



## **TRIO ENGINEERED PRODUCTS**

**QUALITY & VALUE IN MINERAL PROCESSING EQUIPMENT**



### **TRIO TC Series Cone Crushers**

**A proven design delivering safety, easy maintenance, and high performance.**

The rugged, reliable, familiar design of the TC Series cones incorporates modern, user-friendly features such as hydraulic tramp relief and fully hydraulic crusher adjustment. Comparisons with other brands will show that TRIO crushers are among the most heavy-duty machines available.

Comparison with other brands shows that TRIO crushers are among the most heavy-duty machines available.



**Hard rock crushing**

**Mixed demolition  
debris**

**Crushed or broken  
concrete**

**Asphalt**

**River rock**

**Industrial applications**

### **Key Features of the TC Series Crushers**

Full hydraulics for clamping, adjustment, and clearing

Automation-friendly design integrates into existing plants

Common wear parts available from multiple sources

Innovative bushing design allows increased power and operating speeds, generating 15-20% more production than other company's designs

Rugged spiral bevel or straight tooth gearing



# TC36 Fine Head

Product Gradations – Percent Passing											
Closed Side Settings											
	Standard						Higher Speed				
Inch	1/8"	1/4"	3/8"	1/2"	3/4"	1/8"	1/4"	3/8"	1/2"	3/4"	
MM	3	6	10	13	19	3	6	10	13	19	
4" (100)											
3" (75)											
2 1/2" (64)											
2" (50)											
1 1/2" (38)					100					100	
1 1/4" (32)					90					90	
1" (25)				100	85				100	85	
3/4" (19)			100	85	60			100	90	70	
1/2" (13)		100	85	60	35		100	90	70	50	
3/8" (10)	100	85	60	40	22	100	90	70	50	31	
1/4" (6)	85	60	35	22	14	90	70	50	31	22	
4# (5)	60	40	22	16	11	70	50	30	22	17	
6# (3)	35	24	15	12	8	50	32	22	17	12	
8# (2)	22	16	11	8	6	31	22	17	12	8	

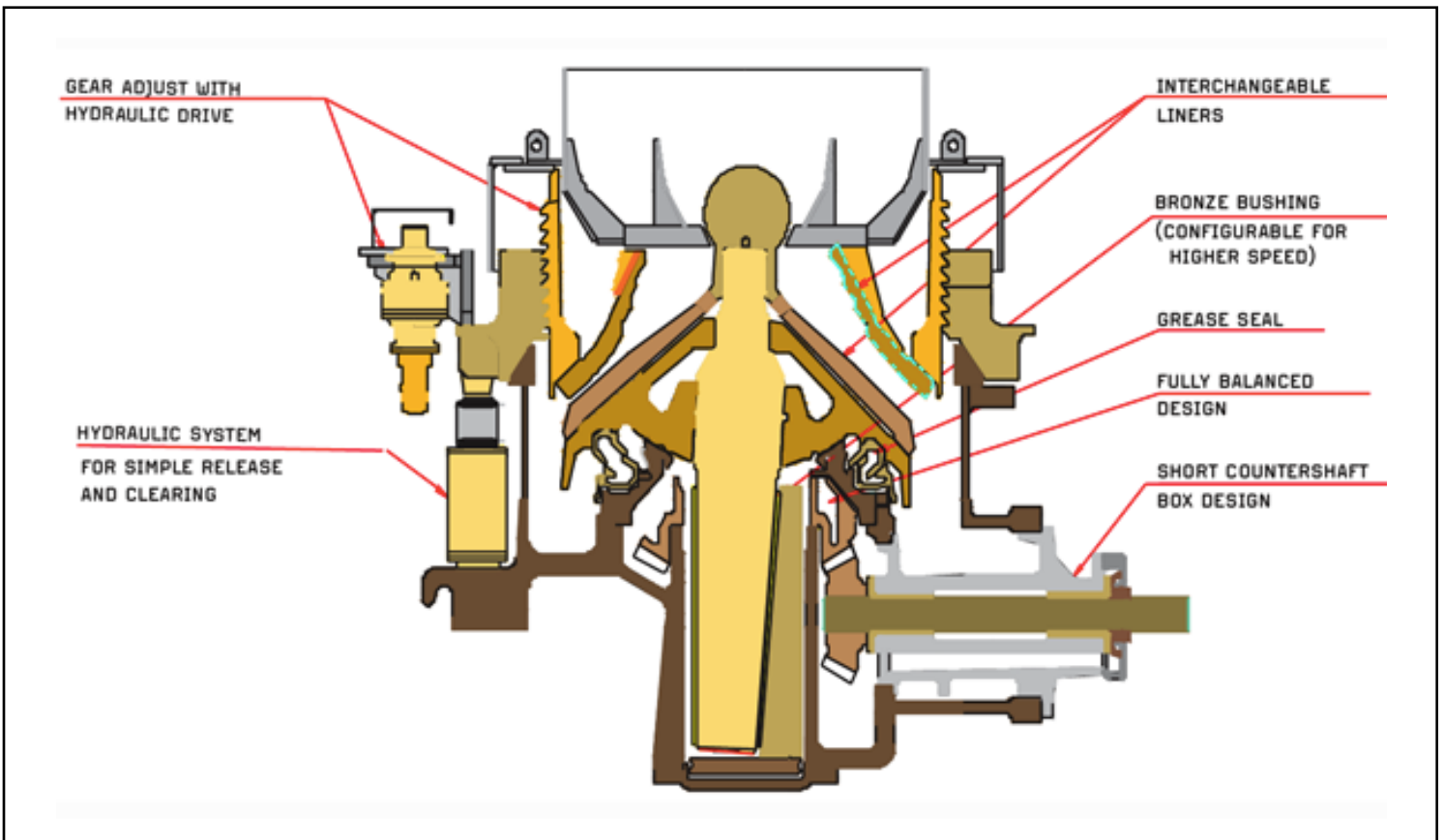
Note 1: Figures for 1/4" to 3/4" Closed Side Settings are for closed circuit application and the rest are for open circuit application. Note 2: The values are for the average feed material with WI = 12 to 14. Note 3: The values in the above tables will vary with the method of feeding, feed distribution, feed segregation, crushing cavity, bulk density, fines in the feed, moisture content, fracture characteristics, speed, etc. Consult Trio Engineered Products, Inc. for more accurate estimate.

