

INNOVATION.  
NOT DUPLICATION.™

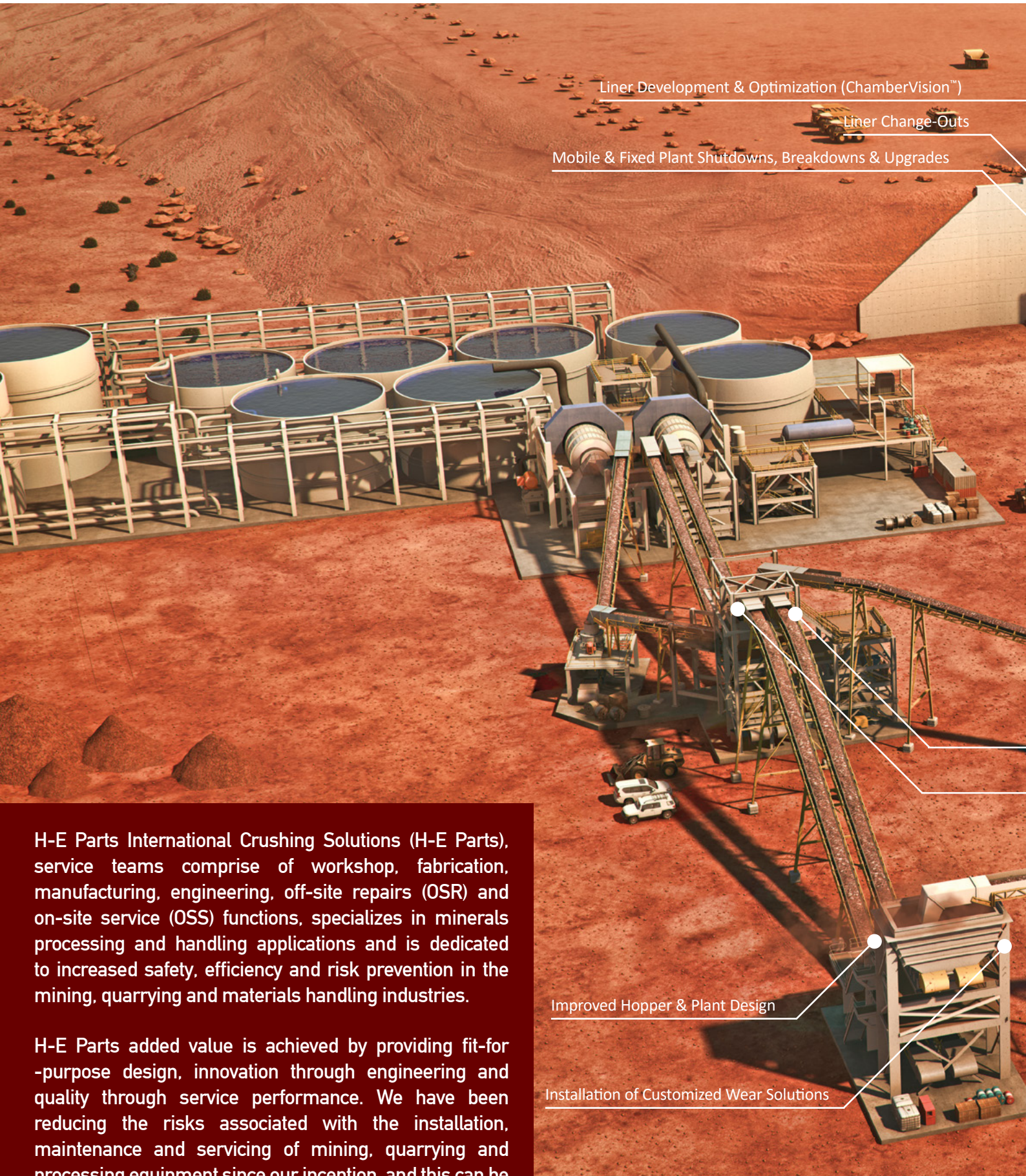


CRUSHING SOLUTIONS

SERVICE

RELENTLESS  
PURSUIT OF  
THE BASICS





Liner Development & Optimization (ChamberVision™)

