

# MEKA

## CONE CRUSHERS

HIGH CAPACITY  
SOLUTION  
FOR CRUSHING  
HARD AND ABRASIVE  
MATERIALS





## **MCH/MCS Series Single Cylinder Hydraulic Cone Crusher**

MCH/MCS Series Single Cylinder Hydraulic Cone Crushers are currently among the most advanced cone crushers internationally. These cone crushers are equipped with the latest research and development achievements, integrating new technologies from various fields such as crushing, machinery, hydraulics, and control. They are well-suited for secondary, tertiary, and quaternary crushing applications in the mining and aggregate industries. They can effectively crush various types of ores with high Work Index and high Abrasion Index, even in demanding working conditions. The MCS series crushers share the same principles and structure as the MCH series but having a larger feeding intake, making them particularly suitable for primary and secondary crushing operations in mineral processing.

### **Versatility**

MEKA MCH/MCS Series Single Cylinder Hydraulic Cone Crusher is widely used for intermediate crushing, fine crushing and extra-fine crushing operations in mining, aggregate and minerals processing.

Several standard crushing chambers are available for each model. The crushers can easily be adjusted and changed for different applications by the proper selection of crushing chamber and eccentric throw.

The bottomshell, tank and electrical devices are interchangeable for MCH/MCS series cone crushers, which has a great saving on components and parts inventory and equipment management.

## Advanced Technologies

With the optimized design of crushing chambers, the production capacity and gradation can basically be kept consistent throughout the liner's lifespan.

The safe and reliable hydraulic system effectively provides iron tramp or overload protection.

Transmission efficiency and low noise are achieved through a unique bevel gear set design and an excellent internal structure. The power consumption of this crusher is only 50% of that of conventional crushers.

Robust design crusher topshell and bottomshell structure with mainshaft supported by both the upper and lower ends, thus enabling to have better force conditions.

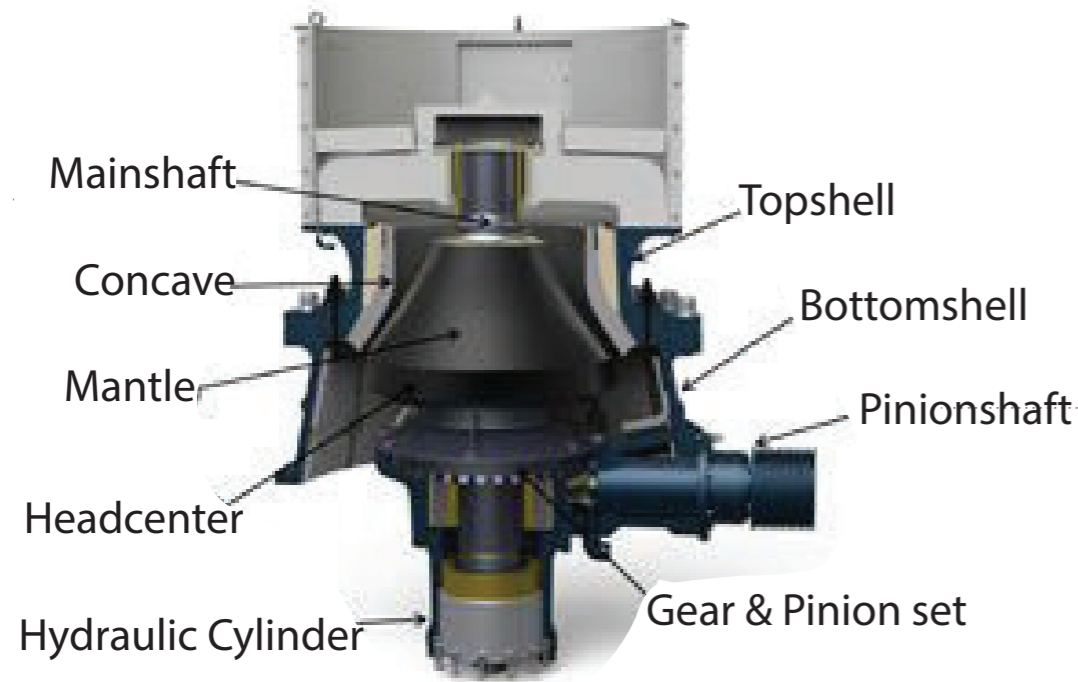
Up to dozen crusher chambers design makes the crushers can easily be matched to changes in production by the proper selection of crushing chamber and eccentric throw.

