

SCREEN MACHINE INDUSTRIES™

4043T, 4043TR IMPACT CRUSHERS



4043T IMPACT CRUSHER Page 2

- Mid-size, heavy-duty crusher
- Ideal for concrete, asphalt, rock
- Patented *Crusher Relief System*™

4043TR RECIRCULATING CRUSHER Page 6

- Crusher with large double-deck screen
- Front fines conveyor produces sized material
- Radial side overs conveyor feeds into hopper, or can be used as second stacker



4043T Impact Crusher - Key Features

The 4043T Impact Crusher is a mid-sized, heavy-duty, track-mounted horizontal impact crushing plant for effectively processing rock, concrete and asphalt materials. The 4043T is the original model to feature the patented *Crusher Relief System*™ that provides the ability to quickly clear blockages caused by marginally oversized or stacked materials.



CRUSHER

- 40" x 43" (1016mm x 1092mm) horizontal impact crusher
 - Years of proven engineering and design reliability
- Large 43" wide x 28" high (1092mm x 711mm) feed inlet opening
- Variable speed control from 600-700 rpm
- Two fully adjustable aprons for multi-stage crushing
- 4 bar rotor design
 - 2 active low chrome ceramic bars and 2 inactive low chrome steel "dummy bars"
- Optional high chrome ceramic or low chrome steel blow bars are also available

ENGINE

- Equipped with a *Caterpillar*® C9 ACERT 300HP (223.7kw) Current Tier Flex diesel engine
- 6 cylinder water-cooled design
- Large, lockable engine compartment with easy walk-in maintenance access
 - Easier maintenance on all service access points
- 175 gallon (663 liter) fuel tank, 105 gallon (398 liter) hydraulic tank
- Hydraulic cooler maintains ideal operating temperature



FLUID COUPLING

- *Transfluid*® fluid coupling
 - Provides smooth startup and shutdown of crusher without risk of excessive wear or total failure
- Designed to allow instant crusher stoppage due to steel or other large uncrushable material
 - Slips fluid on fluid, causing no wear, unlike mechanical clutches
- Operator can disengage the crusher, move the machine and re-engage the crusher in seconds



