



# CHANGING TO SHELL GADUS S5 T460 1.5\* HELPS STEEL COMPANY TO IMPROVE FURNACE OPERATION

TOTAL REPORTED ANNUAL CUSTOMER SAVING

## US\$5,145



**COMPANY:** Southern Steel Corp.

**COUNTRY:** Vietnam

**APPLICATION:** Bearings

**SAVING:** US\$5,145 total reported annual customer saving

**KEY EDGE:** Shell Gadus S5 T460 1.5

**Southern Steel Corp, a subsidiary of Vietnam Steel Corp., operates a foundry in the Phu My industrial zone near Ho Chi Minh City in Vietnam. In its continuous casting area, the company has seven ladle furnaces that work at extremely high temperatures. The grease in the furnace bearings was burning and forming a solid build-up. This was preventing the furnaces from operating properly and required the operators to change the bearings every 2-3 weeks.**

The company turned to Shell Lubricants for advice. Shell recommended that the company should change its grease to Shell Gadus S5 T460 1.5. The Shell technical team also identified that changing the re-greasing interval from one month to one week would ensure that the bearings remained in good condition.

After changing to Shell Gadus S5 T460 1.5 and reducing the re-greasing interval, Southern Steel Corp. found that the grease was no longer burning and that it did not need to replace the bearings as frequently. By reducing the cost of replacing the bearings and the associated maintenance costs, the company has reported a total annual saving of US\$5,145. With fewer breakdowns, the company also has less unplanned downtime.



GRE00193

# 1

## CHALLENGE

Southern Steel Corp. found that the grease in its furnace bearings was burning and forming a solid build-up. This was preventing the furnaces from operating properly and required the operators to change the bearings every 2–3 weeks.

# 2

## SOLUTION

Shell recommended that the company should change its grease to Shell Gadus S5 T460 1.5. The Shell technical team also identified that changing the re-greasing interval from one month to one week would ensure that the bearings remained in good condition.

# 3

## OUTCOME

After changing to Shell Gadus S5 T460 1.5 and reducing the re-greasing interval, Southern Steel Corp. found that the grease was no longer burning and that it did not need replace the bearings as frequently.

# 4

## VALUE

By reducing cost of replacing the bearings and the associated maintenance costs, the company has reported a total annual saving of US\$5,145.<sup>1</sup>

<sup>1</sup>The savings indicated are specific to the calculation date and mentioned site. These calculations may vary from site to site and from time to time, depending on, for example, the application, the operating conditions, the current products being used, the condition of the equipment and the maintenance practices.



## SHELL GADUS S5 T460

EXTREME-TEMPERATURE, HEAVY-DUTY, MULTIPURPOSE SYNTHETIC POLYUREA GREASE

Shell Gadus S5 T460 grease is an advanced-performance, extreme-temperature, long-life grease for heavy-duty industrial applications. It uses fully synthetic base stocks and the latest technology diurea thickener.



It offers excellent extreme-temperature oxidation performance, and other additives to enhance its anti-oxidation, anti-wear and anti-corrosion properties. Shell Gadus S5 T460 is especially suitable for sealed and semi-sealed applications involving slow-moving heavy-duty bearings operating at high temperatures and under severe loads.

### Applications

Shell Gadus S5 T460 grease can be used for greasing the heavy-duty, slow-moving bearings, both sealed and semi-sealed, used in machinery found in the steel, cement, paper, wind power, chemical and mining industries.

### Performance features and benefits

- High-base-oil viscosity. Shell Gadus S5 T460 meets leading equipment manufacturer requirements for slow-moving large bearings. It is based upon the latest diurea grease technology and is proven in the steel, paper, wind turbine and other industries around the world.
- Excellent resistance to extreme temperatures and "heat soak". Synthetic base stocks, combined with the inherent oxidation resistance of the diurea thickeners, give class-leading performance in this area.
- Enhanced extreme-pressure properties. Shell Gadus S5 T460 helps to provide excellent load-carrying performance.
- Excellent water resistance. The product helps to ensure lasting protection, even in the presence of large amounts of water.

- High dropping point. Shell Gadus S5 T460 is resistant to high temperature softening.
- Effective corrosion protection. Shell Gadus S5 T460 helps to ensure components such as bearings do not fail through corrosion.
- Free from all heavy metals, including lead and barium, and nitrites. The product is safe to handle.

### Specification and approvals

Shell Gadus S5 T460 meets the requirements of DIN 51825 grease KHC2S and Danieli Code 0.340335.Z.

### Complementary products

| Application                  | Lubricants    |
|------------------------------|---------------|
| Hydraulic oils               | Shell Tellus  |
| Gear oils                    | Shell Omala   |
| Bearing and circulating oils | Shell Morlina |