

The image is a close-up, high-angle shot of several engine cooling pump components. The components are made of polished metal, likely aluminum, and are mounted on a red-painted metal base. The focus is sharp on the central component, showing its internal structure and the surrounding housing. The lighting is bright, highlighting the metallic surfaces and the red paint. The background is slightly blurred, emphasizing the foreground components.

GILKES

ENGINE COOLING PUMPS



GILKES DEVELOPS AND MANUFACTURES ENGINE COOLING PUMPS



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AN INTRODUCTION TO **GILKES**

Established in 1853 Gilbert Gilkes & Gordon Ltd is an internationally established manufacturing company, based in Kendal, UK on the edge of the English Lake District. The original premises were outside the town of Kendal but in 1856 the company moved to its existing location where it has been ever since, today employing 170 people. Other operations include Gilkes Inc, Gilkes Japan and Gilkes Energy.

Gilkes Inc is a wholly owned subsidiary of Gilbert Gilkes & Gordon Ltd in the UK and was incorporated in 1978. It is based in League City, Texas, USA. Today, it is focused on the repair, remanufacture and sale of engine cooling pumps.

PUMPING SYSTEMS:

Gilkes manufactures a range of sophisticated pumps for the cooling of diesel and gas engines and plant as well as supplying many of the world's major engine manufacturers. Gilkes also produces pumping solutions for the lubricating of oil or gas and steam turbines and supplies a range of industrial pumps for virtually any application.

GILKES

**“GILKES IS AN
INTERNATIONALLY
RECOGNISED
MANUFACTURER,
ESTABLISHED
SINCE 1853”**



1.



2.

- 1. The Gilkes site in Kendal, Cumbria
- 2. The Gilkes site in Texas, USA
- 3. Inside the Gilkes office, Kendal



3.

A large yellow mining truck is parked on a dirt road in front of a steep, rocky hillside. The truck is a heavy-duty vehicle with large tires and a high cab. The background is a rugged, rocky landscape with various sized stones and boulders. The sky is not visible, suggesting a close-up shot of the truck and the hillside.

GILKES

“

**OVER 158 YEARS
OF ENGINEERING
EXPERTISE MAKES
GILKES A WORLD
LEADER IN PUMPING
EQUIPMENT
SOLUTIONS**

”

ENGINE COOLING PUMPS

Gilkes will engineer your cooling solution from concept to production including aftermarket support.

Engine and gearbox cooling pumps, designed and manufactured in Kendal, Cumbria are supported throughout the world via our new refurbishment facility Gilkes Inc in Texas, USA.

Constant investment in new technology and facilities, aligned with over 158 years of engineering expertise in manipulating fluid movement, make Gilkes a world leader in pumping equipment solutions.

Sales, development and production operate through **TS16949**, maintaining the highest levels of quality and customer support. A commitment to Six Sigma, continual improvement and customer needs sets Gilkes apart.

OUR COMMON APPLICATIONS

INDUSTRIAL



POWERGEN



MARINE



OIL & GAS



LOCOMOTIVE



OPERATIONS & SERVICES

OPERATIONS IN KENDAL:

- ▶ 90,000 square feet facility
- ▶ 170 employees
- ▶ Full manufacturing capability
- ▶ Mapics ERP integrated business system
- ▶ EDI links with customers

COOLING PUMP DESIGN PROCESS:

- ▶ Mechanical and hydraulic
- ▶ AutoCAD
- ▶ 3D solid modelling
- ▶ In-house prototype facilities
- ▶ Pro/Mechanical stress analysis software
- ▶ Integrated design and production engineering
- ▶ Test facilities

ENGINEERING SERVICES:

- ▶ Research and development
- ▶ Hydraulic selection
- ▶ 3D mechanical design and modelling
- ▶ Finite element stress analysis
- ▶ CFD tuning
- ▶ Lean manufacture evaluation
- ▶ Component modelling
- ▶ Performance and endurance testing
- ▶ Product evaluation
- ▶ Engineering support

MANUFACTURING:

- ▶ CNC machine shop
- ▶ Manual machine shop
- ▶ Comprehensive testing facilities
- ▶ Full assembly, performance testing capabilities
- ▶ Packing & shipping [secure]
- ▶ Service

COOLING PUMP TESTING FACILITIES:

- ▶ Variable speed drive with torquemeter
- ▶ Turbine flowmeters
- ▶ National Instruments Labview data acquisition software
- ▶ Durability test rigs for coolant and simulated sea water
- ▶ Multi inspectorate testing

QUALITY:

- ▶ Engine Cooling Pumps has: ISO/TS 16949:2002 accreditation (one of the first in UK to achieve this standard)
- ▶ Gilkes Kendal is accredited to ISO 9001:2000

PUMP REMANUFACTURING:

- ▶ Testing facility
- ▶ Fitting and assembly
- ▶ Pump refurbishment

LOGISTICS

- ▶ Supply via US warehouse facility
- ▶ Ship direct to engine builders in US and Europe
- ▶ Secure storage



1.



2.



3.



4.

1. In-house 3D pump design
2 & 3. Production machining
4. Pump test facilities



GILKES

**“
GILKES OPERATES TO
TS 16949:2002
ACCREDITATION”**



GILKES

**“ GILKES OFFERS
COMPETITIVE
SOLUTIONS FOR
A VAST RANGE
OF ENGINE
MANUFACTURERS ”**

ENGINE COOLING PRODUCTS

Gilkes has a lifetime of experience specialising in producing high quality engine cooling water pumps. Gilkes engine cooling pumps are design engineered to meet the exacting high standards demanded by our customers.

