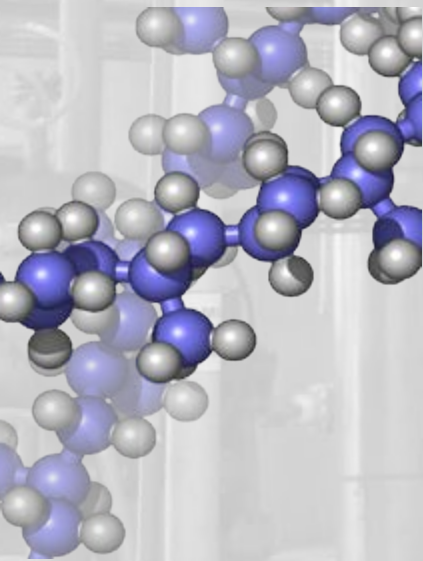




## Proven Pumps & Compressors For Polymer Production

Capable, Reliable & Efficient

Polyethylene and Polypropylene



Supporting your valuable plastics production processes with improved performance and reliability.



# *Sundyne Delivers Reliable Precision Engineered Fluid Handling Solutions for Your Polyolefin Services.*

## **Meeting Challenging Process Conditions**

- We offer both pumps and compressors and have millions of operating hours in tough, process-critical PE/PP services.
- Sundyne pumps assuredly handle the specialized low-flow polymerization services that others cannot.
- Our range of API 617 and fit-for-purpose process gas compressors meet demanding specifications with centrifugal reliability.
- We have extensive experience overcoming the fines, high hydrogen concentrations, polymer deposits and other challenges found in PE/PP processes.
- The world's top polyolefin process licensors prefer and recommend Sundyne pumps and compressors when quality cannot be compromised.

## **Enhancing Process Stability and Flexibility**

- Sundyne OH6 technology provides a flat curve advantage – steady discharge pressure over a range of flows – over other centrifugal pumps.
- Inlet guide vanes now available on Sundyne compressors adjust and control gas flow properties as required.

## **Providing More Uptime, Lower Operating Costs**

- Sundyne delivers unmatched reliability, long periods between maintenance and the shortest overhaul periods.
- Our single-stage pump design is engineered to perform at the best-efficiency point, keeping plant energy costs to a minimum.
- Centrifugal integrally-gearred single-stage compressors have a smaller footprint, are easier-to-maintain, and require less energy than other designs.

## **Sundyne Pumps**

Sundyne Pumps are in a league of their own when it comes to handling challenging and low-flow PE/PP process applications with centrifugal reliability in an easy-to-maintain single-stage design.



## **Pump Applications**

- Light Hydrocarbon Feed and Transfer
- Comonomer Injection
- Pentane
- Washing
- HC / Condensate
- Recycle Duties
- Reinjection Service
- Product Handling
- Stripper Bottoms



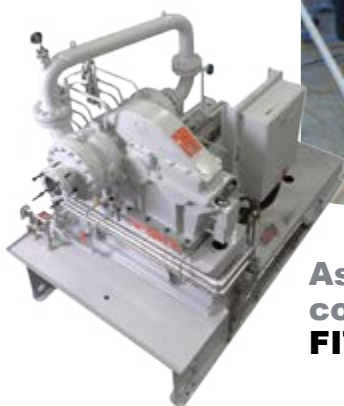


## Sundyne Compressors

Sundyne Compressors are preferred by the world's top polyolefin process licensors for providing a range of single-stage API 617 and fit-for-purpose machines that handle demanding and low-flow services with unmatched centrifugal reliability.

### Compressor Applications

- Ejector Booster
- Reaction Gas
- Butadiene
- Hydrogen
- Ethylene Recycle
- Ethylene Feed
- Monomer Recycle
- Separation and Finishing
- Pellet Conveying with Nitrogen
- Gas Feed
- Propylene
- Recycle Gas and Boost
- Regen Nitrogen
- Fluidization
- Splitter Overheads
- Monomer Purification



**NO**  
Inlet and outlet  
check valves on a Sundyne.  
**NO**  
Clogging.  
**NO**  
Stopping for annual  
valve maintenance.

