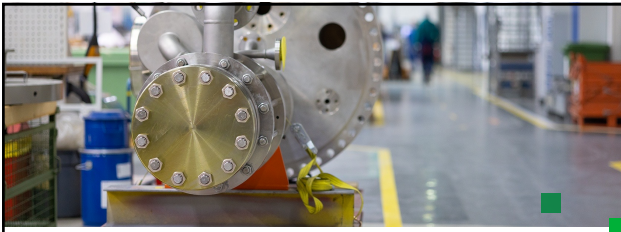
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Thank You!

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