

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

MAXIMUM IN-BUILT VERSATILITY

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

EASY MAINTENANCE

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.

All major components of the crusher can be disassembled from above, enabling easy maintenance. Alternative NSX / NHX spider bushing design available! NS SERIES NH SERIES CONE CRUSHER CONE CRUSHER 2 $\langle \neg$

DURABLE MAIN SHAFT BEARING

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.

OPTIMISED OPERATING TEMPERATURE

Both the larger lubrication tank and more effective cooling system have been designed to maintain the temperature of the crusher and assist it to operate within an optimal temperature range.



CRUSHING CAPACITIES

NS SERIES CAPACITY

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.



NS SERIES

DIMENSIONS, MM

Dim.	NS300	NS400	NS600
А	arnothing 1635	$oldsymbol{arsigma}$ 2000	igodot 2800
В	2485	4075	5100
C1	1125	1300	1600
D	655	745	860
E	1705	2030	2640
F	422	452	631
G	1061	1280	1497
H2	1705	1900	2156
I	2050	2420	2895
K3	4250	4930	5355

APPROXIMATE WEIGHTS, KG

	NS300	NS400	NS600
Heaviest Lift During Maintenance	5100	8100	16500
Total Weight	12000	19300	35700



Dimensions are intended only as a guide for preliminary planning of the installation and should not be used for the construction of foundations, etc.



CRUSHING CAPACITIES

NH SERIES CAPACITY

MODEL	MOTOR KW	MAX FEED MM	NOMINAL CAPACITY IN TPH WITH CSS IN MM											
MODEL			6	8	10	13	16	19	22	25	32	38	44	51
	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			
NH300		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						
		EC 210					165	210	225	240	270	300	305	
		C 175				105	170	205	230	245	280	295	300	
	220	MC 140				115	195	210	220	235	250	265		
NH400		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								
		EC 275					210	325	390	415	480	540	590	510
NH600		C 215					215	340	415	440	505	560	565	355
		MC 175					250	370	395	420	480	500	365	
	315	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		
		FE 65				295	215	300	200					

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.



NH SERIES

DIMENSIONS, MM

Dim.	NH300	NH400	NH600
А	arnothing 1360	arnothing 1540	arnothing 2104
В	2992	3410	4215
C1	1125	1300	1600
D	655	745	860
E	1212	1365	1755
F	422	452	631
G	1061	1280	1497
H2	1705	1900	2156
I	1688	1985	2344
K3	3570	4000	4835

APPROXIMATE WEIGHTS, KG

	NH300	NH400	NH600
Heaviest Lift During Maintenance	2900	4700	8500
Total Weight	9200	14300	26800



Dimensions are intended only as a guide for preliminary planning of the installation and should not be used for the construction of foundations, etc.







TRIMAX AUTOMATED CONTROL SYSTEM

REAL - TIME CSS MONITORING AT YOUR FINGER TIPS

Dimension A - Clearance Distance Between Main Bearing Chamber & Head Nut





IMPORTANCE OF DIMENSION A

CSS is not measured but instead, calculated by the program. The position of the piston and therefore, the shaft is measured by a position displacement sensor at the bottom of the crusher. By relating to dimension "A", the CSS can be calculated.

A maximum shaft travel distance is pre-determined by the program settings to ensure that the mantle will not be able to collide with the main bearing chamber.

This figure is used during calibration to determine the bottom position and also a metal-to-metal position.

Once calibrated, dimension A can be checked by measuring between the main bearing chamber & head nut.

KEY COMPONENTS OF THE TRIMAX AUTOMATED CONTROL SYSTEM (ACS)



Position Sensor



Pressure Sensor







Push Button Control Station

KEY BENEFITS OF THE TRIMAX AUTOMATED CONTROL SYSTEM (ACS)

- 1. Controls your crusher automatically whilst protecting it from damage.
- 2. Helps increase production.
- 3. Helps obtain the highest degree of reduction.
- 4. Improves product distribution.

- 5. Achieves better product shapes.
- 6. Improves consistency of all aspects of final products.
- 7. Simple colourful graphics and touch-screen interface with built-in instruction manual that is easy for the operator to understand.

Today's customers have to maximise return on their investment. This not only means achieving the maximum throughput from their crushers but having control in a way that maximises the quality and volume of their most saleable products, while reducing maintenance costs especially unplanned and expensive traumatic failure.

To achieve this, the customer has to have maximum control especially of the setting at which the crusher operates. This can only be accomplished with a setting control system such as the Trimax Automated Control System (ACS).