The CIS intelligent control system optimizes crusher performance while reducing operational costs. (Optional)

### High performance and high reliability

Advanced Finite Element Analysis (FEA) combined with computer simulation casting software ensures high strength and high quality of casting components.

The latest research achievements in fields such as crushing technology, hydraulic technology and computer control technology are adopted to ensure that the MCH/MCS Series Single Cylinder Hydraulic Cone Crusher can adapt to various harsh application conditions and characteristics of different minerals.

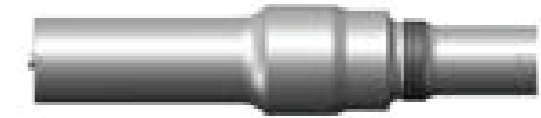


**Topshell****Casting advantages on topshell and bottomshell**

- High-quality steel adopted
- Advanced simulation software MAGMA
- Casting quality guaranteed

**Bottomshell****Structure optimization on topshell and bottomshell**

- Frame structure optimized by finite element analysis
- The horizontal and vertical stiffeners significantly strengthen the frame's strength and reduce the risk of frame cracking.

**Mainshaft****Material and process advantages of mainshaft**

- Forged with high-quality high-grade alloy steel
- All forgings subject to strict and precise heat treatment, precision machining and flaw detection processes

**Tank Design Features :**

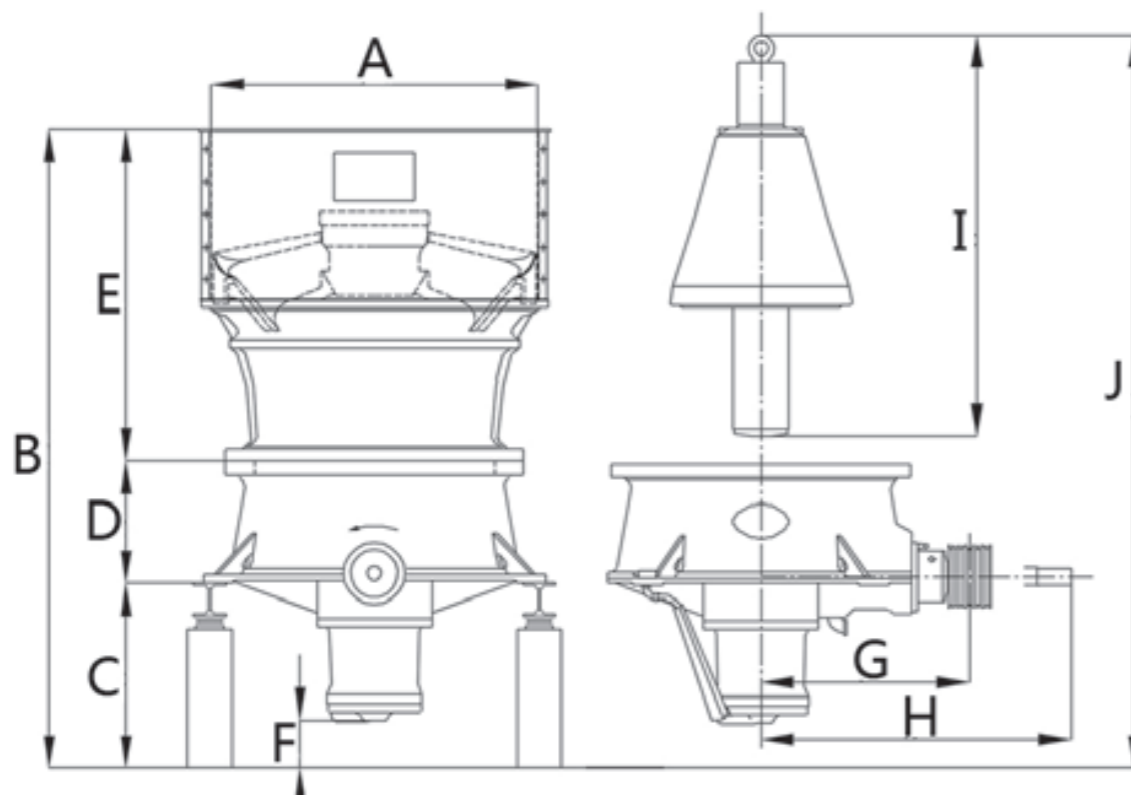
All key components and parts are internationally renowned brands. All pump units are installed horizontally, expanding internal space of the tank for ease of maintenance. Suitable for mining and aggregate plants at static installation.