Open Circuit Maximum Capacities (TPH)							
CSS		1/8"	1/4"	3/8"	1/2"	5/8"	3/4"
		3MM	6MM	10MM	13MM	16MM	19MM
Standard	Short	30	60	75	100	120	130
	Metric	27	54	68	91	109	118
High Speed	Short	35	69	86	115	138	150
	Metric	32	63	78	105	125	136

Description				
Standard		Higher Speed		
HP	100 HP	74 KW	125 HP	100KW
Speed	585 RPM		660 RPM	
Weight	26500 LBS		12000 KG	
Size	89x73x83"		2260x1850x2100mm	

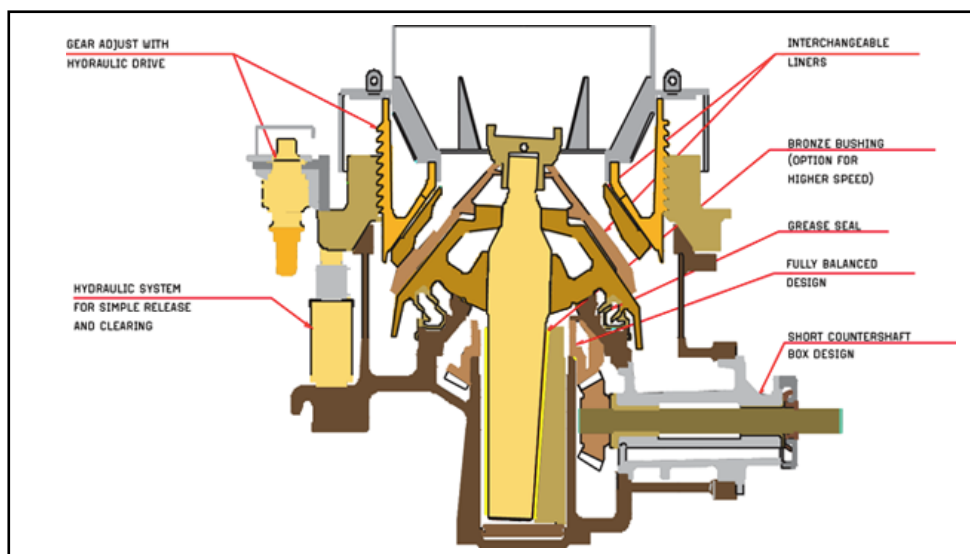
Liner Selection (Tertiary)				
Min Setting		Higher Speed		
	Inch	MM	Inch	MM
Ex-Coarse				
Coarse	1/4"	6	3"	75
Medium	1/8"	3	2 3/8"	60
Fine	1/8"	3	1 5/8"	40

Note: Maximum feed size should be 80% of the open side (OS) feed opening.



