

SCREEN MACHINE INDUSTRIES, INC.

AN AMERICAN MANUFACTURER OF PORTABLE CRUSHING AND SCREENING EQUIPMENT

JXT JAW CRUSHER

WEIGHT: 98,000 LBS
(44,452 KGS)



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INDUSTRIAL EQUIPMENT INCORPORATED
Concrete, Aggregate, and Material Handling Equipment

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SCREEN MACHINE INDUSTRIES, INC.

JXT Jaw Crusher

OVERVIEW

Screen Machine Industries is a global leader in crushing and screening equipment with manufacturing headquarters located in Columbus, Ohio, USA.

Directionally reversible, 42" wide conveyor with impact bed, rebar guard and guide idlers creates maintenance free material flows

Caterpillar® C-9 Tier III ACERT engine coupled directly to the crusher through a *Transfluid®* fluid coupling eliminates costly mechanical clutch problems or expensive hydraulic issues

Universal Engineering Jaw Crusher, manufactured in Cedar Rapids, Iowa, USA

USA Sourced GRADE 80 steel construction for strength and durability

Crossbelt magnet with stainless steel cladding and chutes to prevent magnetic material buildup

Multiple catwalks and lockable access doors create ease of maintenance

Industry unique **Hydraulic Blockage Clearance** and **Remote Control Hydraulic Adjustment** facilitates maximum productivity

State of the art **Tramp Iron Relief** feature automatically senses and bypasses uncrushables continuously during operation

Track-mounted design with easy to use wireless remote control allows for quick and efficient setup and operation

Specifications Subject To Change Without Notice

KEY FEATURES

JAW CRUSHER

- Rigid one-piece fabricated base frame is reinforced for unmatched durability and strength
- Fabricated steel pitman is heavily reinforced, machined and stress relieved
 - Provides the ability to absorb shock loads
 - Stronger than cast pitmans
- Toeless pitman design prevents material build up at crusher discharge outlet
- 1 ¼" (32mm) throw on the eccentric shaft creates a constant downward force on material
- Four manganese jaw dies are reversible and interchangeable
 - Compact size of dies allows for ease of handling
 - Identically sized die is used on all four die sections
- Rebar guard under crusher protects conveyor belt
- Protective grate above crusher keeps large material in crusher chamber



The Value of a Universal Engineering Jaw Crusher

With its overhead eccentric principal, Universal Engineering Corp. brought double crushing action to the rock producers of America several decades ago and made crushing a profitable business. Universal's patent in 1906 was the first overhead eccentric, single toggle jaw crusher. Universal's overhead eccentric jaw crushers last longer and crush longer because they are constructed from top quality materials to a field proven design. These crushers are built with brute strength for rugged service in a tough industry. There are many attempted copies of the Universal overhead eccentric jaw crushers, but few have challenged Universal's superiority. Daily reports from owners of Universal jaw crushers, some of them in service for 70 years and still going strong, lend proof to Universal's superiority and durability in the industry.



CRUSHING ACTION

- Steep toggle angle creates strong toe action
 - Creates crushing force over the full face of the chamber
 - Universal Engineering* is well known for their steep toggle angles having 5 to 10 degree advantages over many other jaws creating industry leading crushing actions
- More toe action equates to more crushing throughput
 - Strong toe action decreases chance of plugging when processing sticky materials



JAW SIZE

- Actual jaw size [Depth (A)] measures 26" (66cm) from peak of jaw die to peak of jaw die on new and unworn dies
 - Measured without the jaw dies yields a 32" (81cm) dimension
- Actual jaw size [Width (B)] measures 44 ½" (1.13M) inside of unworn liner plate to inside of unworn liner plate
 - Measured without the liners plates yields a 46 ½" (1.18M) dimension
- The larger the die opening, the larger the possible raw material size
 - Inconsistent measuring of jaw opening, either without dies, with heavily worn dies or from valley to valley of dies, can lead to misleading size claims and lower production capabilities
 - Accurate jaw sizing and true crushing action determine true production rates and profitability



HYDRAULIC RELEASE SYSTEM

BLOCKAGE CLEARANCE

- Screen Machine Industries' exclusively designed control system
- Jaw can be opened with the remote control to clear a blockage
Upon clearing jaw will return automatically to the previously set limit



TRAMP IRON RELIEF

- State of the art Tramp Iron Relief System protects the jaw when an uncrushable enters the jaw chamber
- Jaw automatically returns to previously set limit after the tramp iron has cleared
- True "adjust on the fly" capability via hydraulic adjustment during operation



Visit www.screenmachine.com to view video animation



JAW ADJUSTMENT

- Hydraulics allow the jaw to be adjusted quickly and easily by the wireless remote control or the control panel and can be operational within minutes
- Low pressure hydraulic system uses common components for ease of maintenance
- Hydraulic cylinder combined with mechanical spring creates constant tension on the toggle without wear on hydraulic components