**Tank Design Features:**

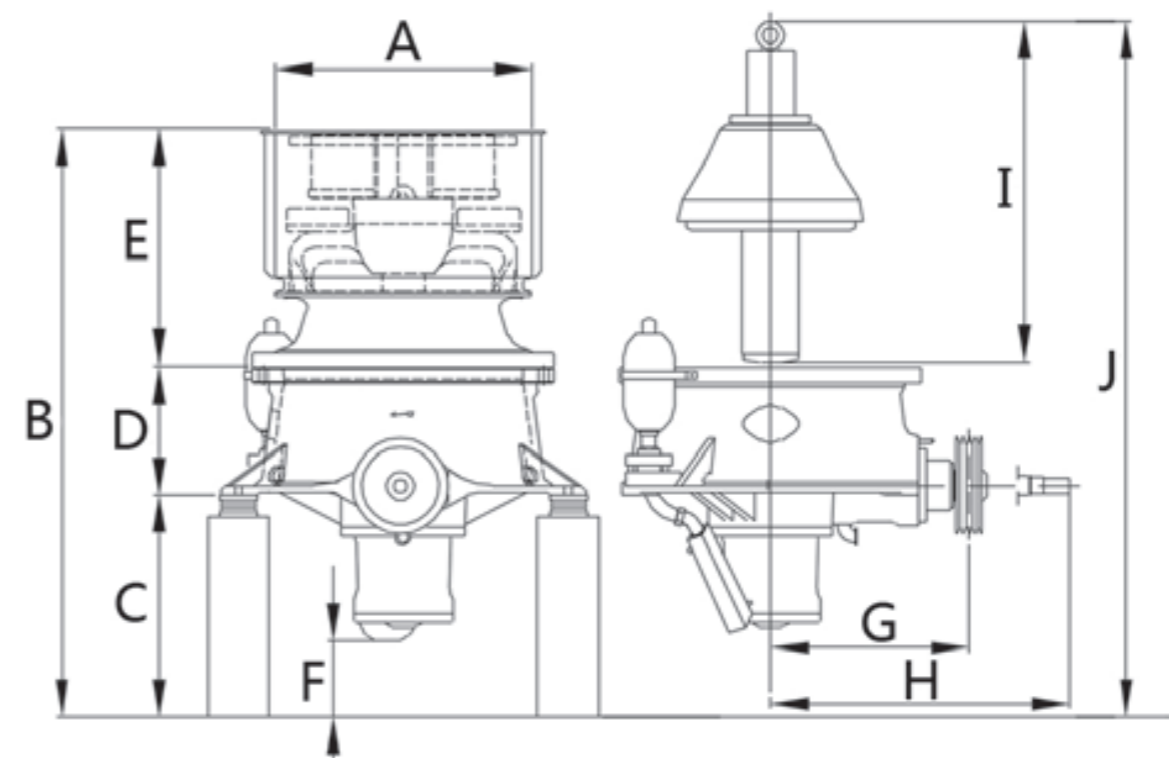
Compact design with small footprint  
Integrated electrical cabinet for the control system. Suitable for mobile and modular installation.

## DATA AND DIMENSIONS

Dim.(mm)	MCS200	MCS300	MCS400	MCS600	MCH200	MCH300	MCH400	MCH600	MCH800
A	Φ1285	Φ1635	Φ2000	Φ2800	Φ1078	Φ1365	Φ1545	Φ2104	Φ2450
B	2905	3495	4095	5105	2565	2995	3415	4225	5475
C	1025	1130	1305	1600	1025	1135	1305	1605	2205
D	542	657	748	865	545	665	755	865	1230
E	1345	1710	2040	2645	1000	1215	1375	1765	2045
F	402	423	453	632	400	422	452	631	999
G	843	1061	1280	1497	843	1062	1283	1505	1830
H	1270	1710	1900	2160	1270	1705	1900	2166	2850
I	1703	2050	2420	2895	1425	1688	1985	2344	3095
J	3600	4250	4930	5355	3000	3580	4150	4855	6620
Heaviest Lift (kg)	2,300	5,100	8,100	16,500	1,600	2,900	4,700	7,800	14,500
Total Weight (kg)	6,850	12,100	19,500	36,500	5,500	9,500	15,000	25,200	50,000