# TRIO TC Series Cone Crushers

## TC36 Standard Head



Open Circuit Maximum Capacities (TPH)										
CSS		1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"
		3MM	6MM	10MM	13MM	16MM	19MM	25MM	32MM	38MM
Standard	Short	30	60	75	100	120	130	145	160	180
	Metric	27	54	68	91	109	118	132	145	164
High Speed	Short	35	69	86	115	138	150	165	184	205
	Metric	32	63	78	105	125	136	150	167	186

Liner Selection (Secondary)				
	Min Setting		Higher Speed	
	Inch	MM	Inch	MM
Ex-Coarse	1"	25	7 1/8"	180
Coarse	1/2"	13	7"	175
Medium				
Fine	3/8"	10	4"	100

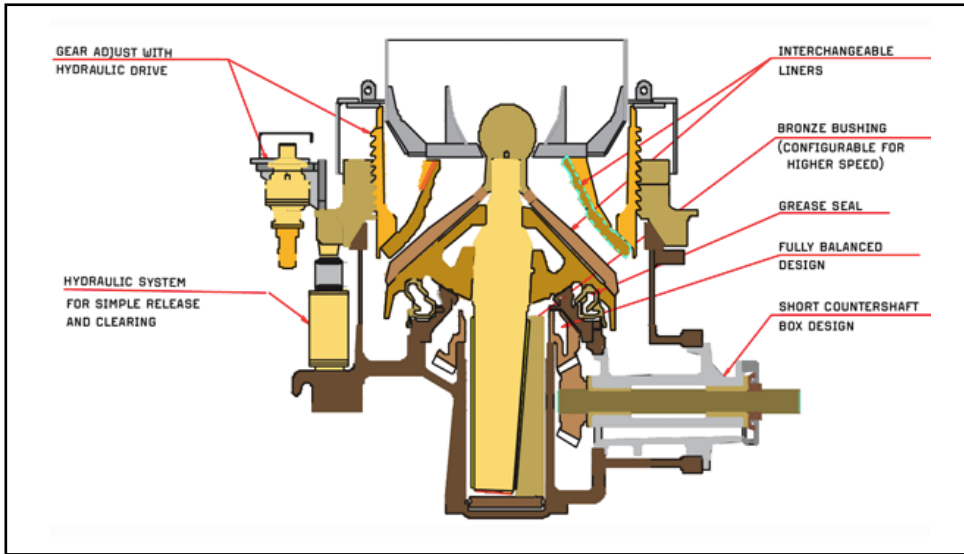
Note: Maximum feed size should be 80% of the open side (OS) feed opening.

Product Gradations – Percent Passing												
Closed Side Settings												
	Standard						Higher Speed					
Inch	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"
MM	10	13	19	25	31	38	10	13	19	25	31	38
4" (100)												
3" (75)						100						100
2 1/2" (64)					100	90					100	90
2" (50)				100	90	80				100	90	80
1 1/2" (38)			100	90	80	60			100	90	80	70
1 1/4" (32)			90	80	60	46			90	80	70	50
1" (25)		100	85	60	43	30		100	85	70	51	30
3/4" (19)	100	85	60	40	29	20	100	90	70	50	31	24
1/2" (13)	85	60	35	22	17	14	90	70	50	30	24	17
3/8" (10)	60	40	22	16	13	11	70	50	31	22	17	12
1/4" (6)	35	22	14	11	9	7	50	31	22	16	12	8
4# (5)	22	16	11	8	7	5	30	22	17	12	8	5
6# (3)	15	12	8	6	5	3	22	17	12	8	5	3
8# (2)	11	8	6	4	3	2	22	17	12	8	5	3

Note 1: Figures for 1/4" to 3/4" Closed Side Settings are for closed circuit application and the rest are for open circuit application. Note 2: The values are for the average feed material with WI = 12 to 14. Note 3: The values in the above tables will vary with the method of feeding, feed distribution, feed segregation, crushing cavity, bulk density, fines in the feed, moisture content, fracture characteristics, speed, etc. Consult Trio Engineered Products, Inc. for more accurate estimate.

Description		
Standard		
HP	100 HP	75 KW
Speed	585 RPM	
Weight	26500 LBS	
Size	89x73x83"	
Higher Speed		
HP	125 HP	100KW
Speed	660 RPM	
Weight	26500 LBS	12000 KG
Size	89x73x83"	2260x1850x2100mm

# TC51 Fine Head



Open Circuit Maximum Capacities (TPH)								
CSS		1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"
		3MM	6MM	10MM	13MM	16MM	19MM	25MM
Standard	Short	40	90	115	150	180	225	235
	Metric	36	80	105	135	163	205	215
High Speed	Short	45	105	135	175	215	265	280
	Metric	40	95	125	160	195	240	255

Liner Selection (Tertiary)				
	Min Setting		Higher Speed	
	Inch	MM	Inch	MM
Ex-Coarse	5/8"	16	5 1/4"	135
Coarse	5/16"	8	4 1/8"	105
Medium	1/4"	6	3 1/2"	90
Fine	1/8"	3	2 1/2"	65

Note: Maximum feed size should be 80% of the open side (OS) feed opening.

