

YOUR TRUSTED TOTAL SOLUTIONS PROVIDER



www.trimaxmachinery.com



SCAN ME

25+ YEARS
TRUSTED BY CUSTOMERS

Trimax
Machinery

NH400

15+ YEARS
CRUSHER ASSEMBLY EXPERIENCE

OVER 30 CRUSHING PLANTS
INSTALLED IN VARIOUS SITES

OVER 20 CORE TECHNICIANS
DEDICATED FIELD TEAM

OVER 100 SUPPORT TEAM MEMBERS
IN VARIOUS APPLICABLE FIELDS

OVER 200 UNITS
HEAVY EQUIPMENT INSTALLED

TRIMAX MACHINERY
ABOUT US

DRIVING OUR EXCELLENCE

Trimax Machinery is an engineering company with its headquarters in Singapore, with subsidiary companies in Malaysia and Indonesia, as well as distributors in various other countries. Today, we have over 200 heavy equipment units in operation in various sites around the world.

SEEING BEYOND CRUSHERS



Trimax Machinery today is recognised as a valued premium solutions provider to the mining & aggregates industries. We are no longer merely a crushing equipment supplier. We provide unique solutions in several ways that no other industry suppliers can.

In recent years, we have strived to broaden our range of products and services to the mining and quarrying industry. This includes providing comprehensive on-site support and maintenance services to improve efficiency and equipment lifespan. advanced machinery

custom tailored to specific needs, and end-to-end functions such as civil work construction and contract manufacturing.

STRIVE TO PROVIDE UNMATCHED LOCAL SUPPORT

Whenever possible, Trimax Machinery strives to provide comprehensive on-site support and maintenance services essential for enhancing efficiency and extending the lifespan of equipment in your quarry operations. Regular maintenance checks ensure machinery operates at optimal performance, reducing downtime and costly repairs. Our skilled technicians conduct thorough inspections, promptly address issues, and implement preventive measures to avert future problems. Our proactive on-site maintenance assistance include calibration, lubrication, parts replacement, wear liner changes and equipment upgrades, tailored to meet specific operational needs.



YOUR SUPPORT, OUR PRIORITY

**MAINTENANCE ASSISTANCE**

TAILORED CUSTOMISED SOLUTIONS

Trimax Machinery stands at the forefront of the quarrying and mining industry, offering advanced, customized solutions tailored to meet the unique needs of our clients. From belt feeder hoppers, washing screens, and washing plants, iron ore separation and recovery, radial conveyors, modular skid mounted plants for quick set-ups, long distance overland conveyors to barge-loading jetting conveyors, Trimax Machinery is the go-to partner for companies seeking to optimize their quarrying and mining processes through cutting-edge customized solutions. With a

focus on innovation and reliability, reliability, Trimax Machinery integrates various machineries and equipment to develop bespoke solutions, ensuring performance and minimal downtime.

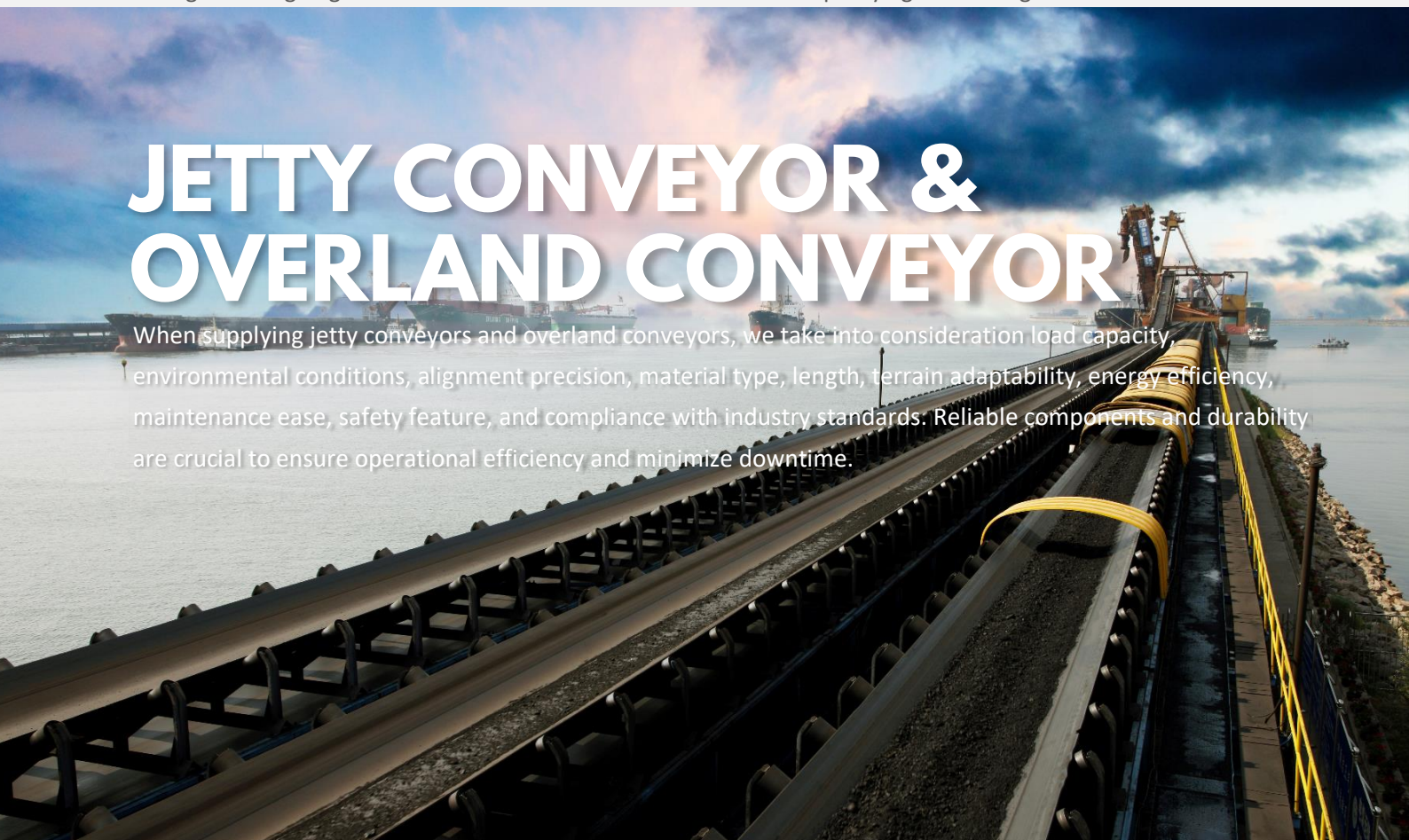
END-TO-END SOLUTIONS

**FINE WATER MIST DUST SUPPRESSION
& INERTIAL SETTLEMENT**

Trimax Machinery excels in providing end-to-end solutions for the quarrying and mining industry, ensuring seamless project execution from start to finish. Our comprehensive offerings begin with precise land surveys to map out sites with unparalleled accuracy. Following the survey phase, Trimax Machinery undertakes extensive civil work, infrastructure development, supply of machinery and equipment, and even contract manufacturing once the project is completed. Our expertise spans the entire project life-cycle, from initial planning and design to the final deployment and maintenance of equipment. Trusted by industry leaders, Trimax Machinery is the preferred partner for comprehensive, reliable, and efficient quarrying and mining solutions.

JETTY CONVEYOR & OVERLAND CONVEYOR

When supplying jetty conveyors and overland conveyors, we take into consideration load capacity, environmental conditions, alignment precision, material type, length, terrain adaptability, energy efficiency, maintenance ease, safety feature, and compliance with industry standards. Reliable components and durability are crucial to ensure operational efficiency and minimize downtime.



CONTRACT CRUSHING

OPERATIONAL EFFICIENCY

Access to skilled operators and well-maintained equipment.

FOCUS ON CORE ACTIVITIES

Clients can focus on their core business operations while outsourcing the crushing operation.

SCALABILITY

Ability to handle varying product sizes and requirements.





In recent years, we have leveraged our advanced engineering technology, numerical control systems, and extensive practical experience to incorporate “green” initiatives, “low-carbon” and sustainable economic development. With our superior product design and development, manufacturing, project construction, and installation, we focus on EPC (Engineering, Procurement, and Construction) projects, delivering complete solutions aimed at enhancing production and efficiency, whilst reducing investment and operating cost.



From initial site assess to design, fabrication, installation, commissioning, after-sales service to contract crushing.



GREEN ECO-CONSCIOUS COVERED PLANTS

Maximum dust control and noise reduction, whilst maintaining consistent operational efficiency without interruptions from weather related factors.

BALL MILL

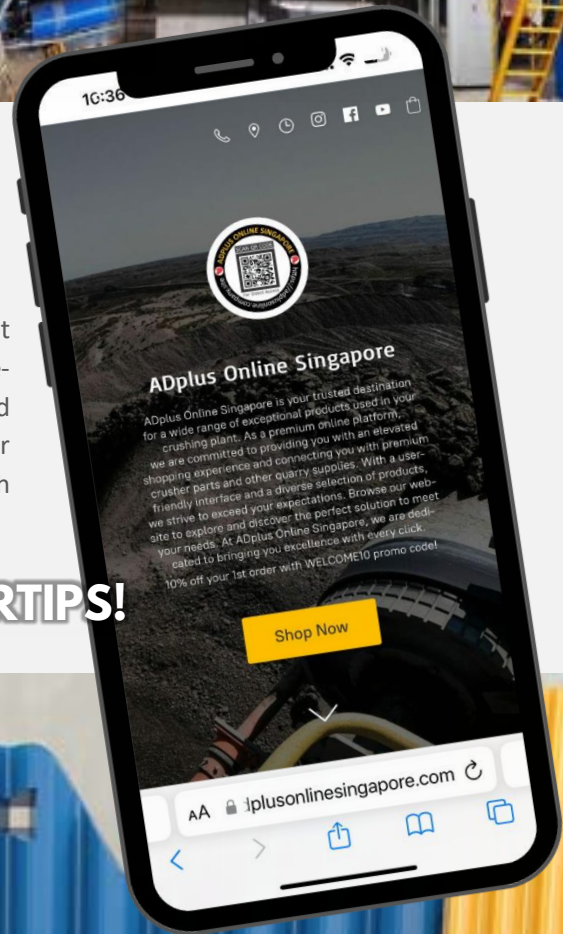
For fine grinding required of many types of minerals for subsequent processing.

TRUSTED OVER 25 YEARS

NOW with a new way to order for your quarry.

Our ADplus Online shopping platform represents our newest advancement, ensuring unmatched support and round-the-clock access to our products. Enjoy seamless browsing and customer service whenever you need, reaffirming our commitment to bring you reliable products coupled with convenience and customer satisfaction.

CONVENIENCE AT YOUR FINGERTIPS!



PRE-CONSTRUCTION DESIGN

Site Assessment and Planning

- Survey** Conducting a thorough survey of the site to understand the existing topography, soil types, and other geological features.
- Design** Developing an overall site plan that specifies the locations where various machineries and conveyors will be installed.

Foundation Design

- Load Design** Considering static and dynamic loads from the machineries.
- Stability** Ensuring that the foundations and structures remain stable under all load conditions.

Footprint Design

- Planning** Planning the shape, size, and orientations of the steel structures / buildings within the available land.

Electrical Design

- Calculations** Calculating adequate power requirements to meet the demands of all machineries and conveyors.
- Schematics** Creating detailed electrical schematics and diagrams once the project is confirmed.

PROFESSIONAL SUPPORT FROM THE BEGINNING

LAND SURVEY UPON REQUEST

Able to conduct a precise measurement of land boundaries & features using advanced tools for mapping. Ensuring accurate land management and development.

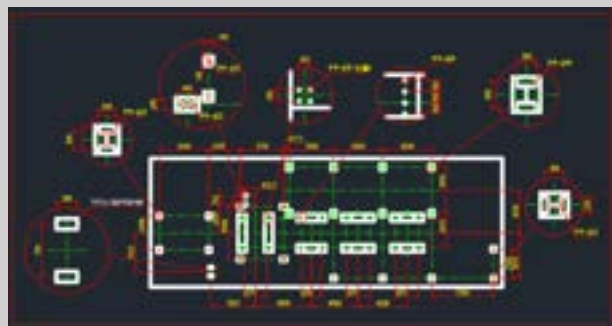


FOUNDATION DESIGN

Upon request, we can assist to assess machinery loads and structural requirements to determine suitable types such as shallow or deep foundations, ensuring stability and longevity of the buildings and steel structures

ELECTRICAL DESIGN

Understand the electrical requirements of the project, including power demand, load, and specific functionalities.