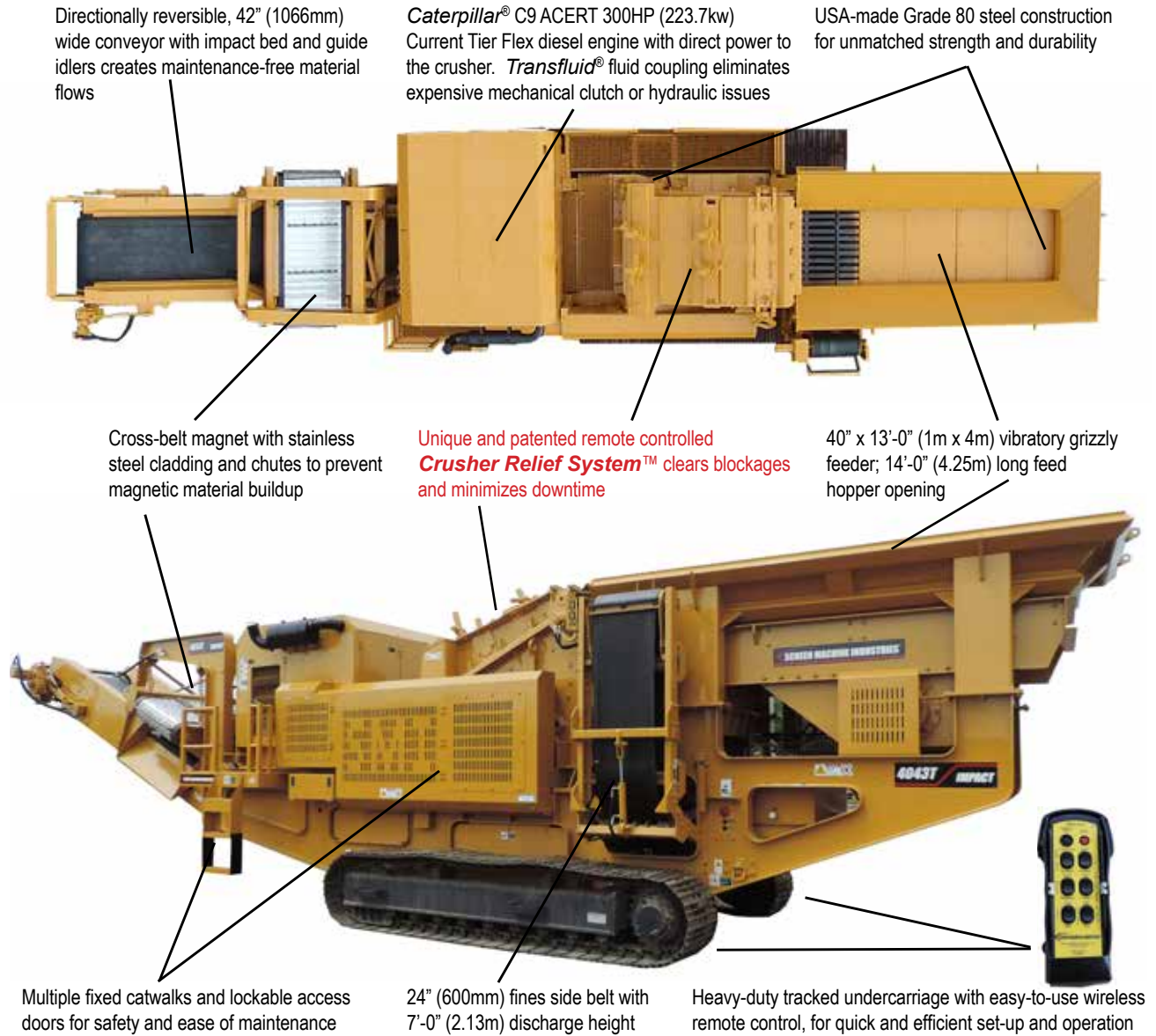
UNDERCARRIAGE

- Heavy-duty tracked undercarriage
- Track operation controlled from a safe distance
 - Wireless remote control handset for movement and operation
 - Low speed for maneuvering, high speed for longer travel
- 24" (600mm) wide pads create low ground pressure



* Specifications subject to change without notice

4043T Impact Crusher - Overview

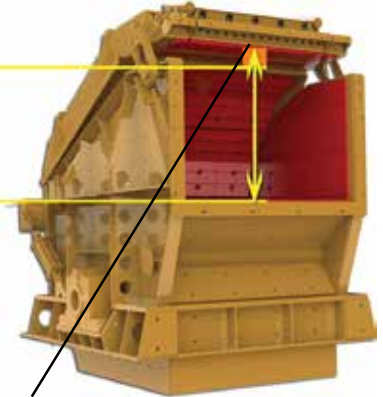


PATENTED CRUSHER RELIEF SYSTEM™

- Raise and lower crusher lid and attached aprons
- Crusher lid operated by remote control
- Hydraulically raise crusher lid up to 6" during operation
 - Raises lid opening 28" to 34" (711mm—864mm)
 - Clears marginally oversized/bridged materials
 - Eliminates the need to reduce feed volume over concern of material bridging
 - Reduces costly downtime/labor to clear crusher
- Multiple safety features, including sensors, mechanical stops and material guards, ensure safe operation
- **U.S. Patent # 7,229,041**

Operating Position

Blockage Clearance



Two hydraulic cylinders raise the crusher lid up to 6" (152mm) relative to the rotor

As the lid is raised, the increase in opening height will dislodge most bridged materials that otherwise shuts down production for a significant period of time

4043T Impact Crusher - Key Features

REMOTE OPERATING SYSTEM/CONTROL PANEL

- Laird® wireless remote with 300ft (91m) range controls virtually all functions of the machine
 - Variable speed feeder with shutoff
 - Patented Crusher Relief System
 - High and low speed track function
 - Left, right, forward and backward movement
 - Engine shutoff control button
- Wireless remote means never leaving the safety of the loader cab to reposition 4043T and continue working
- Remote operation also eliminates climbing on and off the machine while loading for transport
- Detailed control panel allows for easy operation
- Five emergency stops mounted on machine for safety
- Optional Tethered Pendant available



STRUCTURE

- Unibody frame handles the high stress of continual crushing operation and on-site movement
- USA-made Grade 80 steel construction
 - High-strength, wear-resistant steel ensures long life structural integrity through the most demanding job site applications
- Robotically welded to ensure consistent quality and durability
- Elevated frame design for rapid set up
 - 8" (203mm) ground clearance uniquely minimizes preparation needed before unloading and during use
 - More mobility at the job site