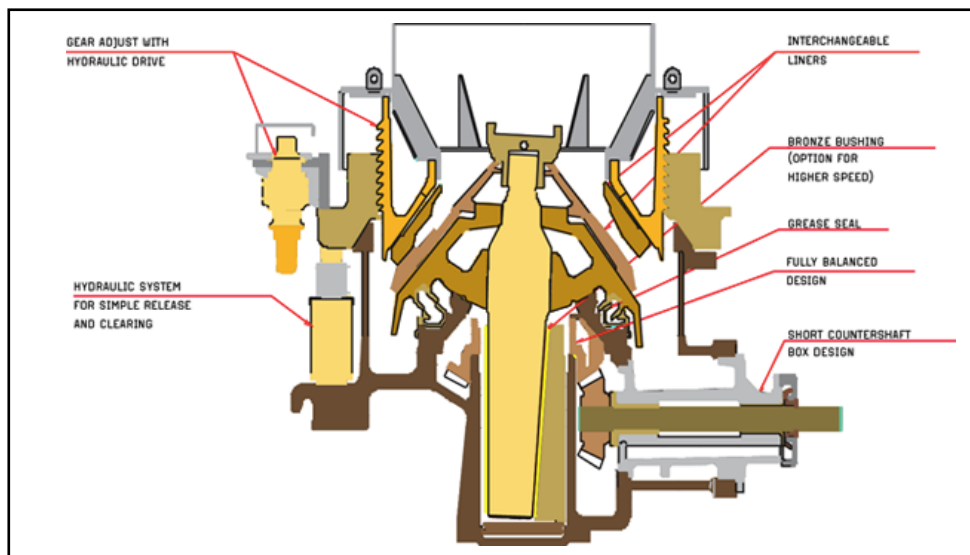
Product Gradations – Percent Passing												
Closed Side Settings												
	Standard						Higher Speed					
Inch	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"
MM	10	13	19	25	31	38	10	13	19	25	31	38
4" (100)												
3" (75)												
2 1/2" (64)												
2" (50)						100						100
1 1/2" (38)					100	90					100	90
1 1/4" (32)					90	80					90	80
1" (25)				100	85	60				100	85	70
3/4" (19)			100	85	60	40			100	90	70	50
1/2" (13)		100	85	60	35	22		100	90	70	50	30
3/8" (10)	100	85	60	40	22	16	100	90	70	50	31	22
1/4" (6)	85	60	35	22	14	11	90	70	50	31	22	16
4# (5)	60	40	22	16	11	8	70	50	30	22	17	12
6# (3)	35	24	15	12	8	6	50	32	22	17	12	8
8# (2)	22	16	11	8	6	4	31	22	17	12	8	5

Note 1: Figures for 1/4" to 3/4" Closed Side Settings are for closed circuit application and the rest are for open circuit application. Note 2: The values are for the average feed material with WI = 12 to 14. Note 3: The values in the above tables will vary with the method of feeding, feed distribution, feed segregation, crushing cavity, bulk density, fines in the feed, moisture content, fracture characteristics, speed, etc. Consult Trio Engineered Products, Inc. for more accurate estimate.

Description		
Standard		
HP	200 HP	160 KW
Speed	485 RPM	
Weight	55000 LBS	25000 KG
Size	126x92.5x105.5"	3200x2350x2680MM
Higher Speed		
HP	250 HP	186 KW
Speed	550 RPM	
Weight	55000 LBS	25000 KG
Size	126x92.5x105.5"	3200x2350x2680MM

# TRIO TC Series Cone Crushers

## TC51 Standard Head



Open Circuit Maximum Capacities (TPH)								
CSS		1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"
		13mm	16mm	19mm	25mm	32mm	38MM	50MM
Standard	Short	150	180	220	240	275	320	385
	Metric	136	164	200	218	250	291	350
High Speed	Short	175	215	265	280	320	375	470
	Metric	160	195	240	255	290	340	425

Liner Selection (Secondary)				
	Min Setting		Higher Speed	
	Inch	MM	Inch	MM
Ex-Coarse	1"	25	10 3/8"	260
Coarse	3/4"	19	9 5/8"	240
Medium	5/8"	16	8 1/4"	210
Fine	1/2"	13	5 3/8"	140

Note: Maximum feed size should be 80% of the open side (OS) feed opening.