FOOT-PRINT DESIGN

Minimizes land use whilst maximizing efficiency and functionality of structures.

Controlled Environment

Fabrication in a controlled setting allows for stricter quality control measures, ensuring higher quality and consistency.

Predictable Timelines

Pre-assembly can lead to more predictable project timelines, improving project management and coordination.

Consistent Quality

High quality fabrication and precise assembly ensure that the structural integrity of the components is maintained, leading to safer and more reliable structures.



CIVIL CONSTRUCTION UPON REQUEST



**LARGE FABRICATION CAPACITY
WITH PRE-ASSEMBLY**

Accelerated Timelines

Integrated services can speed up project timelines by reducing the time needed for coordination between different contractors.

Accountability

With a single entity responsible for the entire project, there is a greater accountability for the quality and performance of the work.



NOISE REDUCTION

Fully covered plants contain and absorb sound within the structures. Thereby, reducing noise pollution in the surrounding area and improving working conditions for operators.

DUST SUPPRESSION

Fully covered plants help contain the dust within the structures, reducing airborne particles and improving air quality in the surrounding area.



GALVANIZED STEEL UPON REQUEST

Cost-Effective

While the initial cost of galvanised steel might be slightly higher than non-galvanized steel, the long-term savings in maintenance and replacement costs make it a cost-effective choice.

Long-Lasting Protection

The zinc coating protects the steel from corrosion, extending the lifespan of the structure.

Durability

The robust nature of galvanized steel reduces the need for frequent maintenance and repairs.



AGILITY SERIES

Skid-Mounted Structures Designed for Fast Set-up.

We supply a wide range of equipment for crushing, screening, and various mineral processing applications including jaw crushers, cone crushers, horizontal shaft impact crushers, vertical shaft impact crushers, and washing equipment.

EQUIPMENT SUPPLY



LARGE EQUIPMENT SUPPLY STRENGTH

Large equipment supply strength, modern manufacturing machineries, immense engineering capability and our expertise in electrical & hydraulic control ensure that you receive the support you need to complete your projects on time and on target.



**ELECTRICAL & HYDRAULIC
CONTROL CAPABILITY**



MODERN MANUFACTURING



ENGINEERING CAPABILITY

CONVEYOR IDLER

Our conveyor idlers include carrier idlers, return idlers, and impact idlers. Efficient and reliable for conveyance of bulk material.



Each of these components play a crucial role in the operation and efficiency of conveyor systems and industrial machinery. Their designs and materials are tailored to specific industry needs, providing durability, efficiency, and reliability in material handling and processing applications.

ELECTRICAL MOTOR

Designed to operate efficiently across a range of speeds and loads.



RUBBER CONVEYOR BELT

Durable and able to withstand harsh conditions. Impact resistant conveyor belts able to withstand the impact of sharp and large particle size ores, especially for primary and secondary crushing sections. Abrasion resistant conveyor belts especially suitable for medium to long distance transportation in mines, ports, electrical power, metallurgy, coal, and other industries.

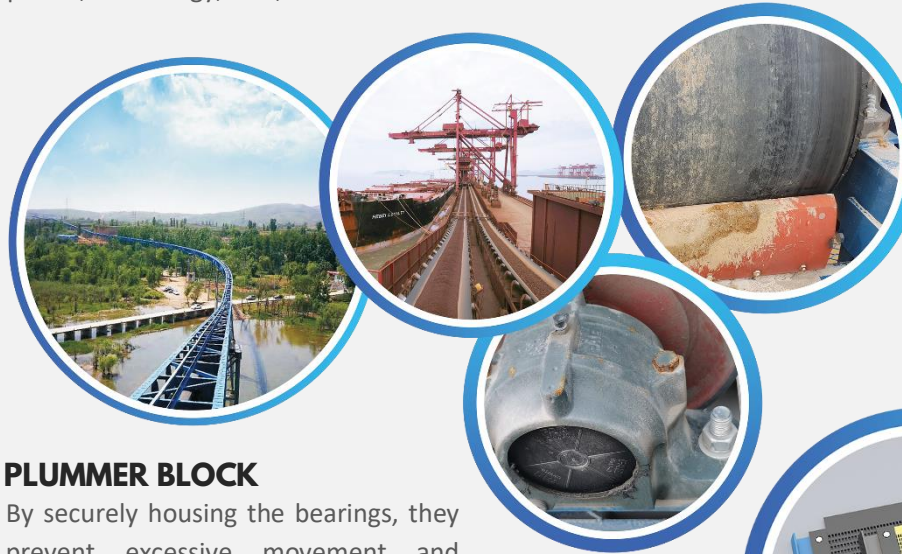
VIBRATORY MOTOR

Commonly used on dewatering screens and pan feeders.



BELT CLEANER

Primary and secondary belt cleaners are available. They remove material adhering to the surface of the conveyor belt. They help maintain belt cleanliness and prevent material carry, improve conveyor efficiency, reduce maintenance, and extend belt life.



PLUMMER BLOCK

By securely housing the bearings, they prevent excessive movement and ensure that the shaft operates smoothly without unwanted vibrations or misalignment.

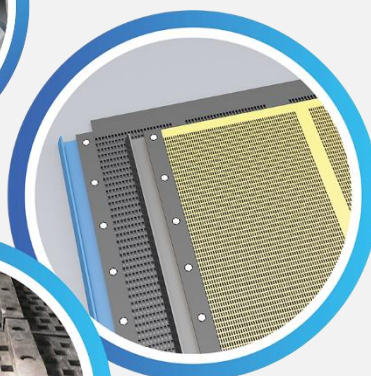
RUBBER MESH

Good resilience and resistance to wear. Able to greatly reduce noise levels.



PU MESH

Our PU meshes offer high durability, abrasion resistance, and flexibility.



SPEED REDUCERS

Our speed reducers are designed efficiently to minimise energy losses and ensure smooth operation.

OVERBAND MAGNET

Span across the width of a conveyor belt. It automatically removes ferrous metal contaminants from the material flow.



METAL DETECTOR

Installed on the conveyor and assists in protection of equipment.

SUSPENDED MAGNET

Suspended above a conveyor belt to attract and remove ferrous metal contaminants from conveyed material.



We offer training in terms of both Theoretical Classroom Training as well as Practical Hands-On Training.

CONCEPTUAL UNDERSTANDING

Operators gain a comprehensive understanding of the crushing plant's machinery, processes, and the principles behind their operation. This knowledge is crucial for troubleshooting and optimizing plant performance.

TECHNICAL KNOWLEDGE

Classroom training covers the technical specifications and operational limits of the equipment. This understanding helps operators make informed decisions about machine settings and maintenance schedules.



SAFETY AWARENESS

Classroom training emphasizes safety protocols and procedures. Understanding the theoretical aspects of safety helps operators recognize potential hazards and understand the importance of following safety guidelines to prevent accidents.

PROBLEM-SOLVING SKILLS

Hands-on training exposes operators to real-life challenges, enhancing their ability to diagnose and resolve issues quickly.



ENGAGEMENT & RETENTION

Active involvement in practical tasks reinforces theoretical concepts. Operators are more likely to retain and understand information when they can see and experience it firsthand.

CONFIDENCE BUILDING

Practical training builds confidence in operators' abilities to handle equipment and perform their duties effectively. This confidence is essential for maintaining high performance and safety standards.



The integration of unmatched on-site support with robust maintenance support is essential for the seamless operation of a crushing plant.

IMMEDIATE ASSISTANCE

On-site support provides immediate assistance when issues arise. Quick response times are essential for diagnosing problems and implementing solutions, minimising the impact on production schedules.

EXPERTISE AVAILABILITY

Having our technicians on-site means access to specialised knowledge and experience. We have the experience to provide insights and recommendations that operators might not have, ensuring optimal equipment performance.

TAILORED SOLUTIONS

On-site support allows for the development of tailored solutions specific to the plant's needs. Our technicians can assess the unique operational context and suggest modifications or improvements that are most effective.

PREVENTIVE MAINTENANCE

Regular maintenance schedules help identify and address potential issues before they escalate into significant problems. This proactive approach reduces the likelihood of unexpected breakdowns and extends the lifespan of equipment.

CONFIDENCE BUILDING

Preventive maintenance is more cost-effective than reactive repairs. Regularly servicing equipment prevents major failures, saving the plant from expensive emergency repairs and associated downtime costs.

**UNPARALLELED
ON-SITE SUPPORT**

MINIMISED DOWNTIME

Effective maintenance support ensures that any necessary repairs are conducted swiftly and efficiently, minimising downtime. Reduced downtime translates directly into increased productivity and profitability.

**MAINTENANCE
SUPPORT**

WASHING PLANT



RECOVERY & DEWATERING MODULE

Our sand units consist of a hydrocone and dewatering screen. This module eliminates loss of quality fines to ponds/lagoons and reduces moisture content of the final sand product.

CLEANING & SCREENING MODULE

All washing screens are fitted with water spray bars and polyurethane wear liners and can be fitted with a range of screening media options including polyurethane, wire or rubber.



Thickener Tank

Waste water from your washing plant is delivered to the Thickener Tank to allow maximum time for material settlement.

Water Tank

Stores and allows clean water to be introduced to the washing plant.

Sludge Tank

Temporarily stores the sludge from the Thickener Tank before it is fed into the filter press.

Filter Press

Capable of separating liquid from solids under pressure.

RECYCLING MODULE

Water treatment is composed of elements such as the Thickener Tank, Flocculent Tank, Water Tank, Sludge Tank/Silo and Filter Press.

STEEL TUNNEL

The durability of corrugated steel tunnels ensures longevity and minimal maintenance, reducing downtime and operational costs.



BELT FEEDER

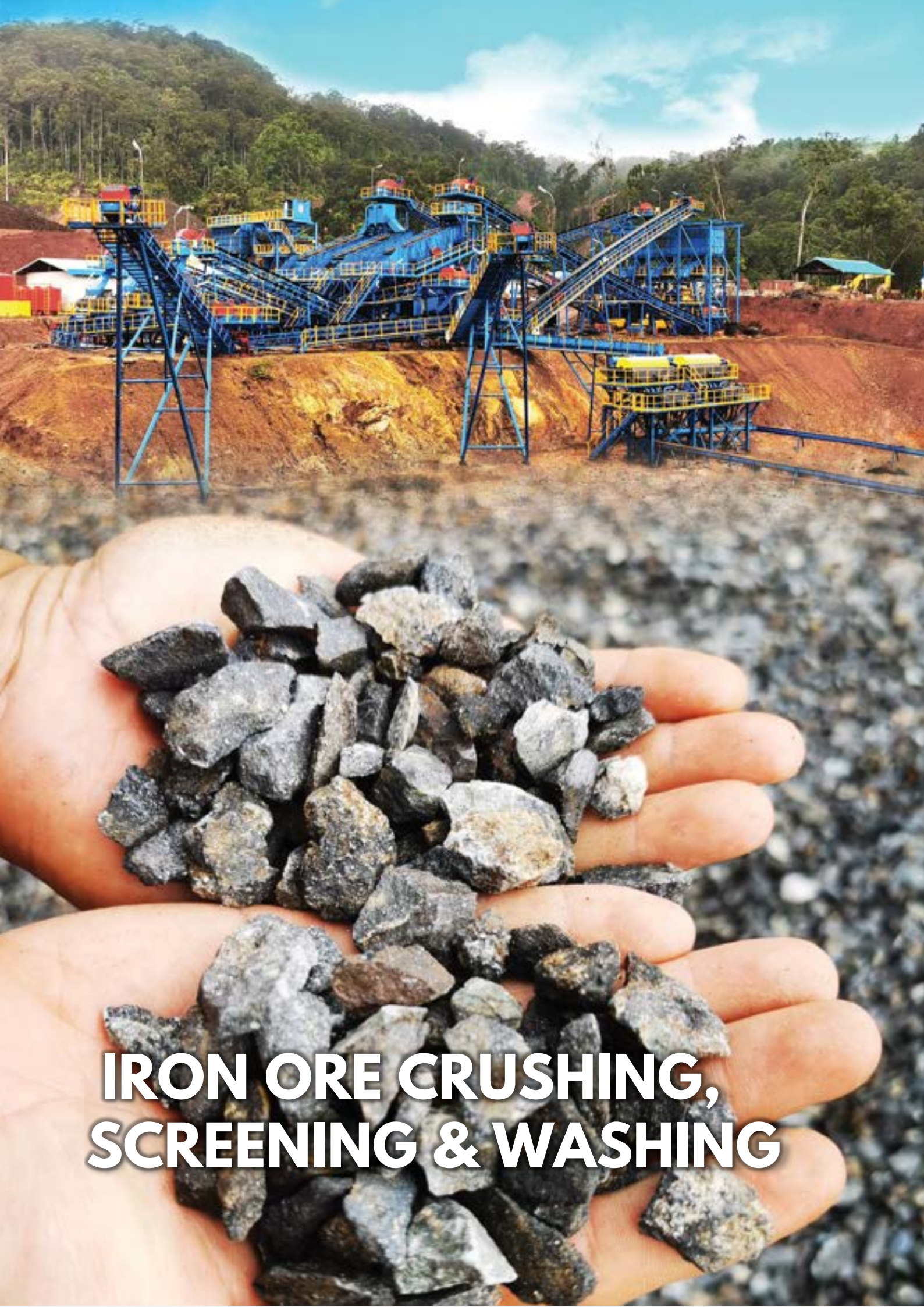
Waste water from your washing plant is delivered to the Thickener Tank to allow maximum time for material settlement.