Liner Change-Outs

Mobile & Fixed Plant Shutdowns, Breakdowns & Upgrades

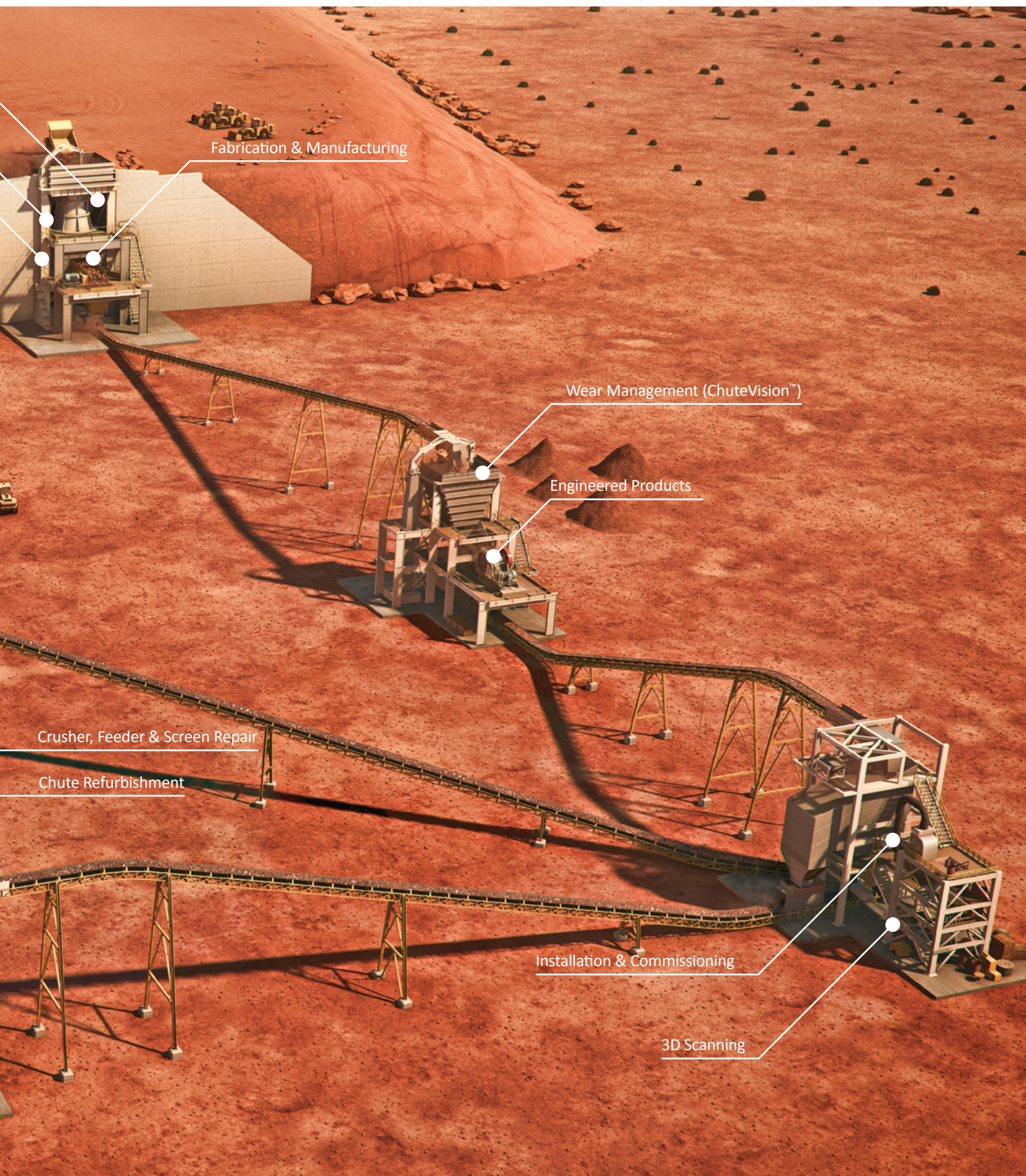
H-E Parts International Crushing Solutions (H-E Parts), service teams comprise of workshop, fabrication, manufacturing, engineering, off-site repairs (OSR) and on-site service (OSS) functions, specializes in minerals processing and handling applications and is dedicated to increased safety, efficiency and risk prevention in the mining, quarrying and materials handling industries.

