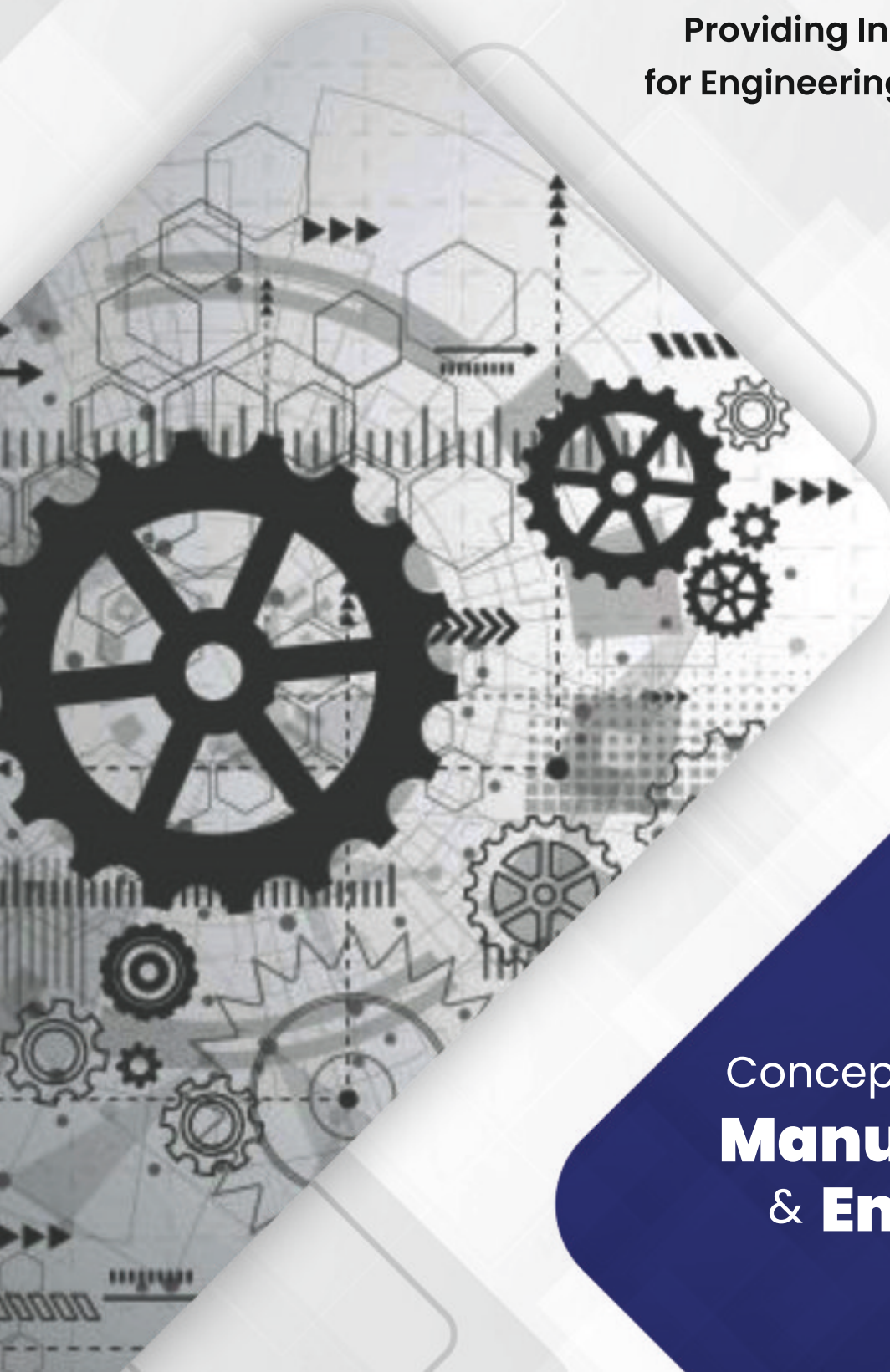




LODESTAR QUALITY LLC

Providing Innovative Solutions
for Engineering & Manufacturing



From
Concept to Production
**Manufacturing
& Engineering**
Solutions

ANCHOR BOLTS

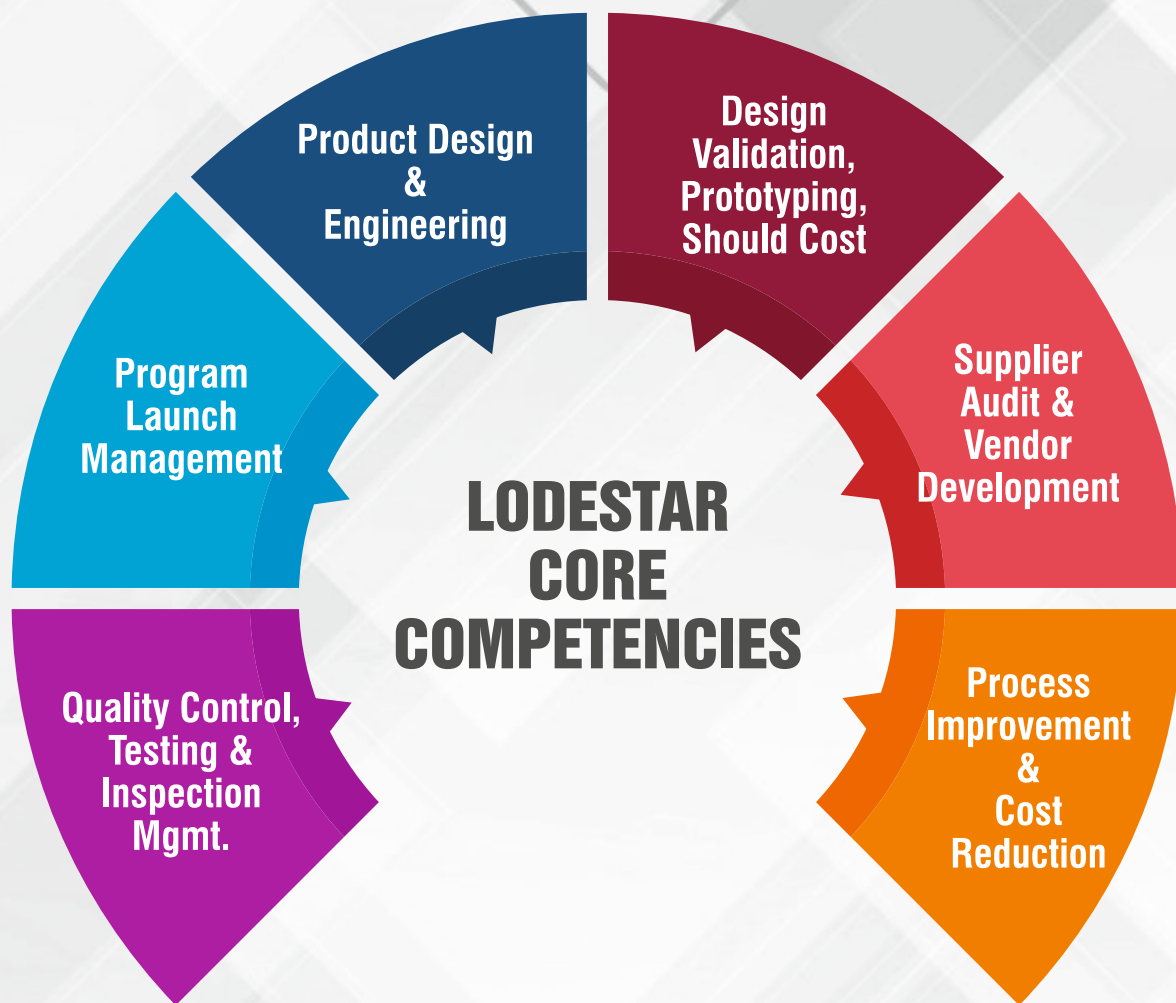
■ THE PROBLEM

Lodestar's customer, a producer of marine equipment had designed a patented anchor bolt system which can be installed when needed or removed when not in use to prevent tripping hazards. The design called for bolts to be made with high strength stainless steel material through casting and machining, with very tight tolerances, with specific heat treatment and electro-polishing requirement. The customer was having a hard time developing a supply chain that could meet all the design requirements at a cost that would make the product competitive.

■ LODESTAR'S SOLUTION

- ▶ Lodestar developed a comprehensive supply chain for manufacturing the anchor bolts which included developing and implementing foundry control processes, designing machining fixtures, vacuum heat treat procedures and establishing quality control systems
- ▶ **Lodestar produced anchor bolts not only met all stringent design and quality requirements at a cost that was 40% lower than the alternatives available to the customer.**





ABOUT LODESTAR QUALITY LLC

Lodestar Quality LLC is a knowledge-driven custom manufacturing solutions provider that

- ▶ Provides manufacturers of products a full range of services from innovative design and engineering, to sourcing and production using best in class quality control methods in a cost- efficient manner.
- ▶ Focus areas include fabrications, castings, machining and forging, and plastic products.

Our team of engineering experts and network of high-quality manufacturers work together to develop and deliver products to our customers.

“Lodestar utilizes the expertise of its team members and its manufacturing partners to address key problems faced by industry segments or individual manufacturers with high quality products and intelligent solutions which are customized to address a particular market's or entity's needs in a comprehensive manner.

THANK YOU!