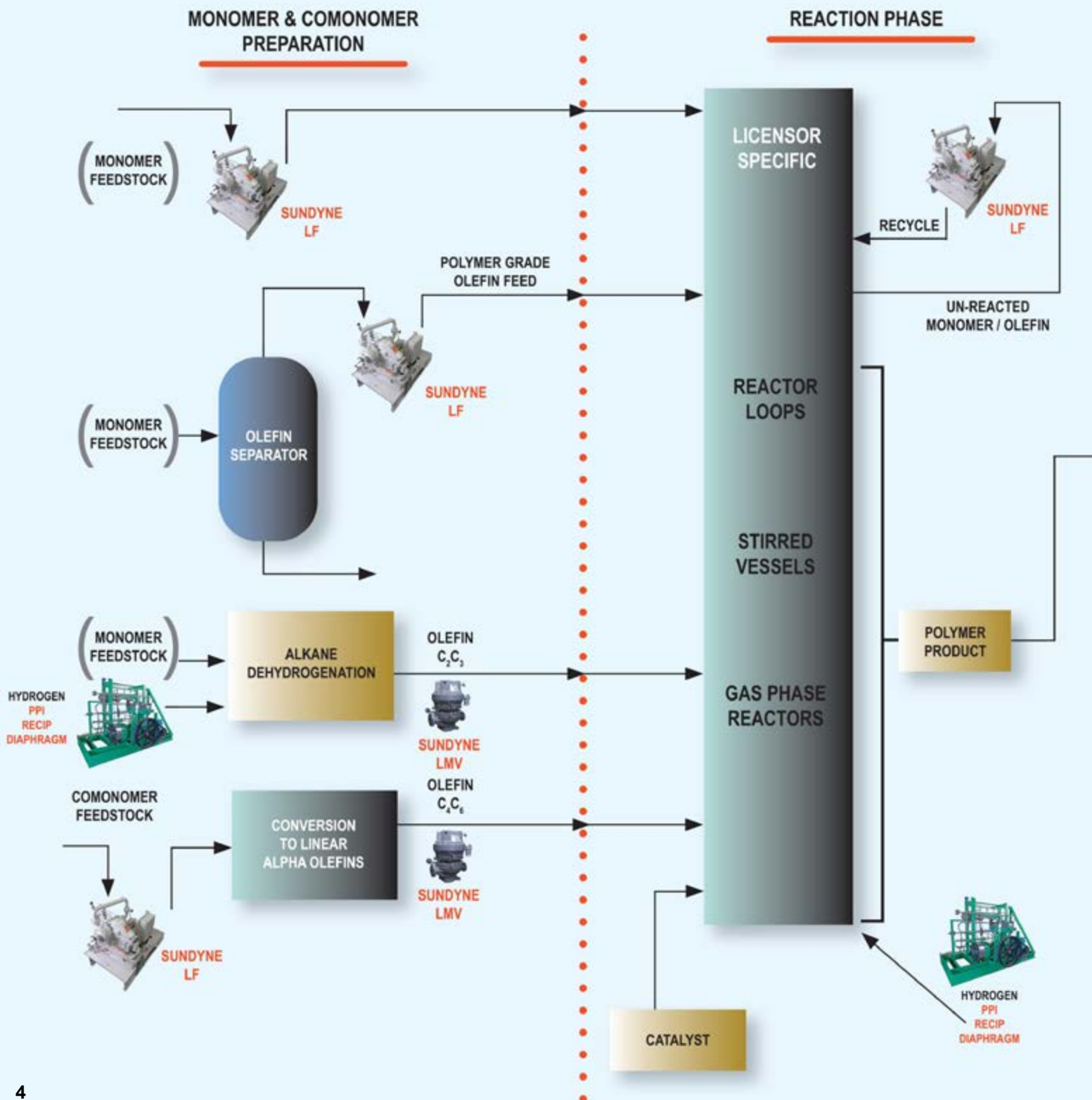


Ask us about our highly reliable,  
cost efficient (**non-API 617**)  
**FIT FOR PURPOSE** equipment!