H-E Parts added value is achieved by providing fit-for-purpose design, innovation through engineering and quality through service performance. We have been reducing the risks associated with the installation, maintenance and servicing of mining, quarrying and processing equipment since our inception, and this can be demonstrated through our range of certified crusher safety lifting devices, designed and patented by our in-house engineering department.

Improved Hopper & Plant Design

Installation of Customized Wear Solutions





Fabrication & Manufacturing

Wear Management (ChuteVision™)

Engineered Products

Crusher, Feeder & Screen Repair

Chute Refurbishment

Installation & Commissioning

3D Scanning



# ON-SITE SERVICE

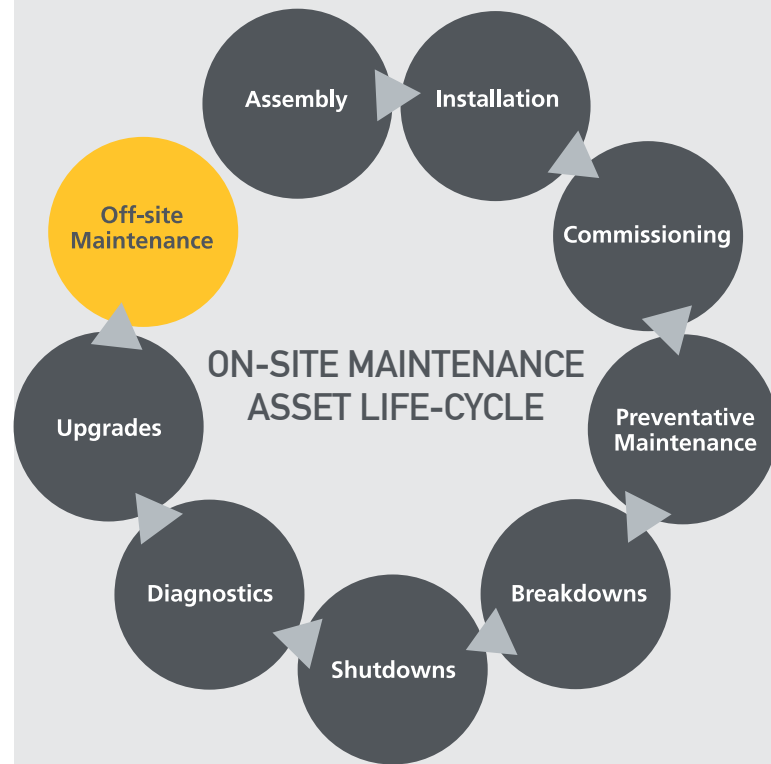
H-E Parts can offer fixed and mobile minerals processing plant asset management for the entire scope of on-site maintenance support work; from assembly to installation, to commissioning, diagnostics, shutdowns, breakdowns and plant upgrades. Planning, support, drafting and applications engineering are also conducted in-house which allows H-E Parts to provide a full-service support package for the entire asset life-cycle.

H-E Parts can provide project management, experienced engineers, planners, supervisors, service specialists/technicians and tradespeople for turn-key installations, maintenance shutdowns or failures, and provide preventative maintenance proposals and major refurbishment work globally.

All site personnel are inducted to client and site requirements and arrive at site with specialized tooling and logistical support. All H-E Parts service technicians are experienced, qualified and can competently work alongside the client's labor force or conduct all work independently to suit the requirement.

Specialist services include:

- Fixed and mobile plant installation and commissioning.
- Fixed and mobile plant preventative and corrective maintenance.
- Fixed and mobile plant shutdowns, breakdowns and upgrades.
- Crusher, feeder and screen repairs.
- Manganese mantle and liner change-outs.
- Chute and skip refurbishment.
- Supply and install customized wear solutions.



