

# ENGINEERED PRODUCTS FOR RENEWABLE ENERGY





## VERSATILE PRODUCTS WITH SAFETY & EFFICIENCY IN MIND

Custom manufactured from initial chemistry to end components, Nylacast Engineered Products help to deliver increased application safety, performance and efficiency with lower whole life costs.

Nylacast Engineered Products help to reduce machine downtime and maintenance need through being corrosion resistant, low weight, low friction and self-lubricating.

# ABOUT NYLACAST

Nylacast is a world-leading manufacturer of engineering polymers and products.

Holding over five decades of engineering excellence and know-how, Nylacast employs passionate engineering teams across international sites (UK, USA, South Africa and China), and is committed to meeting the needs of critical applications within key global industries. Nylacast’s unique engineering and R&D capability provides full engineering solutions from initial concepts and raw chemistry, through to final products.

The unique material range developed by Nylacast is proven to improve performance whilst reducing maintenance and running costs; often recognised as the ideal replacement to traditional engineering materials such as steel, cast iron, bronze and ceramics.

## KEY FACTS

- Established in 1967
- State of the art manufacturing facilities
- Worldwide locations
- ISO 14001, ISO 9001, ISO 29001
- In-house Research, Development & Testing centre
- Award winning engineering academy
- Industry specific sales and engineering teams
- Fast route to market from concept to completion
- Consignment/schedule ordering
- Kanban and JIT systems



# INDUSTRIES SERVED

Custom manufactured for specific client requirements, Nylacast Engineered Products are widely featured within key equipment for the following industries



AUTOMOTIVE



AVIATION



CIVIL ENGINEERING



CONSTRUCTION & AGRICULTURE



ENERGY, OIL & GAS



FOOD & BEVERAGE



MARINE & DEFENCE



PACKAGING



PHARMACEUTICAL



QUARRYING & MINING



RAIL



RENEWABLES



# MATERIALS TECHNOLOGY

Nylacast Engineered Products are created from initial chemistry to end component using unique materials technology developed through more than fifty years of field experience in design, testing and material selection.

Premium chemicals and state of the art manufacturing facilities are coupled with engineering know-how to produce high quality engineering polymers capable of delivering increased performance and replacing traditional materials such as steel and bronze.

In addition to custom formulated materials for more demanding needs, Nylacast offer a wide range of standard grades renowned for being low weight, low friction, self-lubricating, corrosion resistant, highly versatile and dimensionally stable.

## NYLACAST'S WORLD RENOWNED RANGE OF STANDARD GRADES INCLUDES

- Nylube
- Oilon
- Aquanyl PA 6/12
- PA 6 Natural
- Moly
- H.S Blue
- Impact
- CF150
- CF160
- CF306
- Nylube GF (glass filled)
- Nylastat (ATEX approved) 

## ADDITIONAL MATERIALS INCLUDE

- Acrylic
- Acetal
- Polycarbonate
- Polyurethane
- PTFE
- POM
- PET
- PEEK
- Polypropylene
- Nylon 66
- Polyethylene
- PVDF
- PVC

# BENEFITS & ADVANTAGES

## LCOE REDUCTION

LCOE is achieved in addition to increased efficiency through the reduction in frictional losses and lower power requirements.

## LOWER CO2 EMISSIONS

Engineered polymers have the potential for recycling therefore reduction in CO2 emissions can potentially be reduced.

## WEIGHT REDUCTION

Nylacast Engineered Products are typically 1/7th the weight of an equivalent steel product.

## WEAR REDUCTION

Low friction materials technology results in high resistance to wear and abrasion when in application.

## COMPONENT COUNT REDUCTION

Reducing component count can be achieved through unique lubrication properties, removing the need for different metallic properties in sub-assemblies.

## OPERATION AND MAINTENANCE

Self-lubrication and corrosion resistant materials reduce the wear rates and by default increase the life span of the component.

## CORROSION RESISTANCE

Corrosion resistant materials technology protects against the arduous industry environments.

## CUSTOM SOLUTIONS

Engineered products custom developed for specific application need from initial chemistry to end product.