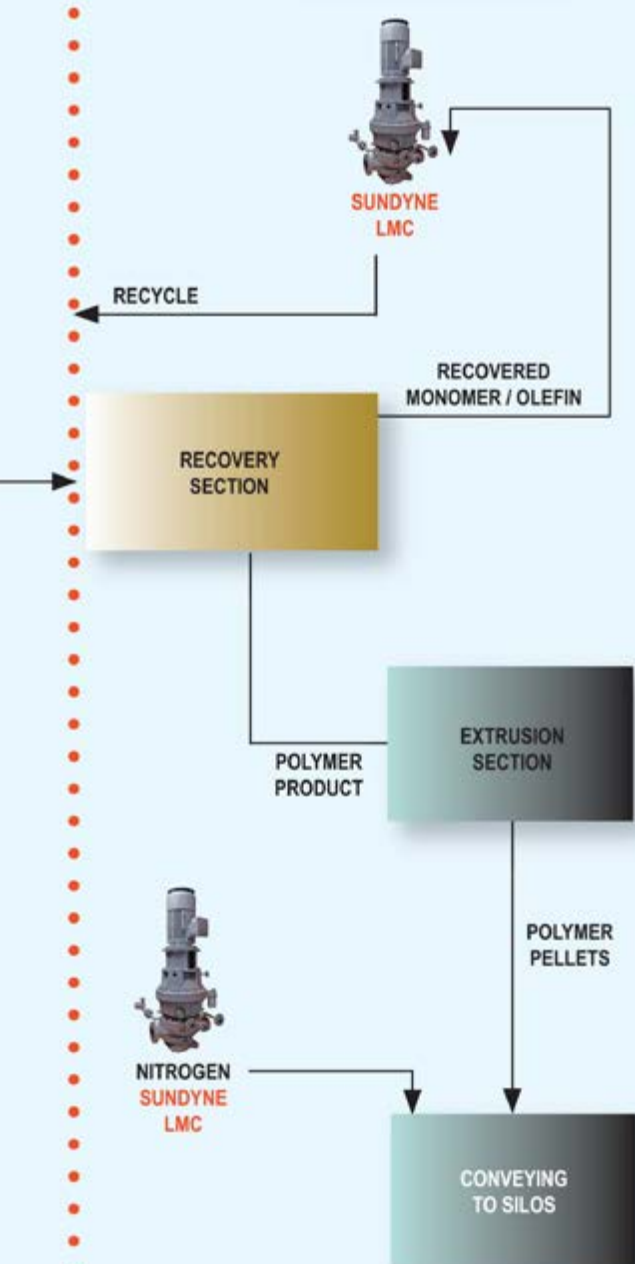
Check out our **Inlet Guide Vanes** option, used for **CAPACITY CONTROL** of the Sundyne compressor, featuring an improved efficiency for the off-design conditions.



# *Our Experience Is Your Advantage*



GAS / PRODUCT  
SEPARATION, EXTRUSION,  
PELLET CONVEYING



“ We use **Sundyne Pumps** to boost the pressure of the flow before entering the polymerization process. The pumps are also used for fluids that contain solid particles in suspension. No manufacturers compete with them. Sundyne is on our preferred suppliers list.

We use **Sundyne Compressors** for gaseous phase polyethylene production mainly. We use the vertical centrifugal compressors for processing polypropylene. Sundyne has a niche in smaller designs with smaller capacities. They are a good fit.”



– A top ten multinational petrochemicals producer





***Working hand-in-hand with process licensors from the early stages of a project allows our products to be approved from the start. Our field service engineers continue to support site start-ups and beyond, partnering with EPCs and end-users around the world.***

***For efficiency gains and lower total cost of ownership throughout the plant – Sundyne matches the most effective solution to your application.***



< Precision-cast Barske impellers generate high pressure at relatively low flows, and lower radial loads for extended bearing life.



< The closed impeller design is not only efficient, but also eliminates the potential for leakage.

Customized high performance compressor impellers.