MAGNETIC SEPARATOR

Commonly used in iron ore plants, magnetic separators efficiently separate magnetic from non-magnetic materials, improving downstream processing and product value. Essential for mining operations, they boost recovery rates and ensure the production of higher-grade concentrates, contributing to overall operational efficiency.





**IRON ORE CRUSHING,
SCREENING & WASHING**



TRIMAX TRENT JAW CRUSHER

HEAVY DUTY JAW CRUSHER

HEAVY DUTY TRENT JAW CRUSHER

The Trimax Trent heavy duty jaw crusher is our top-of-the-range single-toggle jaw crusher. It is a rugged heavy duty, high capacity jaw crusher capable of crushing any type of feed material. It was designed and engineered to give reliable, high performance in every primary crushing application. Incorporating several design improvements has strengthened its position as a tough and durable jaw crusher.

DESIGN IMPROVEMENTS THAT MATTER

For all models, the Trimax Trent jaw crusher is supplied with a versatile integral motor base. Reducing the need for additional space and long V-belts. With the operator in mind, the Trimax Trent jaw crusher is equipped with hydraulic wedge closed side setting (CSS) adjustment as standard. Thus, improving the productivity and minimising down-time for the quarry.



It is also designed for easy maintenance with centralised greasing points and installed with durable FAG bearings for added assurance that you will receive many years of service from your Trimax Trent jaw crusher.



In addition, the Trimax Trent jaw crusher offers several optional add-ons to enhance its total package as a modern jaw crusher suitable for your quarry.

MONITORING SENSORS

Optional sensors for temperature monitoring of bearings can be supplied with your Trimax Trent jaw crusher, enabling real-time monitoring of the bearings.



AUTO-GREASING

Optional auto-greasing of the Trimax Trent jaw crusher's bearings is now possible with the supply of a lubrication pump system.

Frequent and small measured quantities of greasing gives the bearings better protection as opposed to the common practice of replenishing grease only once before every shift.

MODERN DESIGN IMPROVEMENTS AT A GLANCE

Increased Crushing Capacity that will not only meet but exceed your expectations.

Strengthened Steel Frame Construction to handle the most severe crushing conditions.

Higher Reduction Ratios due to efficient crushing.

Large FAG Bearings to withstand the toughest crushing operating loads & pressures.

Versatile Integral Motor Base is provided. Reducing the need for space & longer v-belts.

Faster Adjustment of Closed Side Setting by using a wedge setting adjustment system.



CRUSHING CAPACITIES

TRENT SERIES

MODEL	MOTOR KW (HP)	MAX FEED MM	FEED OPENING MM	NOMINAL CAPACITY IN TPH WITH CSS IN MM											WT. KG
				50	75	100	125	150	175	200	225	250	275	300	
36-25	90 (125)	620	930 x 580 (36" x 25")	125	160	195	225	255	290						18,100
42-30	110 (150)	750	1070 x 700 (42" x 30")		215	260	305	345	390	420					29,500
48-36	160 (200)	875	1220 x 910 (48" x 36")		280	330	385	440	495	535	570				42,300
54-42	185 (250)	910	1370 x 1070 (54" x 42")			395	470	535	615	670	720				62,900

Performance figures are approximate and only give an indication of what the crusher can do. Degree of reduction, material's crushability, size of feed material, and moisture content of feed material, etc. all affect crusher performance.



The product graph and the percentage of the crusher product that is smaller than the closed side setting (square hole, mm) is dependent on the crushability of the material, size distribution of the feed material, as well as other factors.





TRIMAX TRENT JAW CRUSHER

Heavy Duty Crushing for Heavy Duty Needs.

Penghancuran Tugas Berat untuk Kebutuhan Tugas Berat.



TRIMAX JC JAW CRUSHER

UNRIVALLED RELIABILITY

FEATURES THAT MATTER

The Trimax JC heavy duty jaw crusher has been designed with unrivalled reliability in mind. It has several exceptional in-built features that will meet your material reduction requirements.

HIGH CAPACITY

- ❖ "V" Shaped Symmetrical Crushing Chamber
- ❖ Deep Crushing Cavity
- ❖ Small Nip Angle
- ❖ Appropriate High Rotation Speed
- ❖ Large Aggressive Stroke

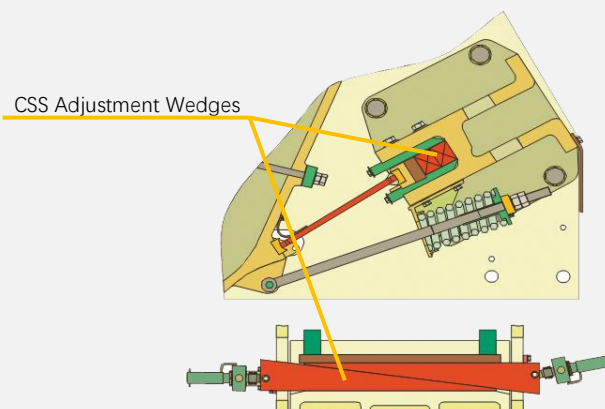
These attributes collectively contribute to maximising the capacity and productivity of the equipment, making it well-suited for demanding crushing applications.

LARGE BEARINGS

The Trimax JC heavy duty jaw crusher is installed with large bearings that allows it to have a high load-bearing capacity and enables a longer service life.



CLOSED SIDE SETTING (CSS) ADJUSTMENT



The use of wedges to adjust Close Side Setting (CSS) allows convenient operation and faster adjustment for the operator.

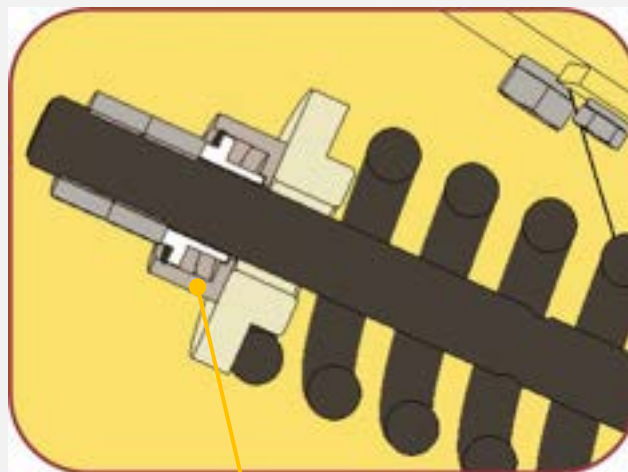
INTEGRATED MOTOR STAND DESIGN

The Trimax JC Jaw Crusher comes standard with an integrated motor stand design.

- ❖ Simplifies Site Preparation
- ❖ Faster & Easier Installation at Site
- ❖ Small Foot-Print
- ❖ Belt is Naturally Tensioned. Less Likely to Slip and Easier to Adjust.

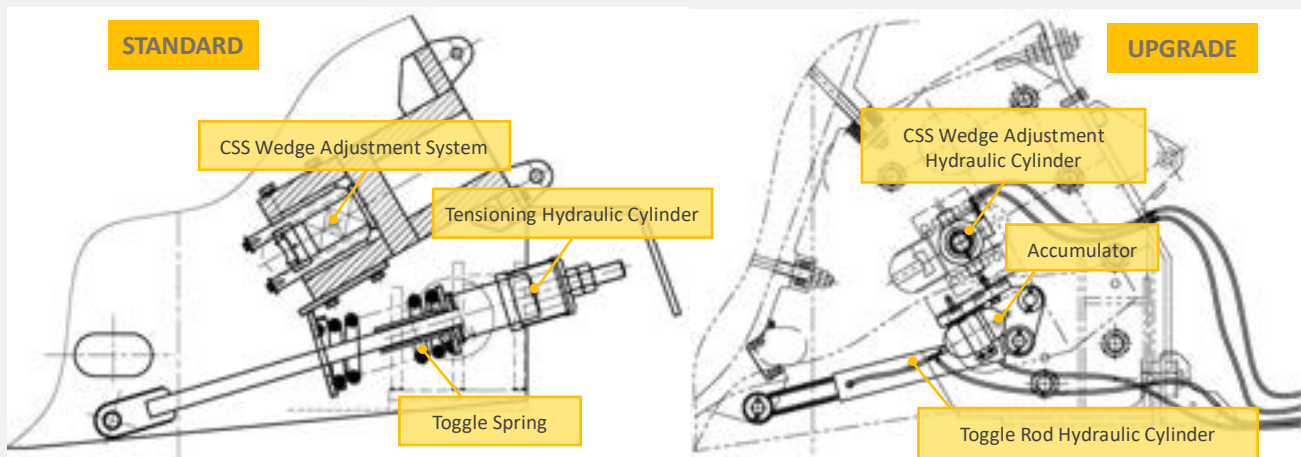
ENHANCED TOGGLE SPRING ASSEMBLY

The inclusion of a thrust bearing within the toggle spring assembly serves multiple purposes. Primarily, it provides crucial support for handling heavy loads, ensuring smoother functionality and reduced wear on components. Additionally, the presence of the thrust bearing facilitates quick and straight-forward adjustments during tensioning and loosening of the spring. This feature significantly saves time and effort for operators, allowing them to maintain optimal spring tension with minimal downtime or hassle.



Thrust Bearing

CONFIGURATION OPTIONS



CRUSHING CAPACITIES

JC SERIES

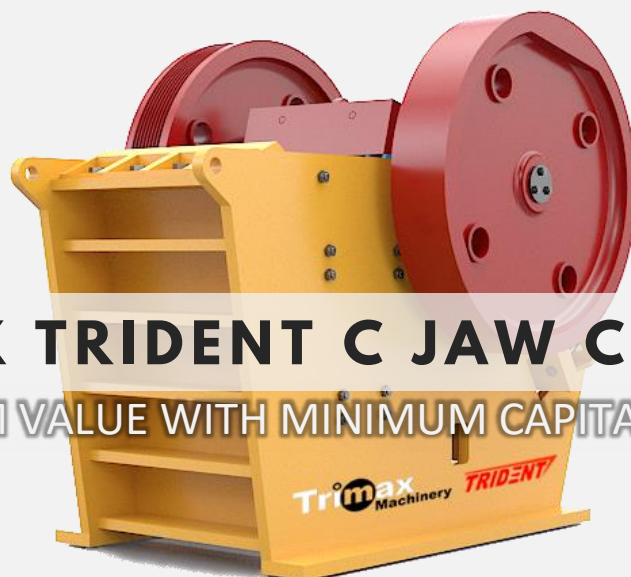
MODEL	MOTOR KW (HP)	MAX FEED MM	FEED OPENING MM	NOMINAL CAPACITY IN TPH WITH CSS IN MM												
				60	70	80	90	100	125	150	175	200	225	250	275	300
JC96	90 (125)	460	930 x 580	105 135	125 155	140 180	160 200	175 225	220 280	265 335	310 390					
JC106	110 (150)	590	1060 x 700		150 185	165 215	190 235	205 265	255 325	305 385	355 450	395 500				
JC116	132 (175)	610	1150 x 760		165 205	180 235	205 255	225 285	270 345	320 405	370 465	410 520				
JC120	160 (200)	700	1200 x 870		175 240	195 270	210 305	235 325	285 395	340 475	385 540					
JC130	185 (250)	800	1300 x 1000					270 369	325 446	380 523	435 600	490 677	545 754	600 831		
JC150	200 (300)	960	1400 x 1200						340 470	400 555	460 635	520 720	580 800	640 880		
JC160	250 (350)	960	1600 x 1200							430 610	495 695	560 790	625 880	685 965	745 1055	815 1145
JC200	400 (500)	1200	2000 x 1500								630 890	710 1000	785 1105	865 1215	940 1320	1015 1435

Performance figures are approximate and only give an indication of what the crusher can do. Degree of reduction, material's crushability, size of feed material, and moisture content of feed material, etc. all affect crusher performance.