# INDUSTRY SECTORS SERVICED

Custom manufactured for specific client requirements, Nylacast Engineered Products are widely featured within key industry equipment.





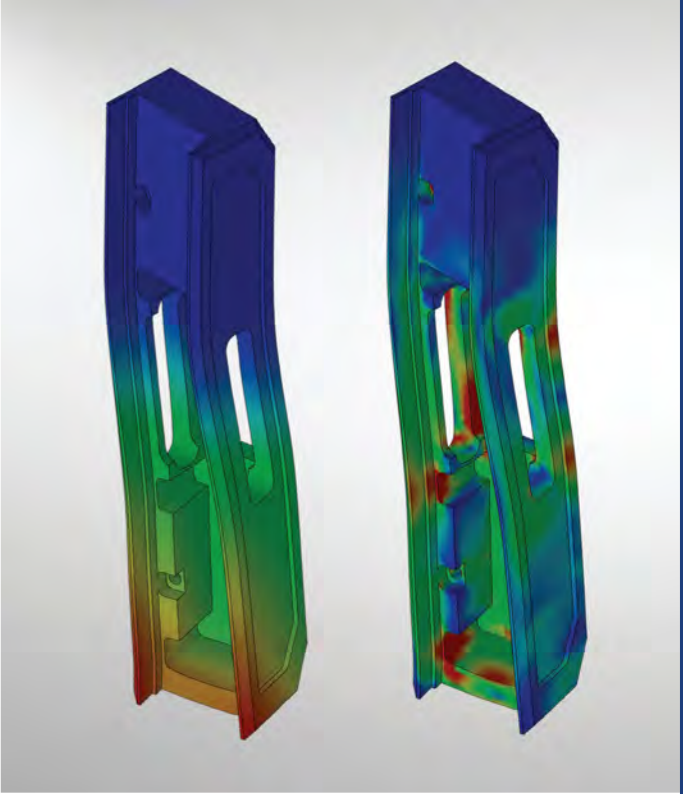
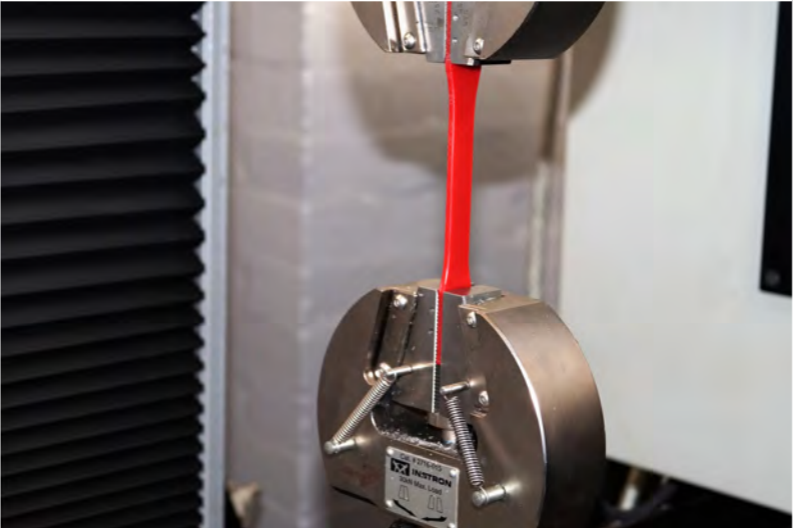
# CUSTOM COMPONENTS

As leaders in the design and manufacture of engineering polymer solutions, Nylacast work closely with customers worldwide, delivering significant increases in product performance, safety and efficiency.

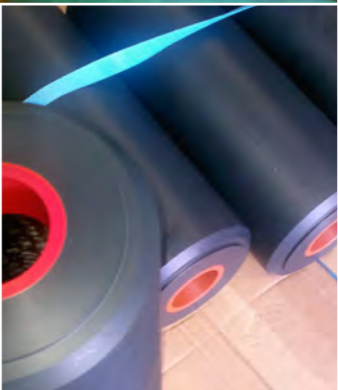
With full control of the manufacturing process from design and initial chemistry to end products, Nylacast are able to offer custom manufactured components based around specific application and industry requirements.