MAGNET

- Cross-belt permanent magnet included
 - Four-corner chain height adjustment
- Reversible direction
- Heavy-duty belt with armor cladding and flights for extended belt life - a Screen Machine exclusive!
- Stainless steel chutes on both sides of the conveyor for metals discharge
- Impact bed under magnet
- Variable speed magnet belt



FEEDER

- 40" x 13'-0" (1m x 4m) vibratory grizzly feeder
- 14'-0" (4.25m) long feed hopper opening
- Fixed hopper allows for quick setup/tear down
 - No folding hopper walls to manipulate into place
- USA-made Grade 80 steel hopper wall construction
- AR400 replaceable liner plates on feeder deck
- T1 Tapered grizzly bars for pre-screening
 - Removes fines that do not need to go through crusher, reduces wear on crusher parts
 - Increases lifespan of blowbars and other wear parts
- Variable speed feeder 600 to 900 rpm
- Belt-driven sheave allows hydraulic motor to work in optimal speed range, resulting in long life of motor
 - Hydraulic motor is protected from falling debris



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4043T Impact Crusher - Key Features

CONVEYORS

Main belt:

- 42" (1066mm) wide heavy-duty 440 PIW belt
- 10'-9" (3.28m) main discharge belt height
- Reversible belt to manage material flow/blockage
- Precision® head and tail pulleys with spherical roller bearings
- Martin Engineering® belt scraper for optimum cleaning
- Large Dodge® reducer with hydraulic drive motor
- Impact bed below crusher discharge reduces belt damage/wear
- Rubber disc return rollers and guide idlers on all belts
- Optional 3-point dust suppression system

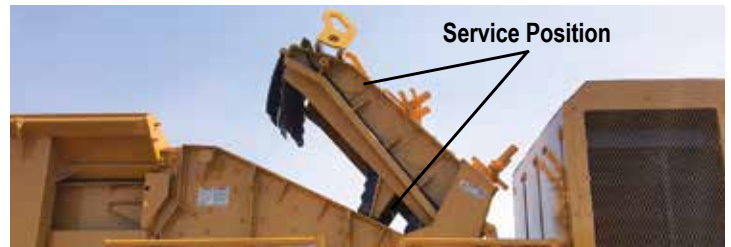
Side stacker:

- Fines conveyor has 24" (609mm) 220 PIW belt with 7'-0" (2.13m) discharge height
- Crusher bypass lever allows for optional fines removal



SERVICEABILITY

- Multiple non-slip platforms with ladders
- Key lock doors to service locations and tool storage compartment
- Service manuals in book form or electronic format
- Rapid response parts availability
- Free lifetime telephone and email technical support



ADD A SCREEN MACHINE SPYDER FOR MAXIMUM PRODUCTIVITY



516T

Add a Spyder® screening plant to separate the 4043T's crushed aggregate into three or even four different sizes. Recirculate oversized product back into the 4043T with the Spyder 622TH or 514TS. Track mounted portable stacking conveyors can be added to increase the stockpiling capacity and reduce the frequency of plant repositioning. Whatever your screening needs, Screen Machine has a product to do it, and to work in perfect integration with the 4043T.



514TS



512T



622TH

4043TR Recirculating Impact Crusher - Key Features

Built with all the rugged performance and durability of our standard 4043T, the 4043TR Recirculating Impact Crusher offers two additional functions:

- A large two-deck screen, fed directly from the crusher, delivers sized product off the fines conveyor
- An additional radial overs conveyor feeds directly back into the hopper, or can be positioned to the side for stockpiling

The 4043TR incorporates two of our patented technologies — the *Crusher Relief System* for the crusher lid and *Smooth Start*® for the screen box. For unmatched productivity, especially in areas such as road construction where a smaller footprint is needed, the 4043TR is an ideal choice.



CRUSHER

- 40" x 43" (1016mm x 1092mm) horizontal impact crusher
 - Years of proven engineering and design reliability
- Large 43" wide x 28" high (1092mm x 711mm) feed inlet opening
- Two fully adjustable aprons for multi-stage crushing
- 4 bar rotor design
 - 2 active low chrome ceramic bars and 2 inactive low chrome steel "dummy bars"
- Optional high chrome ceramic or low chrome steel blow bars available



RADIAL RECIRCULATING CONVEYOR

- 20" (508mm) recirculating conveyor delivers overs back to hopper
- Conveyor projects material far into the hopper and spreads it across the feeder, preventing uneven wear on one side of the crusher rotor
- **Hydraulic swivel allows conveyor to be used for recirculating or positioned at 90-degree angle for stockpiling — a Screen Machine exclusive!**
- Conveyor swivels 180 degrees and anchors parallel to the unit, making it simple for transfer to another job site