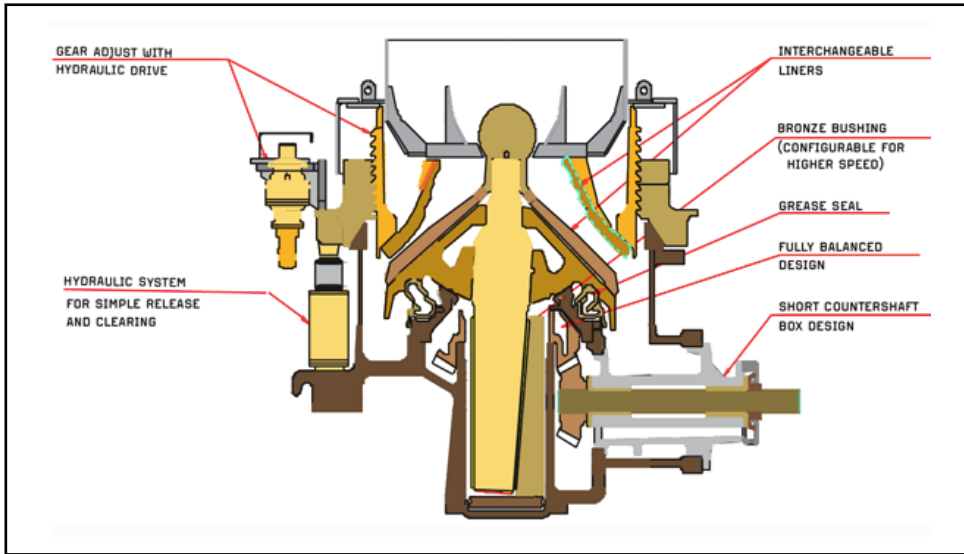
Product Gradations – Percent Passing												
Closed Side Settings												
	Standard						Higher Speed					
Inch	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
MM	13	19	25	31	38	50	13	19	25	31	38	50
4" (100)						100						100
3" (75)					100	90					100	90
2 1/2" (64)				100	90	80				100	90	80
2" (50)			100	90	80	60			100	90	80	70
1 1/2" (38)		100	90	80	60	45		100	90	80	70	50
1 1/4" (32)		90	80	60	46	30		90	80	70	50	30
1" (25)	100	85	60	43	30	20	100	85	70	51	30	24
3/4" (19)	85	60	40	29	20	14	90	70	50	31	24	17
1/2" (13)	60	35	22	17	14	11	70	50	30	24	17	12
3/8" (10)	40	22	16	13	11	7	50	31	22	17	12	8
1/4" (6)	22	14	11	9	7	5	31	22	16	12	8	5
4# (5)	16	11	8	7	5	3	22	17	12	8	5	3
6# (3)	12	8	6	5	3	2	17	12	8	5	3	2
8# (2)	8	6	4	3	2	1	12	8	5	3	1	1

Note 1: Figures for 1/4" to 3/4" Closed Side Settings are for closed circuit application and the rest are for open circuit application. Note 2: The values are for the average feed material with WI = 12 to 14. Note 3: The values in the above tables will vary with the method of feeding, feed distribution, feed segregation, crushing cavity, bulk density, fines in the feed, moisture content, fracture characteristics, speed, etc. Consult Trio Engineered Products, Inc. for more accurate estimate.

Description		
Standard		
HP	200 HP	160 KW
Speed	485 RPM	
Weight	55000 LBS	25000 KG
Size	126x92.5x105.5"	3200x2350x2680MM
Higher Speed		
HP	250 HP	186 KW
Speed	550 RPM	
Weight	55000 LBS	25000 KG
Size	126x92.5x105.5"	3200x2350x2680MM



# TC66 Fine Head



Open Circuit Maximum Capacities (TPH)								
CSS		3/16"	1/4"	3/8"	1/2"	5/8"	3/4"	1"
		5MM	6MM	10MM	13MM	16MM	19MM	25MM
Standard	Short	115	145	125	240	280	340	355
	Metric	105	130	170	220	254	310	325
High Speed	Short	135	170	220	285	335	400	420
	Metric	122	155	200	260	304	365	380

Liner Selection (Tertiary)				
	Min Setting		Higher Speed	
	Inch	MM	Inch	MM
Ex-Coarse	1/2"	13	6"	150
Coarse	3/8"	10	5 1/4"	133
Medium	1/4"	6	3 1/2"	90
Fine	3/16"	5	2 3/4"	70

Note: Maximum feed size should be 80% of the open side (OS) feed opening.