## NYLACAST OFFER A RANGE OF IN-HOUSE DESIGN, TESTING AND MANUFACTURING SERVICES INCLUDING

- Material selection
- Full material characterisation
- Full tracibility from concept to end components
- Custom formulated materials
- Testing to ASTM/ISO
- FEA, CAD, CAM
- Material integration

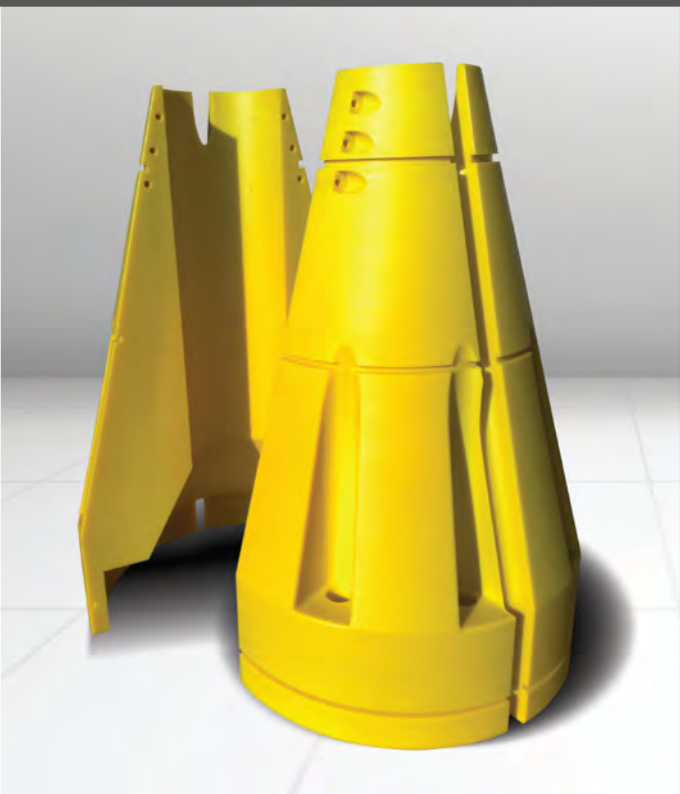
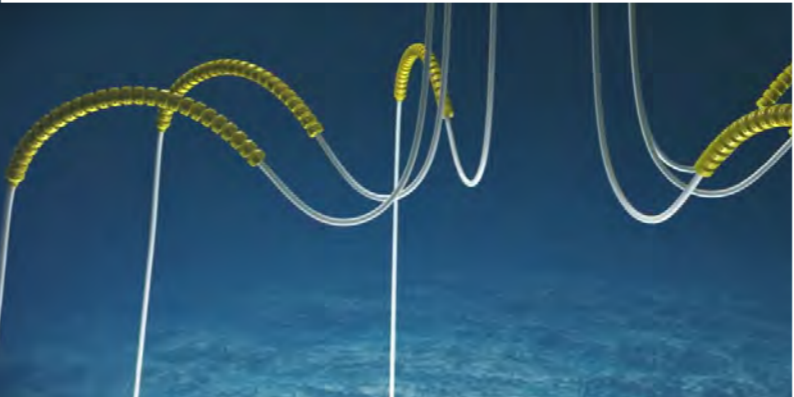
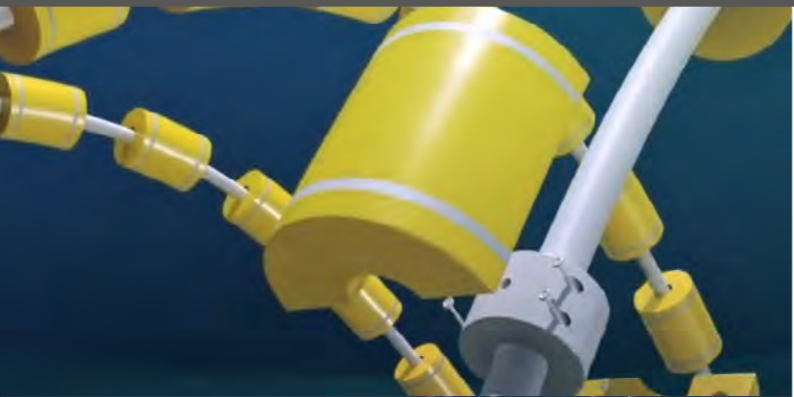