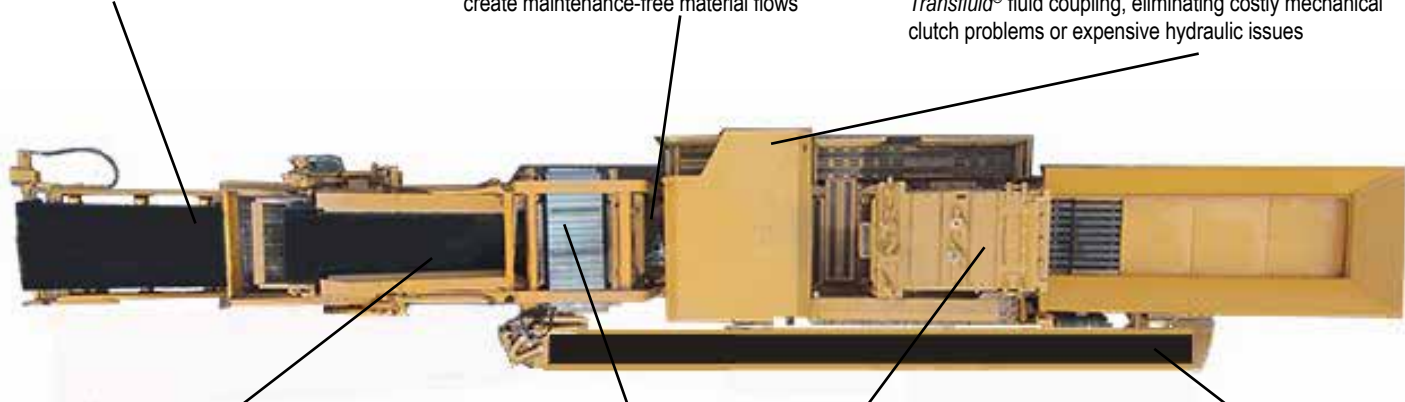
* Specifications subject to change without notice

4043TR Recirculating Impact Crusher - Overview

48" (1219mm) wide fines conveyor delivers sized material off the front of the machine

Directionally reversible, 42" (1066mm) wide conveyor with impact bed and guide idlers create maintenance-free material flows

Caterpillar® C9 ACERT 350HP (261kw) Current Tier Flex diesel engine provides power directly to the crusher through Transfluid® fluid coupling, eliminating costly mechanical clutch problems or expensive hydraulic issues



5' x 12' (1.5m x 3.7m) two-deck shaker screens, with heavy throw (3/8" at 1100 rpm). Patented Smooth Start® technology eliminates low-speed stress

Cross-belt magnet with stainless steel cladding and chutes to prevent magnetic material buildup

Unique and patented remote controlled Crusher Relief System™ clears blockages and minimizes downtime

20" (508mm) recirculating conveyor pivots 180 degrees — rear parallel for recirculating, perpendicular for side stacking, forward parallel for transport



Front support legs for operating stability.

20" (508mm) recirculating conveyor with cross conveyor for smooth material flow. Also swivels perpendicular to unit for use as a stacker when not engaged for recirculating

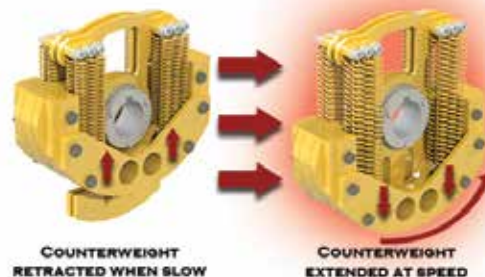
Heavy-duty tracked undercarriage with easy-to-use wireless remote control, allowing for quick and efficient set-up and operation



PATENTED SMOOTH START® TECHNOLOGY

Smooth Start technology (U.S. Patent #6,669,026) eliminates the risk of machinery damage caused by slow speed, violent shaking during start up and shut down.

At slow speeds, shaker weight is retracted, creating no shake. As shaft spins up to operating speed, weight extends, creating shake necessary to screen material. This process works in reverse during shutdown.



