

SYTECHS MINING TECHNOLOGY



ST-SS-H/S SERIES

HYDRO CONE CRUSHERS

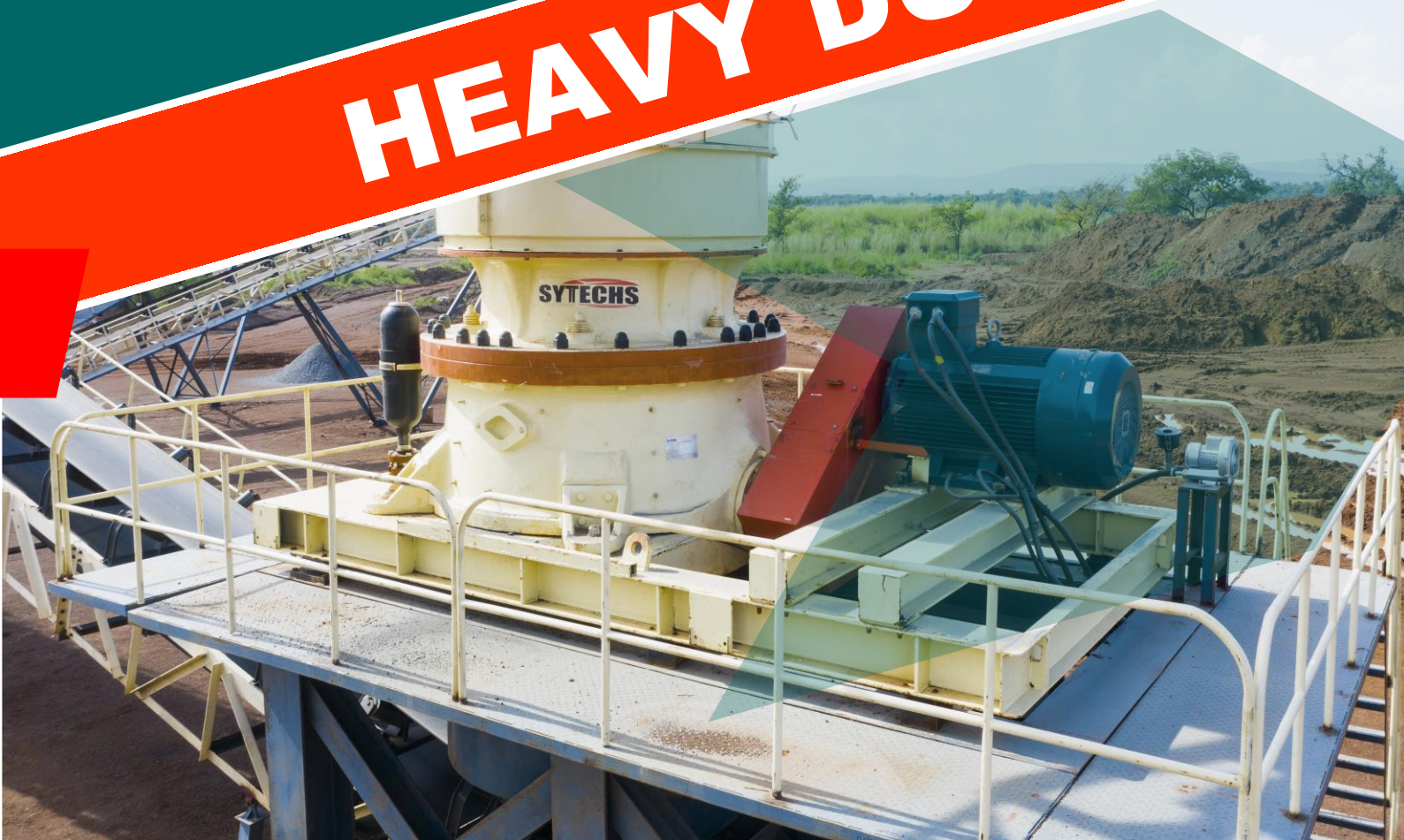


NORTH AMERICAN TECHNOLOGY

5
YEARS EXTENDED
WARRANTY

SYTECHS
MINERALS
MINING TECHNOLOGY

HEAVY DUTY



SS-H/S SERIES CONE CRUSHERS

The Sytechs **SS-H/S** Series Hydro Cone crushers are suitable for a high-capacity Secondary, Tertiary and Quaternary applications. The SS-H/S series are of Single Shaft design that is hydraulically adjustable for proper selection of the crushing chamber. The Hydro cones can match any changes in production requirements through the selection of crushing chambers and an eccentric throw while the crusher is in working condition and by a press of button.. This flexibility means that it's suitable for a wide range of applications.