ROLLERS



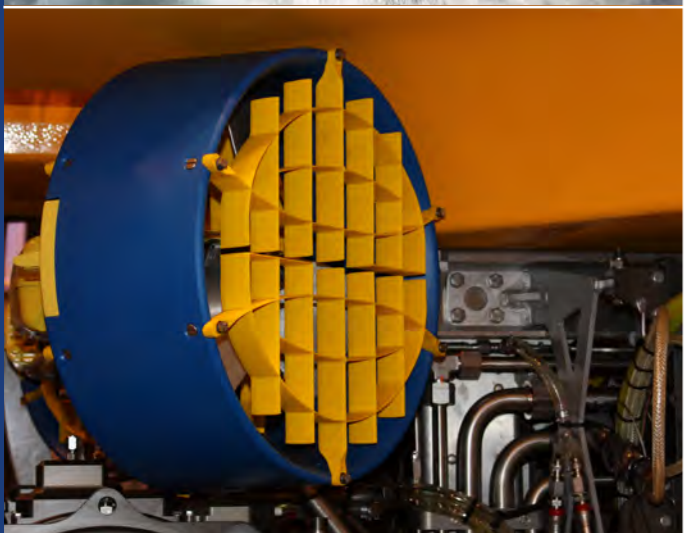
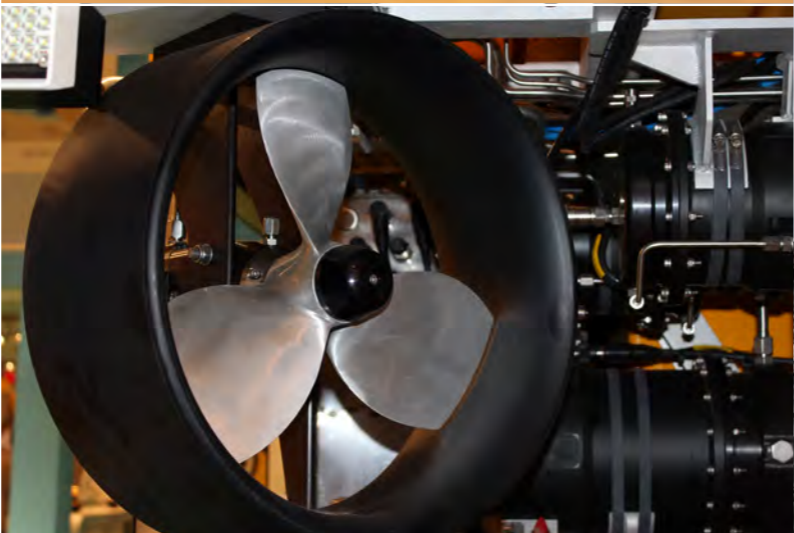
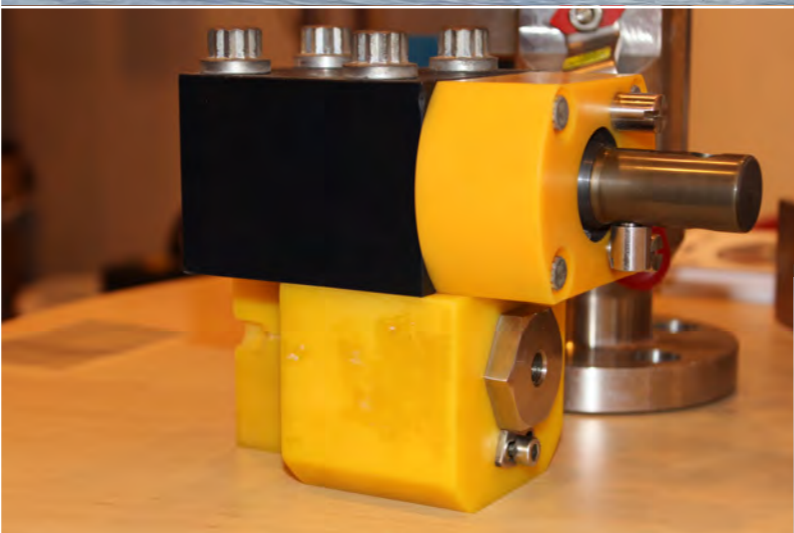
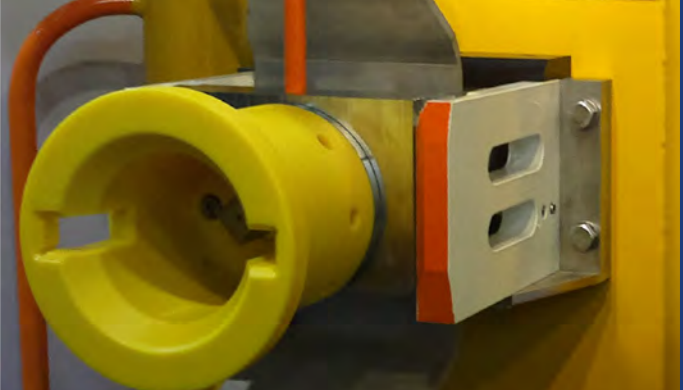
GEARS & BEARINGS

