

BEFORE

AFTER

**Joseph Yates** 1 Briar Gate, Long Eaton, Nottingham NG10 4BJ, UK +44 123 456 789 [joseph.yates@gmail.com](mailto:joseph.yates@gmail.com)

Click **in** to see my profile  
 DOB: 08/01/1989  
 French nationality  
 Driving licence

## Rotating Machinery Engineer

Vibration Analyst III  
 EUR ING Chartered Engineer MIMechE

*With a strong academic background in mechanics/thermodynamics and a taste for hands-on work, my diverse experience with various operators made me an all-round machines engineer focused on adding value to the business I serve. My strong analytic and collaborative skills allow me to solve complex machinery problems, design fit-for-purpose solutions and lead effective implementation. With exposure to contract management and financial metrics, I am able to turn cost-saving opportunities into reality.*

| EXPERIENCE  |  |
|---|--|
| <p><b>Company UK</b><br/>           Gt. Yarmouth, UK<br/>           10/2016 – Present</p>                         | <p><b>Rotating and Static Equipment Engineer</b><br/> <b>Multi-discipline engineer responsible for Clipper platform (525 MMscf/d)</b></p> <ul style="list-style-type: none"> <li>Refreshing condition-monitoring strategy, reduced contract costs, improved effectiveness</li> <li>Solved major vibration issues (hot restart, high speed resonance) adding &gt;0.6 M\$ in production value. Led investigations and field repairs/software changes. Ensuring plant integrity (Fitness for service analyses using API 579 &amp; other)</li> <li>Designing fit for purpose solutions for pipe/vessel degradation, pipework vibration, production sand issues, valve selection</li> </ul>   |
| <p><b>Company UK</b><br/>           (off/onshore)<br/>           Bacton, UK<br/>           03/2016 to 10/2016</p> | <p><b>Rotating Equipment Engineer – Problem Solving Team member</b></p> <p><b>Increasing plant availability (900 MMscf/d gas, 8k b/d condensate capacity)</b></p> <ul style="list-style-type: none"> <li>Leading investigations, solutions design and implementation: increased gas compression availability and addressed long-standing integrity issues</li> <li>Lead position to upgrade obsolete reciprocating compressors including new safeguarding and control systems, managing complex project across organisations</li> <li>Providing support to offshore platforms (Leman Alpha and Clipper)</li> </ul>   |
| <p><b>Company UK</b><br/>           Gt. Yarmouth, UK<br/>           2014 – 2016</p>                               | <p><b>Rotating Equipment Engineer</b><br/> <b>Responsible for Leman offshore platform machines (280 MMscf/d cap.)</b></p> <ul style="list-style-type: none"> <li>Important deferment reduction via field balancing/vibration surveys/troubleshooting using ADRE 408.</li> <li>Designed in-house performance monitoring software allowing us to extend compressor washing frequencies, saving 1.2 M\$/year.</li> <li>Justified, planned, prepared and executed field repairs and inspections.</li> <li>RCA, troubleshooting, FATs, HAZOP, techno-economic / reliability analyses.</li> <li>Working knowledge of APIs (617, 618, 684...) and internal standards.</li> <li>Initiated and led to success cost-cutting exercises (eg maintenance insourcing)</li> </ul> |
| <p><b>Company UK</b><br/>           Assen, NL<br/>           2012 – 2014</p>                                      | <p><b>Trainee Rotating Equipment Engineer</b><br/> <b>Team member supporting production of &gt;120 small onshore gas/oil fields</b></p> <ul style="list-style-type: none"> <li>Managed 0.5 M€ condition-monitoring retrofit project across machine fleet.</li> <li>RCA, field troubleshooting, maintenance optimisation and techno-economic studies, in particular on electric driven API 618 reciprocating compressors.</li> <li>Successfully completed the Graduate program including multiple detailed courses/workshops at various OEMs in Europe.</li> </ul>  |

**Joseph Yates CEng MIMechE**  
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**Professional Profile**

An internationally experienced chartered engineer combining a strong academic background in mechanics and thermodynamics with proven expertise in the safe, optimal maintenance and operational support of various types of turbomachinery. Specialises in developing innovative solutions to complex problems resulting in substantial improvements in uptime and reliability whilst ensuring integrity and compliance with international API (610-619), ISO and ASME standards. An ISO certified level III vibration analyst combining hands-on technical capabilities with skills in troubleshooting, equipment selection, rerating and repairs, economic analysis and reliability studies. Integrates with ease into multi-disciplinary teams, championing high quality and value-adding delivery whilst mentoring younger staff and effectively training front line personnel.

**Career Summary**

**Rotating & Static Equipment Engineer** 10/2016-date  
 Company – Clipper Platform (525 MMscf/d), Great Yarmouth, UK

A multi-disciplinary, office-based engineering position with regular offshore trips providing day-to-day support to ensure the integrity and high reliability of rotating equipment (compressors, turbines, pumps, engines) and static equipment (valves, piping, vessels, heat exchangers).

