



## TRIO APP & APS SERIES IMPACT CRUSHERS

High Efficiency Crushing Solutions

TRIO offers World Class Design, Engineering and Manufacturing to provide high value solutions for your crushing, screening and material handling requirements.

The core goal of TRIO Engineered Products, Inc. is to pursue product improvement, product quality, and provide our customers with the most cost-effective equipment solutions.

## **TRIO - Building Solutions Together**

APP4354

APP5148

APP5160

APP5560

APP6384

APS3030

APS4034

APS4054

APS5148

APS5160

APS6084



TRIO continues to expand as a world-class designer & manufacturer of crushers, screens, washers, and conveyors for the aggregate, mining, recycling, and industrial minerals industries.

TRIO strives to provide the most rugged, robust, and reliable equipment for the most demanding applications. TRIO provides customized high value solutions according to our customers' needs, from single machines to stationary or portable plants, including turnkey projects.

### **TRIO: Creates Value for You**

TRIO Horizontal Shaft Impact Crushers offer customers a low cost crusher alternative that has the ability to work in a wide range of applications when processing low to medium abrasive materials.

One of the main benefits of using a TRIO H.S.I crusher is the high ratio of reduction that can be achieved in a single stage of crushing which is normally 16:1. When compared to the nominal 6:1 reduction ratio achievable in a compression type; jaw or cone crusher.

### TRIO: Creates Value for You

H.S.I crushers produce a very good cubical product shape to meet today's asphalt and concrete products specifications for skidness and elongation.

These high capacity crushes are ideal for aggregate, cement and limestone industries, concrete and asphalt recycling, slag and glass recycling and the mining industry.

TRIO's H.S.I crushers offer rugged reliability, simple maintenance and interchangeable wear parts. TRIO offers two configurations of horizontal impact crushers: the APP Series for high-production primary applications and the APS Series for high production secondary or recycling applications

All models are available as single units or can be incorporated into stationary or modular configurations and portable plants.

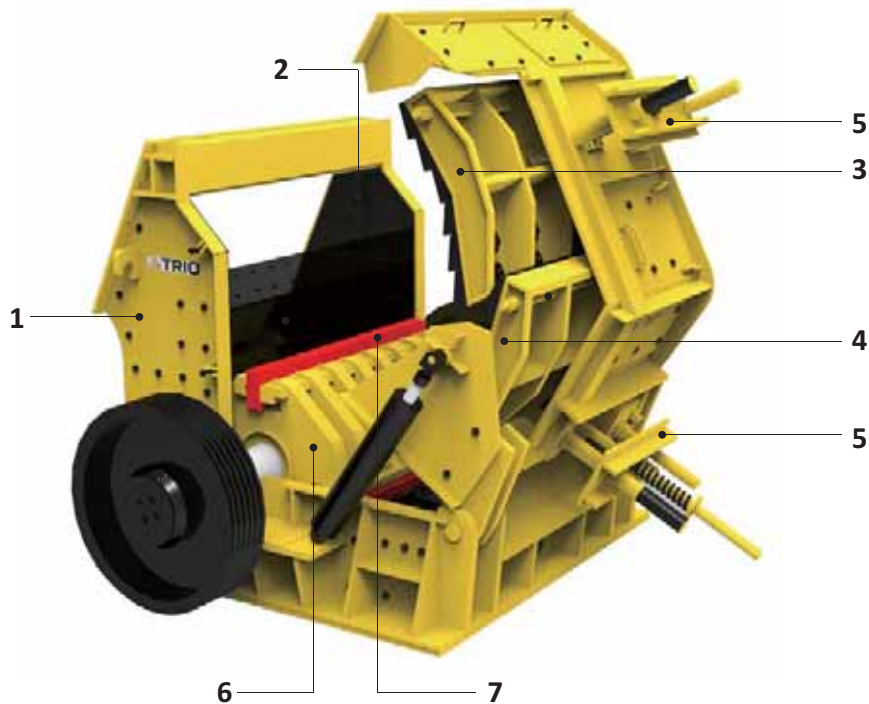


### Features

- High reduction ratio
- Large unobstructed feed opening
- High production capacity
- High quality product gradation
- Hydraulic apron adjustment
- Multiple rotor & blow bar configurations
- Easy to operate & maintain