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JXT Jaw Crusher

ENGINE

- Caterpillar® C-9 Tier III ACERT 300 HP diesel engine
- Large lockable engine compartment
 - Walk-in area provides ease of maintenance on all service access points
- 175 gal (663 l) fuel tank and 105 gal (398 l) hydraulic tank with hydraulic cooler

FLUID COUPLING

- Transfluid® hydraulic fluid coupling
 - Provides smooth startup and shutdown operations of crusher without the risk of excessive wear or catastrophic 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 uniquely disengage the crusher, move the machine and re-engage the crusher as quickly as you can read this



STRUCTURE



- Massive unibody structure features unrivaled deep frame design
 - Massive unibody frame handles the high stresses of uneven loading during operation and rough terrain during movement
- USA grade 80 steel construction
 - All structural supports and wear surfaces are manufactured from high strength Grade 80 steel generating a yield strength of 80,000 psi. That's more than two times the yield strength of A36 steel (36,000 psi) commonly used in most other machinery. This single feature alone could double your machine's structural life span.
- Elevated frame design equates to rapid deployment and set up
 - High ground clearance uniquely eliminates the need for any machine disassembly or extensive site preparation prior to movement

UNDERCARRIAGE

- Heavy-duty design for optimum grade climbing ability
 - Low speed for maneuvering and high speed for long distance travel
- Track operation is controlled from a safe distance via remote control
- 24" (600 mm) wide pads create low ground pressure



REMOTE OPERATING SYSTEM & CONTROL PANEL



- Remtron® wireless remote control with 300 ft. (91M) range
 - Variable speed feeder with feeder shutoff
 - Crusher relief and jaw size settings
 - Full track motion and speed (high and low)
 - Engine shutoff control button
- Wireless remote means never leaving the safety of the loader cab to reposition the JXT and resume material processing
- Detailed control panel allows for ease of operation
- Four emergency stops mounted on machine for safety

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JXT Jaw Crusher

FEEDER



- 40"x13'-0" (1M x 4M) vibratory grizzly feeder
- 14'-0" (4.3M) long feed hopper opening
- Fixed hopper allows for quick setup and teardown
 - No folding hopper walls to manipulate
- Grade 80 steel hopper wall construction
- AR400 replaceable liner plates on feeder deck
- T1 tapered grizzly bars for pre-screening
- Variable speed feeder range from 600 to 900 rpm
- Sheave drive allows hydraulic motor to work in optimal speed range, resulting in long life of motor
 - Hydraulic motor is protected from falling debris and loaders
- Automatic feeder shutoff to prevent overload if jaw speed drops
 - Feeder automatically restarts at recovered jaw speed

CONVEYORS



- **Main Belt:**
 - 42" (107cm) wide 440 PIW Global® belt
 - 10'-9" (3.27M) main belt discharge height, reversible in direction
 - Precision® head & 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 prevents belt wear
 - Rubber disc return rollers and guide idlers on all belts
- **Side Stacker:**
 - Fines side conveyor with 24" (600mm) belt and 7' (2.13M) discharge height
 - Crusher bypass lever allows for optional fines removal to side stacker
- **Optional Dust Suppression System**



MAGNET

- Cross belt permanent magnet
 - Four adjustable corner ratchets allows for optimal positioning above material
- Reversible direction
- Heavy duty belt with stainless steel cladding and flights for extended life
- Stainless steel chutes on both sides of conveyor
 - Prevents magnetic material buildup on chutes
- Impact bed with stainless steel mounted under magnet
 - Prevents magnetic material buildup on rollers while discharging metals

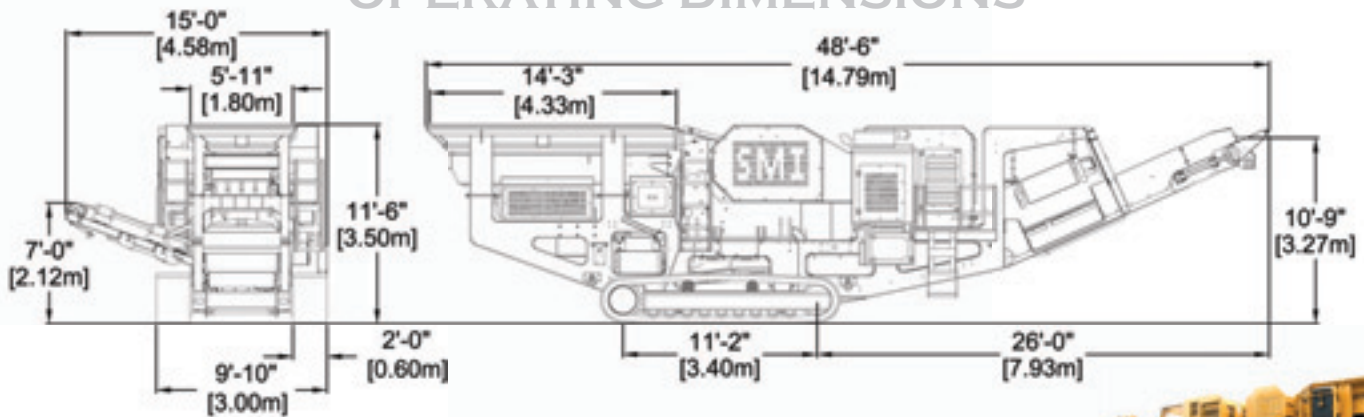


SERVICEABILITY

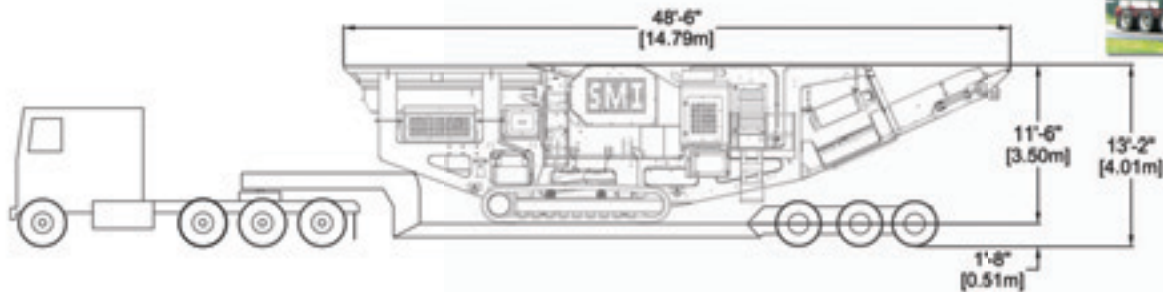
- Multiple non-slip platforms with ladders
- Key lock doors to service locations and tool storage compartment.
- Service manuals in book form or electronic format
- Rapid response parts availability
- Free lifetime telephone and email technical support



OPERATING DIMENSIONS



TRANSPORTATION DIMENSIONS



Length: 48'-6" [14.79M]
Width: 9'-10' [3.00M]
Height: 11'-6" [3.50M]
Weight: 98,000 lbs
[44,452 kgs]

SPYDER 516T



For more information about the Spyder 516T visit www.screenmachine.com

Screen Machine Industries' Spyder 516T is a perfect match to the JXT Jaw Crusher. This wireless remote controlled 3-way split screening plant satisfies the need for a heavy-duty machine to process large volumes in the most demanding applications. This unit can operate alone, or in tandem with the JXT Jaw Crusher (as shown below).

Features include:

- Patented overall machine design allows loaders to uniquely feed from 3 sides of the feeder while maintaining a safe distance from conveyors and stockpiles
- Massive structural components manufactured from Grade 80 USA Steel for superior durability
- Leading American brand name components to ensure peace of mind investment
- Impacts beds and apron feeders support severe duty applications
- Straight pass through design engineered to process large oversize materials
- 5'x16' (1.5M x 4.9M) double deck shaker screen uses patented **Smoothstart** technology



Spyder 516T is covered by
US patents 6,669,026 and 6,698,594

SCREEN MACHINE INDUSTRIES, INC.

AN AMERICAN MANUFACTURER OF PORTABLE CRUSHING AND SCREENING EQUIPMENT

Screen Machine Industries, Inc. is an innovative American manufacturer of portable machinery dedicated to material crushing, screening, washing and stockpiling. Our product offering provides production solutions across a vast array of applications ranging from 15 – 600 tons/yards per hour (rock, sand & gravel, concrete & asphalt, topsoil & compost products, just to name a few). Our engineering design philosophy of incorporating only industry leading brand name components and feature rich competitive advantages has prominently influenced our 40+ years of success.



Screen Machine Industries, Inc.
Corporate Headquarters

The manufacturing process includes the utilization of high definition plasma tables, CNC fabrication equipment, robotic welders, advanced painting facilities and highly skilled mechanical technicians assembling these machines. Multiple levels of quality control and thorough run-time inspections are in place to ensure the quality and reliability that we demand and that you expect.

Screen Machine Industries, Inc. continues to make substantial investments in research and development. Our highly skilled engineers, combined with the latest computer technology, create the most innovative products in the screening industry. Numerous US Patents have been awarded as a result of our creative ambition in developing machinery superior to any in the world. We also strive to add the best design engineers to our organization. Several of our engineers are graduates of M.I.T. and other prestigious universities throughout the United States. Our machines are designed to handle the most rugged demands our customers require.



Our diverse product line consists of heavy-duty track-mounted Jaw and Impact Crushers, Spyders, Scalper, Trommel and Conventional Screening and Shredding Plants. Portable Radial Stacking Conveyors complete the product line with sizes available to fit most every job.



SCALPER 107T



612T TROMMEL



SCALPER 77C



SCALPER 107D



4043T IMPACT CRUSHER



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