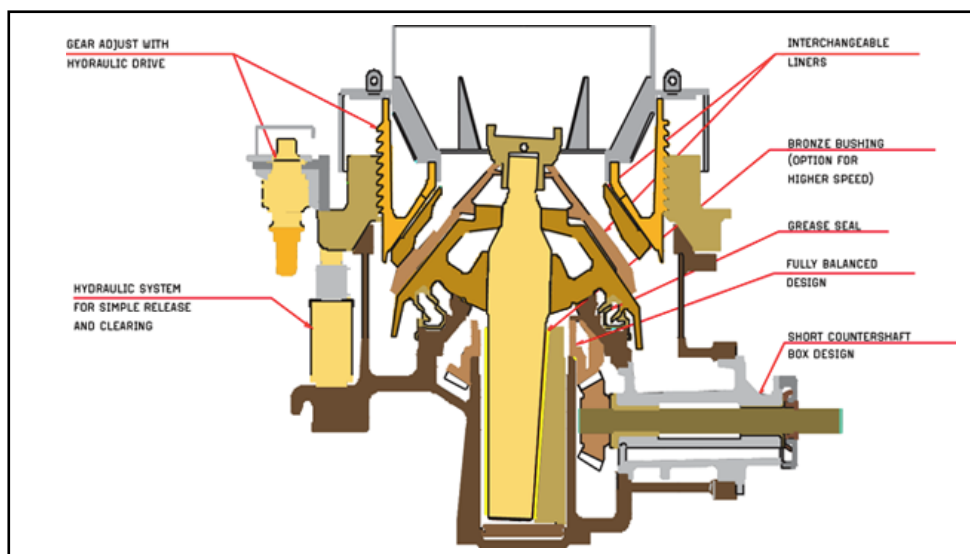
Product Gradations – Percent Passing												
Closed Side Settings												
	Standard						Higher Speed					
Inch	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"
MM	10	13	19	25	31	38	10	13	19	25	31	38
4" (100)												
3" (75)												
2 1/2" (64)												
2" (50)						100						100
1 1/2" (38)					100	90					100	90
1 1/4" (32)					90	80					90	80
1" (25)				100	85	60				100	85	70
3/4" (19)			100	85	60	40			100	90	70	50
1/2" (13)		100	85	60	35	22		100	90	70	50	30
3/8" (10)	100	85	60	40	22	16	100	90	70	50	31	22
1/4" (6)	85	60	35	22	14	11	90	70	50	31	22	16
4# (5)	60	40	22	16	11	8	70	50	30	22	17	12
6# (3)	40	24	15	12	8	6	50	32	22	17	12	8
8# (2)	22	16	11	8	6	4	31	22	17	12	8	5

Note 1: Figures for 1/4" to 3/4" Closed Side Settings are for closed circuit application and the rest are for open circuit application. Note 2: The values are for the average feed material with WI = 12 to 14. Note 3: The values in the above tables will vary with the method of feeding, feed distribution, feed segregation, crushing cavity, bulk density, fines in the feed, moisture content, fracture characteristics, speed, etc. Consult Trio Engineered Products, Inc. for more accurate estimate.

Description		
Standard		
HP	350 HP	260 KW
Speed	485 RPM	
Weight	106000 LBS	48000 KG
Size	155x116x130"	3930x2950x3300MM
Higher Speed		
HP	400 HP	300 KW
Speed	550 RPM	
Weight	106000 LBS	48000 KG
Size	155x116x130"	3930x2950x3300MM

# TRIO TC Series Cone Crushers

## TC66 Standard Head



Open Circuit Maximum Capacities (TPH)										
CSS		1/4"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"
		6MM	10MM	13MM	16MM	19MM	25MM	32MM	38MM	50MM
Standard	Short	145	185	240	295	330	345	365	425	500
	Metric	132	165	220	270	300	315	330	385	455
High Speed	Short	170	220	285	355	400	420	450	525	620
	Metric	155	200	260	320	365	380	410	475	565

Liner Selection (Secondary)				
	Min Setting		Higher Speed	
	Inch	MM	Inch	MM
Ex-Coarse	1 1/2"	38	14 1/2"	370
Coarse	1"	25	10 3/4"	270
Medium	7/8"	22	9 5/8"	240
Fine	5/8"	16	8 3/8"	210

Note: Maximum feed size should be 80% of the open side (OS) feed opening.