## Rugged Reliable Design



- 1-CRUSHER MAIN FRAME: is fabricated from low carbon steel, welded and stressed relieved.
- 2-CRUSHING CHAMBER: is completely lined with thick, interchangeable, bolt on, AR liners.
- 3-[APS] PRIMARY IMPACT CURTIAN: is fabricated steel lined with thick, interchangeable, bolt on liners.
- 3-[APP] PRIMARY IMPACT CURTAIN: is a massive reversible one piece cast manganese mono-block.
- 4-SECONDARY IMPACT CURTIANS: are fabricated and lined with thick, interchangeable, bolt on, AR liners. TRIO incorporates hydraulic assisted independent adjustment for all impact curtains. A third stage adjustable curtain for grinding path applications is available as an option on the [APS] machines.
- 5-ROBUST STEEL COIL SPRINGS: provide additional tension on the secondary curtain to maintain a consistent gap setting ensuring a uniform product, while the primary curtain employs bevel spring washers for the same function.
- 6-TRIO ROTORS: are available in solid cast steel or fabricated/stress relieved types. Our rotors have solid forged steel through shaft that is precision machined for assembly and use a keyless rotor to shaft locking device. The rotor shafts are supported on grease lubricated spherical, self-aligning roller bearings with labyrinth type seals and utilize a pedestal mount split pillow block housing for extended life.
- 7-BLOW BARS: There is a wide selection of blow bar metallurgies available to maximize parts wear life, including manganese, and various compositions of chrome. Rotors can be equipped with 2, 3 or 4 rows of blow bars.



### Easy Operation & Maintenance

TRIO provides as standard equipment a self contained hydraulic package with electric motor, hydraulic pump, filter and directional control valves to provide power for opening and closing the machine and assisting in the curtain setting adjustments.

A ported hydraulic manifold with quick disconnect fittings provide a convenient location to attach hoses from the hydraulic power unit. The hoses are disconnected and reconnected depending on which function (crusher opening or curtain adjustment) is being performed



TRIO Guidelines for [APP] & [APS] - HSI Crusher Maximum Allowable Feed Size

Model	Recycling		Limestone		Minimum Discharging Set			
	IN	MM	IN	MM	Primary		Secondary	
APP4354	24" x 24" x 12"	610 x 610 x 305	24	610	6"	152	4"	102
APP5148	24" x 24" x 12"	610 x 610 x 305	36	915	6"	152	4"	102
APP5560	30" x 30" x 12"	760 x 760 x 305	36	915	6"	152	4"	102
APP6384	36" x 36" x 12"	915 x 915 x 305	42	1,066	8"	203	6"	152
APP8084	36" x 36" x 12"	915 x 915 x 305	48	1,220	8"	203	6"	152

Model	Recycling		Limestone		Hard Rock		Minimum Discharging Set	
	IN	MM	IN	MM	IN	MM		
APS3030	*	*	N/A	N/A	N/A	N/A	38	13
APS4034	24" x 24" x 9"	610 x 610 x 230	18	457	16	400	38	19
APS4054	24" x 24" x 9"	610 x 610 x 230	18	457	16	400	38	19
APS5148	24" x 24" x 12"	610 x 610 x 305	21	533	18	457	51	25
APS5160	24" x 24" x 12"	610 x 610 x 305	21	533	18	457	51	25
APS6084	30" x 30" x 12"	760 x 760 x 305	24	610	20	508	51	25

\* Data for marketing use, detail information subject to change without notice due to product updates and customization.





### Safe Easy Access

TRIO's Impact crushers have maintenance access doors on the top, front and sides making inspection and routine maintenance safe and easy.

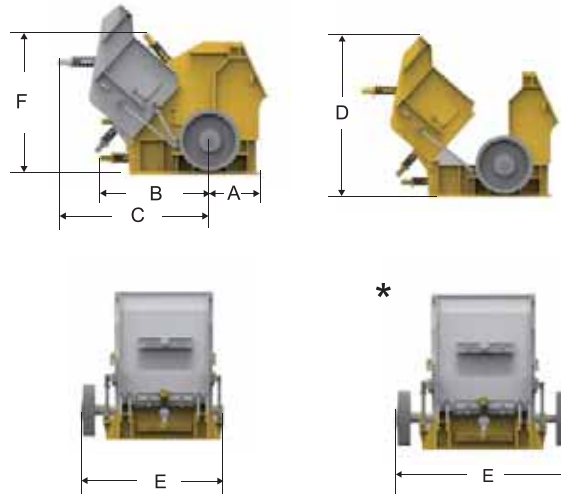
Front housing locking bars on both sides of the machine ensure a positive locking method during inspection and maintenance inside the machine.

Removing and replacing the stripperbar is done outside of the machine via a bolted access cover.

A bolt-on rotor locking device ensures the rotor is locked in a fixed position while the blow bars are being changed out. Helicoils in the ends of the blow bars allow easy rotation of the bars during this procedure.