# OFF-SITE REPAIRS

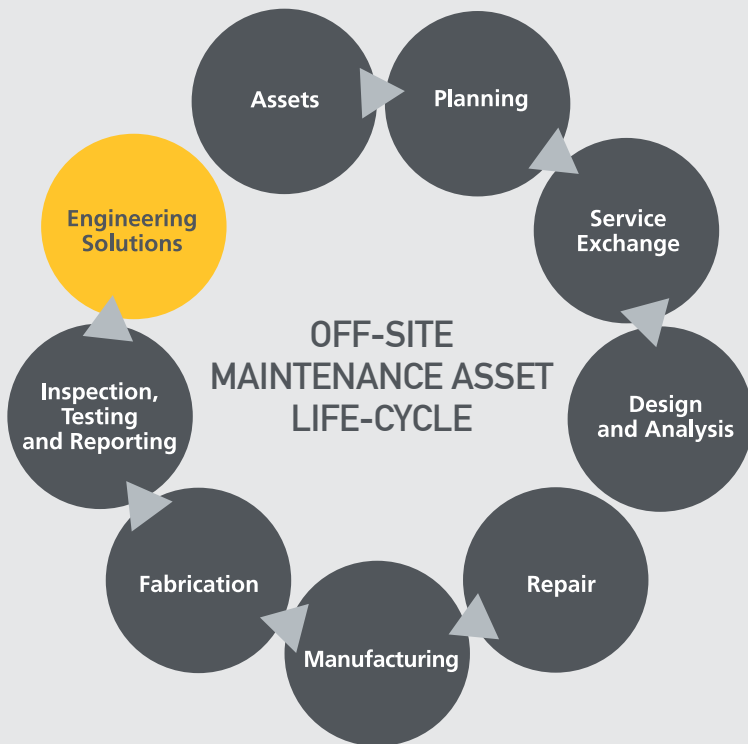
## WORKSHOP - STRIP, ASSESS, REFURBISH AND REPAIR

H-E Parts off-site service division is able to offer a tailored repair and maintenance service, and in conjunction with in-house engineering; provide clients with best practice service that provides added value by extending service intervals, improved plant performance and productivity, whilst reducing downtime and associated capital costs.

Maintenance regimes can be tailored to suit the individual client requirement or conform to industry standard specifications. This enables H-E Parts to provide the client with failure analysis reports, preventative maintenance recommendations, continuous improvement proposals and ongoing product and maintenance wear management strategies.

H-E Parts facilities located globally, operate fully equipped workshops for the specialist repair and remanufacture of minerals processing equipment and components, including all fixed and mobile plant up to the largest gyratory, jaw and cone crushers within the toughest deadlines.

### OFF-SITE MAINTENANCE ASSET LIFE-CYCLE







RELENTLESS  
PURSUIT OF  
THE BASICS

REPORT  
HAZARDS  
ALL OF THEM



# MANUFACTURING

## DESIGN, FABRICATION & ASSEMBLY

H-E Parts manufacturing facilities are strategically located in major mining regions. In conjunction with in-house engineering; H-E Parts is capable of providing quality medium-to-heavy fabrication and erection, machining and fitting and welding services.

To complement H-E Parts product and service offerings, the company has manufactured, tested and commissioned a large range of standard, and tailored fabricated steel structures and ore handling equipment including;

- Ore bins/hoppers.
- Trailer mounted crushers (VSI).
- Apron feeders.
- Impact tables.
- Conveyors.
- Chutes.
- Transport frames.
- Tailored crusher and chute wear components.





# ENGINEERING SOLUTIONS

H-E Parts can provide tailored, specialized in-house engineering, drafting and project management services to the mining, quarrying and materials processing industries globally. With vast project experience, H-E Parts is positioned to provide engineering solutions to service all types of fixed or mobile minerals processing plants, minerals handling and associated equipment. With this extensive experience throughout the mining and quarrying industries, H-E Parts offers customers the opportunity to benefit from this knowledge globally through transfer of best practices between the regions. H-E Parts dedicated engineering and drafting team play a pivotal role in providing value to the client, as expertise extends from industry professionals, to mechanical engineers, to QA/QC specialists.