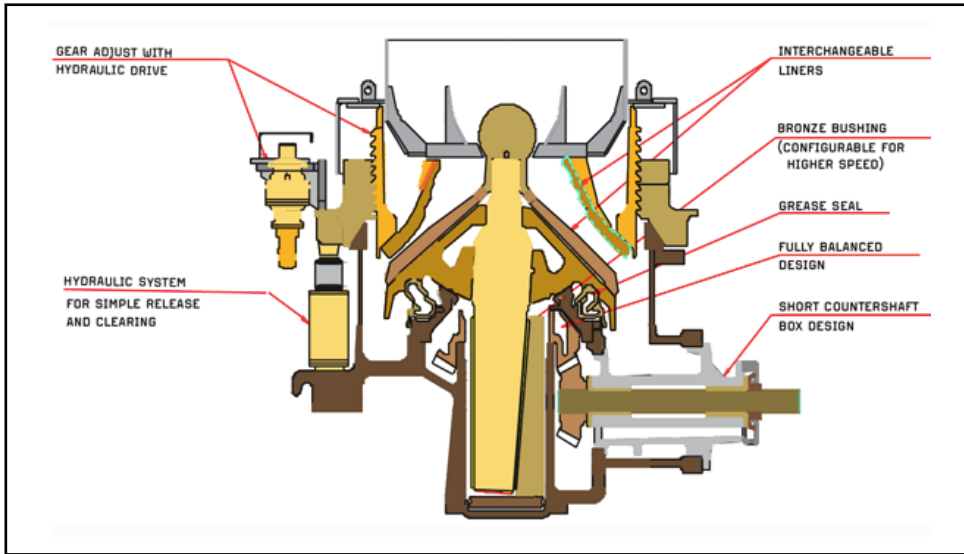
Product Gradations – Percent Passing												
Closed Side Settings												
	Standard						Higher Speed					
Inch	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
MM	13	19	25	31	38	50	13	19	25	31	38	50
4" (100)						100						100
3" (75)					100	90					100	90
2 1/2" (64)				100	90	80				100	90	80
2" (50)			100	90	80	60			100	90	80	60
1 1/2" (38)		100	90	80	60	46		100	90	80	70	46
1 1/4" (32)		90	80	60	46	30		90	80	70	50	30
1" (25)	100	85	60	43	30	20	100	85	70	51	30	24
3/4" (19)	85	60	40	29	20	14	90	70	50	31	24	17
1/2" (13)	60	35	22	17	14	11	70	50	30	24	17	12
3/8" (10)	40	22	16	13	11	7	50	31	22	17	12	8
1/4" (6)	22	14	11	9	7	5	31	22	16	12	8	5
4# (5)	16	11	8	7	5	3	22	17	12	8	5	3
6# (3)	12	8	6	5	3	2	17	12	8	5	3	2
8# (2)	8	6	4	3	2	1	12	8	5	3	1	1

Note 1: Figures for 1/4" to 3/4" Closed Side Settings are for closed circuit application and the rest are for open circuit application. Note 2: The values are for the average feed material with WI = 12 to 14. Note 3: The values in the above tables will vary with the method of feeding, feed distribution, feed segregation, crushing cavity, bulk density, fines in the feed, moisture content, fracture characteristics, speed, etc. Consult Trio Engineered Products, Inc. for more accurate estimate.

Description		
Standard		
HP	350 HP	260 KW
Speed	485 RPM	
Weight	106000 LBS	48000 KG
Size	155x116x130"	3930x2950x3300MM
Higher Speed		
HP	400 HP	300 KW
Speed	550 RPM	
Weight	106000 LBS	48000 KG
Size	155x116x130"	3930x2950x3300MM



# TC84 Fine Head



Open Circuit Maximum Capacities (TPH)										
CSS	1/4"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
	6MM	10MM	13MM	16MM	19MM	25MM	32MM	38MM	50MM	64MM
Short	320-350	420-460	475-575	540-630	570-685	605-740	750-960	880-1050	1210-1430	1400-1650
Metric	290-315	380-425	430-520	485-565	515-615	550-670	680-872	800-955	1100-1300	1270-1500

Product Gradations – Percent Passing								
Closed Side Settings (High Speed)								
Inch	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
MM	6	10	13	19	25	31	38	50
4" (100)								100
3" (75)							100	90
2 1/2" (64)						100	90	80
2" (50)					100	90	80	65
1 1/2" (38)				100	90	80	65	50
1 1/4" (32)				90	80	65	50	30
1" (25)			100	85	65	51	30	24
3/4" (19)		100	85	65	49	31	24	17
1/2" (13)	100	85	65	49	30	24	17	12
3/8" (10)	87	65	49	31	22	17	12	8
1/4" (6)	65	49	31	22	16	12	8	5
4# (5)	50	30	22	16	12	8	5	3
6# (3)	32	22	17	12	8	5	3	1
8# (2)	22	17	12	8	5	3	1	0