Model	A	B	C	D	E	F
APP4354	955	2,017	2,223	3,568	2,462	2,559
APP5148	959	2,296	2,492	3,862	2,355	2,920
APP5160	959	2,299	2,493	3,862	2,637	2,920
APP5560	740	2,307	2,495	4,119	2,627	3,125
APP6384	850	2,536	2,991	4,729	3,990	3,085
APP8084	1,703	3,331	4,949	5,895	4,577	4,900
APS3030	480	1,234	1,398	2,007	1,525	1,620
APS4034	750	1,543	1,890	2,772	1,960	2,458
APS4054	776	1,670	2,020	2,802	2,528	2,264
APS5148	959	2,096	2,440	3,362	2,355	2,920
APS5160	959	2,104	2,424	3,351	2,637	2,920
*APS6084	1,210	2,493	2,613	4,099	3,990	3,085

\* Results may vary depending on feed material gradation, density, moisture content, friability, applications and crusher settings. Consult Trio for your specific application capacity.



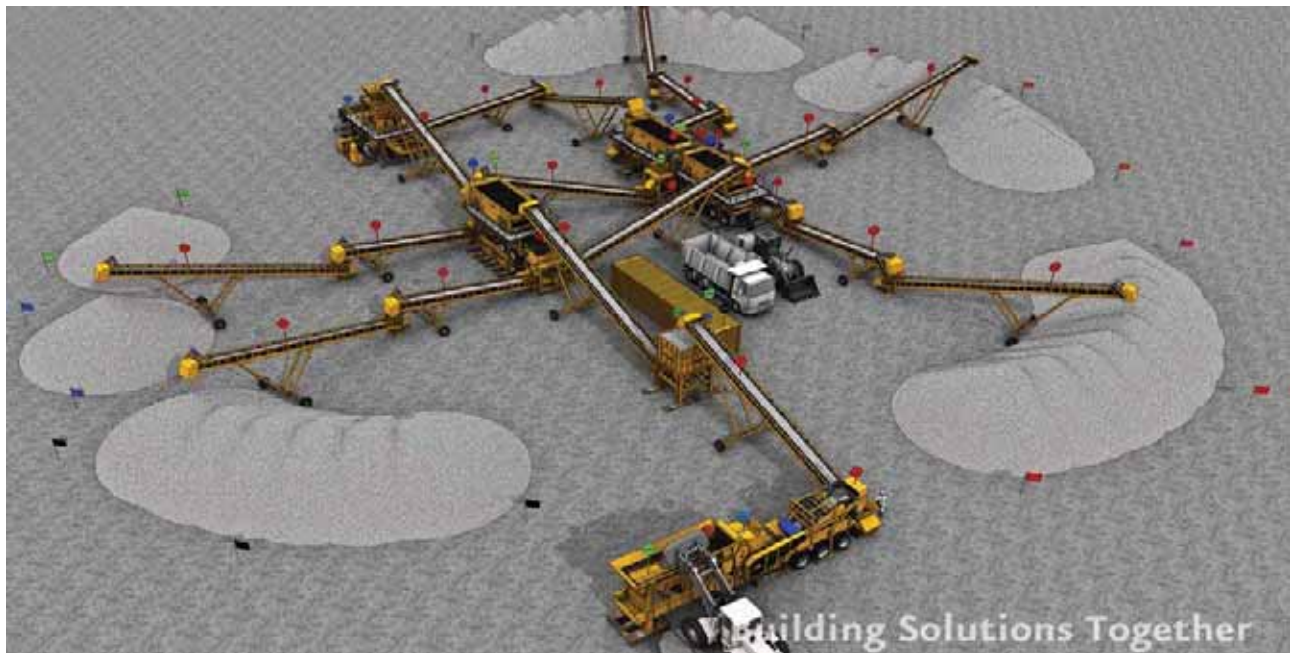
Model	ROTOR SIZE(DIA X L)		FEED OPENING		POWER		WEIGHT		SPEED	CAPACITY	
	IN x IN	MM x MM	IN x IN	MM x MM	HP	KW	LBS	KG	RPM	STPH	MTPH
APP4354	43" x 54"	1,100 x 1,370	40" x 45"	1,000 x 1,400	215 - 270	160 - 200	38,600	17,500	400 - 650	225 - 315	250 - 350
APP5148	51" x 48"	1,300 x 1,220	44" x 50"	1,100 x 1,250	270 - 335	200 - 250	48,600	22,050	350 - 600	270 - 405	300 - 450
APP5160	51" x 59"	1,300 x 1,500	51" x 59"	1,100 x 1,570	335 - 470	250 - 350	52,890	23,990	350 - 600	360 - 495	400 - 550
APP5560	55" x 60"	1,400 x 1,500	56" x 63"	1,400 x 1,570	355 - 470	250 - 350	56,580	25,660	350 - 600	450 - 585	500 - 650
APP6384	59" x 84"	1,500 x 2,130	64" x 86"	1,600 x 2,150	450 x 2	315 x 2	107,500	45,700	350 - 500	585 - 765	650 - 850
APP8084	79" x 96"	2,000 x 2,440	70" x 98"	1,800 x 2,500	603 x 2	450 x 2	253,187	94,500	300 - 450	675 - 900	750 - 1,000
APS3030	30" x 30"	760 x 760	32" x 27"	800 x 680	70	55	9,240	4,190	900 - 1,200	18 - 59	20 - 65
APS4034	40" x 31"	1,000 x 800	32" x 36"	800 x 900	120 - 145	90 - 110	21,650	9,820	400 - 650	72 - 135	80 - 150
APS4054	40" x 54"	1,000 x 1,370	32" x 56"	800 x 1,400	175 - 215	132 - 160	29,550	13,400	400 - 650	108 - 180	120 - 200
APS5148	51" x 48"	1,300 x 1,220	32" x 51"	800 x 1,295	335 - 470	250 - 350	44,890	20,400	350 - 650	225 - 315	250 - 350
APS5160	51" x 60"	1,300 x 1,500	32" x 63"	800 x 1,570	335 - 470	250 - 350	51,550	23,400	350 - 600	225 - 315	250 - 350
APS6084	60" x 84"	1,500 x 2,130	40" x 86"	1,000 x 2,150	350 x 2	250 x 2	93,960	42,620	350 - 500	315 - 405	350 - 450

