



Lokotrack CV, ST and SW Series Mobile Screens





Offering the world's widest range of Lokotrack series smart mobile screens

For over twenty years now, Metso Minerals has pioneered the development of mobile crushing and screening equipment: serial production of both track and wheel mounted mobile crushing and screening equipment started up in 1985.

Today, Metso Minerals remains at the cutting edge of mobile crushing and screening technology. We have delivered well over 10,000 mobile screens and mobile crushing plants to customers worldwide.

Our mobile screen family consists of eight different models. Lokotrack ST Series and Nordberg CV and SW Series mobile screens today set the standard in product development and quality. The product range covers all screening applications, from the accurate classification of aggregates, soil and recycle materials to one or multiple end products.

SmartScreen™ technology provides optimum, continuous screening results

Metso Minerals is the first manufacturer to incorporate the revolutionary SmartScreen™ technology into its track-mounted mobile screens (Lokotrack ST171, ST348, ST352 and ST358)

With its intelligent controller, the SmartScreen™ system supervises and adjusts the unit automatically for optimum, continuous screening results.

For the customer, this automation technology provides increased efficiency and reliability, higher production, easier operation, a reduced need for manpower and thus more profitable screening contracts.

SmartScreen™ technology also means it is possible to link the whole mobile crushing and screening process together with this intelligent control system.

Take a closer look at the new, comprehensive mobile screen range under the Lokotrack brand name. Only Metso Minerals offers you proven features, quality products, and world wide after sales service.



Nordberg CV50

Nordberg CV100

Lokotrack ST171

Lokotrack ST348

Lokotrack ST352

Lokotrack ST358

Lokotrack ST620

Nordberg SW348



Proven and compact mobile screens for efficient contracting

Metso Minerals – the world’s leading manufacturer of crushing and screening equipment – is proud to introduce the new Nordberg CV50 and CV100 mobile screens. Based on proven technology, the new models provide contractors with a simple to use, compact, and highly reliable screening plant that can handle a wide variety of materials. Contractors save money by screening these materials on the job site, thus reducing hauling and tippinging costs.

Portability spells improved productivity

The compact size of Nordberg CV50 and CV100 means that end users can move their screening plant from job site to job site with the fastest set up time in the industry, thereby increasing productivity and profits.

The new mobile screens are so simple to operate that no standby operator is required. This reduces operating costs and increases profits.

Convertible shakerhead adds versatility

The patented convertibility of the CV50 and CV100 shakerhead may accommodate either woven screen cloth, punch plates, grid decks, harp screens or finger decks, (grid decks not available on CV50s).

The CV100 shakerhead angle is hydraulically adjustable from 0 to 35 degrees. Also included is a remote controlled tipping cycle to clear the shakerhead of any unwanted debris. This feature increases job site versatility and allows the user to screen a wide variety of materials.

Standard CV50 and CV100 features include: bolt together shakerhead, SKF and Torrington spherical bearings, wheel brakes, hydraulically operated lifting system, Sauer-Danfoss hydraulics, automatic shut-down system with indicator lights, tamper-proof hour meter, locking engine compartment, tail lights and directional signals and emergency break-away system.

Optional equipment includes casting plate for use with excavators and CE equipment package.

Main features of Nordberg CV50 and CV100:

- Patented, convertible shakerhead for versatility
- Screen a wide variety of materials
- Full portability improves productivity and profits
- Based on field proven technology

The shakerhead angle on the Nordberg CV100 mobile screen is hydraulically adjustable from 0 to 35 degrees.



Woven screen cloth, punch plate, harp screens or finger decks can be used with Nordberg CV50's patented, convertible shakerhead.



Remote controlled tipping cycle to clear the shakerhead of any [unwanted] debris is a standard feature on the Nordberg CV100 mobile screen.



Nordberg CV100 mobile screen is simple to use, compact, highly reliable, and it is able to handle a wide variety of materials.



The first intelligent mobile screen

Lokotrack ST171 is a self-propelled, track mounted, conveyor equipped mobile screening plant for the classification of aggregates, soil and recycle materials. The ST171 provides the ideal solution for jobs that require high production and good mobility combined with compact size.

The patented convertible shakerhead of the ST171 can accommodate either a woven screen mesh, perforated plates, fingers or grid bars. This increases job site versatility and allows the user to screen a wide variety of materials.

New SmartScreen™ technology

With the Lokotrack ST171, Metso Minerals also introduces the revolutionary SmartScreen™ technology. The new ST171 is the first truly intelligent mobile screen in the marketplace with the ability to monitor machine performance and adjust itself continuously for maximum efficiency.

With the push of just one button, the ST171 starts the whole screening process. The new IC300 intelligent controller supervises and adjusts the unit automatically for optimum screening results, depending on conditions and materials. In addition, it carefully monitors all key functions and unit components to ensure longevity and reliability. The interactive display allows for easy monitoring of the whole operation.

Adjustable screen angle

The ST171 screen angle is adjustable from 0 – 35 degrees, giving more efficient screening and increased production. The 35-degree position allows the operator to effectively clear debris from the decks. Forward and reverse shakerhead motion produces maximum screening efficiency and increases production with difficult materials.

The wide, adjustable-speed, cassette style hopper conveyor is capable of moving up to 725 mtph (800 stph) of feed materials.

The ST171 is capable of climbing gradients up to 28 degrees. Optional equipment include high side track protection, a patented casting plate, wing extension plates, grid decks, finger decks, mesh decks, a perforated plate deck and radio remote control.

Main features of Lokotrack ST171:

- Compact and highly mobile screen for contracting
- Patented, convertible shakerhead makes cleaning quicker
- High capacity with SmartScreen™ technology
- Easy access to all service points
- User-friendly with one button process start-up

The Lokotrack ST171 mobile screen with revolutionary SmartScreen™ technology is the first truly intelligent mobile screen in the marketplace.



The adjustable speed, cassette style hopper conveyor is capable of moving a variety of different feed materials.



The Nordberg IC300 intelligent controller supervises and adjusts the ST171 automatically for optimum screening results.



A close-up of the IC300 intelligent controller view.



Optimum screening results with IC300 intelligent controller

The all-new Lokotrack ST348 is a track-mounted mobile screening plant that provides the ideal solution for jobs requiring high production, fine screening, and multiple products.

New SmartScreen™ technology

The Lokotrack ST348 incorporates the revolutionary SmartScreen™ technology. The intelligent controller (IC300) not only controls the start up and shut down process, but also supervises and adjusts the unit automatically for optimum screening results. By controlling the feed rate and screen performance, it maintains maximum screening efficiency. In addition, IC300 carefully monitors all key functions and unit components to ensure longevity and reliability. The ST348 automation system may also be linked with other Lokotrack crushers (LTs) and mobile screens (STs).

2.4 m x 1.2 m (8' x 4') 2-bearing screen

The unique end to end crowning of the ST348 screen box and adjustable screen angle allow for higher production and more efficient separation than with similarly sized flat screens.

The on-board stockpiling conveyors allow for fast set up times by eliminating the need for off-plant stacking conveyors. The side conveyors have a patented folding mechanism that provides a compact profile for transport.

The ST348 is available with a direct feed system when a hopper and feed conveyor are not needed.

Main features of Lokotrack ST348:

- IC300 intelligent controller as standard
- Accurate screening and multiple products
- Adjustable screen angle allows for higher production
- Patented conveyor folding mechanism makes transport easy
- 74 kW installed power

The end to end crowning screen box and adjustable screen angle of ST348 allow for higher production and more efficient separation.



By controlling the feed rate and screen performance, the ST348 maintains maximum screening efficiency.



The hydraulically folding on-board stockpiling conveyors allow for fast set up times.



The Lokotrack ST348 can communicate with LT series mobile crushing plants, increasing operational efficiency.



SmartScreen™ for high production and multiple products

Metso Minerals mobile screens now incorporate SmartScreen™ technology. The latest innovation in this field is the new Lokotrack ST352 track-mounted mobile screening plant that provides the ideal solution for jobs requiring high production, fine screening, and multiple products.

New SmartScreen™ Technology

The Lokotrack ST352 incorporates the revolutionary SmartScreen™ technology. The intelligent controller (IC300) not only controls the start up and shut down process, but also supervises and adjusts the unit automatically for optimum screening results. By controlling the feed rate and screen efficiency, it maintains maximum screening efficiency. In addition, IC300 carefully monitors all key functions and unit components to ensure longevity and reliability.

The ST352 automation system may also be linked with other Lokotrack crushers (LTs) and mobile screens (STs).

Heavy duty construction

The ST 352's heavy duty construction provides the increased stability and durability that is required in difficult applications. Mounted on heavy duty twin 400 mm (15.75") wide hydraulically driven tracks, the ST 352's precision-engineered balance allows for safe movement over soft and uneven terrain. Remote and radio controls make movement around the job site easier.

3.7 m x 1.5 m (12' x 5') 2-bearing screen

The unique end to end crowning of the ST352 screen box and adjustable screen angle allow for higher production and more efficient separation than with similarly sized flat screens.

Main features of Lokotrack ST352:

- Complete process control with IC300 as standard
- High-capacity 12' x 5' screen box
- Proven 2-bearing screen with adjustable screen angle
- Easy access to all service points
- Patented conveyor folding mechanism makes transport easy

The Lokotrack ST352's heavy duty construction provides increased stability and durability for the most demanding applications.



Remote and radio controls are provided as standard features for easy movement around the job site.



The Lokotrack ST352 is available with a direct feed system when hopper and feed conveyors are not needed.



The ST352's new, modular design makes servicing quick and easy.



The new two-deck mobile SmartScreen™

The Lokotrack ST358 mobile screen provides the ideal solution for jobs requiring high production capacity and a large screen area for fine screening. The standard unit is capable of producing two sized fractions, but, depending on the application, an optional two-deck vibrating grid can be installed to yield three sized fractions.

SmartScreen™ technology

The IC300 intelligent controller featuring SmartScreen™ technology offers fully automated control of all machine functions during the screening process. Screen speed and amplitude in conjunction with conveyor speeds are constantly monitored and adjusted, giving higher production rates and more accurate final products.

Heavy-duty construction

The solid construction, demonstrated in the sufficient weight of the Lokotrack ST358, provides for increased durability while allowing the ST358 the ability to withstand the rigors of heavy applications.

The ST358 is mounted on heavy-duty twin hydraulically driven tracks, giving maximum on-site mobility with low ground pressure. Remote and radio control options provide for safe, easy movement around the work site. Process adjustments and tipping of the grid are also possible from the radio control.

Large two-deck, two-bearing screen

The unique end-to-end crowning of the 5.4 m x 1.5 m (18' x 5') ST358 two-deck, two bearing screen box in conjunction with SmartScreen™ technology allows for higher production rates and more efficient separation of difficult materials.

The on-board stockpiling conveyors allow for fast setup by eliminating the need for off-plant stacking conveyors. The self-cleaning side conveyors have a patented folding mechanism that provides a compact profile for transport. The side conveyor discharge height of 4.5 m (15'8") offers a large stockpile capacity and also allows the unit to work in closed circuit with Lokotrack mobile crushing plants.

Lokotrack ST358 highlights

- 110 kW installed power
- High-capacity hopper
- Large two-deck, two-bearing screen
- SmartScreen™ complete process control
- Built with proven, first-class components

The Lokotrack ST358 mobile screen features a large, two-deck screen for high capacity screening.



The standard unit Lokotrack ST358 mobile screen is capable of producing two accurately sized fractions.



The ST358's end to end crowning screen is more efficient than similarly sized flat screens.



The large capacity hopper makes feeding of materials easy.



High capacity mobile screen for contracting and quarries

Lokotrack ST620 is a track-mounted mobile screen, specially designed for applications that require high performance and excellent mobility. Its good continuous screening capacity and adaptability to different crushing and screening processes make it the ideal choice for contractors and quarry operators working with a wide range of different applications.

The ST620's frame is the same strong, robust frame used in the world-acclaimed Lokotrack LT mobile crushing units. The screening unit is equipped with discharge conveyors for four separate product sizes. The powerful diesel engine ensures efficient and independent screening in all conditions.

Efficient DS Series triple-deck screen

The high-performance DS triple-deck screen is specially designed for mobile applications. High capacity is guaranteed by a screen deck area of 11 square metres for all three decks and a steeper inclination angle at the loading end. Screening accuracy is in turn ensured by a shallower angle at the discharge end.

The hydraulically driven screen can be equipped with a wide range of screening meshes to suit different product sizes and requirements.

Easy to operate

The Lokotrack ST620 mobile screen is extremely easy to operate. One push of a button actuates the advanced PLC logic control, which automatically starts the whole screening process.

Main features of Lokotrack ST620:

- High continuous screening capacity
- Easy to use with mobile crushing applications
- User-friendly "one button" process start-up
- Proven, efficient triple-deck screen
- Guaranteed Metso Minerals after sales service

The Lokotrack ST620 mobile screen is fully compatible with LT series mobile crushing plants, like Lokotrack LT1213S.



Full mobile crushing and screening process with Lokotrack LT1415 and ST620.



High screening capacities are ensured with efficient, triple-deck DS screen.



Lokotrack ST620 screening the output of an LT300HP mobile crushing plant for secondary crushing.



Proven heavy-duty mobile screens on wheels

Nordberg SW348 mobile screens combines a heavy-duty design with proven technology to provide high production and increased durability even in the most demanding screening applications.

8' x 4' (2.4 m x 1.2 m) 4-bearing screen

The unique SW348 end to end crowning screen box allows for higher production and more efficient separation than with similarly sized flat screens.

On-board stockpiling and product conveyors allow for fast set up by eliminating the need for off plant stacking conveyors. The self cleaning wing conveyors have a patented folding mechanism that provides a compact profile for transport as well as an excellent stockpile height.

The top screen deck wing conveyor hydraulic system allows the user to adjust the speed of the conveyor to control rollback of material, providing for a safer and more efficient operation.

The maintenance platforms on the SW348 extend across the rear portion of the screens and provide easy access to the screen panels for screen mesh replacement. Ladders with handrails are installed for access to the maintenance platform.

Emergency Stop System

Every SW348 is equipped with an emergency stop system that will render the plant inoperable when activated, providing added safety for the operator.

As an option, a hammermill type shredder allows for more efficient separation of materials prior to screening than more traditional knife style shredders. Optional remote control tipping agid function allows the operator to operate the mobile screen from his loader or excavator, increasing efficiency and plant production.

Main features of Nordberg SW348:

- Equipped with proven, 4-bearing screen
- Hydraulic speed adjustment of top screen deck wing conveyor
- Easy to use with mobile crushing applications
- Added safety with emergency stop system
- Hammermill shredder and remote control as options

The self cleaning SW348 wing conveyors have a patented folding mechanism that provides a compact profile for transport.



The maintenance platform provides easy access to the screen panels for screen mesh replacement.



Nordberg SW348 mobile screen at a multi-stage screening operation.



A hammermill type shredder and a remote control tipping agid function are available as options for SW348.

Nordberg CV50

Shakerhead

Shakerhead size:	7'8" x 7'3" (2300 x 2200 mm)
Loader bucket size range:	1-3 yd ³ (0.8-2.3 m ³)
Opening for bucket* :	9'-10" (3000 mm)
Screen openings available:	1/4"-4" (6 mm-102 mm)
Harp screen openings available:	1/32" x 3/4" (1 mm-19 mm)
Punch plate openings available:	4"- 6" (102 mm-152 mm)
Finger openings available:	1/2"- 2 1/4" (13 mm-57 mm)

*Under screen

Engine

Engine make:	Deutz F2L2011F
Power (kW)	29 hp (22 kW)

Transport dimensions

Length:	20'3" (6200 mm)
Width:	8' (2400 mm)
Height:	10'11" (3300 mm)
Weight:	13 500 lbs. (6124 kg)
Loading height:	9'4" (2.8 m)

Nordberg CV100

Shakerhead

Shakerhead size:	11' x 7' (77 ft ²) 3400 x 2100 mm (7.2 m ²)
Loader bucket size range:	4 -7 yd ³ (3-5.3 m ³)
Opening for bucket* :	13' 2" (4 m)
Screen openings available:	1/4" - 4" (6 mm-101 mm)
Harp screen openings available:	1/32"- 3/4" (1 mm-19 mm)
Punch plate openings available:	3"- 8"
Finger openings available:	1/2"-2 1/4" (13 mm-57 mm)
Tow arrangement:	5th wheel type

*Under screen

Engine

Engine make:	Deutz F4L2011F
Power (kW)	44 hp (32.5 kW)

Transport dimensions

Weight:	24 380 lbs (11 059 kg)
Length:	27' 9" (8500 mm)
Width:	8' 6" (2600 mm)
Height:	11' 11" (3600 mm)
Loading height:	11' 4" (3500 mm)



The convertible shakerhead of Nordberg CV100 adds versatility and productivity of the mobile screen.



Lokotrack ST171 mobile screen.

Lokotrack ST171

Shakerhead

Shakerhead size: 3400 x 2100 mm (11' x 7')

Hopper & conveyor

Hopper conveyor width: 1200 mm (47")
Discharge conveyor belt width: 1200 mm (47")
Discharge conveyor height: 3000 mm (10' 11")
Loading height: 3400 mm (11' 2")
Max. loading width: 4700 mm (15' 6")
Stockpile capacity: 50 m³ (65 yd³)

Engine

Engine make/model: Deutz BF4M2012
Power: 74 kW (100 hp) @ 2200 rpm

Transport dimensions

Length: 12 400 mm (40' 9")
Width: 2500 mm (8' 4")
Height: 3300 mm (10' 10")
Weight: 18 500 kg (40 800 lbs)



The forward and reverse shakerhead motion of Lokotrack ST71 mobile screen allows to obtain maximum screening efficiency with difficult materials.

Lokotrack ST348

Screen

Screen box size	2400 x 1200 mm (8' x 4')
Screen box type	2 bearing

Hopper & conveyors

Hopper capacity	4.5 m ³ (5.8 yd ³)
Loading height	3000 mm (9' 10")
Loading width	3400 mm (11' 2")
Product conveyor width	800 mm (32")
Stockpile capacity	73 m ³ (95 yd ³)

Engine

Engine make/model	Deutz BF4M2012
Power	74 kW (100 hp) @ 2200 rpm

Transport dimensions

Width	2500 mm (8' 2")
Height	3300 mm (10' 10")
Length	12 200 mm (40' 2")
Weight	18 000 kg (39 700 lbs)

Lokotrack ST352

Screen

Screen box size	3700 x 1500 mm (12' x 5')
Screen box type	2 bearing

Hopper & conveyors

Hopper capacity	7.5 m ³ (9.6 yd ³)
Loading height (with grid)	3200 mm (10' 6")
Loading width	4600 mm (15' 3")
Product conveyor width	1200 mm (47")
Stockpile capacity	161 m ³ (210.5 yd ³)

Engine

Engine make/model	Deutz BF4M2012
Engine type	4 cylinder liquid cooled diesel
Engine Power	74 kW (100 hp) @ 2200 rpm

Transport dimensions

Width	3000 mm (9' 10")
Height	3200 mm (10' 10")
Length	17 000 mm (55' 9")
Weight	25 401 kg (56 000 lbs)

Lokotrack ST358

Screen

Screen box size	5480 x 1500 mm (18' x 5')
Screen box type	2 bearing

Hopper & conveyors

Hopper capacity	7.5 m ³ (9.6 yd ³)
Loading height	3300 mm (11')
Loading width	4500 mm (14' 9")
Product conveyor width	1200 mm (47")

Engine

Engine make/model	Deutz BF4M1013C
Power	110 kW (148 hp)

Transport dimensions

Width	3000 mm (9' 10")
Height	3350 mm (11')
Length	17 990 mm (59')
Weight	27 500 kg (60 500 lbs)



Lokotrack ST358 mobile screen features large capacity hopper and extra wide product conveyors.



Lokotrack ST348 mobile screen.



Lokotrack ST352 mobile screen.



Nordberg SW348 mobile screen.

Nordberg SW348

Screen

Screen box size	2400 mm x 1200 mm (8' x 4')
Screen box type	4 bearing

Hopper & conveyors

Hopper capacity	5.3 m ³ (6.9 yd ³)
Loading height	3300 mm (10' 8")
Loading width	3800 mm (12' 6")
Feed conveyor width	1050 mm (42")
Product conveyor width	1000 mm (40")
Side conveyors (2) width	650 mm (26")

Engine

Engine make/model	Deutz F4L2011
Power	37 kW (49 hp)

Transport dimensions

Width	2500 mm (8' 2")
Height	3900 mm (13')
Length	12 200 mm (40' 3")
Weight	18 000 kg (39 700 lbs)



The Nordberg SW348 on-board stockpiling and product conveyors with fast set-up times eliminate the need for off plant stacking conveyors.



Lokotrack ST620 mobile screen.

Lokotrack ST620

Screen

Nordberg DS303 triple-deck screen

- deck width: 1800 mm (5' 11")
- deck length: 6000 mm (19' 8")
- area: 11 m²/deck (118 ft²)

Engine:

CAT3056 DITA

- power: 134 kW (182 hp)/2500 rpm

Transport dimensions

- Length: 14 900 mm (48' 10")
- Width: 3000 mm (9' 10")
- Height: 3800 mm (12' 5")
- Weight: 27 600 kg (60 720 lbs)
- Side conveyors (three units): 3900 kg (8580 lbs)

Conveyors

- Lifting conveyor: H12-11 (feed onto the screen)
- belt width: 1200 mm (3' 11")
- conveyor length: 11 000 mm (36' 1")
- Discharge conveyor: H12-9 (underflow from lower screen deck)
- belt width: 1200 mm (3' 11")
- conveyor length: 9000 mm (29' 6")
- discharge height: 3270 mm (10' 9")
- Side conveyor: H8-8 (overflow from upper screen deck)
- belt width: 800 mm (2' 7")
- conveyor length: 8000 mm (26' 3")
- discharge height: 3100 mm (10' 2")
- Side conveyors (two units): H6,5-8 (overflow from middle and lower screen deck)
- belt width: 650 mm (2' 2")
- conveyor length: 8000 mm (26' 3")
- discharge height: 3100 mm (10' 2")



The triple-deck DS screen of Lokotrack ST620 is specially designed for mobile applications.



Picture 1: Lokotrack ST358 mobile screen screening wet gravel - Finland.

Picture 2: Lokotrack LT105 and LT300HP mobile crushing plant and ST620 mobile screen - Finland.

Picture 3: Lokotrack LT1213S mobile crushing plant and ST620 mobile screen - Spain.

Picture 4: Lokotrack LT1415 mobile crushing plant and ST620 mobile screen - Switzerland.

Picture 5: Lokotrack LT1110 mobile crushing plant and ST348 mobile screen - Germany.

Metso Minerals Mobile Screening Equipment

Our ranges:

CV Series

CV50 mobile screen
CV100 mobile screen

ST Series

ST171 mobile screen
ST348 mobile screen
ST352 mobile screen
ST358 mobile screen
ST620 mobile screen

SW Series

SW348 mobile screen

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