Updated December 2024

TRIMAX TRIDENT C JAW CRUSHER

MAXIMUM VALUE WITH MINIMUM CAPITAL INVESTMENT



ABOUT THE TRIDENT C JAW CRUSHER

The Trimax Trident C Jaw Crusher is a robust single-toggle jaw crusher developed through a close partnership with a renowned French crusher manufacturer. Compared to other jaw crushers of similar size, the Trimax Trident C Jaw Crusher offers significantly higher production throughput, lower energy consumption, and enhanced durability thanks to its reliable steel frame structure.

Available in 2 popular models, the Trimax Trident C Jaw Crusher serves the mining and aggregate industries with reliable, high performance at a competitive price. This means you get maximum value with minimum capital investment.

It also features user-friendly design elements that make maintenance easier and more efficient, delivering high performance and reliability for a range of crushing applications.

IDENTICAL JAW PLATES

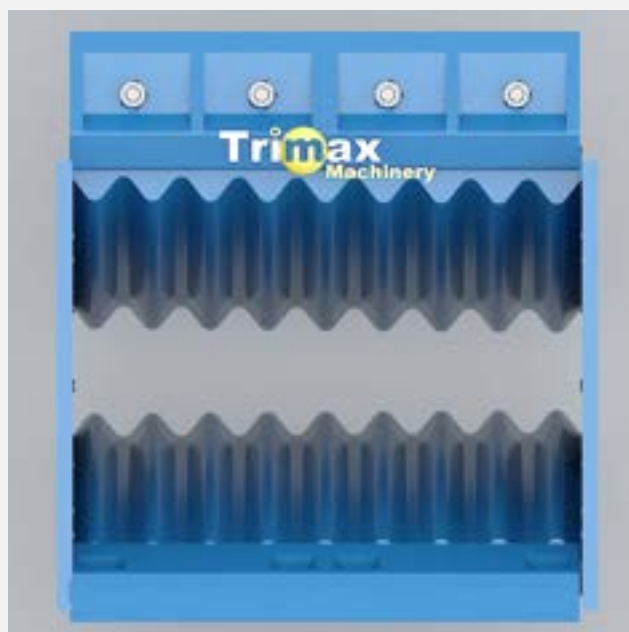
The fixed and swing jaw plates of the Trimax Trident C Jaw Crusher are specifically designed to be identical and interchangeable, providing greater operational flexibility and reducing downtime. This clever design allows both jaw plates to be rotated 3 or 4 times before needing replacement, significantly extending their wear life by up to 50%. By maximising the usage of each plate, this unique feature reduces the frequency of replacements and minimises the need to keep a large inventory of spare parts, ultimately



Improving operational efficiency and lowering maintenance costs of the crusher.

INCREASED ABILITY TO CRUSHER

The Trimax Trident C Jaw Crusher features identical jaw plates, resulting in a tooth-to-tooth design. This design ensures uniform engagement between the plates during operation, maximising its crushing efficiency.



By evenly distributing pressure across the entire surface, the crusher can handle even the hardest materials with ease. This tooth-to-tooth configuration enhances grip on tough materials, allowing for better fracture and reduced wear, ultimately boosting performance and durability in demanding crushing applications.



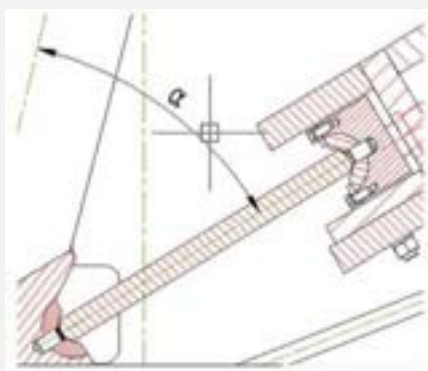
WIDER JAW OPENING

The top of the swing jaw is engineered with a wider outward angle, enhancing its ability to accommodate larger feed material. This design directs material away from sensitive areas, like the bearings, preventing damage from excessive wear or impact. The deflector plate benefits from this wider angle, as it can better deflect oversized feed material, ensuring smooth operation. By protecting the bearings, which is a key component, this design improves the crusher's overall efficiency and longevity.



SUPERIOR TOGGLE ASSEMBLY DESIGN

The toggle plate in the Trimax C Jaw Crusher features an adjustable acute angle, enabling operators to fine-tune the angle for optimal crushing efficiency. This flexibility ensures efficient crushing, even when the jaw plates are nearly worn out, prolonging their usability and reducing downtime.



Additionally, the curvature design of the toggle plate and toggle seats results in reliable power transfer. This enhances overall crushing performance while minimising mechanical stress. Moreover, this design also contributes to noise reduction during operation, making the crusher not only efficient but also quieter and more operator-friendly.

CRUSHING CAPACITIES

TRIDENT C SERIES

MODEL	MOTOR KW (HP)	MAX FEED MM	FEED OPENING MM	NOMINAL CAPACITY IN TPH WITH CSS IN MM											WT. KG
				75	90	100	115	125	150	180	200	220	250	275	
C1008	110 (150)	750	1020 x 800	200	220	240	270	280	335	380	410	450	500		23,000
C1210	132 (180)	875	1180 x 1000	270	310	340	380	405	470	550	605	660	740	810	33,200

Performance figures are approximate and only give an indication of what the crusher can do. Degree of reduction, material's crushability, size of feed material, and moisture content of feed material, etc. all affect crusher performance.

TRIMAX PFQ HORIZONTAL SHAFT IMPACTOR

UNBEATABLE PERFORMANCE

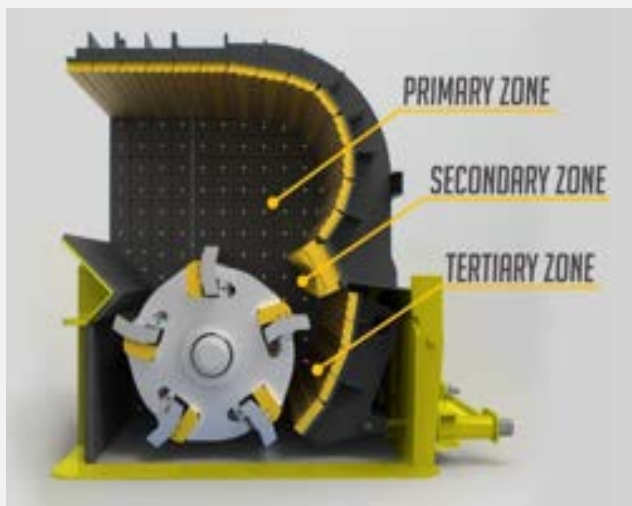
HIGH PERFORMANCE HSI

Trimax PFQ Horizontal Shaft Impact Crusher (HSI) features a combination of optimized rotor design, wear liner material, and crushing chamber design. This combination has proven revolutionary in improving capacity, product quality and in reducing operating and wear costs.

3 CRUSHING ZONES

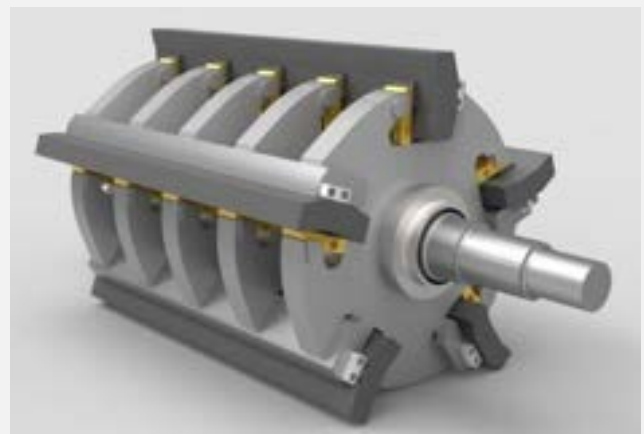
The PFQ Horizontal Shaft Impact Crusher has 3 innovative crushing zones within its crushing chamber design.

These three innovative crushing zones enable it to achieve higher reduction ratios, high production volumes, and better shaping.

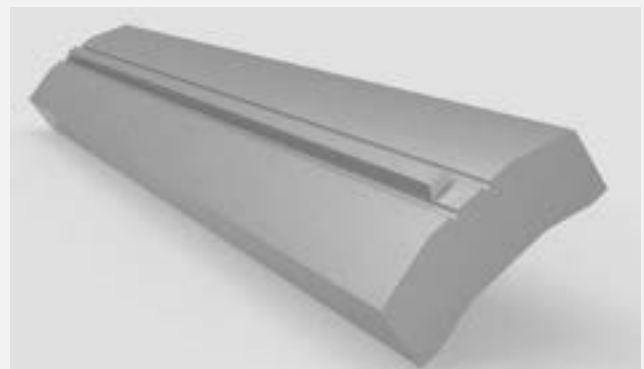


DESIGN FEATURES THAT MATTER

A combination of optimized rotor design and high rotational inertia allows higher crushing yields and greater crushing ratios.



Innovative C-shaped hammers / blow bars made of heavy-duty wear alloy, ensure the stability of the output product shape and particle size distribution throughout its wear life.



CRUSHING CAPACITIES

PFQ SERIES

MODEL	MOTOR KW (HP)	MAX FEED MM		OUTPUT SIZE	CAPACITY TPH
		150 MPa	250 MPa		
PFQ1108	75 (100)	300	180	≤ 30mm (80 – 90%)	80
PFQ1110	110 (150)	400	200	≤ 35mm (80 – 90%)	110
PFQ1113	132 (175)	400	200	≤ 40mm (80 – 90%)	140
PFQ1310	160 (215)	500	200	≤ 40mm (80 – 90%)	180
PFQ1313	200 (270)	500	250	≤ 40mm (80 – 90%)	225
PFQ1315	250 (335)	500	300	≤ 40mm (80 – 90%)	280
PFQ1320	2 x 160 (2 x 215)	500	300	≤ 50mm (80 – 90%)	350
PFQ1520	2 x 250 (2 x 335)	600	300	≤ 50mm (80 – 90%)	500

The product graph and the percentage of the crusher product that is smaller than the closed side setting (square hole, mm) is dependent on the crushability of the material, size distribution of the feed material, as well as other factors.

The discharge gap of the PFQ Horizontal Shaft Impactor can be easily adjusted according to the distribution size and gap requirements of the finished product.



The standard modular impact plates and side liners are highly interchangeable within the crushing chamber, enabling maximum versatility. This results in higher utilisation rates and longer service wear life.





TRIMAX NS & NH CONE CRUSHERS

Heavy Duty Cone Crushers

NS & NH CONE CRUSHERS

We have incorporated the latest cone crushing technology with field proven crushing concepts, and applied them in our range of heavy duty cone crushers.



WHY SIMPLY BETTER CRUSHERS

The Trimax range of heavy duty cone crushers consists of the NS series cone crusher suitable for secondary crushing applications and the NH series cone crusher suitable for tertiary crushing applications.

All Trimax cone crushers are high-speed cone crushers of heavy duty construction, with high reliability and durability that give exceptional production capacity relative to their size.

As a standard safety feature within the Trimax NH series cone crusher, the accumulator & hydraulic system functions as an Automated Overload Protection.

With the operator in mind, Trimax cone crushers are equipped with hydraulic closed side setting (CSS) adjustment at the push of a button. It is also designed for easy maintenance and is installed with SKF and FAG/INA bearings for added assurance that you will receive many years of service from your Trimax cone crusher.



DYNAMIC SETTING ADJUSTMENT

Closed Side Setting (CSS) can be hydraulically adjusted at the push of a button even when the crusher is under load.

EASY MAINTENANCE

All major components of the crusher can be disassembled from above, enabling easy maintenance.

DURABLE MAIN SHAFT BEARING



PREMIUM
RANGE ONLY



Alternative NSX / NHX spider
bushing design available!

A spherical plain bearing is used instead of a conventional spider bushing, improving bearing life due to minimised resistance to the movement of the main shaft. This allows better alignment and extends the life of the eccentric and bronze bushings. Alternatively, the spider bushing design is available for customers who are more familiar with this design.

MAXIMUM IN-BUILT VERSATILITY

A key design advantage of the Trimax cone crusher over our competitors is its in-built versatility. With its wide range of manganese liner options and multiple eccentric throw selection, it has the widest range of versatility available in the market and is capable to handle any type of crushing application.