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## Comprehensive solutions

TRIO can provide not only key single machines, but also complete crushing, screening, washing, and material conveying solutions. We take your investment scale, working environment, capacity and product gradation requirements into consideration to provide a customized solution. Our optimized solutions include machine model selection, operating simulation, and on-site layout.

TRIO's outstanding design, engineering and manufacturing capabilities; together with complete after-sales service will ensure the successful implementation of your project; creating value to help you achieve your pro t objectives.



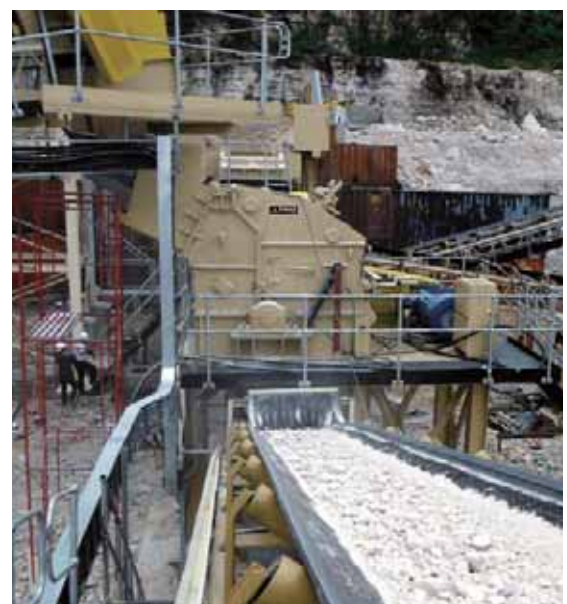
## GLOBAL SERVICE & SUPPORT

From Europe to mid-Asia, Africa to America, China to Australia, in every corner of the world, no matter what you order (a complete system, single machine, or a spare part) TRIO will provide you with professional service and support.

Combined with, off-the-shelf availability, Global distribution for rapid delivery and Superior quality, TRIO replacement parts, and skilled service support personnel make TRIO a valued partner in the global mining and aggregate industries

All TRIO products are assembled and test run in our factory to ensure a fast and efficient installation, creating extra value for you. We also provide professional training for maintenance and operations personnel to insure smooth and efficient plant operations along with safe and easy maintenance.

TRIO APP & APS Series impact crushers are rugged, reliable, high performance crushers, and your best choice. Please contact us to get more information.





## CRUSHERS

CT Series Jaw Crusher  
TC Series Cone Crusher  
APS& APP Series Impact  
Crusher  
TV Series VSI Crusher

## SCREENS

TIH, TIO&TIOSP Series  
Inclined Screen  
TTH Series Horizontal  
Screen  
TBSS& TBSD Series Banana  
Screen

## PORTABLE PLANTS

Track mounted portable  
plants  
Wheel mounted portable  
plants

## PLANT SOLUTIONS

'Turn-key' projects

## TRIO - US

Corporate Office  
12823 Schabarum Ave.  
Irwindale, CA 91706  
United States  
Tel +1 626 851 3966  
Fax +1 626 851 9526  
productinfo@trioproducts.com



[www.trioproducts.com](http://www.trioproducts.com)