WEAR PARTS



RISER GUIDES, BEND RESTRICTORS  
& BUOYANCY MODULES

SUBSEA APPLICATIONS



MOORING CONNECTOR



ROV COMPONENTS & THRUSTER NOZZLES

# FURTHER APPLICATIONS & PRODUCTS

- SLIDING PADS / FRICTION PADS
- EQUIPMENT MOUNTS
- LIGHTENING CONDUCTOR BRACKETS
- MACHINED GEARS / SPROCKETS
- BEARING HOUSINGS (VARIOUS SIZES)
- SHAFT SUPPORTS
- PIPE CLAMPS
- CABLE ENTRY SEALS
- LADDER INSULATION
- CABLE CLAMP
- WALK TO WORK DOCKING STATION
- DAVIT CRANE - WEAR PADS, SPOOL LINERS, PULLEYS
- CABLE PROTECTION SYSTEMS
- BUOYANCY CLAMPS
- CABLE ENTRY JOINTS
- INSTRUMENT / SENSOR COLLARS
- BEND RESTRICTORS
- FLOATING ANCHOR SYSTEMS

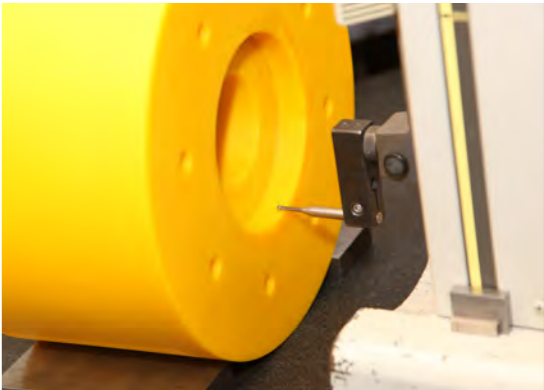
# QUALITY

Nylacast inspection departments are fully equipped with the latest coordinate measuring machines, computer controlled surface finish and gear profile testing machines as well as a comprehensive range of traditional measuring instruments.