## WEAR MANAGEMENT SOLUTIONS

H-E Parts wear management solutions were created in response to inefficient, unproductive minerals processing practices. Because H-E Parts is not limited to a single wear material type, our certified engineers are able to evaluate individual applications and select the best combination of materials for a given area and perform financial modeling to ensure that the most cost-effective solution is obtained.

H-E Parts offers an impressive range of wear products that include; a full range of LinerSafe™ manganese crusher liners, ProTech™ weld overlay and Q&T wear plate, bars, blocks and steel, rubber and polyurethane grinding mill liners and ProTech™ ceramic wear blocks. This allows H-E Parts to recommend and supply the most beneficial solution for any given client problem that will extend mean time to repair, improve reliability, reduce cost and increase efficiency.

Through a combination of in-service monitoring and post-removal analysis, H-E Parts has developed tools and processes to map wear patterns to ensure that liner performance can be continuously improved over time and altered when conditions change. This can be of great benefit to clients when these tools are combined with the extensive range of wear products currently offered by H-E Parts.

## QUALITY

H-E Parts places priority on quality to ensure we meet or exceed clients' expectations in design, products, services, and solutions globally.

Quality and compliance is an integral part of what we do at H-E Parts, and as such, we regularly review and improve our policies and practices to reflect this.

## ENGINEERED SITE-SPECIFIC LINER DESIGNS

H-E Parts liner development program goes above and beyond the normal industry practice of simply trialling a given set of liners, and instead uses all available information to provide a customized solution that will normally achieve targets on the first run and provide added value for any given operation.

Once the initial designs have been validated, H-E Parts applies site-specific demand management procedures to assist customers in determining the most cost-effective liner management policy. A tailored approach allows H-E Parts to ensure that liner management policies are compatible with other maintenance requirements, whether that is isolated to a single crusher or the processing plant as a whole.











## ENGINEERED PRODUCTS

H-E Parts is adept at providing solutions, even if this means designing, manufacturing and supporting a product from inception to fruition. H-E Parts prides itself on providing quality products that create value for our clients, and examples of these can be seen in H-E Parts engineered and manufactured products such as the; Auspactor™ Vertical Shaft Impact (VSI) crusher and the H-E Parts 1100HD Jaw Crusher. Both products were designed in-house for client and industry specific requirements and are now available to the industry.

Being able to provide innovative products allows H-E Parts to fulfill its motto of 'Innovation. Not Duplication™', and aids clients by offering continuous improvement opportunities for their specific application.

## CRUSHER PERFORMANCE MODELING

H-E Parts CrusherVision™ software is used in conjunction with their ChamberVision™ software to develop modified crushing cavities to satisfy specific customer targets. Depending on customer requirements, liner profiles can be changed to improve wear life, reduce power draw or increase tonnage. H-E Parts also has expertise with and utilizes Aggflo; a plant simulation and flow analysis package used to optimize complete crushing circuits.