**With proven industry references, Sundyne products afford many operational benefits for petrochemical producers, including:**

- Sundyne high-speed impellers are optimized and custom fabricated to customer-specified BEP
- BEP avoids overheating of fluid pumped
  - ✓ Reduces cooling water requirements for lower operating cost
  - ✓ Avoids cavitation risk for enhanced reliability
- Proprietary impeller designs can deliver NPSHr as low as 5 ft (1.5 m)
- OH6 flat curve keeps maximum allowable pressure (MAWP)/design pressure down, thereby reducing static equipment capex
- Sundyne centrifugal compressors eliminate the in/out valve clogging on polymer fines services inherent with reciprocating machines
- Class-leading total installed cost (TIC) due to high speed, small footprint, no vibration



## *Sundyne Offers a Broad Portfolio of Ancillary Products to Keep Your Petrochemical Processes Up and Running*

### **Leak-Free Sealless ETFE-Lined Magnetic Drive Pumps**

Offered in a wide-range of sizes, Sundyne ANSIMAG pumps dimensionally interchangeable design eliminates piping and baseplate rework. These pumps take on the most corrosive, acidic and caustic applications in the chemical industry, including the manufacture of vinyl chloride monomers (VCM) and polyvinyl chloride (PVC) resin.



### **Leak-Free Sealless Metallic Magnetic Drive Pumps**

For applications involving high temperatures, high viscosity, high pressures and volatile substances, Sundyne HMD Kontro pumps are the clear choice. From petrochemical processes that involve toxic, fine, or aggressive liquids to transferring hot oils and resins to additional off-site services, this pump gets the job done safely and reliably.



### **Heavy-Duty Multi-Stage Centrifugal Pumps**

Our Marelli brand pumps meet API 610 11th edition and ISO 13709 international standards. With an install base of over 10,000 units worldwide, these engineered pumps allow Sundyne to address additional services – like off-site applications – complementing our integrally geared pump and compressor products.



### **High-Pressure Centrifugal Pumps**

Sundyne has developed a variety of fluid handling solutions that are perfect for high-pressure applications, such as those required for many processes relating to plastics manufacturing. Our Sunflo line of non-API pumps are ideal for use in VRU, pellet water, silo and blender washing.



### **Reciprocating Sealless Diaphragm Compressors**

For moving hydrogen, the pulsation-free PPI brand compressors boast a leak-tight mechanism that features static seals that do not need to be purged or vented. This API 618 compressor is a proven work horse for high-pressure hydrogen applications found in propane dehydrogenation (PDH) plants.





### Backed By Global Support

Sundyne is more than just a manufacturer of high quality compressors and pumps...much more. Not only do we offer some of the fastest delivery times in the industry, we also back each and every product shipped with a full range of aftermarket support services, extending the value of our highly engineered machines well beyond the point of sale.

And with our training services, worldwide presence and compact designs, installation and maintenance has never been more efficient. Our number one goal is to keep your operations up and running.

The Sundyne service team is here to help protect your investment and provide a trouble-free customer experience at every turn. That's *RELIABILITY REALIZED*.

#### Our Aftermarket Programs Include:

- Expedite Programs
- Maintenance Kits
- Conversion Programs
- Gearbox Exchanges
- Service Schools
- On-Site Service
- Overhaul and Repair Services



To learn more about our extended service offerings and specific application references, visit [www.sundyne.com](http://www.sundyne.com) or contact a dealer nearest you.

#### COMPRESSORS

#### PUMPS

#### GENUINE PARTS

#### SERVICE

**Sundyne, LLC**  
14845 West 64th Avenue  
Arvada, Colorado 80007  
USA  
1-866-Sundyne  
Phone: 1 303 425 0800  
Fax: 1 303 425 0896  
[www.sundyne.com](http://www.sundyne.com)

**United Kingdom**  
Marshall Road  
Hampden Park Industrial Estate  
Eastbourne East Sussex, BN22 9AN  
United Kingdom  
Phone: +44 1323 452000  
Fax: +44 1323 503369

**France**  
13-15, Bld. Eiffel - B.P. 30  
21604 Longvic Cedex  
France  
Phone: +33 (0)3 80 38 33 00  
Fax: +33 (0)3 80 38 33 66

**Spain**  
Ctra. Madrid-Toledo, Km.30.8  
45200 Illescas  
Toledo, Spain  
Phone: +34 925 53 45 00  
Fax: +34 925 51 16 00

**China**  
Building 1, No. 879 Shen Fu Road  
XinZhuang Industrial Zone  
Min Hang District  
Shanghai, China 201108  
Phone: +86 21 50555005  
Fax: +86 21 54425265



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