**MCS SERIES**



**MCH SERIES**



## MCS CONE CRUSHERS NOMINAL CAPACITY IN T/H

Model (Motor Power)	Chamber	Max Feed Size (mm)	Nominal Capacity in t/h																		
			CSS (mm)																		
MCS 200 (90kw)	EC	240	19	22	25	29	32	35	38												
	C	200	70	95	128	112															
MCS 300 (160kw)	EC	360		22	25	29	32	35	38	41	44										
	C	300		108	145	199	254	270	285	301											
MCS 400 (250kw)	EC	450				29	32	35	38	41	44	48									
	C	400				225	299	381	484	511											
MCS600 (315kw)	EC	560	38	41	44	48	51	54	60	64	70										
	C	500	318	420	618	753	788	823	892												

Data in the table just indicates the approximate performance of the crushers. They are based on the open circuit crushing of dry material with a bulk density of 1.6t/m<sup>3</sup> and it is assumed that the maximum feed size does not exceed the permissible value of the crusher and the minimum feed size is bigger than the crusher's closed side setting. The chosen eccentric throw, degree of reduction, the material's crushability, the size analysis of the feed, the design of recrushing circuit and the moisture content of the feed all affect the performance of the crushers.

The following factors can improve the production capacity and performance of the crushers:

- Choose appropriate crushing chamber according to the feed
- Appropriate feed size ratio
- Control feeding amount
- Uniform feeding distribution
- Specification of the discharge conveyor matches the maximum capacity of the crushers
- Appropriate screen specification of prescreening and closed-circuit screening
- Automatic control device
- Unobstructed discharge area

The following factors can reduce the production capacity and performance of the crushers:

- A certain proportion of viscous material in the feed
- Fine grade of the feed size exceeds the capacity of the crushers
- High moisture content of the feed
- Feeding amount is too small or the feed is unstable
- Feeding distribution is not uniform
- The crusher can not achieve full feeding due to the lack of feeding control
- Insufficient screening capacity of prescreening and closed-circuit screening
- Obstructed discharge area
- The material's crushability is too high