Features:

- Heavy Duty Hydraulic Cylinder , supporting and adjusting the Main Shaft
- Automatic Overload Protection
- A variety of standard crushing chamber types to be chosen, which can fully meet various production requirements
- Automatic Control System Continuous monitoring of the internal load of the crusher and automatically adjust the equipment to get the best performance.
- Guaranteed performance when original Sytechs parts are used, a long lifetime of the cone crusher is guaranteed.

- High Performance & Efficiency
- Constant Feed acceptance Capability
- High output
- High quality product
- Full Control of the Process
- Intelligent Control System
- Safety & Setting Adjustment Functions

Easy Handling & Maintenance

- All Servicing & Handling of the cone is done from the upper side.
- Robust & Effective Sealing against Dust

Excellent Versatility

- Easy setting adjustment to match the desired output size
- Excellent choice for Secondary, Tertiary applications.

Customers Satisfaction

- Vast Experience around the Globe
- High Efficient worldwide service & Distribution network
- Efficient, Cost Effective repair and rebuilding services.



INTELLIGENT PLC CONTROL

Soft Start Drive (SSD) System

The SS-H Series Cone crushers are supplied with Soft Start Drives (SSD) System which are used to limit inrush current associated with electric motor startup. Soft-start drives lower the initial voltage by adding solid-state series impedance and ramp up until full speed is achieved. Doing this extends the life of the motor and mechanical components that are connected to it. The SSD also eliminates high inrush current on large electric motors which places a high demand (Power Surge) on the electrical supply system and often results in extra cost and larger power generators.

Guaranteed performance when original Sytechs parts are used, a long lifetime of the cone crusher is guaranteed
Wearing parts are available with High Manganese MN13%, Mn18%, Mn21%

TECHNICAL PARAMETERS

Motor Power (Kw)	Cavity	Max Feed Size (mm)	CSS mm																
			19	22	25	29	32	35	38	41	44	48	51	54	60	64	70	76	83
ST-SS420S	EC	267	-	85	92-115	101-158	107-168	114-143	121	-	-	-	-	-	-	-	-	-	-
	C	223	70	76-95	82-128	90-112	96	-	-	-	-	-	-	-	-	-	-	-	-
ST-SS430S	EC	400	-	-	126	138-173	147-230	156-293	165-310	174-327	183-344	196-306	205-256	214	-	-	-	-	-
	C	334	-	108	116-145	127-199	135-254	144-270	152-285	161-301	196-264	108	-	-	-	-	-	-	-
	MC	263	91	98-123	106-166	116-218	124-232	131-146	139-261	147-275	154-241	165	-	-	-	-	-	-	-
ST-SS440-S	EC	500	-	-	-	-	-	267	282-353	298-446	313-563	334-601	349-524	365-456	-	-	-	-	-
	C	445	-	-	-	225	239-299	254-381	269-484	284-511	298-448	318-398	333	-	-	-	-	-	-
	MC	335	-	-	195	214-267	228-342	242-435	256-461	270-486	284-426	303-378	317	-	-	-	-	-	-
ST-SS840S	EC	431	-	-	230	248-391	262-442	276-466	290-489	304-512	317-535	336-566	350-590	363-613	391-659	409-597	437-487	-	-
	C	345	-	212-260	225-380	243-410	257-433	270-456	284-478	297-501	311-524	329-554	342-577	356-600	383-645	401-584	428-477	-	-
ST-SS660-S	EC	622	-	-	-	-	-	-	-	349	368-460	392-588	410-718	428-856	465-929	489-978	525-1050	562-983	604
	C	556	-	-	-	-	-	-	318	336-420	353-618	376-753	394-788	411-823	446-892	469-822	504-631	-	-