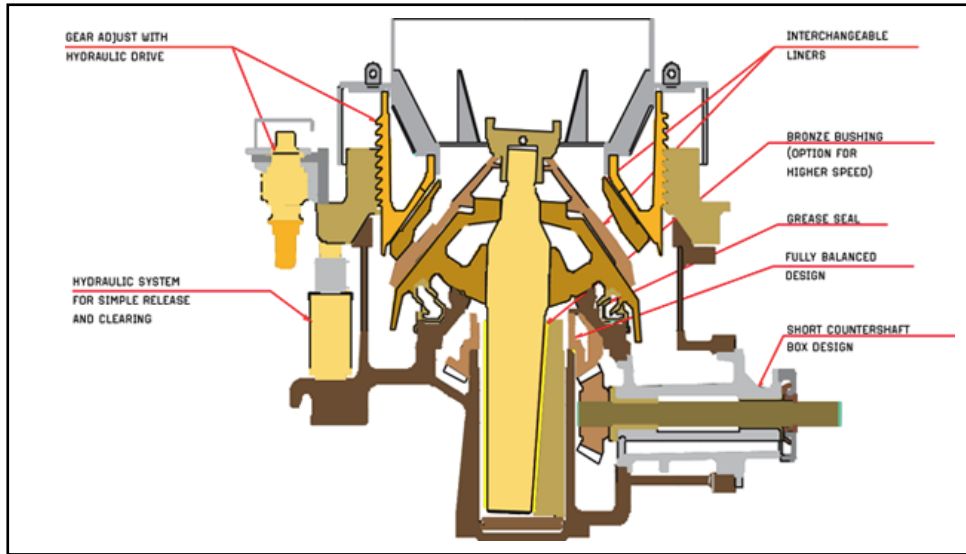
Note 1: Figures for 1/4" to 3/4" Closed Side Settings are for closed circuit application and the rest are for open circuit application. Note 2: The values are for the average feed material with WI = 12 to 14. Note 3: The values in the above tables will vary with the method of feeding, feed distribution, feed segregation, crushing cavity, bulk density, fines in the feed, moisture content, fracture characteristics, speed, etc. Consult Trio Engineered Products, Inc. for more accurate estimate.

Liner Selection (Tertiary)				
	Min Setting		Higher Speed	
	Inch	MM	Inch	MM
Ex-Coarse	5/8"	16	8"	200
Coarse	1/2"	12	7"	180
Medium	3/8"	10	5 1/4"	135
Fine	3/16"	5	4 1/8"	105

Note: Maximum feed size should be 80% of the open side (OS) feed opening.

Description		
Standard		
HP	500 HP	355 KW
Speed	485 RPM	
Weight	174000 LBS	79000 KG
Size	185x134x162"	4700x3400x4100MM
Higher Speed		
HP	500 HP	355 KW
Speed	530 RPM	
Weight	174000 LBS	79000 KG
Size	185x134x162"	4700x3400x4100MM

## TC84 Standard Head



Open Circuit Maximum Capacities (TPH)										
CSS	1/4"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"
	6MM	10MM	13MM	16MM	19MM	25MM	32MM	38MM	50MM	64MM
Short	320-350	420-460	475-575	540-630	570-685	605-740	750-960	880-1050	1210-1430	1400-1650
Metric	290-315	380-425	430-520	485-565	515-615	550-670	680-872	800-955	1100-1300	1270-1500

Product Gradations – Percent Passing								
Closed Side Settings (High Speed)								
Inch	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
MM	6	10	13	19	25	31	38	50
4" (100)								100
3" (75)							100	90
2 1/2" (64)						100	90	80
2" (50)					100	90	80	65
1 1/2" (38)				100	90	80	65	50
1 1/4" (32)				90	80	65	50	30
1" (25)			100	85	65	51	30	24
3/4" (19)		100	85	65	49	31	24	17
1/2" (13)	100	85	65	49	30	24	17	12
3/8" (10)	87	65	49	31	22	17	12	8
1/4" (6)	65	49	31	22	16	12	8	5
4# (5)	50	30	22	16	12	8	5	3
6# (3)	32	22	17	12	8	5	3	1
8# (2)	22	17	12	8	5	3	1	0

Note 1: Figures for 1/4" to 3/4" Closed Side Settings are for closed circuit application and the rest are for open circuit application. Note 2: The values are for the average feed material with WI = 12 to 14. Note 3: The values in the above tables will vary with the method of feeding, feed distribution, feed segregation, crushing cavity, bulk density, fines in the feed, moisture content, fracture characteristics, speed, etc. Consult Trio Engineered Products, Inc. for more accurate estimate.

Liner Selection (Tertiary)				
	Min Setting		Higher Speed	
	Inch	MM	Inch	MM
Ex-Coarse	5/8"	16	8"	200
Coarse	1/2"	12	7"	180
Medium	3/8"	10	5 1/4"	135
Fine	3/16"	5	4 1/8"	105

Note: Maximum feed size should be 80% of the open side (OS) feed opening.

Description		
Standard		
HP	500 HP	355 KW
Speed	485 RPM	
Weight	174000 LBS	79000 KG
Size	185x134x162"	4700x3400x4100MM
Higher Speed		
HP	500 HP	355 KW
Speed	530 RPM	
Weight	174000 LBS	79000 KG
Size	185x134x162"	4700x3400x4100MM

## TRIO Builds Standard and Customized Solutions for Your Application Needs.

Whether it's feeders, crushers, washers, screens, conveyors, or complete plants, TRIO is known around the world for innovative engineering and unmatched value. Built to withstand the most demanding mine and quarry environments, TRIO helps companies meet their operational requirements on time and on budget.



### TRIO Engineered Products Inc

For regional contacts and more information about TRIO products, visit our web site, call, or email us at [info@trioproducts.com](mailto:info@trioproducts.com).

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