## MCH CONE CRUSHERS NOMINAL CAPACITY IN T/H

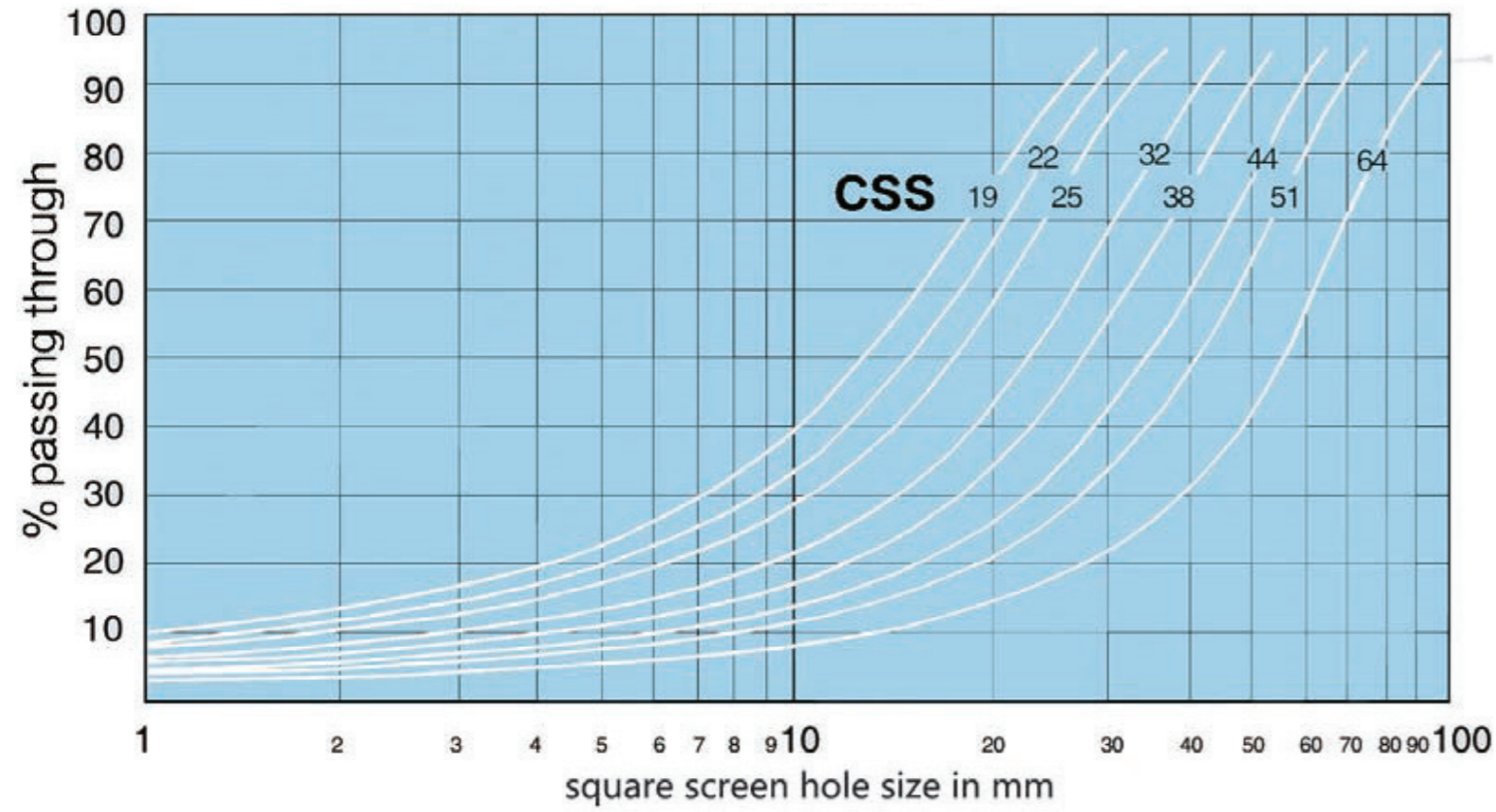
Model (Motor Power)	Chamber	Max Feed Size (mm)	Nominal Capacity in t/h																		
			CSS (mm)																		
MCH200 (90kw)	EC	135	6	8	10	13	16	19	22	25	29										
	C	90			54	89	95	104	110	117											
	M	65		42	74	79															
	MF	50	37	67	73																
	F	38	50	53	58																
MCH300 (160kw)	EC	185	6	8	10	13	16	19	22	25	29	32									
	C	145				133	143	152	164	174	187	199									
	MC	115			56	141	151	161	174	184											
	M	90			82	131	141	150	162												
	MF	75		62	106	117	125														
	F	50	79	83	87	97	103														
MCH400 (250kw)	EC	215	8	10	13	16	19	22	25	29	32	38									
	C	175				101	220	293	312	334	360	378									
	MC	140			121	263	285	300	321	346	327										
	M	110			185	278	297	316	339												
	MF	85		115	227	247	264	281	301												
	F	70	136	176	190	207	221	235	252												
MCH600 (315kw)	EC	275	13	16	19	22	25	29	32	38	44										
	C	215				367	482	511	551	584	644										
	MC	175			253	425	456	485	525	553											
	M	135			294	438	470	499	538												
	MF	115	194	370	396	425	451	486													
	F	85	305	328	351	377	400	431													
	EF	65	293	315																	
MCH800 (600kw)	EC	350	13	16	19	22	25	32	38	44	51	57	64								
	C	240				405	637	893	1017	1126	1232	1356	1465	1461							
	MC	195			438	723	837	953	1056	1155	1270	1373									
	M	155			563	788	837	953	1056	1155	1271	1374									
	MF	100		424	715	766	814	927	943												
	F	90	395	655	702	751	799	910													
	EF	80	517	558	598	640	680	774													

Standard crushing chambers available:

EF=Extra Fine F=Fine MF=Medium Fine M=Medium MC=Medium Coarse C=Coarse EC=Extra Coarse