4043TR Recirculating Impact Crusher - Key Features

TWO-DECK SHAKER SCREEN

- Heavy-duty double deck 5' x 12' (1.5m x 3.7m) two bearing screen with downhill throw
- Shaker screen shaft spins at 1100 RPM with a 3/8" (9.53mm) throw to create a perfect screening platform in both energy and efficiency
- *Smooth Start*® technology utilized in warm up and shut down operations, saving stress and wear and tear on entire machine
- 1/4" (6.4mm) USA Grade 80 steel screen box walls for industry leading durability
- Both decks accept wire cloth screens



ENGINE

- Power supplied by a *Caterpillar*® C9 ACERT 350HP (261kw) Current Tier Flex diesel engine
- 6 cylinder water-cooled design
- Large, lockable engine compartment with easy walk-in maintenance access
 - *Easier maintenance on all service access points*
- 175 gallon (663 liter) fuel tank, 150 gallon (568 liter) hydraulic tank
- Hydraulic cooler maintains ideal operating temperature



FLUID COUPLING

- *Transfluid*® fluid coupling
 - *Provides smooth startup and shutdown of crusher without risk of excessive wear or total failure*
- Designed to permit instantaneous crusher stoppage due to steel or other large uncrushable material
 - *Slips fluid on fluid, causing no wear, unlike mechanical clutches*
- Operator can disengage the crusher, move the machine and re-engage the crusher in just seconds



STRUCTURE

- Unibody frame handles the high stress of continual crushing operation as well as on-site movement
- USA-made Grade 80 steel construction
 - *High-strength, wear-resistant steel ensures long life and structural integrity through the most demanding job site applications*
- Robotically welded to ensure consistent quality and durability
- Elevated frame design for quick and easy set-up
 - *8" (203mm) ground clearance*



* Specifications subject to change without notice

4043TR Recirculating Impact Crusher - Key Features

REMOTE OPERATING SYSTEM/CONTROL PANEL

- Laird® wireless remote with 300ft (91m) range controls virtually all functions of the machine
 - Variable speed feeder with shutoff
 - Patented Crusher Relief System
 - High and low speed track motion
 - Left, right, forward and backward movement
 - Engine shutoff control button
- Wireless remote means never leaving the safety of the loader cab to reposition and continue working
- Remote operation also eliminates climbing on and off the machine while loading for transport
- Detailed control panel allows for easy operation
- Five emergency stops mounted on machine for safety
- Optional Tethered Pendant available



CONVEYORS

Main belt:

- 42" (1066mm) wide heavy-duty 440 PIW belt
- 11'-3" (3.43m) main discharge belt height, reversible
- Precision® head and tail pulleys with spherical roller bearings
- Impact bed below crusher discharge prevents belt wear

Fines belt:

- 48" (1219mm) wide heavy-duty 440 PIW belt with 10'-10" (3.31m) discharge belt height
- Delivers sized product from the front of the machine

Recirculating belt:

- Cleated 20" (508mm) recirculating conveyor with cross conveyor for smooth material flow
- Also swivels perpendicular to unit for use as a stacker

Side stacker:

- Fines conveyor with 24" (609mm) 220 PIW belt with 7'-0" (2.13m) discharge height



Fines belt



Recirculating belt



Side belt

UNDERCARRIAGE

- Heavy-duty tracked undercarriage
- Track operation controlled from a safe distance
 - Wireless remote control handset for movement and operation
 - Low speed for maneuvering, high speed for longer travel
- 20" (508mm) wide pads create low ground pressure



