

Principal Risks and Uncertainties

The Group faces various risks, both internal and external, which could significantly impact long-term performance

The Board is responsible for the Group's risk management and assessment of the measures used in managing risk across the Group. Vesuvius operates a continuous process for identifying, evaluating and managing significant risks and regular reports are made to the Board on the process of how these are being managed. Thus, the Board receives regular reports on major issues that have arisen during the year, can make an assessment of how the risks have changed

over any given period, and can assess whether they are being effectively managed. Where practical, risks are managed in order to mitigate exposure and, where cost effective, the risk is transferred to insurers.

The risks identified below are those seen by the Board as being the most relevant to the Group in relation to their possible impact on achieving its strategic objectives.

All of the risks set out below could materially affect the Group, its businesses, future operations and financial condition and could cause actual results to differ materially from expected or historical results. The risks below are not the only ones that the Group will face. Some risks are not yet known and some that are not currently deemed material could later become so.

Risk	Potential Impact	Mitigation
End-market cyclical	<ul style="list-style-type: none"> Unplanned drop in demand and revenue Failure of one or more customers leading to debtor bankruptcy 	<ul style="list-style-type: none"> Prudent balance sheet management to maintain robust financial position Strong internal reporting and monitoring of external data to identify economic trends Flexible cost base to react quickly to end-market conditions No one customer exceeds 10% of Vesuvius revenue Robust credit control processes
Protectionism in key countries	<ul style="list-style-type: none"> Loss of business from enforced preference of local suppliers Imposition of increased import duties Increased tax burden or changes to rules and enforcement 	<ul style="list-style-type: none"> Local manufacturing operations in 26 countries Robust internal tax policies and strict transfer pricing rules Strong internal control of inter-company trading
Product liability issues	<ul style="list-style-type: none"> Claims from third parties resulting from use of potentially hazardous materials Customer claims and loss of business from product quality issues Personal injury claims arising from product failure 	<ul style="list-style-type: none"> Appropriate insurance cover obtained Active monitoring of HSE issues Stringent quality control standards systematically implemented in manufacturing Experienced legal team used to negotiate appropriate customer agreements
Regulatory compliance	<ul style="list-style-type: none"> Financial loss through failure to comply with appropriate regulations Business disruption from investigations Reputational damage 	<ul style="list-style-type: none"> Widely disseminated Code of Conduct and supporting policies which highlight the Group's ethical approach to business Whistleblowing procedure implemented across the Group Ongoing training and review of effectiveness of relevant policies

Risk	Potential Impact	Mitigation
Maintenance and protection of leading technologies	<ul style="list-style-type: none"> Loss of business through new technology developed by others Failure to adapt solutions to meet changing customer needs Revenue lost through ineffective protection of intellectual property 	<ul style="list-style-type: none"> Market-leading research and development team with significant investment in R&D Patent protection sought when new developments are made Stringent defence of patents and other intellectual property Control of access to intellectual property through IT controls and physical security
Foreign exchange, capital market, interest rate and inflation uncertainties	<ul style="list-style-type: none"> Inability to raise sufficient capital to fund growth of business Reduction in earnings from increased interest charges Weakness in foreign currencies leading to reduced profitability 	<ul style="list-style-type: none"> Long-term capital structure planning to secure availability of capital at acceptable costs Substantial proportion of debt capital secured at fixed rates of interest International presence reduces the Group's reliance on any one currency Hedging of transactional foreign exchange exposure when necessary Alignment of cost structure with revenue where possible
Loss of a major site	<ul style="list-style-type: none"> Loss of revenue resulting from inability to supply customers on loss of production facilities 	<ul style="list-style-type: none"> Diversified manufacturing footprint with some 69 facilities across 26 countries Maintenance of excess capacity to allow plants to meet peak demands
Ability to source and use critical raw materials	<ul style="list-style-type: none"> Manufacturing interruption from failure of a key supplier Loss of availability of a source of critical raw materials 	<ul style="list-style-type: none"> Strategic stocks of certain materials are retained Number of single-sourced materials reduced through expanding supplier base Development of new products and research on substitution of raw materials
Cyber security	<ul style="list-style-type: none"> Loss of availability of IT service leading to disruption of business Intellectual Property accessed by malicious third parties leading to loss of revenues through copying 	<ul style="list-style-type: none"> State-of-the-art firewalls and networking equipment with associated monitoring and follow-up Encrypted traffic over the Internet Centralised backups and server virtualisation Specific focus on security issues and programmes controlling internal and external access
Attraction and retention of staff	<ul style="list-style-type: none"> Insufficient high quality staff to run base business and generate growth through innovation 	<ul style="list-style-type: none"> Contacts with universities to identify and develop talent Internal programme to attract and develop high potential staff from emerging markets through cross border exchange programmes Extensive internal courses run by experienced staff to transfer knowledge in a structured manner Building career trajectories for technical staff to show potential and reduce attrition