**KEY ACHIEVEMENTS**

- Increased production value by £0.6 million by resolving complex turbomachinery issues with limited repair costs, including cases of hot restart and high-speed resonance vibration
- Revitalised the condition-monitoring strategy resulting in annual contracting cost savings as well as improvements in overall programme effectiveness and plant uptime
- Ensured overall plant integrity performing fitness for service analysis using engineering calculations and industry codes, also assessing potential consequences, defining time for resolution and designing in-house innovative fit-for-purpose solutions

**Rotating Equipment Engineer** 03/2016-10/2016  
 Company – Bacton gas processing plant (900 MMscf/d, 8kb/d condensate), UK

Member of a multi-disciplinary problem-solving team tasked with investigating long-standing reliability issues and designing cost-effective solutions.

**KEY ACHIEVEMENTS**

- Took a leading role in investigations that lead to increased gas compression availability through the design and implementation of innovative solutions
- Solved reciprocating compressor scrubber blockage that had costed £2.7M in deferment
- Managed a complex project across organisations to upgrade obsolete reciprocating compressors, including introducing new safeguarding and control systems (budget £1.2M)

**Rotating Equipment Engineer** 2014-2016  
 Company – Leman offshore platform machines (280MMscf/d cap), Great Yarmouth, UK

Responsible for entire rotating fleet providing day-to-day support, performing RCA investigations, managing equipment repairs and FATs. Optimised maintenance regimes and spare parts, prepared and undertook field repairs and inspections. Produced valuable reliability analyses, made input to HAZOPs and SIF studies.

**KEY ACHIEVEMENTS**

- Achieved annual savings of £1.2M through the design of in-house performance monitoring software that enabled extended compressor washing frequencies
- Delivered significant deferment reductions through the completion of field balancing (without vendor support) and turbine control system modifications following vibration surveys and troubleshooting using ADRE 408
- Successfully delivered numerous cost reduction initiatives, including insourcing gas engine maintenance resulting in £100k per annum savings

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**TOTAL**  
Pau, France  
2011

**Company**  
Witry, France  
2010

**EDUCATION**

**University**  
2011-2012 (UK)

**University**  
2010-2011 (France)

**University**  
2009-2010

*Oehmichen*  
2007-2009

Secondary school  
< 2007

**REFERENCES**

**Placement in Rotating Machinery department (Front End Projects)**

- **Objective:** create software to assist project engineers in evaluating centrifugal compressors from different manufacturers.
- Application of the tool **achieved significant savings** by allowing Total to challenge OEMs' conservative requirements and develop optimised designs.
- **Developed centrifugal compressors sizing software:** thermodynamics computation from specifications, rotor model generation, rotor-dynamics analysis (Transfer Matrix Method), wrote associated manuals, presented tool to engineers.
- Use of API 684 and 617

**Placement in aeronautics industry**

- Repairs to fighter plane fuel tanks (*Rafale, Mirage*)
- Production of oil tanks for aircraft hydraulic systems (*Airbus*) including exposure to multiple NDTs

**MSc Thermal Power – Rotating Machinery, Engineering and Management**  
Gas turbines (performance, simulation & diagnostic), materials, rotating electrical equipment, steam turbines, pumps, compressors, piston engines, CFD, fuels & combustion, management for technology.  
Thesis: **sponsored by BP**, "on-line compressor washing optimisation"  
Awarded Course Director's Prize in recognition of academic achievement

**Master's Degree from Paris University**  
Mechanical design, mechanics, fluid mechanics, turbomachinery.  
Design of a glass scratching machine for research purposes. Led to an original design that was being patented.  
Received "Gold Medal" reward upon completion, ranking 2<sup>nd</sup> out of 1126 students

**Bachelor's degree in Mechanical and Industrial Engineering (Honours)**  
Ranked 4<sup>th</sup> out of 1107 *Paris University*

**2-year preparation course for engineering school, core subject: Mechanics**  
Final year project about accelerometers in submarine robots

**Scientific French "baccalauréat" passed with Honours (High school leaving diploma)**  
Core subject Engineering Sciences

**Senior Rotating Equipment Engineer, Technical Authority level 1 for The Netherlands, Southern North Sea UK/NL and Germany**

**Head of Total E&P Rotating Machinery Department, ETN President (European Turbines Network)**

**Senior rotating machines engineer (Total E&P Rotating Machinery Dept.)**  
Vibration specialist

**Head of Power and Propulsion Department at City University**

**Trainee Rotating Equipment Engineer** 2012-2014  
Company - 120 small onshore gas / oil fields, Assen, Netherlands

Gained experience in RCAs, field troubleshooting, maintenance optimisation and techno-economic studies, on API 618 reciprocating compressors, magnetic bearing compressors and pumps. Successfully completed Company Graduate Programme, with months of in-depth courses at various OEMs in Europe.

