











HOUCHIN





LOCATION

Ashford, Kent, UK

BUSINESS SECTOR

Aerospace

SIZE

ITW Group: \$17.5bn turnover

VEHICLES

Houchin Ground Power Unit (GPU) with Cummins QSB 6.7 engine / 420HP

CHALLENGES FACED

- Houchin Aerospace's Ground Power Units (GPUs) required oil changes every 500 hours to preserve their reliability. Houchin wanted to reduce their customers' costs by extending the time between oil change services.
- 2. Houchin wanted to promote a distinct technical advantage over other GPU manufacturers.

SOLUTIONS DELIVERED

- 1. The oil drain interval was safely extended from 500 to 2,000 hours by fitting an EDI System. Houchin's customers only need one annual oil change service instead of four.
- 2. Reducing oil costs by 61% is a strong selling point for Houchin. As well as financial savings, Houchin can also promote the extra efficiency a customer gains from fewer services.

When we extend EDI' cost-savings for one GPU across a customer's entire fleet the money and time that can be saved is staggering.



MarShip UK's EDI System













FINANCIAL GOOD SENSE

LIVING WITHOUT EDI

	Year 1	Year 2	Year 3	Year 4	Year 5
Services Costs					
Oil	£44	£44	£44	£44	£44
Full-Flow Filters	£15	£15	£15	£15	£15
Labour	£240	£240	£240	£240	£240
Oil Analysis	£10	£10	£10	£10	£10
Total cost per service	£309	£309	£309	£309	£309
Annual Services	4	4	4	4	4
Annual Spend	£1,236	£1,236	£1,236	£1,236	£1,236
Total E year spend 66 190					

Total 5 year spend £6,180

SAVING WITH EDI

Services Costs	Year 1	Year 2	Year 3	Year 4	Year 5
Oil	£44	£44	£44	£44	£44
Full-Flow Filters Labour	£15 £247	£15 £247	£15 £247	£15 £247	£15 £247
Oil Analysis EDI Elements	£10 £37	£10 £37	£10 £37	£10 £37	£10 £37
Total cost per service	£353	£353	£353	£353	£353
Annual Services EDI (incl. Installation)	1 £480	1	1	1	1
Annual Spend	£833	£353	£353	£353	£353

ANNUAL SAVINGS WITH EDI INSTALLED £883 per engine

resulting in a 5 year saving £3935 - 64%

These statistics exclude additional savings from:

- · Productivity enhancements available from fewer service stops
- Reduced oil disposal costs









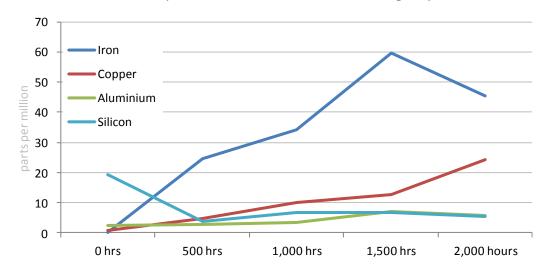




TECHNICAL GOOD SENSE

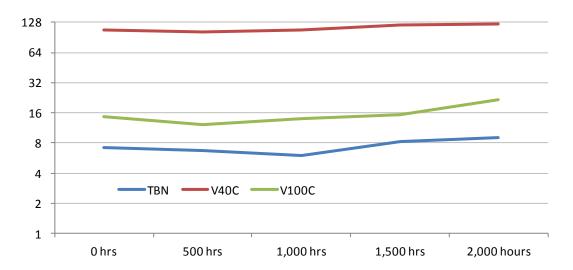
REMOVING WEAR METALS

Even after 2,000 hours (four times the normal oil-change service interval), the EDI unit keeps wear metal levels far below the norm, improving the oil's ability to lubricate engine parts. The EDI's protein-rich 1µm cotton element removes the particles that combine to cause engine problems.



MAINTAINING FLUID PHYSICAL PROPERTIES

After the same extended service interval, the oil's Total Base Number (i.e. the level of alkaline additives) and viscosity are stable thanks to the EDI unit's ability to evaporate off water and sulphur dioxide, the precursors of a sulphuric acid reaction.















BACKGROUND

Houchin Aerospace (now part of the ITW Group) manufacture diesel -driven Ground Power Units. Customers include airlines, ground handling companies, lease companies, airports and military organisations.

Houchin determined that its customers wanted equipment that was easier to service and maintain. While their GPUs conformed to industry norms in requiring oil changes every 500 hours, the company wanted to set itself apart from its competitors by being as close to maintenance-free as possible.

SUCCESSFUL TESTING

A 2,000 hour test clearly demonstrated the EDI unit's ability to maintain oil condition and reduce engine wear. The oil's all-important Total Base Number (TBN) and viscosity remained constant from the start of the test to the finish.

A TRIPLE SUCCESS

By safely demonstrating the EDI unit's ability to extend oil life, Houchin can promote significant cost savings to its customers. Annual service costs drop from over £1,200 to £319 $per\ unit$. For customers who run fleets of GPUs this represents a substantial saving every year.

Longer service intervals help Houchin's customers improve their operational efficiency. Units can run all year without needing to be taken offline for oil changes. Fewer standby units are required to cover for units that are being serviced.

Longer oil life permits improved customer service throughout Houchin's supply chain.

64%

Reduction in oil costs

www.marship.eu/ reduceyouroilspend

ABOUT HOUCHIN AEROSPACE

Houchin Aerospace is a global supplier of Ground Power Units (GPUs). Houchin designs and develops equipment tailored to the aerospace working environment, guaranteeing reliability and longevity. It has extensive knowledge of all forms of engine and industrial filtration.

ABOUT MARSHIP UK

MarShip UK's oil products can help extend the life of engine and transmission oils and hydraulic fluids by removing harmful contaminants and by monitoring and analysing contamination levels and properties. MarShip UK's specialist team has extensive knowledge of all forms of engine and industrial filtration together with fuel cleaning and fuel polishing.

MarShip UK

Priory Park, Tetbury, GL8 8HZ
Phone: +44 (0) 1666 818791
Email: info@marship.eu

Web: www.marship.eu/reduceyouroilspend