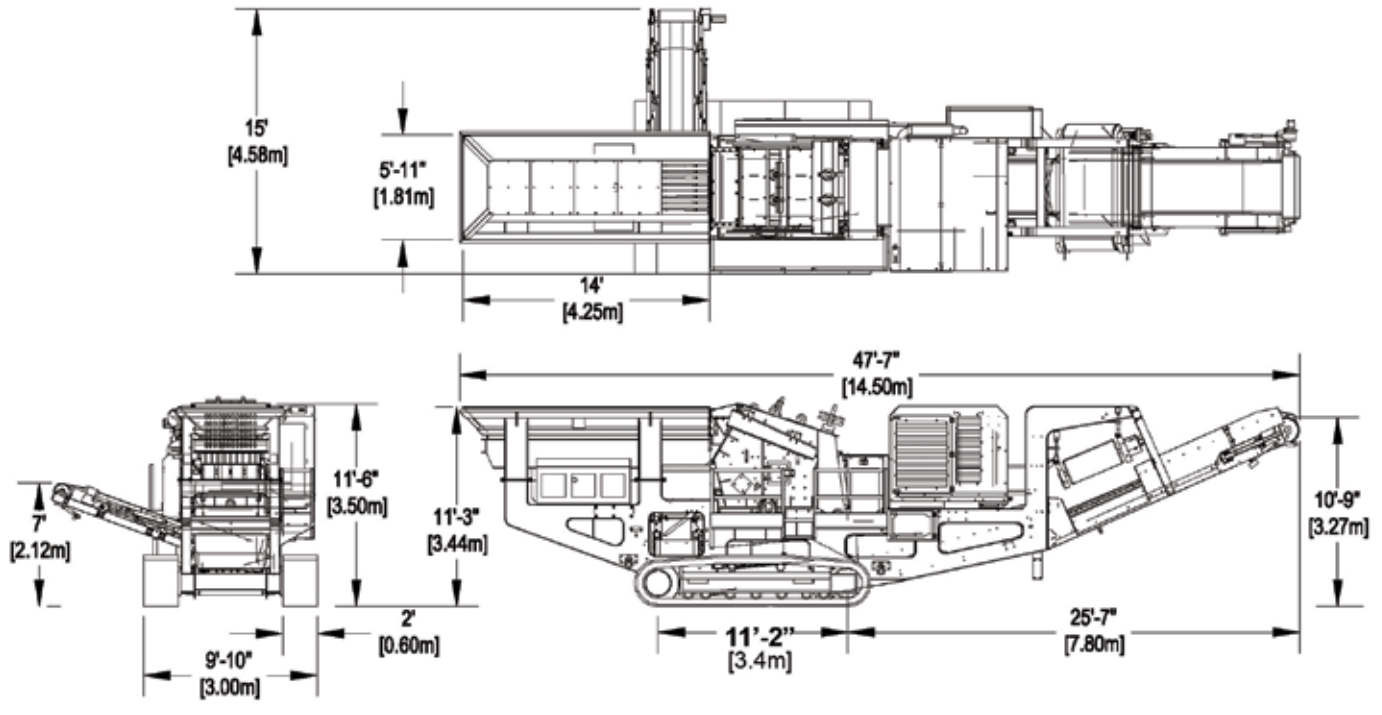
SERVICEABILITY

- Multiple non-slip platforms with ladders
- Fines conveyor and screenbox lower to allow access to screens
- Key lock doors to service locations and tool storage compartment
- Service manuals in book form or electronic format
- Rapid response parts availability
- Free lifetime telephone and email technical support