KEY ACHIEVEMENTS

- Played a pivotal role in managing a €0.5 million condition-monitoring retrofit project across the machine fleet after initiating its combination with safeguarding improvements.

**Placement – Rotating Machinery Department (Front End Project)** 2011  
Total, Pau, France

Acquired skills in compressor design, thermodynamics and rotordynamics. Responsible for creating software to assist project engineers in evaluating bids from manufacturers

KEY ACHIEVEMENTS

- Created an innovative software generating physical rotor from process specifications and then assessing vibration stability over predicted speed range, the tool achieved significant savings by enabling Total to challenge OEM requirements and optimise designs

**Education**

**MSc Thermal Power – Rotating Machinery, Engineering & Management** 2011-2012  
Cranfield University, UK  
Awarded Course Director's Prize for Academic Achievement  
Thesis (Sponsored by BP): "On-line compressor washing optimisation"

**Master's Degree** 2010-2011  
Arts et Métiers ParisTech, France  
Gold Medal Award; ranked 2<sup>nd</sup> out of 1126 students

**Bachelor's Degree (Honours) Mechanical & Industrial Engineering** 2009-2010  
Arts et Métiers ParisTech, France  
Ranked 4<sup>th</sup> out of 1107 students

CERTIFICATION  
Chartered Engineer (CEng MIMechE) | EUR ING (European Engineer)  
ISO 18436 CAT III Vibration Analysis (Mobius) & CAT II Vibration Analysis (BINDT)  
Offshore Certificates (BOSIET and MIST), Dutch H2S and VCA (safety) certifications

**Competencies**

**IT Skills**  
Word, Excel, PowerPoint, Access, SAP BluePrint, Mathematica, MathCAD, Matlab  
Bently Rack Configuration Software, Adre 5xP, Catia, Solidworks, Icem, Turbogrid, Fluent, CFX  
Simulink, LabView, HTML, Visual Basic, VBA, Fortran 90, SQL and LaTeX

**Languages**  
Native French, Fluent English (TOEIC: 990) and Basic Dutch, Spanish and Arabic

**Interests**  
Indoor football, jogging, rowing, technology and antiques

**Volunteering**  
Registered STEM Ambassador – participating in various science and technology related events and engaging children in STEM subjects via interactive talks, workshops and competitions

**BEFORE**

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|------------------------|--|
| <b>SKILLS</b>          |  |
| Languages              | <p><b>French:</b> native language<br/> <b>English:</b> fluent (TOEIC: 990)<br/> <b>Dutch:</b> basic<br/> <b>Spanish:</b> basic<br/> <b>Arabic dialect:</b> basic<br/> <b>Written Arabic:</b> basic</p>   |
| Certifications         | <p><b>Chartered engineer CEng MIMechE</b><br/> <b>EUR ING (European Engineer)</b><br/> <b>ISO 18436 CAT III Vibration Analyst (Mobius)</b><br/> <b>ISO 18436 CAT II Vibration Analyst (BINDT)</b><br/>         Full VCA (Veiligheids Checklist Aannemers) (Dutch HSE course)<br/>         H2S certification<br/>         Offshore certificates (BOSIET and MIST)</p> |
| I.T. skills            |  |
| Office suite           | Word, Excel, Power Point, Access   |
| CMMS                   | SAP BluePrint (Computerised Maintenance Management Software)   |
| Rotordynamics          | RotorInsa  |
| Bently Nevada software | Bently rack configuration software, Adre SxP   |
| CAD                    | Catia, Solidworks  |
| CFD                    | Icem, Turbogrid, Fluent, CFX   |
| Computation            | Mathematica, Mathcad, Mathlab  |
| Simulation             | Simulink, LabView  |
| Languages              | HTML, Visual Basic, VBA, Fortran 90, SQL, LaTeX  |
| Personal               | <p>Curious<br/>         Team player, open-minded and sociable<br/>         Not afraid to get my hands dirty<br/>         Problems solver</p>   |
| <b>LEISURES</b>        |  |
|                        | <p>Indoor football, jogging, rowing<br/>         Technology<br/>         Antiques</p>  |
| <b>VOLUNTARY</b>       |  |
|                        | <p>STEMNET: As a registered STEM ambassador, I take part in various science and technology related events. By way of interactive talks, workshops and competitions, I engage with children to encourage them to enjoy STEM subjects.</p>   |

**THE ORIGINAL DOCUMENT HAS BEEN CONDENSED TO A RECOMMENDED LENGTH AND AS A RESULT IS CLEARER AND MORE SUCCINCT.**