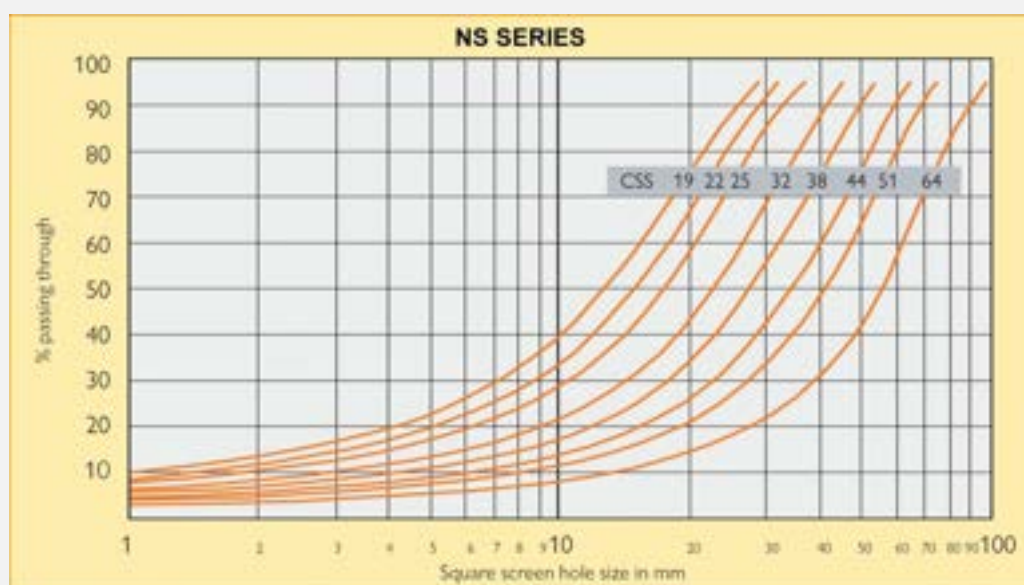


CRUSHING CAPACITIES

NS SERIES

MODEL	MOTOR KW	MAX FEED MM	NOMINAL CAPACITY IN TPH WITH CSS IN MM												
			22	25	29	32	35	38	41	44	48	51	54	60	64
NS300	160	EC 360		180	220	230	280	290	305	310	315	310			
		C 300	150	185	225	240	255	270	280	265					
NS400	220	EC 450				335	390	425	460	465	470	465	455		
		C 400			335	380	390	410	405	400	390	335			
NS600	315	EC 560							475	560	650	690	790	855	900
		C 500						490	510	590	700	725	755	820	790

Performance figures are approximate and only give an indication of what the crusher can do. Eccentric throw, degree of reduction, material's crushability, size of feed material, and moisture content of feed material, etc. all affect crusher performance.



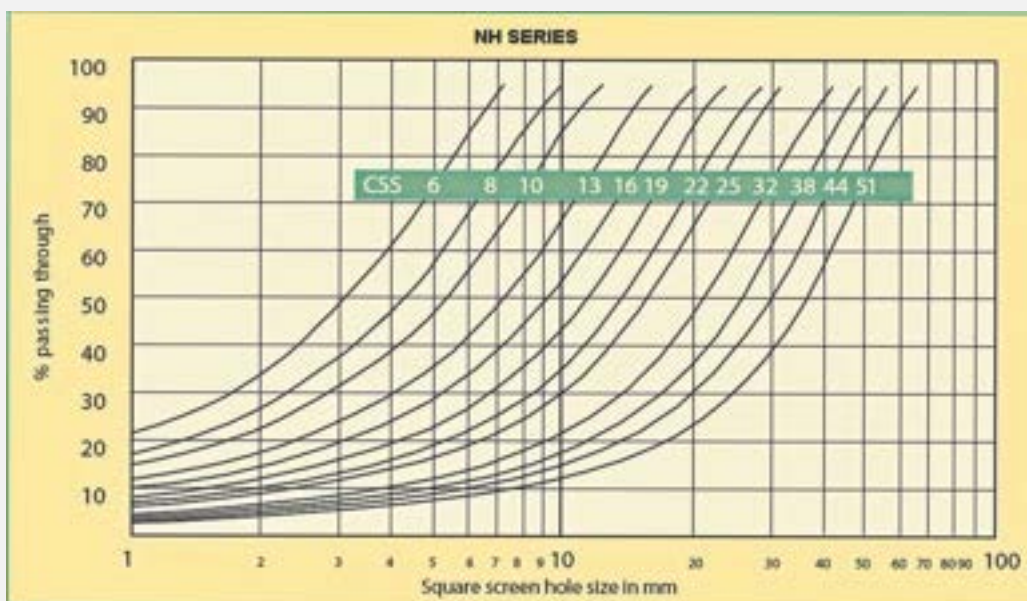
The product graph and the percentage of the crusher product that is smaller than the closed side setting (square hole, mm) is dependent on the crushability of the material, size distribution of the feed material, as well as other factors.

CRUSHING CAPACITIES

NH SERIES

MODEL	MOTOR KW	MAX FEED MM	NOMINAL CAPACITY IN TPH WITH CSS IN MM											
			6	8	10	13	16	19	22	25	32	38	44	51
NH300	160	EC 190				105	130	140	150	160	180	210		
		C 145				115	125	130	145	150	170	160		
		MC 115			65	115	125	135	145	155	150			
		M 90			90	115	130	135	140	150	140			
		MF 75		70	75	105	115	120	115	110				
		F 50		75	75	80	90	100	105	95				
		EF 35	75	75	80	85	95	100						
NH400	220	EC 210					165	210	225	240	270	300	305	
		C 175				105	170	205	230	245	280	295	300	
		MC 140				115	195	210	220	235	250	265		
		M 110				160	210	215	220	240	250	255		
		MF 85			120	185	200	215	230	245	250			
		F 70		120	145	155	170	180	190	205	200			
		EF 38	100	110	125	140								
NH600	315	EC 275					210	325	390	415	480	540	590	510
		C 215					215	340	415	440	505	560	565	355
		MC 175					250	370	395	420	480	500	365	
		M 135					300	400	425	455	475	480		
		MF 115				230	350	375	400	430	450	460		
		F 85				305	325	350	375	400	395	325		
		EF 65				295	315	300	290					

Performance figures are approximate and only give an indication of what the crusher can do. Eccentric throw, degree of reduction, material's crushability, size of feed material, and moisture content of feed material, etc. all affect crusher performance.



The product graph and the percentage of the crusher product that is smaller than the closed side setting (square hole, mm) is dependent on the crushability of the material, size distribution of the feed material, as well as other factors.





REAL - TIME CSS MONITORING AT YOUR FINGERTIPS

TRIMAX AUTOMATED CONTROL SYSTEM

ACS 3.0



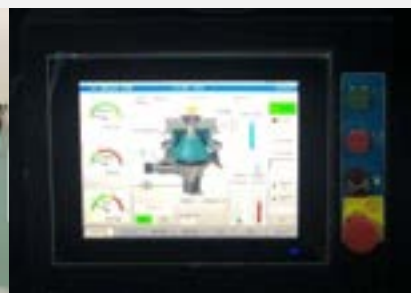
Position Sensor



Pressure Sensor



Push Button
Control



Touch Screen LCD

KEY BENEFITS OF TRIMAX ACS

- Controls your crusher automatically whilst protecting it from damage.
- Helps increase production.
- Helps obtain the highest degree of reduction.
- Improves product distribution.
- Achieves better product shape.
- Improves consistency of all aspects of final products.
- Simple colourful graphics and touch-screen interface with built-in instructional manual that is easy for the operator to understand.

WHAT'S NEW IN TRIMAX ACS 3.0?

AutoLoad (Only for NH Series)

ACS strives to sustain the pre-set targeted CSS, taking into account real-time loads within the crusher.

AutoCSS

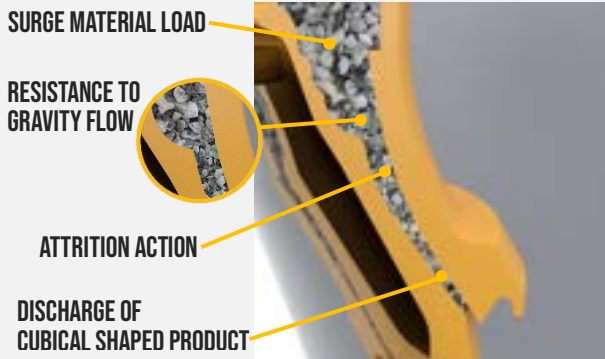
ACS strives to sustain the pre-set targeted CSS during operation.

Manual

ACS adjusts the main shaft level according to the pre-set CSS.

SC SERIES SAND CONE CRUSHER

In the SC Sand Cone Crusher, a fine product is produced by a combination of impact and attrition of a multi-layered mass of particles. This process of crushing is termed “inter-particle comminution”. Here is how it works.



METERED FEEDING

Each time the mantle moves away from concave, part of the feed material mix enters the attrition chamber from the surge load above. The mantle's flat angle is less than the feed material's angle of repose, meaning that if the mantle remained stationary, the feed material would not naturally slide down through the chamber. The shallow angle provides enough resistance to the feed material's gravity-driven flow, so the head center's motion is what pushes the feed material slightly outward with each gyration. The material moves positively through the chamber due to the head center's movement.



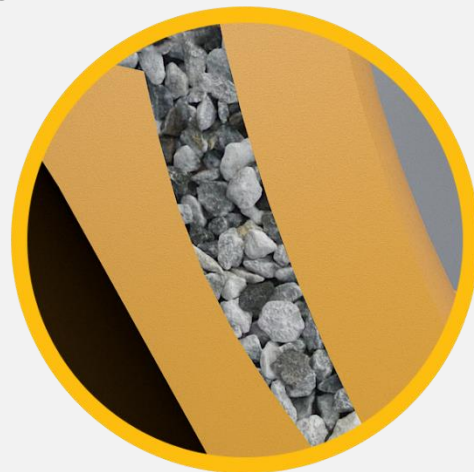
In other words, the gyrating head center's action and the pressure from the surge load causes the material to move outward in small increments. The material's movement is intermittent, much like fuel entering an internal combustion engine.

The Trimax SC Series Sand Cone Crusher advances the feed only before the power stroke. Thanks to the

frequent gyrations and cavity design, the Trimax SC Series Sand Cone Crusher produces a highly efficient crushing process with minimal oversized product.

IMPACT WITH ATTRITION – THE MOST EFFICIENT CRUSHING

As reduction begins, the material is lifted by the mantle, moved outward, and trapped between the crushing wear liners. The head center's impact causes material reduction through grinding and the particle-on-particle fracturing, resulting from the forceful displacement of particles within the mass. Even at the closest point between the wear liners, a layer of small particles of considerable thickness remains between the wear liners. In most cases, increasing the gap, rather than reducing it, produces a better product and a larger quantity of the desired size, particularly when balancing machine capacity and power consumption. Therefore, the gap setting between the wear liners is less directly related to the product size compared to a normal cone crusher.



Attrition Zone

During the upward thrust of the rotating head center, two distinct processes combine to reduce the feed into a uniform fine product: -

- ❖ The impact of coarse particle against fine particle similar to the action of balls or pebbles in a grinding mill.
- ❖ The attrition resulting from the high surface friction during forceful relocation of the particles into smaller voids within the feed mass. In the Trimax Sand Cone Crusher, the combination of impact and attrition offers the most efficient utilisation as compared to other fine crushing or reduction methods employed today.



PREDETERMINED STROKE AND TIMED ROTATION

With each recession of the head center, the void at the throat of the attrition chamber is filled by particles flowing in from the surge chamber. This process repeats until the particles at the edges of the attrition chamber are discharged. During each gyration, the head center's stroke and timing are such that the mantle withdraws faster than the free-fall speed of the crushed material. Since the descent is initially slow, the gyration speed allows for a half revolution of the head center before the crushed material moves significantly.

This enables the mantle to withdraw and return to strike the falling material, scattering it and creating a new particle alignment before the next impact. The reorientation of the particles with each impact ensures a high degree of uniformity in both size and shape, resulting in a cubical-shaped product.

SPECIFICATIONS

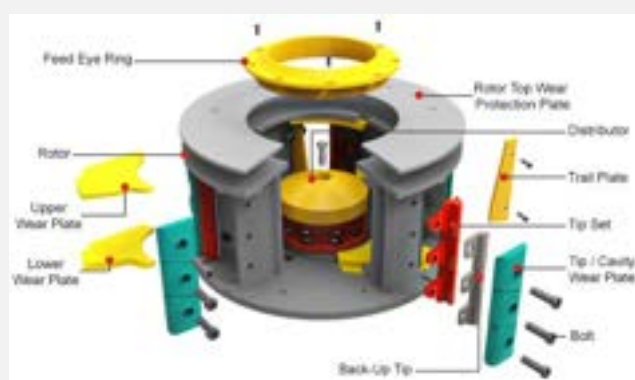
SC SERIES

MODEL	MAX FEED SIZE MM	CSS MM	CAPACITY TPH	MOTOR KW	WEIGHT KG
SC335	35	6 – 10	70 – 80	160	9,200
SC350	50	8 – 13	75 – 80	160	9,200
SC438	38	6 – 10	100 – 140	220	14,300
SC470	70	8 – 13	120 – 145	220	14,300
SC665	65	10 – 16	280 – 315	315	26,800
SC685	85	13 – 19	305 – 350	315	26,800

Performance figures are approximate and only give an indication of what the crusher can do. Eccentric throw, degree of reduction, material's crushability, size of feed material, and moisture content of feed material, etc. all affect crusher performance.