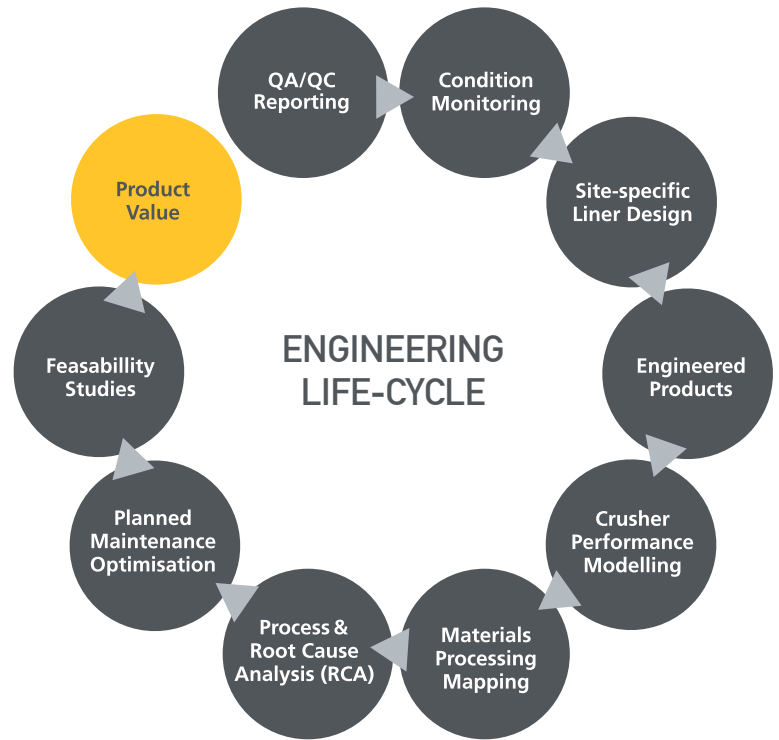
ChamberVision™ is H-E Parts proprietary wear modeling software and has been proven over many years to accurately predict wear performance in cone and gyratory crushers. More recently, H-E Parts has extended this capability to jaw crusher liners, providing a complete range of wear monitoring services.

ChamberVision™ allows H-E Parts to verify the expected performance of liner designs within hours, whereas conventional testing methods may take years to complete. By combining the capabilities of ChamberVision™ and CrusherVision™, liner performance can be predicted at all stages of the liner life, minimizing risk and allowing for accurate benchmarking figures to be set with a high degree of certainty,



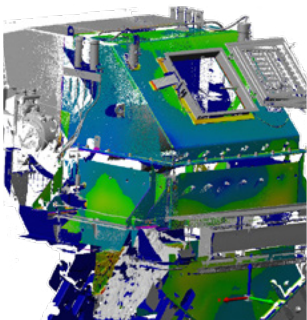


**“H-E PARTS DESIGNS COMPLETE CRUSHING CIRCUITS UTILIZING ITS EXISTING RANGE OF CAPITAL EQUIPMENT”**



## WEAR MANAGEMENT SERVICE

In line with our commitment to provide additional value to our customers, H-E Parts has launched ChuteVision™, which utilizes point cloud data captured from laser scanning devices. ChuteVision™ is designed to give accurate forecasts of remaining liner life as well as allowing individual liner or zone monitoring, graphical reporting and performance analysis. ChuteVision™ allows customers to plan liner change-outs more accurately, reducing wastage and minimizing costly stock levels.



## DESIGN FEASIBILITY STUDIES

H-E Parts can design complete crushing circuits utilizing its existing range of capital equipment and can also assist in performing independent evaluations and feasibility studies for third party plant designs. Capital cost and expenditure estimates are performed using established industry standard methods, with expected plant performance being evaluated in partnership with Bear Rock Solutions. This approach combines the expertise of one of the world's most respected consultants with a multidisciplinary team from H-E Parts, to ensure that financial, design and practical considerations are all taken into account.

As a result of these studies, H-E Parts is often able to identify opportunities for improvement at a very early stage, allowing users to begin continuous improvement program before the mine is even constructed. Issues such as maintenance scheduling and liner optimization are often overlooked until the plant is fully commissioned and production/utilization inefficiencies are exposed. However, if these issues are addressed initially, ramp-up times can be reduced, and new installations can become profitable within a shorter time frame.



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NOT DUPLICATION.™

# H-E PARTS, GLOBAL LOCATIONS, FOR GLOBAL SOLUTIONS.



H-E Parts International replacement parts are compatible with the makes and/or models of the third-party equipment described. H-E Parts International is not an authorized repair facility of these third parties and it does not have an affiliation with any manufacturers of these third-party products. All brands, original equipment manufacturer (OEM) part numbers or references are owned by the respective OEM entities or their affiliates. These terms are used by H-E Parts International for identification and cross reference purposes only and are not intended to indicate affiliation with, or approval by the OEM, of H-E Parts International or its products.



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