Motor Power (Kw)	Cavity	Max Feed Size (mm)	CSS mm																
			4	6	8	10	13	16	19	22	25	32	38	44	51	57	64	70	
ST-SS420-H	EC	155	-	-	-	46	50-85	54-92	59-99	62-105	66-112	76-128	-	-	-	-	-	-	
	C	103	-	-	-	43-53	46-89	50-96	54-103	57-110	61-118	70	-	-	-	-	-	-	
	M	76	-	-	36-44	38-74	41-80	45-76	48-59	-	-	-	-	-	-	-	-	-	
	MF	58	-	36	38-67	40-71	44-68	47-53	-	-	-	-	-	-	-	-	-	-	
	F	42	27-34	29-50	31-54	32-57	35-48	38	-	-	-	-	-	-	-	-	-	-	
	EF	31	-	-	-	-	-	-	30-40	80%	4.5-5.5 mm	-	-	-	-	-	-	-	
ST-SS430-H	EC	214	-	-	-	69-108	75-150	80-161	86-171	91-182	104-208	115-208	-	-	-	-	-	-	
	C	168	-	-	-	66-131	71-142	76-152	81-162	86-173	98-197	109-150	-	-	-	-	-	-	
	MC	129	-	-	57	62-140	67-151	72-162	77-173	82-184	93-145	-	-	-	-	-	-	-	
	M	101	-	-	64-84	69-131	75-142	80-152	86-162	91-154	104	-	-	-	-	-	-	-	
	MF	86	-	61	65-106	70-115	76-124	81-126	87-114	92	-	-	-	-	-	-	-	-	
	F	62	-	48-78	51-83	54-88	59-96	63-103	68-105	72-95	77	-	-	-	-	-	-	-	
EF	42	-	-	-	-	-	-	70-90	80%	5-5.6 mm	-	-	-	-	-	-	-		
ST-SS440-H	EC	250	-	-	-	114-200	122-276	131-294	139-313	159-357	175-395	192-384	-	-	-	-	-	-	
	C	204	-	-	-	101	109-218	117-292	125-312	133-332	151-378	167-335	183-229	-	-	-	-	-	
	MC	157	-	-	-	97-122	105-262	113-282	120-301	128-320	146-328	161-242	-	-	-	-	-	-	
	M	124	-	-	-	117-187	126-278	136-298	145-318	154-339	175-281	194	-	-	-	-	-	-	
	MF	98	-	-	114	124-227	134-245	144-263	153-281	163-299	186-248	-	-	-	-	-	-	-	
	F	83	-	90-135	96-176	104-191	112-206	120-221	129-236	137-251	156-208	-	-	-	-	-	-	-	
EF	47	-	-	-	-	-	100-125	80%	6-7.5 mm	-	-	-	-	-	-	-	-		
ST-SS830I-H	EC	211	-	-	91	98-181	106-230	114-247	122-264	130-281	148-295	163-245	-	-	-	-	-	-	
	C	153	-	-	89-119	97-209	104-226	112-243	120-259	127-276	145-242	160-187	-	-	-	-	-	-	
	M	93	-	70-116	74-160	80-174	87-188	93-201	99-215	106-194	120-161	-	-	-	-	-	-	-	
	F	61	45-59	48-103	51-110	54-116	58-126	63-126	68-124	72-108	77-102	-	-	-	-	-	-	-	
	EF	62	39-84	42-90	44-96	47-94	51-94	55-83	59-79	63	-	-	-	-	-	-	-	-	
	EC	250	-	-	-	153-197	165-307	177-329	190-352	202-374	230-427	254-400	278-318	-	-	-	-	-	
C	205	-	-	-	157-202	170-316	182-339	195-362	207-385	236-405	261-336	-	-	-	-	-	-		
MC	159	-	-	-	166-261	179-333	192-357	205-381	218-406	249-462	275-432	301-344	-	-	-	-	-		
M	115	-	-	141	153-285	165-307	177-329	190-325	202-288	230	-	-	-	-	-	-	-		
MF	133	-	115-131	122-226	132-245	182-264	153-284	163-280	174-273	198	-	-	-	-	-	-	-		