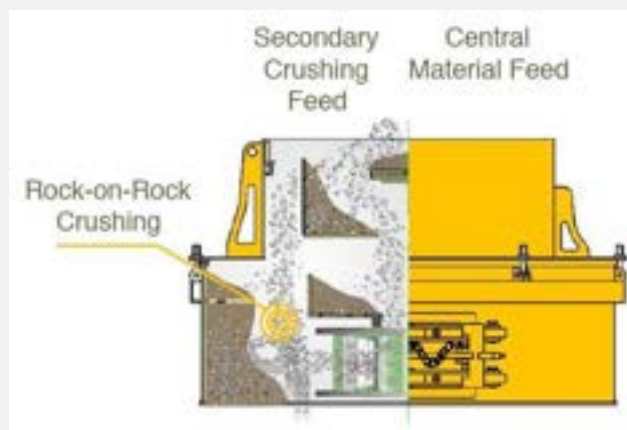


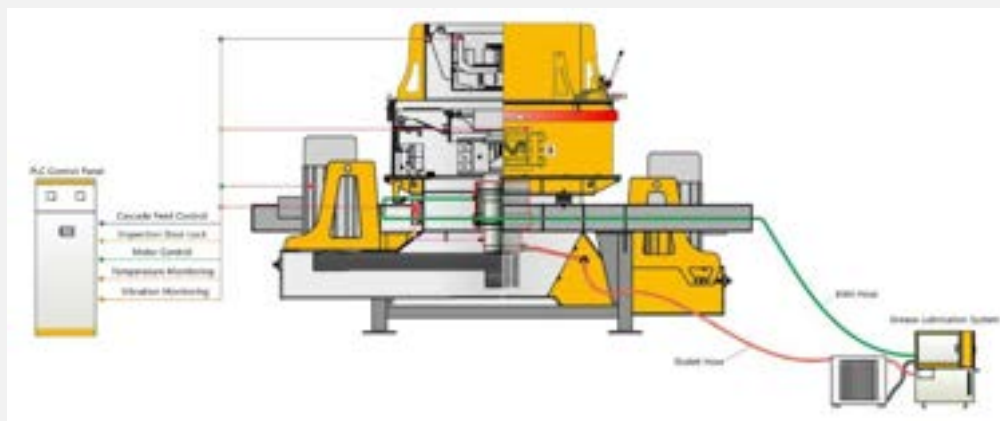
Trimax PLS Vertical Shaft Impactors are used for the production of high quality manufactured sand and high valued cubically shaped aggregates. Other applications include rolled compressed concrete (RCC) for dam construction, recycling industries crushing a wide range of materials (concrete glass, slag, etc.) and industrial mineral plants crushing extremely abrasive high-value materials.



AUTOMATED CONTROL SYSTEM

The optional Trimax Automated Control System (ACS) monitors the temperature of the bearings and vibration levels. An alarm will be raised if any faults are detected. In severe cases, an auto-stop function will be activated in order to protect the crusher.





CRUSHING CAPACITIES

PLS SERIES

MODEL	MAX FEED MM	ROTOR SPEED RPM	MOTOR KW	CAPACITY TPH	WEIGHT KG
PLS-700 II	35	1775 – 2050	55	30 – 38	7,500
			75	40 – 52	
			90	50 – 65	
			110	60 – 78	
PLS-850 II	50	1320 – 1720	2 x 90	95 – 125	11,500
			2 x 110	120 – 160	
			2 x 132	150 – 195	
			2 x 160	200 - 260	
PLS-1000 II	60	1240 – 1460	2 x 160	200 – 260	17,000
			2 x 200	250 – 325	
			2 x 220	275 – 360	
			2 x 250	320 – 410	
PLS-1200 II	60	1040 – 1300	2 x 250	320 – 410	22,650
			2 x 280	375 – 490	
			2 x 315	420 - 550	

Performance figures are approximate and only give an indication of what the crusher can do. Degree of reduction, material's crushability, size of feed material, and moisture content of feed material, etc. all affect crusher performance.



TRIMAX HS GRIZZLY FEEDER

Field-Proven, Durable & Efficient

SPECIFICATIONS

HS SERIES

MODEL	MOTOR KW	SCREEN SIZE MM	CAPACITY TPH	WEIGHT KG
HS-1	30	1300 x 6000	560	8,270
HS-2	11	950 x 3800	150	4,800
HS-3	15	1100 x 4200	250	5,350
HS-4	18.5	1100 x 4900	300	6,265
HS-5	30	1500 x 4200	400	8,735
HS-6	37	1800 x 4800	600	12,580
HS-7	45	2100 x 5200	800	16,300
HS-8	55	2400 x 6000	1500	19,815
HS-9	37	1500 x 6000	620	11,790

KEY FEATURES

Trimax HS Grizzly Feeders are engineered to combine the functions of feeders and screens into one machine and are capable of accepting loads, bypassing material and moving material. The tapered opening design of the grizzly bars is self-cleaning. It nudges rocks hanging between bars along to increasingly wider openings, eventually separating them out from oversize material and bypassing the crusher.

Bypassing material that is already to size helps operators increase overall plant capacity, boost efficiency, control fines and reduce maintenance.

The main frame of a Trimax HS Grizzly Feeder is comprised of deep, fabricated side frames, heavy-duty cross-members, double eccentric shafts, and a pan section that incorporates yield-strength steel; all of which are welded and stress-relieved to provide operators with years of low-maintenance service.

In addition, replaceable grizzly bars and liners that protect the pan are installed in segments for economical replacement.

The HS Grizzly Feeder now comes with double-deck configurations for some selected sizes.





TRIMAX ADPLUS VIBRATING SCREEN

Efficiency Coupled with Tough Construction

SPECIFICATIONS

ADPLUS SERIES

MODEL	MOTOR KW	SCREEN SIZE MM	MODEL	MOTOR KW	SCREEN SIZE MM
1512	5.5	1524 x 3660 x 1 Deck	3620	18.5	1830 x 6096 x 3 Decks
2512	7.5	1524 x 3660 x 2 Decks	2720	18.5	2134 x 6096 x 2 Decks
2612	11	1830 x 3660 x 2 Decks	3720	18.5	2134 x 6096 x 3 Decks
2616	15	1830 x 4880 x 2 Decks	2820	22	2438 x 6096 x 2 Decks
2716	15	2134 x 4880 x 2 Decks	3820	37	2438 x 6096 x 3 Decks
3716	15	2134 x 4880 x 3 Decks	2824	30	2438 x 7316 x 2 Decks
2620	15	1830 x 6096 x 2 Decks	3824	45	2438 x 7316 x 2 Decks

HEAVY DUTY DESIGN

The use of bended steel side plates prevent warping during prolonged stresses. It also has vertical stiffening angle bars which add rigidity to its already rugged construction.

In addition, replaceable grizzly bars and liners that protect the pan are installed in segments for economical replacement.



MINIMAL RESONANCE MOTION



The unique spring-controlled centrifugal counterweight assembly's innovative feature eliminates excessive resonance motion when the vibrating screen is starting or stopping.

At start-up, the counter-weight assemblies have a small “mass x radius” value. This means that they accelerate to operation speeds with a smaller driving torque and drive motor than for a fixed counter-weight.



ADJUSTABLE COUNTERWEIGHTS

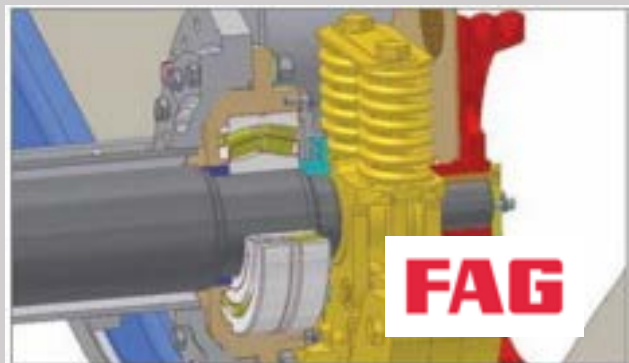
Amplitudes of circular motions can be varied by increasing or decreasing the number of counterweights bolted to the counterweight arms on either side of the centrifugal counterweight assembly.



PERFORMANCE & RELIABILITY

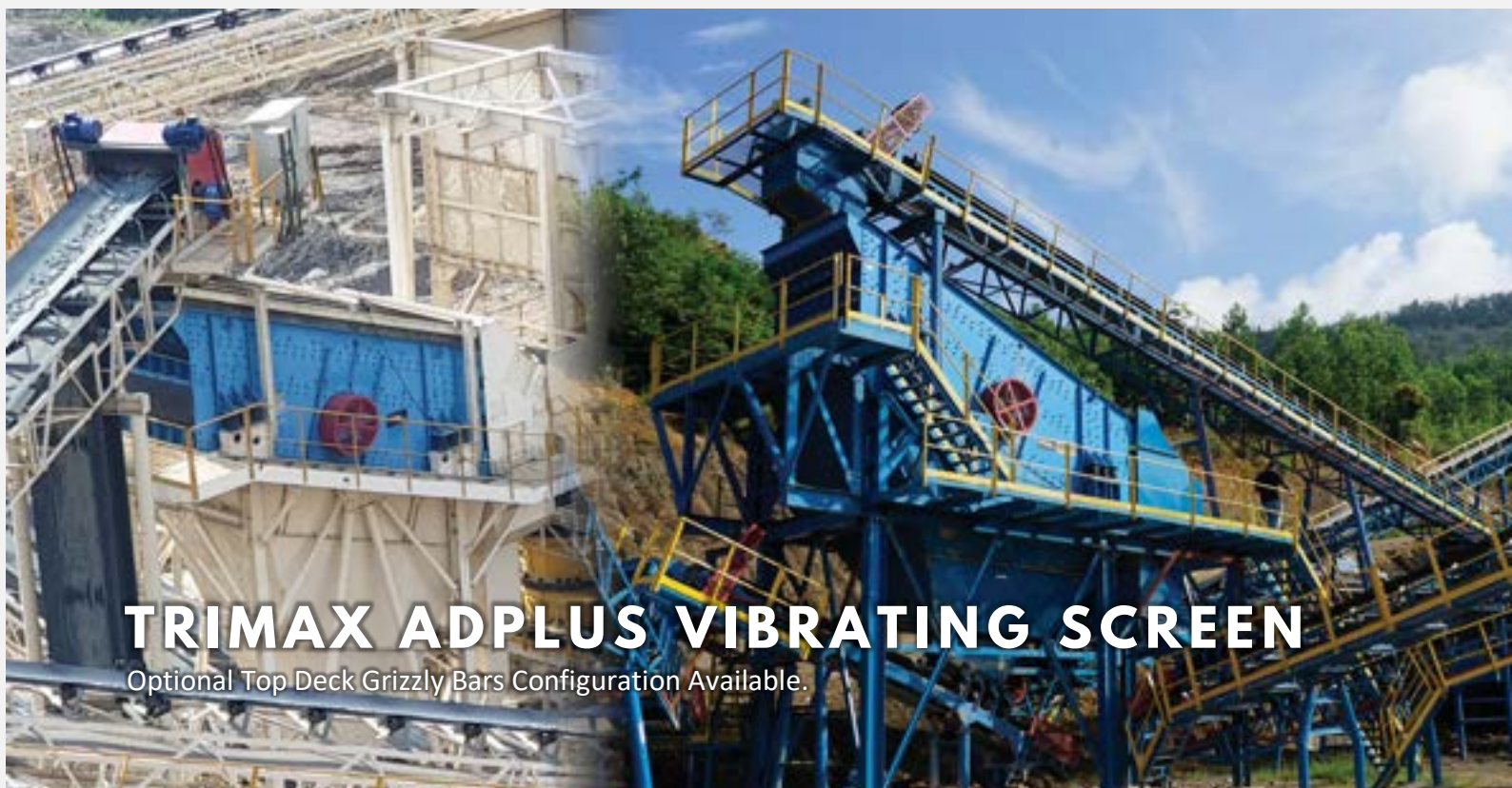
The ADplus vibrating screen is installed with FAG Germany bearings for added performance & reliability.