PRODUCTS

DIESEL ENGINES / MARINE GEARBOXES

Gilkes pump designs are an integral part of the coolant circuit on both freshwater and raw water applications.

RAW WATER CIRCUITS

Our expertise allows us to offer solutions for engines and gearboxes meeting the most challenging applications of vibration and erosion/corrosion. The need for a self-priming, robust, compact design that will withstand the forces applied by an engine is essential to our customers.

FRESH WATER CIRCUITS

Our design and manufacturing capabilities allow us to offer competitive solutions for a vast range of engines and manufactures. We are a world leader in the supply of secondary circuit / aftercooler applications. The introduction, on a worldwide basis of emissions reduction has increased the demand on engine cooling; Gilkes has met this challenge head on and supplies the world's major engine manufactures with pumps to meet current and proposed legislation. Gilkes offers a bespoke design solution for any application encompassing unique and proven water and oil seal technology.

PUMP RANGE

SEAWATER PUMPS (ALL METAL CONSTRUCTION)

- ▶ High speed side channel design, offering compact dimensions.
- ▶ Self-priming centrifugal, for higher flow but with side channel primer.

C FLO SEAWATER RANGE

This range of small seawater pumps in 1½" - 2 1½" sizes are aimed at the smaller end of the marine diesel engine market:

- ▶ Pump Flow 40 l/gpm (11 m³/hr) - 220 l/gpm (60 m³/hr)

FRESH WATER PUMPS

Single and double impeller designs providing:

- ▶ Separate pumping elements for high and low temperature circuits
- ▶ Two pumping elements from one engine drive
- ▶ Reduces requirement for an off engine mounted pump and motor
- ▶ Simplifies engine pipe work
- ▶ Produces a compact engine package
- ▶ Provides a positive engine driven solution
- ▶ Increases engine efficiency
- ▶ Reduces overall package costs.

CHARGE AIR COOLING PUMP (SCAC OR LTA)

- ▶ Custom designed to meet individual requirements.
- ▶ May utilise side channel or centrifugal impeller designs dependent on particular circumstance.

Advantages:

- ▶ Low cost
- ▶ Lightweight design
- ▶ Compact
- ▶ Easily serviced
- ▶ Limited number of components
- ▶ Wear resistant materials
- ▶ Available in many standard mountings
- ▶ Customising design service available for non-standard mountings.

GILKES Inc

Gilkes Inc is a wholly owned subsidiary of Gilbert Gilkes & Gordon Ltd in the UK and was incorporated in 1978. It is based in League City, Texas.

Gilkes Inc supplies the leading diesel engine manufacturers with refurbishment and engine circulating pumps for a range of raw water and fresh water applications.



**BECAUSE OF GILKES' DESIRE
TO EXCEL IN ENGINEERING,
QUALITY AND CUSTOMER
SATISFACTION, WE
STRIVE TO SUPPORT OUR
PRODUCTS THROUGH THEIR
ENTIRE LIFE-CYCLE**



GILKES INC, TEXAS, USA

GILKES INC REMANUFACTURE PROCESS

- ▶ Examine core pumps against an agreed core acceptance criteria
- ▶ Carry out a part failure analysis
- ▶ Produce bi-annual reviews of our failure analysis reports
- ▶ Constantly improve the quality and design of our product based on analysis reports

GILKES INC PROGRAMME OPERATIONS

- ▶ Core pumps returned to Gilkes
- ▶ Pumps evaluated against an agreed core acceptance criteria
- ▶ Core credit issued
- ▶ Pumps are stamped with a pump serial number and pump assembly number for identification purposes
- ▶ Identification numbers used throughout the remanufacturing process, which allows easy access for documentation retention

GILKES INC SERVICES

- ▶ Degreasing processes
- ▶ Paint removal systems
- ▶ Shotblasting equipment
- ▶ Hydraulic presses
- ▶ Fitting and assembly
- ▶ Water pressure testing facilities

GILKES INC QUALITY

Since the company's incorporation in 1978, quality awareness has been at the forefront of the Gilkes Inc business strategy. The management of the Gilkes Inc organisation is wholly committed to the implementation and development of our corporate quality policy as well as international standards.

In adopting this standard our customers can be completely assured that we fully understand their requirements and that all our efforts are targeted towards achieving total customer satisfaction in terms of quality, cost and delivery. Gilkes Inc maintains ISO 9001:2000.

GILKES INC LOGISTICS:

Delivering the right product whilst achieving on-time delivery is always a test of an organisation's operational excellence, more importantly it is crucial for our customers. We are increasingly utilising electronic means for streamlining our processes and to manage our business effectively and efficiently. This facilitates lower work in progress, lower inventory, improved lead times, improved purchasing practices and efficient supplier invoicing.

Through EDI [Electronic Data Interchange], Gilkes Inc can be sure of up to the minute schedules from its key customers.

These schedules include firm orders and horizon planning, so recording pump core is vitally important. Much of our demand for remanufactured pumps is for Caterpillar, Cummins and EMD. Subsequently for distribution throughout the US and worldwide, skilful management of inventory and shipping is vital.



1.



2.



3.



4.

1. Gilkes pumps installed on a Caterpillar engine
2. Re-manufacturing stock
3. Shot blaster at Gilkes Inc, Texas
4. Inside Gilkes office, Texas



GILKES

**“
GILKES INC OPERATES
TO ISO 9001:2000”**



GILKES



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