F	73	-	95-123	102-189	108-200	117-217	126-235	136-232	145-227	154-198	-	-	-	-	-	-	-		
ST-SS660-H	EC	321	-	-	-	177	190-338	203-436	216-464	246-547	272-605	298-662	328-511	-	-	-	-	-	
	CX	275	-	-	-	174-194	187-374	200-488	212-519	242-592	268-654	293-521	323-359	-	-	-	-	-	
	C	253	-	-	-	171-190	184-367	196-480	209-510	238-582	263-643	288-512	317-353	-	-	-	-	-	
	MC	198	-	-	-	162-253	174-426	186-455	198-484	226-552	249-499	273-364	-	-	-	-	-	-	
	M	155	-	-	-	197-295	211-440	226-470	240-500	274-502	302-403	-	-	-	-	-	-	-	
	MF	133	-	-	192	207-369	222-396	237-423	252-450	287-451	318-363	-	-	-	-	-	-	-	
F	96	-	-	195-304	210-328	225-352	241-376	256-400	292-401	323	-	-	-	-	-	-	-		
EF	62	-	-	-	211-293	227-316	244-298	261-290	-	-	-	-	-	-	-	-	-		
ST-SS860I-H	EC	315	-	-	-	326	350-527	374-632	398-725	454-803	501-898	549-985	604-1071	-	-	-	-	-	
	C	263	-	-	-	320-456	344-548	368-653	390-749	447-836	492-933	535-1022	596-1126	-	-	-	-	-	
	MC	196	-	-	-	314-466	336-536	360-607	383-702	436-797	483-886	528-955	581-1055	-	-	-	-	-	
	M	152	-	-	-	289-675	310-541	331-632	353-710	401-768	444-859	486-943	536-1036	-	-	-	-	-	
ST-SS865I-H	MF	123	-	-	210	228-501	276-574	264-616	283-658	300-700	343-615	378-529	414	-	-	-	-	-	
	F	97	-	-	189-416	205-479	221-549	238-585	254-621	270-680	308-554	340-476	373	-	-	-	-	-	
	EF	72	-	-	168-393	183-425	196-459	211-493	225-526	240-560	274-493	303-424	331	-	-	-	-	-	
ST-SS870I-H	EC	350	-	-	-	-	-	-	477-849	544-968	601-1070	658-1172	725-1291	782-1393	849-1512	806-1331	-	-	
	C	287	-	-	-	-	-	-	483-806	511-893	525-1018	581-1125	636-1232	700-1357	756-1464	820-1461	876-1286	-	
	MC	236	-	-	-	-	-	-	443-740	476-793	502-857	522-994	544-1055	596-1155	657-1272	708-1373	769-1370	821-1206	-
	M	184	-	-	-	-	-	-	432-733	468-786	495-836	519-953	533-1054	558-1154	592-1271	686-1372	710-1248	705-1098	-
	MF	108	-	-	-	-	398-694	421-716	454-765	482-814	507-928	522-942	538-1021	572-1070	-	-	-	-	
	F	99	-	-	-	357-595	385-656	414-704	442-752	470-800	495-912	517-857	529-788	-	-	-	-	-	
EF	88	-	-	-	209-505	304-517	328-558	352-598	376-639	405-710	455-775	503-728	551-669	-	-	-	-		
ST-SS890I-H	EC	428	-	-	-	-	-	-	594-859	649-1309	696-1446	743-1584	798-1745	846-1883	801-2043	748-2181	-	-	
	C	382	-	-	-	-	-	-	697	622-974	682-1404	732-1552	783-1700	842-1873	893-2020	952-2193	812-2140	-	
	MC	302	-	-	-	-	-	-	542-817	625-952	689-1232	743-1404	790-1552	836-1700	891-1873	937-2020	992-2005	963-1739	-
	M	219	-	-	-	-	-												