The bearings are protected from dust and dirt by grease-purged labyrinth seals. Grease lubrication is standard for all ADplus vibrating screens



TRIMAX ADPLUS VIBRATING SCREEN

Optional Top Deck Grizzly Bars Configuration Available.



TRIMAX YKR VIBRATING SCREEN

Designed to Handle Higher Capacities

SPECIFICATIONS

YKR SERIES

MODEL	SCREEN SIZE MM	AMPLITUDE MM	SPEED RPM	CAPACITY TPH	MOTOR KW
3YKR2475	2400 x 7500 x 3 Decks	7 – 9	810	150 – 950	2 x 30
3YKR3073	3000 x 7300 x 3 Decks	6 – 9	810	110 – 1100	2 x 30
3YKR3280	3200 x 8000 x 3 Decks	7 – 9	810	125 – 1200	2 x 37
3YKR3680	3600 x 8000 x 3 Decks	7 - 9	810	125 – 1200	2 x 45

TWIN SHAFT DESIGN

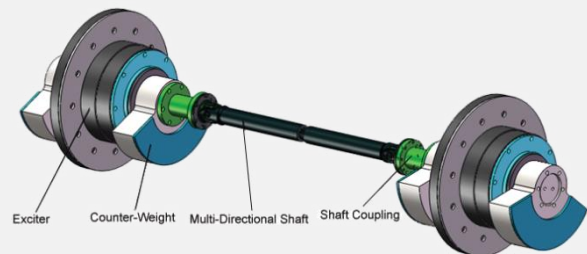


The YKR vibrating screen's twin shaft design has several advantages: -

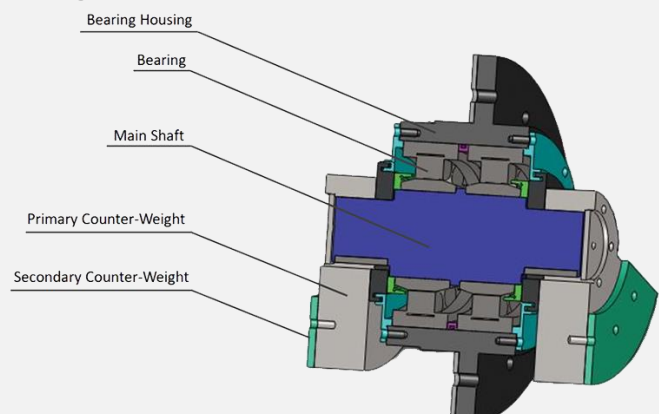
- ❖ Improved Efficiency & Performance
- ❖ Better Handling of Heavy Loads
- ❖ Reduced Vibration Transmission with Counter-Rotating Shafts
- ❖ Durability & Reliability

COUNTER-WEIGHT VERSATILITY

By altering the quantity of secondary counter-weights, the excitor is capable of accommodating varying excitation forces and is suitable for diverse vibrating

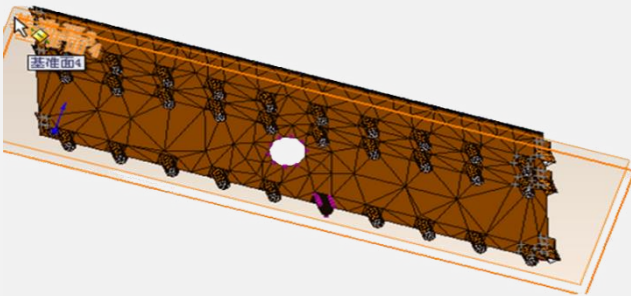


screen specifications. This adaptability ensures excellent part interchangeability and versatility, alongside a high level of standardization and modular design.



DESIGNED BY FINITE ELEMENT ANALYSIS

The YKR Series Vibrating Screen combines the latest modern material technology and advanced engineering design technology.



Utilising Finite Element Analysis (FEA), it guarantees exceptional reliability and an extended lifespan across a wide range of application scenarios.

REDUCED TRANSMITTED AXIAL FORCE



A flexible connection is used between the motor and the exciter to lessen the axial force transmitted, resulting in a smoother operation of the vibrating screen. Managing axial forces is crucial to ensure smooth operation and to prevent undue stress or deformation that could lead to failure or reduced efficiency.

RUBBER SPRING SUPPORTS



Utilises rubber springs for support. Offering these benefits: -

- ❖ Enhances Durability
- ❖ Resistance to Corrosion
- ❖ Smooth Transition Through the Resonance Zone
- ❖ Reduced Noise Levels
- ❖ Minimal Foundation Impact





HIGH CAPACITY
MOBILITY
COST-EFFICIENCY

For years, Trimax Machinery has established a reputation for high performance products that deliver practical solutions to solve today's problems in the quarrying industry.

MAXIMUM FLEXIBILITY

All plants in the Trimax Challenger CMC line are designed for maximum flexible use with regards to the type of feed material. They can master all varieties of changing application conditions present. Moving from job site to job site without any problems, ranging from processing natural stone to recycling.

RAPID DEPLOYMENT & SET-UP

Let's face it. Mobile plants are a huge capital investment. But, perhaps one of the best features of Trimax Challenger CMC Mobile Crushing & Screening Plants is that they can either be rapidly deployed once they arrive on-site, be set-up on-site, be set-up within minutes, and start earning your return on capital investment. processing natural stone to recycling.

DESIGN BASIS

Continuing with this tradition, Trimax Challenger CMC Mobile Crushing & Screening Plants incorporate high quality, state-of-the-art technologies with superior in-built robustness and inherent practicality. That's precisely why they were designed.

LARGE FEED HOPPER

Maximised productivity and trouble-free feeding thanks to the high-capacity feed hopper. In addition, in some models, the hopper volume may be optionally increased by hydraulically extending the hopper walls.



SMART DIESEL-ELECTRIC DRIVE

Besides a high performance and powerful Weichai diesel engine onboard electrically driving the crushers and conveyors, CMC Mobile Crushing & Screening Plants are able to be connected to the government supplied electrical grid. This flexibility results in a highly reliable, operationally economical, and environmentally conscious crushing & screening operation.

SELF-CLEANING OVERBAND MAGNET

Installed as standard preventive safety equipment in all Trimax Challenger CMC Jaw





INTELLIGENT PLC WITH WIRELESS REMOTE

A simple yet intuitive PLC system guarantees the user optimal control over the initial set-up once the plant arrives on site and during subsequent operation, even via a wireless remote control.

ROBUST STRUCTURAL STEEL CHASSIS

Strong yet compact steel chassis is crucial for the plant to withstand all the tough load-bearing pressures it expects to encounter during normal operations.



SAFETY GUARDING

Safety guarding is provided for all flywheels and pulleys to prevent unnecessary accidents.



HEAVY DUTY TRACKS

Reliable heavy-duty tracks that offer superior grip in muddy conditions enable stability and flexible mobility within the site.



RECIRCULATORY CRUSHING

For added versatility, an optional single-deck hanging screen may be installed. A transfer conveyor and return conveyor conveys the retained crushed material back to the crusher to be re-crushed.



Return Conveyor (Optional)

ABOUT WEICHAI ENGINES

Founded in 1946, Weichai Holding Group Co., Ltd. is a leading multinational industrial equipment group in China with significant influence in the world. Weichai Holding Group now has Weichai Power, Shacman heavy-duty truck, Weichai Lovol smart agriculture, Fast transmission, Hande axle, Torch spark plug, Ferretti of Italy, KION of Germany, Linde Hydraulics of Germany, Dematic of the U.S., PSI of the U.S., Baudouin of France, Ballard of Canada and other well-known brands at home and abroad. Among these, 8 companies are listed at home and abroad with 11 stocks. Weichai Holding Group currently has 100,000 employees worldwide and an annual revenue of more than 300 billion yuan. It ranks 86th in China's top 500 enterprises, 31st in China's top 500 manufacturing companies and 18th in China's top 100 multinational companies.

Updated December 2024




**SMART DIESEL-
ELECTRIC DRIVE**

CHALLENGER CMC JAW CRUSHER

JAW CRUSHER	CMC 96	CMC 106	CMC 116	CMC 130
Crusher Feed Opening (mm)	930 x 580	1,060 x 700	1,150 x 760	1,300 x 1,000
Maximum Feed Size (mm)	480	600	640	800
Closed Side Setting (CSS)	60 – 175mm	70 – 200mm	70 – 200mm	100 – 250mm
Approximate Capacity	105 – 390 mtp/h	130 – 500 mtp/h	165 – 520 mtp/h	369 – 831 mtp/h
Engine / Motor Output	300 kW	300 kW	300 kW	500 kW
Approximate Weight	47,268 kg	54,126 kg	57,500 kg	98,000 kg
Transport Dimensions (mm)	14,109 x 2,960 x 3,625	14,388 x 2,960 x 3,625	14,500 x 3,050 x 3,780	17,100 x 3,600 x 5,400
Working Dimensions (mm)	16,650 x 4,530 x 4,260	16,929 x 4,530 x 4,527	16,929 x 4,630 x 4,539	17,085 x 5,521 x 6,256


**SMART DIESEL-
ELECTRIC DRIVE**

CHALLENGER CMC CONE CRUSHER

CONE CRUSHER	CMC 300GS	CMC 300G	CMC 400GS	CMC 400G
Cone Crusher Model	NSX300	NHX300	NSX400	NHX400
Maximum Feed Size (mm)	360	190	450	210
Closed Side Setting (CSS)	25 – 51 mm	10 – 38 mm	32 – 54 mm	8 – 30mm
Approximate Capacity	180 – 315 mtp/h	65 – 210 mtp/h	335 – 410 mtp/h	205 – 360 mtp/h
Engine / Motor Output	400 kW	400 kW	400 kW	400 kW
Approximate Weight	45,100 / 53,700 kg *	43,300 / 51,800 kg *	54,300 / 63,900 kg *	49,500 / 59,100 kg *
Transport Dimensions (mm)	14,109 x 2,960 x 3,625	14,388 x 2,960 x 3,625	14,500 x 3,050 x 3,780	17,100 x 3,600 x 5,400
Working Dimensions (mm)	16,650 x 4,530 x 4,260	16,929 x 4,530 x 4,527	16,929 x 4,630 x 4,539	17,085 x 5,521 x 6,256

* Approximate weight with optional hanging screen, transfer conveyor, screen discharge conveyor, and return conveyor.



**SMART DIESEL-
ELECTRIC DRIVE**



CHALLENGER CMC CONE CRUSHER

CONE CRUSHER	CMC 300HF	CMC 400H	CMC 600HF
Cone Crusher Model	HPY300	HPY400	HPY600
Maximum Feed Size (mm)	85 – 185	85 – 240	85 – 185
Closed Side Setting (CSS)	6 – 45 mm	8 – 51 mm	8 – 45 mm
Approximate Capacity	75 – 430 mtpH	237 – 500 mtpH	237 – 709 mtpH
Engine / Motor Output	400 kW	500 kW	650 kW
Approximate Weight	53,200 / 62,700 kg *	63,500 kg	85,000 kg
Transport Dimensions (mm)	17,150 x 3,119 x 3,800	18,371 x 5,468 x 5,621	18,576 x 5,909 x 6,162
Working Dimensions (mm)	18,940 x 3,560 x 4,706	16,956 x 3,800 x 4,200	19,176 x 3,650 x 4,900



HPY Series Cone Crusher

High Output | Large Crushing Ratio | Good Particle Shape

* Approximate weight with optional hanging screen, transfer conveyor, screen discharge conveyor, and return conveyor.



**SMART DIESEL-
ELECTRIC DRIVE**

Illustration depicted with optional hanging screen, transfer conveyor, screen discharge conveyor, and return conveyor.



CHALLENGER CMC HORIZONTAL SHAFT IMPACTOR

HORIZONTAL SHAFT IMPACTOR	CMC 1310	CMC 1314
Cone Crusher Model	PFY1310	PFY1314
Maximum Feed Size (mm)	265	600
Closed Side Setting (CSS) (mm)	25 – 51	10 – 38
Approximate Capacity (mtpH)	165 – 200	220 – 260
Engine / Motor Output (kW)	350	400
Approximate Weight (kg)	45,100 / 53,700 *	42,295 / 51,795 *
Transport Dimensions (mm)	17,150 x 3,119 x 3,800	17,150 x 3,119 x 3,800
Working Dimensions (mm)	18,130 x 3,560 x 4,965	18,130 x 3,560 x 4,965



* Approximate weight with optional hanging screen, transfer conveyor, screen discharge conveyor, and return conveyor.