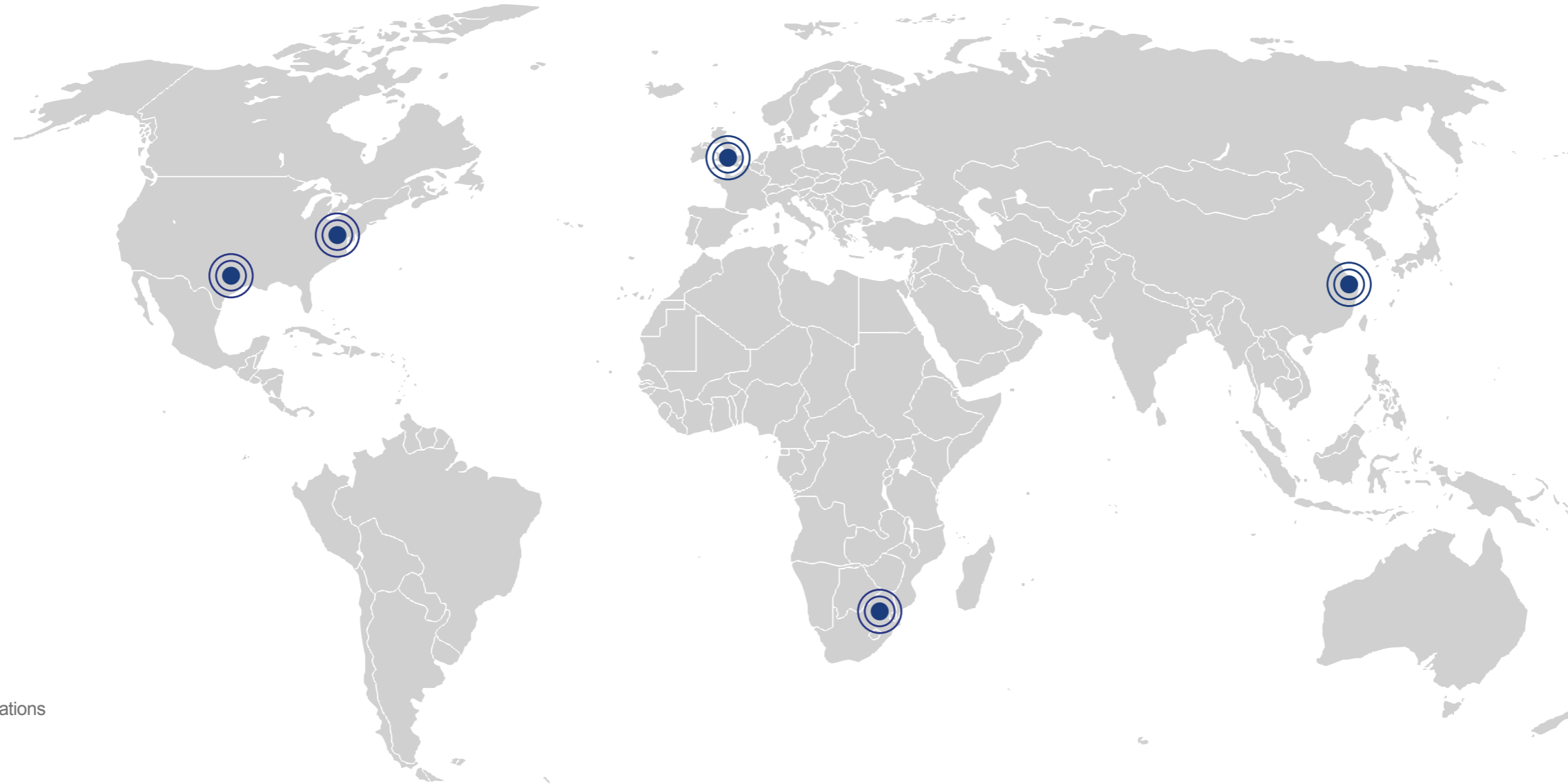
As quality is considered to be a critical factor in the success of our products, we operate to some of the leading and highest quality standards available in industry today.

## NYLACAST EXCEED CUSTOMER EXPECTATIONS WITH

- Full traceability
- Initial sample inspection reports
- Certificates of Conformity
- Certificates of Analysis
- Production Part Approval Process
- Advanced Product Quality Planning
- MSA / Gauge Repeatability and Reproducibility (GR&R) Studies
- PFMEA / SPC / Process Control Plans & Flow Charts
- ISO 9001
- ISO 14001
- ISO 29001



# GLOBAL MANUFACTURE AND REACH



 Nylacast locations





[www.nylacast.com/industries/renewables](http://www.nylacast.com/industries/renewables)

## ENQUIRE

To discover how Nylacast Engineered Products can create value for your projects and products, simply contact our Sales & Engineering team.

✉ [sales@nylacast.com](mailto:sales@nylacast.com)

💻 [www.nylacast.com](http://www.nylacast.com)



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