CRUSHING CHAMBER

EEF- Extra Extra Fine

EF - Extra Fine

EFX - Extra Fine Extra

F - Fine

MF - Medium Fine

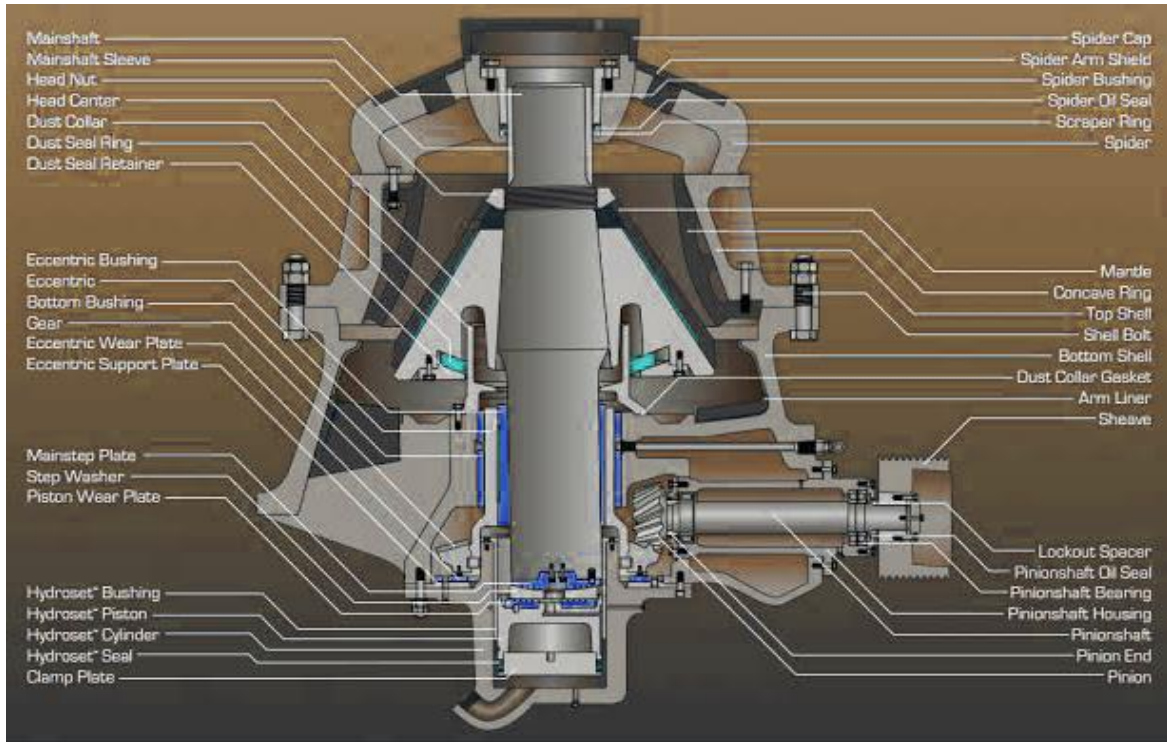
M - Medium

MC - Medium Coarse

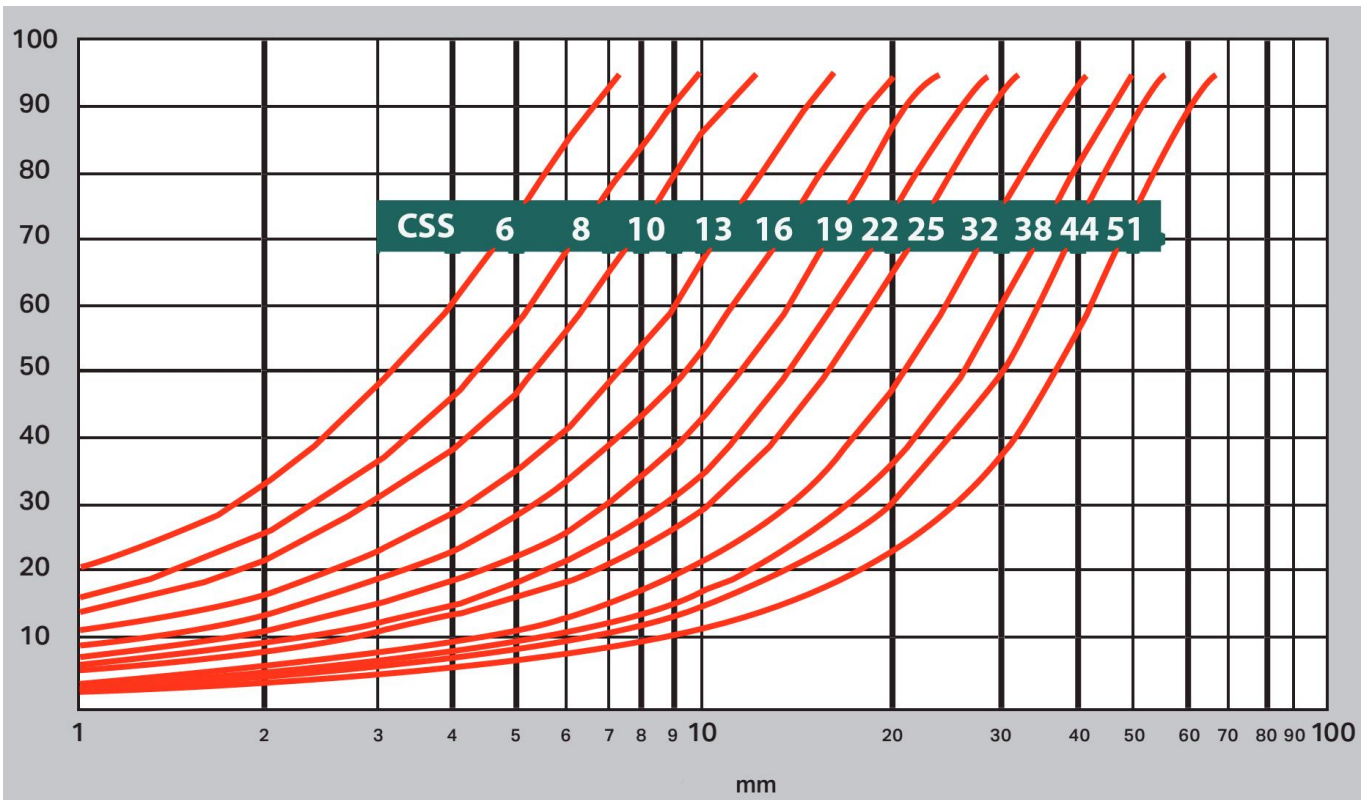
C - Coarse

CX - Coarse Extra

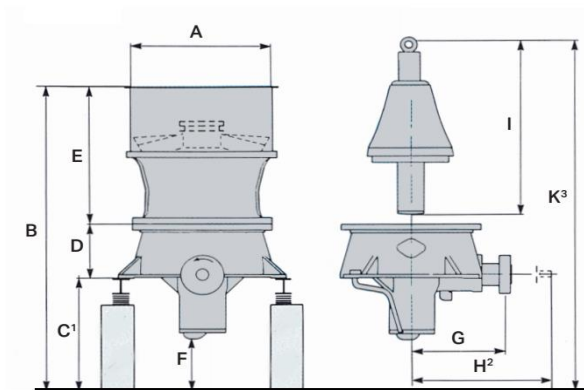
EC - Extra Coarse



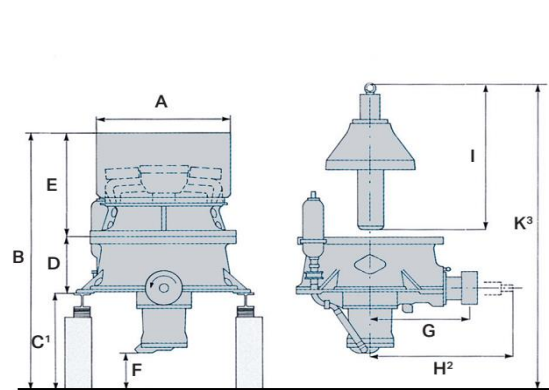
Skid mounted Unit. The cone crusher along with the driving electric motor are both mounted on a skid structure to reduce vibration and belt hammering. This results in better driving performance and longer motor bearing/counter shaft bushing life.