SMART DIESEL-
ELECTRIC DRIVE

CHALLENGER CMC VIBRATING SCREEN

VIBRATING SCREEN	CMS 1860	CMS 2060	CMS 2165	CMS 2465
Vibrating Screen Size (mm)	1,800 x 6,000	2,000 x 6,000	2,100 x 6,500	2,400 x 6,500
Number of Screen Decks	3	3	3	3
Approximate Capacity	375 mtph	450 mtph	500 mtph	500 mtph
Motor Power	37 kW	45 kW	45 kW	45 kW
Approximate Weight	38,500 kg	38,800 kg	50,000 kg	51,000 kg
Transport Dimensions (mm)	17,050 x 3,180 x 3,706	17,050 x 3,380 x 3,706	14,600 x 3,900 x 4,250	14,600 x 4,100 x 4,250
Working Dimensions (mm)	18,578 x 18,954 x 6,480	18,578 x 19,154 x 6,480	19,208 x 19,255 x 6,436	19,208 x 19,555 x 6,436

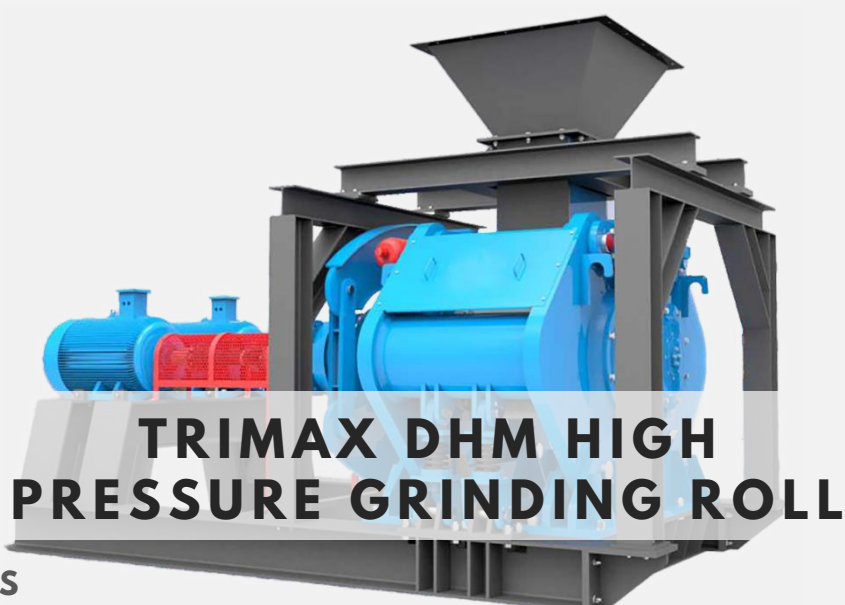


CHALLENGER CMC FINGER SCALPER

FINGER SCALPER	CMS 1845
Finger Screen Model	2YA1845H
Maximum Feed Size (mm)	600
Approximate Capacity	Up to 700 mtp/h
Number of Screen Decks	2
Approximate Weight	3,455 kg
Transport Dimensions (mm)	13,279 x 2956 x 3,500
Working Dimensions (mm)	17,066 x 9,080 x 3,991



Updated December 2024



TRIMAX DHM HIGH PRESSURE GRINDING ROLL

HOW IT WORKS

The DHM series high-pressure roller mill is a newly developed and designed high-efficiency fine and ultra-fine crushing machinery with excellent adaptability. It uses a pre-set crushing pressure, a hydraulic cylinder and an accumulator to push two crushing rollers running in opposite directions and ensure the pressure stability during the entire crushing process, so as to apply a high-pressure crushing of the material between the two rollers.

PERFORMANCE CHARACTERISTICS

- ❖ A high-pressure crushing mechanism is adopted to enable highly efficiency crushing, larger crushing ratio and wider adaptability.
- ❖ Automatically adjust the roller surface gap to keep the set crushing force constant, so that the

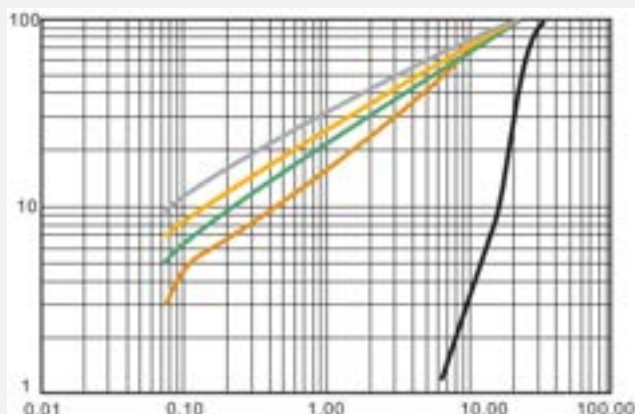
product particle shape is uniform and the particle size is finer.

- ❖ High wear-resistant alloy material and inlaid roller surface lining structure enables a longer service life and omits the need to dismantle the machinery for replacement.
- ❖ Equipped with a reliable hydraulic control system, this machinery has an overload protection function.
- ❖ Different working pressures can be set according to different working conditions.
- ❖ The crushing roller applies a constant non-impact crushing pressure to the material, with low noise and generates minimal dust.

SPECIFICATIONS

DHM SERIES

MODEL	ROLLER SIZE DIA. X LENGTH MM	MAX FEED SIZE MM	ROLL SPEED RPM	MOTOR KW	CAPACITY TPH
DHM800/500	800 x 500	18	30.1	2 x 132	70 -120
DHM1000/625	1050 x 625	25	24.9	2 x 315	120 -250





IRON ORE CRUSHING, WASHING & RECOVERY



Iron is one of the most important minerals in the world, and it is used to produce steel. The processing of iron ore is a complex process that ensures that an adequate iron grade is achieved prior to its shipment.

COMMINUTION STAGE

A Trimax Trent 48-36 Jaw Crusher crushes -800mm +50mm ore feed to -200mm +0mm. A Trimax NH600 Cone Crusher EC performs a secondary crushing role, reducing -200mm +25mm feed material to -40mm +0mm. 2 units of Trimax NH400 Cone Crusher F perform the tertiary crushing function, reducing -25mm +0mm to -10 +0mm output.

PARTIAL SIZING AND SEPARATION

Through the process of wet screening, 2 units of Trimax 3YKR3073 Washing Screen classify crushed material to -25mm +10mm material, -10 +3mm material and -3 +0mm material. Similarly, a Trimax ADplus 3824 Washing Screen classifies -10 +3mm material and -3 +0mm material. Large sized screens were intentionally selected to ensure that the volume of iron ore could be precessed efficiently to improve the Fe content of the iron ore and to reduce its gangue content.



MINERAL LIBERATION

Mineral liberation of higher iron concentration ore was done through several stages of dry and wet magnetic

This Trimax Crushing, Washing, and Recovery Plant was completed and commissioned in North Maluku, Indonesia in 2023.

Equipment used in this plant are: -

Trimax Trent 48-36 Jaw Crusher
Trimax NH600 Cone Crusher – EC
Trimax NH400 Cone Crusher – F x 2 units
Trimax HS-6 Grizzly Feeder
Trimax ADplus 3YKR3073 Washing Screen x 2 units
Trimax ADplus 3824 Washing Screen
YL-0814 Magnetic Separator (Dry)
CTL-0824 Magnetic Separator (Dry) x 2 units
CTL-1024 Magnetic Separator (Dry)
CTS-1245 Magnetic Separator (Wet) x 2 units
CTS-1024 Magnetic Separator (Wet) x 2 units
Sandtec SH-200-850 Sand Unit
ZPG 50-10 Vacuum Filter



separation. Several dry and wet magnetic separators were utilized in several locations to take advantage of the difference in magnetic properties for separating iron ore from non-magnetic associated materials.



PROCESSING OF IRON FINES

High grade iron ore is normally determined by the total FE content in the ore. High grade iron ore after the prior processing stages is that which contains higher than 62% of Fe. A Sand Unit was installed in the plant to dewater and stockpile -3 +0.75mm high grade iron fines. A Vacuum Filter was installed in the plant to recover and stockpile -0.75 +0mm ultra fine high grade iron.

HIGHEST POSSIBLE STANDARDS CRUSHING & SCREENING

This was a project completed during the Covid-19 global pandemic. On 2 February 2021, we completed and commissioned a Trimax 550TPH Crushing & Screening Plant in Cigudeg, Bogor, West Java, Indonesia. This was the first time that this particular customer had ventured into the aggregates quarrying industry and the close support provided by Trimax Machinery every step of the way, greatly helped in giving customer confidence that the project would be completed successfully.

SAFETY AND EFFICIENCY

With the aim of establishing an aggregate plant that would be highly productive, and, at the same time, would also operate to the highest standards of efficiency, whilst simultaneously ensuring that operational safety is at a premium, the client sought for a partner to help in the design of the plant, as well as to construct it, and ensure that its operation would match the high standards of the initial design.

In the end, Trimax Machinery was chosen as their partner of choice in this project, knowing that the company possess extensive turn-key project expertise, which is also matched with local experience. Furthermore, Trimax Machinery had



successfully designed and installed several similar sized crushing and screening plants located in Indonesia.



CRUSHING AND SCREENING

The fully constructed aggregate plant now comprises of some of the company's most advanced breaking, crushing, screening and feeding equipment. At the very heart of the operation is a Trimax NS400 secondary cone crusher and 2 units of Trimax NH400 tertiary cone crushers.

This equipment, when combined into the state-of-the-art plant design, has the capability to efficiently



produce three different products at the required production rate of 550 tonnes per hour. The three products produced comprises of: -

- 0 to 25 millimetres road base material,
- 10 to 28 millimetres aggregates, and
- 0 to 8 millimetres dust.



Another piece of crushing equipment that has been instrumental in the success of the new aggregate plant is the triple-deck Trimax ADplus 3824 Vibrating Screen, of which 2 units were installed. This reliable piece of equipment, with its large screening deck surfaces and low resonance vibrating mechanism, ensure that the large product volume is efficiently screened consistently. The innovative nature of this design also produces reduced power consumption, increased capacities, reduced maintenance costs, and requires fewer maintenance services.

CRUSHING PLANT 1000TPH

This project is a manufactured sand project (Phase II) with an annual output of 5.5 million tons, located in Xiafuqiao Town, Huoshan County, Lu'an City, Anhui Province. This high-quality, high-standard, intelligent “green” quarry produces 4 million tons annually (1,000 tons per hour). It features electrical power controls, environmental protection measures, storage facilities, automated loading, intelligent production control systems, covered steel structures, and loading area, etc.

3 MAIN ZONES

Area A – Coarse Crushing Production: Covering about 8 hectares, it includes the primary crushing section, scalping and screening sections, and a product stacking section.

Area B – Fine Crushing Production: Spanning approximately 12 hectares, it encompasses a secondary crushing area, a tertiary fine crushing area and a manufactured sand buffer stockpile area.



Area C – Automatic Loading and Transportation: Extending over 19 hectares, it comprises finished product silos, loading area, and parking area.

EQUIPMENT USED

JC130 Jaw Crusher x 2 units
GZG130-160 Vibrating Pan Feeder x 3 units
GZG1650 Vibrating Feeder x 2 units
GPY400S Cone Crusher x 1 unit
HPY650 Cone Crusher x 2 units
PLS1200 II Vertical Shaft Impact Crusher x 2 units
BYD-X3000 Dry Powder Separator x 1 unit
ZSW1560 Grizzly Feeder x 2 units
3YKR3060 Vibrating Recovery Screen x 1 unit
3YKR2073 Vibrating Screen x 2 units
3YKR3260 Vibrating Screen x 2 units
B1200 Belt Feeder x 2 units
SJ2000 Twin-Shaft Mixing Conveyor x 2 units
Dust Suppression, Control & Collection System x 1 set



COMPLETE DUST REMOVAL SYSTEM

The dust removal system employs a comprehensive dust removal method using inertial sedimentation dust control + fine mist dust suppression + negative pressure induced dust removal for environmental protection.



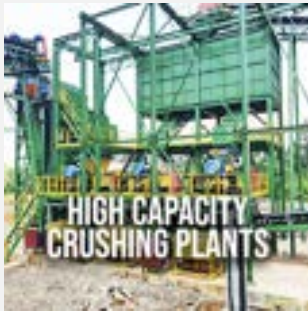
AUTOMATED LOADING

The finished product storage yard and transportation system utilizes on-ground storage with an automatic loading and transportation system.



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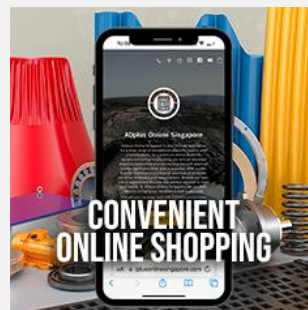


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