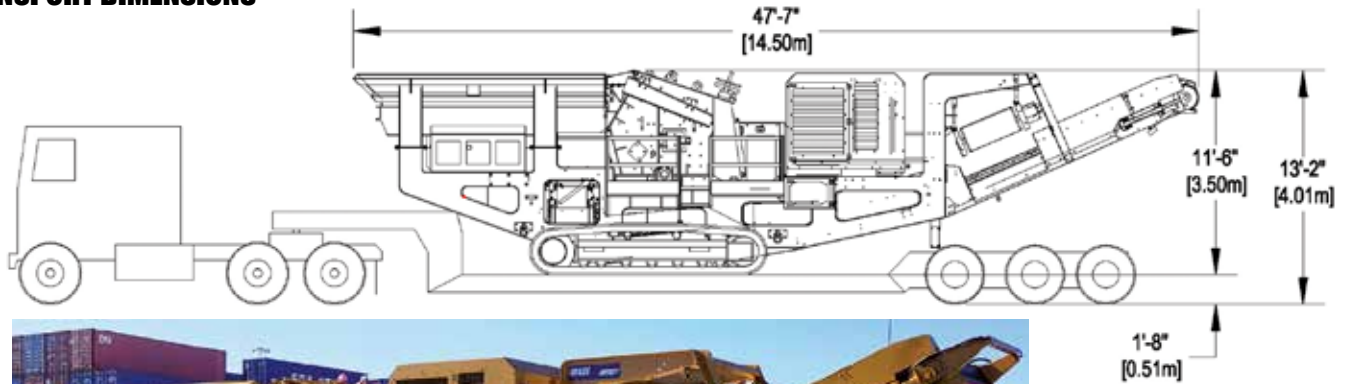


4043T Impact Crusher - Dimensions

OPERATING DIMENSIONS



TRANSPORT DIMENSIONS



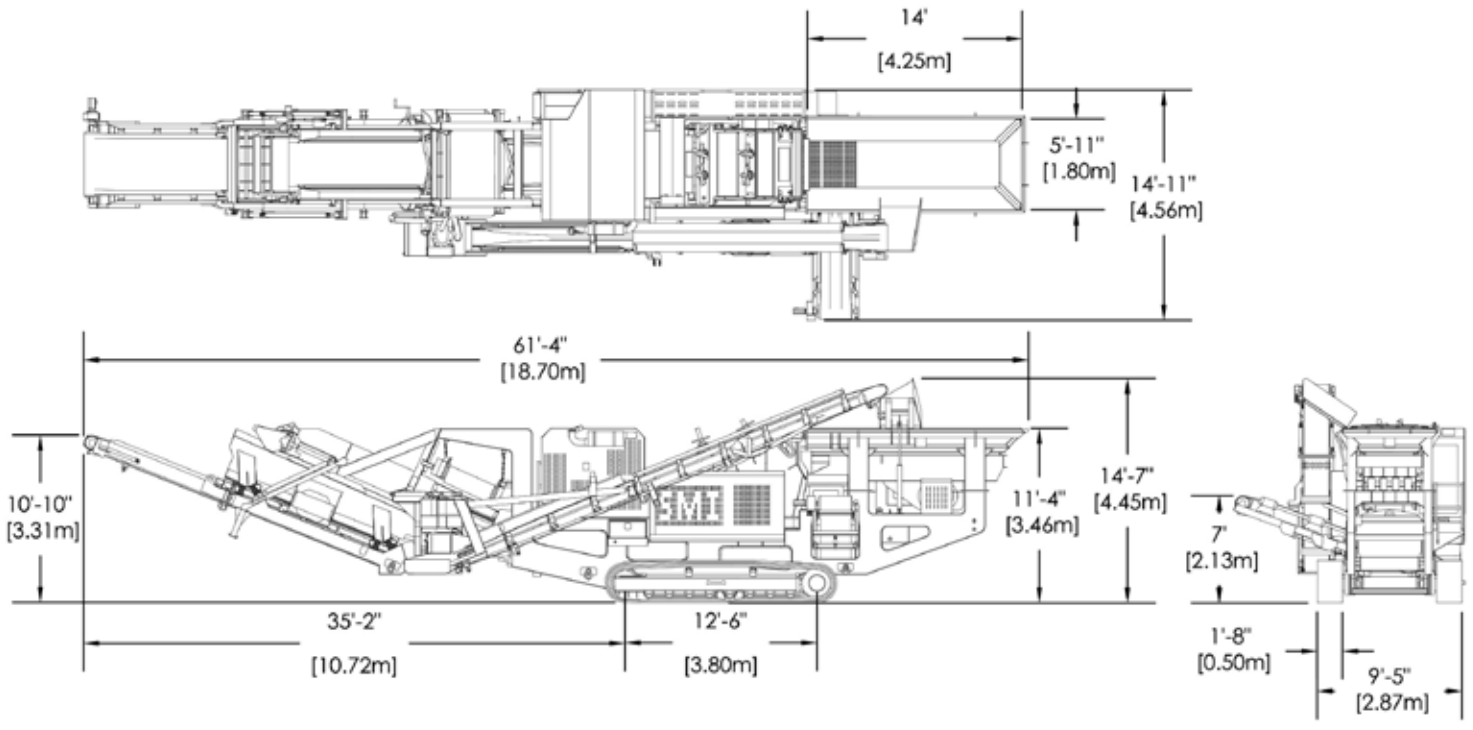
Designed for ease of transport to job site.

SPECIFICATIONS																
Height	Length	Width	Weight	Hopper	Crusher Opening	Rotor	Main Conveyor	Discharge Height	Fines Stacker	Discharge Height	Engine	Crusher Speed	Tracks	Fuel Capacity	Hydraulic Capacity	
11'-6"	47'-7"	9'-10"	79,500lbs	5'-11"x14'	43"x28"	40"x43"	42"	10'-9"	24"	7'-0"	Cat C-9	600-	24" wide	175gal	105gal	
3.5m	14.5m	3m	36,061kgs	1.81m x4.25m	1092mm x711mm	1016mm x1092mm	1066mm	3.28m	609mm	2.1m	ACERT 300HP 223.7kw	700rpm	609mm	663liter	398liter	