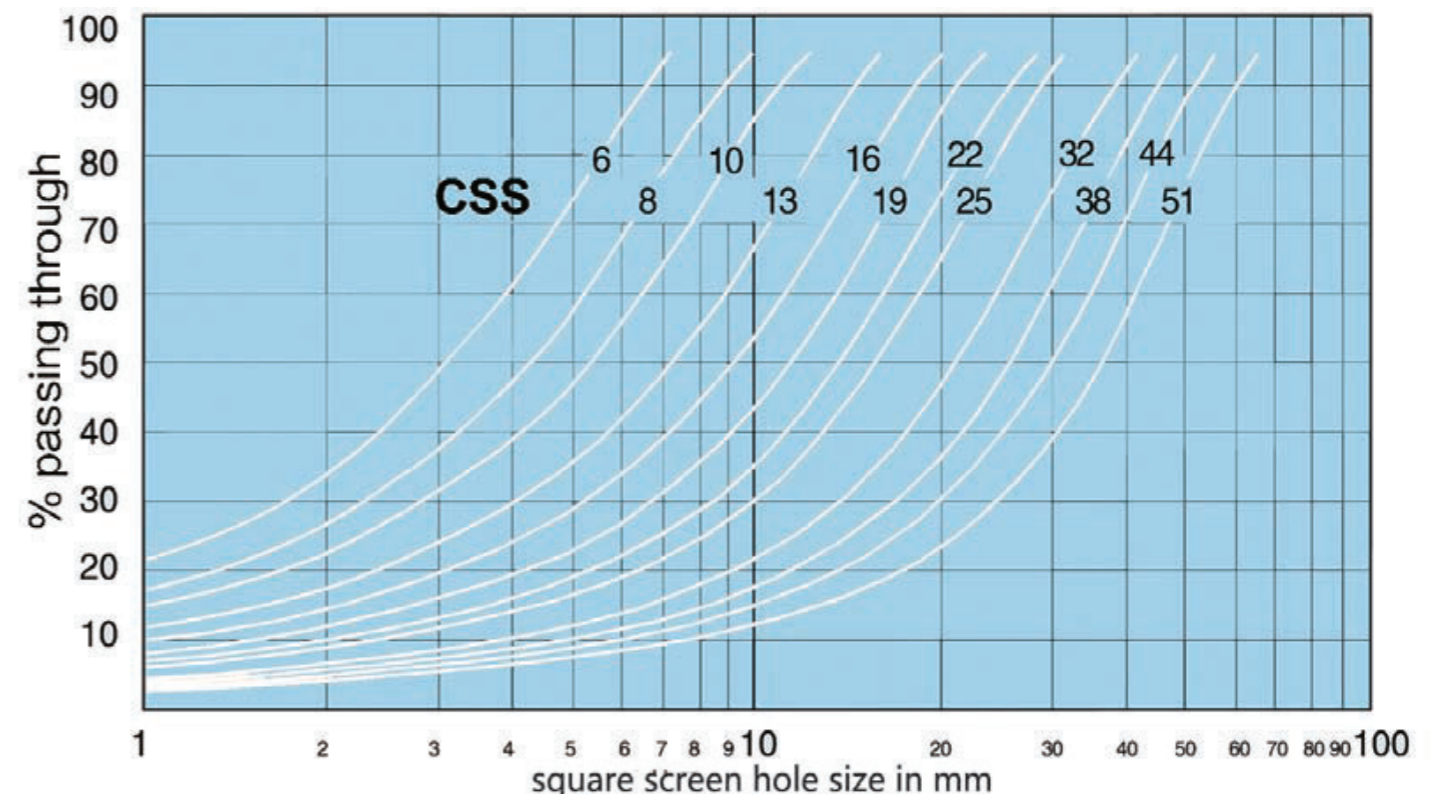
## MCS CONE CRUSHERS PRODUCT CURVES

MCS - crushers



## MCH CONE CRUSHERS PRODUCT CURVES

MCH - crushers



The product curve and the percentage of the crusher product that is smaller than the closed side setting depends on the crushability of the material, the size distribution of the feed and other factors.

# ABOUT MEKA GLOBAL



## ESTABLISHED IN 1987

*We have over 36 years of experience and the passion of the first day.*

## focused on manufacturing of CONCRETE PLANTS AND CRUSHING & SCREENING EQUIPMENT

## MANUFACTURING CAPACITY

*400 Crushing Screening Equipment / year  
300 Concrete Batching Plant / year*

## EXPERT ENGINEERING

*Experienced R&D engineers within  
Meka work to design machines that are  
the most suitable for your needs.*

## EXPORT COUNTRIES

*More Than 90 Countries...  
USA, Russia, Chile, England, Poland, France,  
Romania, Bulgaria, Serbia, Kosovo, Bahrain,  
Qatar, UAE, Belgium, Algeria, Sudan, Morocco,  
Bangladesh, Cameroon, Libya, Burkina Faso,  
Nigeria, Ethiopia, Kazakhstan, Ukraine, Georgia,  
France, Tajikistan, Azerbaijan, Austria, etc.*

## STRONG REFERENCES

*We have produced more than 3,000 plants  
and have gained incalculable experience.  
Heidelberg, Hochtief, Vinci Contractors, Lafarge,  
Gazprom, Italcementi Group, London Concretes/  
Aggregates, Holcim, Strabag GmbH, Euro Cement  
Group, Breedon Aggregates, Knauf, Enka, Galfar,  
Alesco, Recon International, Richard Costain, Tekfen,  
Lakeshore Group, Gama, Orascom, CCC etc.*



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