ST-SS-S



ST-SS-H



	ST-SS-S					ST-SS-H										
(mm)	SS-430I-S	SS-430I-S	SS440I-S	SS660I-S	SS-840I-S	SS-420H	SS-430-H	SS-440-H	SS-660H	SS-830I-H	SS-840I-H	SS860I-H	SS865I-H	SS-870I-H	SS-890I-H	SS895I-H
A	Ø 1285	Ø 1635	Ø 2000	Ø 2800	Ø 2306	Ø 1078	Ø 1360	Ø 1540	Ø 2104	Ø 1549	Ø 1890	Ø 2101	Ø 2101	Ø 2660	Ø 2900	Ø 2900
B	2902	3485	4075	5100	4225	2560	2992	3410	4215	3296	3410	4544	4635	5475	6450	6450
C¹	1020	1125	1300	1600	1339	1020	1125	1300	1600	1160	1300	1815	1815	2200	2870	2870
D	540	655	745	860	910	540	655	745	860	800	910	1126	1126	1228	1190	1190
E	1342	1705	2030	2640	1976	1000	1212	1365	1755	1336	1462	1603	1694	2045	2400	2400
F	400	422	452	631	472	400	422	452	631	406	430	497	497	998	1150	1150
G	843	1061	1280	1497	1276	843	1061	1280	1497	1136	1276	1803	1803	1824	1960	1960
H²	1270	1705	1900	2156	1885	1270	1705	1900	2156	1706	1885	2638	2638	2850	3100	3100
I	1703	2050	2420	2895	2479	1425	1688	1985	2344	1844	2087	2966	2966	3095	3500	3500
K³	3600	4250	4930	5355	5029	3000	3570	4000	4835	3904	4352	5960	5960	6600	7700	7700



EXTENDED WARRANTY POLICY (OPTIONAL)

Equipment Protection Services

As part of Sytechs Life Cycle Services for Aggregates, Equipment Protection Services (EPS) brings you added protection for your most valuable assets, fixed or mobile. This comprehensive plan includes extended warranties, scheduled inspections with Sytechs -certified technicians and Sytechs Metrics Services, our remote monitoring and data visualization solution.

The challenge: managing risks under demanding conditions

In the field, anything can happen. And when you're managing a fleet of mobile crushing equipment often spread out in remote areas or even around the world, maintaining optimal performance for each unit can prove challenging. With new equipment, the likelihood of unexpected failures is low and any required corrective work is likely covered under warranty. Beyond the standard warranty period however, equipment may fail if unsuitable parts are used or the equipment is not maintained in an optimal way.

The solution: Equipment Protection Services

On-site machine inspections and extended warranty under a single plan

Equipment Protection Services (EPS) gives you confidence in your cost structure by anticipating and minimizing unexpected equipment failures. Along with extended warranties that cover repairs or replacements on key designated parts that need to be replaced, this plan also includes comprehensive inspections and other services to keep your equipment running smoothly at all stages of operation.

What we do: Protection starts with prevention 1. Thorough field inspections with certified Sytechs technicians every 1,000 operating hours 2. Full-service reports on your equipment's condition 3. Technicians identify preventive and/or correction actions and provide recommendations 4. Extended protection plan of 5 years or 10,000 hours for designated major components.

Extended warranty to 10,000 hours or 5 years for specified major components on designated equipment

Scheduled inspections with Sytechs-trained and certified technicians, coupled with parts recommendation

Maintenance planning and reporting through our Remote Diagnostic solution,

5 YEARS
EXTENDED WARRANTY



FACTORY



HI-TECH FACTORY



COMPUTERIZED MACHINING





Crusher Capacities

The capacity figures shown apply to material weighing 100 pounds per cubic foot or 1600 kg per cubic meter. The crusher is one component of the circuit. As such, its performance is in part dependent on the proper selection and operation of feeders, conveyors, screens, supporting structure, electric motors, drive component and surge bins. Where used, attention to the following factors will enhance crusher capacity and performance.

- ✓ Proper selection of crushing chamber for material to be crushed.
- ✓ A feed grading containing proper distribution of the particle sizes.
- ✓ Controlled feed rate.
- ✓ Proper conveyor sized to carry maximum crusher capacity.
- ✓ Discharge conveyor sized to carry maximum crusher capacity.
- ✓ Properly sized scalping and closed circuit screens.
- ✓ Automation controls.
- ✓ Adequate crusher discharge area.

The following factors will detract from crusher capacity and performance.

- ✓ Sticky material in crusher feed.
- ✓ Fines material in crusher feed (smaller than crusher setting) exceeding 10% of crusher capacity.
- ✓ Excessive feed moisture.
- ✓ Feed segregation in crushing cavity.
- ✓ Improper feed distribution around circumference of crushing cavity.
- ✓ Lack of feed control.
- ✓ Inefficient use of recommended connected horsepower.
- 8 Insufficient conveyor capacity.
- ✓ Insufficient scalper and closed circuit screen capacities.
- 10 Insufficient crusher discharge area.
- ✓ Extremely hard or tough material.
- ✓ Operation of crusher at less than recommended full load countershaft speed.

TECHNOLOGY & APPLICATIONS

The Sytechs Single Shaft Hydro cone crushers, particularly their single-shaft models, offer several advantages over other competitors. some key points:

Advantages

1. Advanced Technology:

- ✓ Sytechs SS-H/S series Hydro cones : Utilizes a unique Multi-Action technology that combines the best features of traditional cone crushers while addressing common issues like uneven wear and short liner life.
- ✓ Sytechs SS-H and SS-S Series: Engineered for high performance with low total cost, suitable for a wide range of applications.

2. Efficiency and Performance:

- ✓ Higher Capacity: Sytechs models are designed to handle higher capacities with better reduction ratios and superior product quality.
- ✓ Optimized Performance: Features like adjustable settings, hydraulic systems, and advanced automation ensure consistent performance and reduced downtime.

3. Versatility:

- ✓ Multiple Applications: Suitable for secondary, tertiary, and quaternary crushing stages in aggregates production, mining operations, recycling applications.
- ✓ Adaptability: Can be used for various rock types and materials, making them versatile for different crushing needs.

4. Safety and Maintenance:

- ✓ User-Friendly Design: Engineered for improved safety and simpler operation, with features like hydraulic setting adjustments and access to main components.
- ✓ Reduced Maintenance: Advanced designs reduce the need for frequent maintenance, leading to higher uptime and lower operating costs.

Applications

- **Aggregates Production:** Ideal for producing high-quality aggregates for construction and infrastructure projects.
- **Mining Operations:** Efficiently handle large volumes of material, making them suitable for mining applications.
- **Recycling:** Effective in recycling operations, reducing material size for further processing or reuse.

Key Features

1. Hydrose System:

- ✓ Provides safety and setting adjustment functions, ensuring optimal performance and protection against overloads.

2. Intelligent Control System (PLC):

- ✓ Automatically adapts the crusher to varying feed conditions, maintaining consistent performance and maximizing efficiency.

3. Unibody Mainframe:

- ✓ Built as a single unit without moving parts, offering optimal strength and reducing maintenance needs.

4. Adjustable Eccentric Throw:

- ✓ Allows for precise balancing of capacity to the process, harmonizing the crushing stages.

5. Constant Liner Profile:

- ✓ Maintains the feed opening and performance throughout the entire service life of the liners.

6. Top Serviceability:

- ✓ Lifting from above minimizes risks and allows for quicker and safer maintenance.

7. Multiple Crushing Chambers:

- ✓ Various chambers are available (e.g., Coarse, Extra Coarse) to match different production needs.

8. PLC Controlled Mechanical Dump Valve:

- ✓ Provides tramp iron protection, reducing pressure peaks and mechanical stress on the crusher



**ISO 9001
QUALITY SYSTEM
CERTIFIED**

**Manufactured as per North American Design
and Specifications,
Under License of Sytechs Minerals NA**

Form: SCC47-24-2-11

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