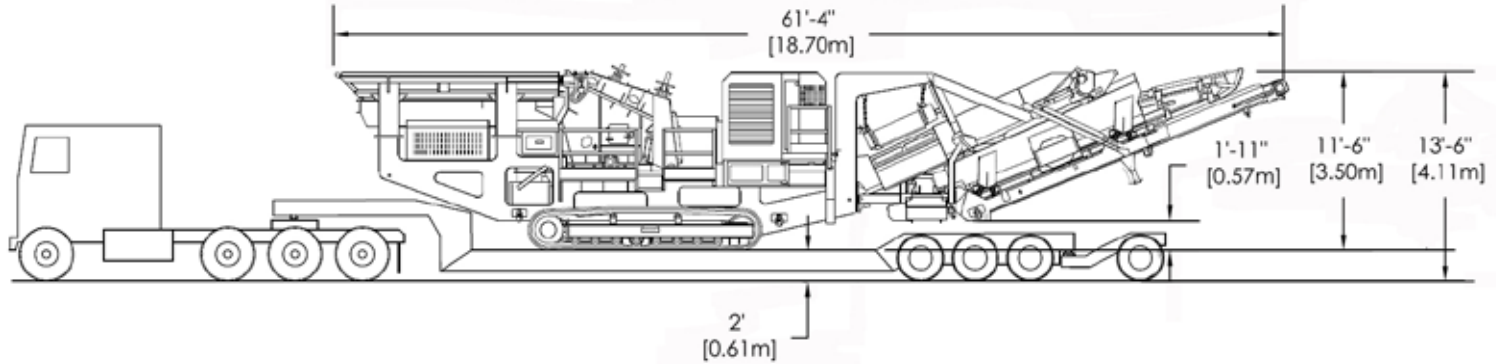
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4043TR Recirculating Impact Crusher - Dimensions

OPERATING DIMENSIONS



TRANSPORT DIMENSIONS



Recirculating conveyor swivels for transport.

SPECIFICATIONS

Height	Length	Width	Weight	Hopper Opening	Crusher	Rotor	Main Conveyor	Discharge Height	Fines Conveyor	Discharge Height	Fines Stacker	Discharge Height	Engine	Crusher Speed	Tracks	Fuel Capacity	Hydraulic Capacity
11'-6"	61'-4"	10'-10"	98,000lbs	5'-11"x14"	43"x28"	40"x43"	42"	11'-3"	48"	10'-10"	24"	7'-0"	Cat C-9 ACERT 350HP 261kw	700rpm	20" wide 508mm	175gal 663 liter	150gal 568liter
3.5m	18.7m	3.3m	44,450kgs	1.81m x4.25m	1092mm x711mm	1016mm x1092m	1066mm	3.43m	1219mm	3.31m	609mm	2.1m					



4043T, 4043TR IMPACT CRUSHERS

CRUSH EVERY JOB™ WITH SCREEN MACHINE INDUSTRIES!

AMERICAN MANUFACTURING

American manufacturing has a proud tradition of quality, durability and innovation. That heritage guides every phase of our engineering, fabrication and assembly. Screen Machine is a global manufacturing leader of portable crushing and screening plants, trommels and conveyors, incorporating innovation and craftsmanship into every machine. It all begins with our commitment to uncompromising quality — a foundation we have had since our company was founded in Central Ohio more than 50 years ago.



BRAND NAME QUALITY

Screen Machine Industries partners with top manufacturers like *Caterpillar*®, *Dodge*® and *Precision*® for vital components in our products, adding even more integrity and reliability to the entire line. Whether those components are the vitals that run the machine or the minute details that bring it all together, we ensure every machine's performance by using only trusted name brands.



STRENGTH AND DURABILITY

Peace of mind is knowing that innovative engineering and quality components are going to last, even under the most extreme conditions. Through our use of the highest quality USA-made Grade 80 steel, fabricated by skilled hands and robotic precision, our machines offer greater strength and longevity without excessive weight. From the first cut of steel through the final weld, Screen Machine products consistently redefine American durability by outlasting the competition.



STRENGTH AND DURABILITY

We stand firmly behind every machine that leaves our factory. Our product support team is here to provide assistance when you need it most. Speaking with product support engineers, design engineers and manufacturing engineers, without waiting hours or days for a callback, is crucial to limiting downtime. On-site set-up and training, along with detailed manuals, rapid parts availability, update alerts and AggFlow simulations, all combine to give you everything you need to get the most out of your machinery.



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AUTHORIZED SCREEN MACHINE DEALER:

