

[SCREENA]

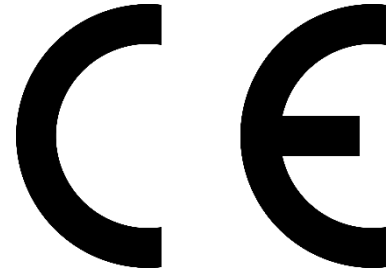
OPERATORS MANUAL





EC Declaration of Conformity

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Machine title: **Screena machine**

Primary use: Vibrating aggregate screener.
For separating & sorting aggregate, dirt and other products by size.

I declare that the machine described above conforms fully to the essential health and safety requirements of the **European Machinery Directive 2006/42/EC**.

Including the following requirements:

EN 953: 1997+A1:2009	Safety of machinery – Guards – General requirements for the design and construction of fixed and moveable guards.
EN ISO 12100: 2010	Safety of machinery – Basic concepts, general principles for design – risk assessment and risk reduction.
EN ISO 13849-1: 2008/AC:2009	Safety of machinery – Safety related parts of control systems – Part 1: General principles for design.
EN ISO 13857: 2008	Safety of machinery – Safe distances to prevent hazard zones being reached by upper and lower limbs.
EN 349: 1993+A1:2008	Safety of machinery – Minimum gaps to avoid crushing of parts of the human body.
EN ISO 14120: 2015	Safety of machinery – Guards – General requirements for the design and construction for fixed and moveable guards.
2006/95/EC	Low Voltage Equipment

Ben Mace
Director

1st February 2021

Important

Read, understand and obey these safety rules and operating instructions before operating this machine. Only trained and authorized personnel shall be permitted to operate this machine.

This manual should be considered a permanent part of your machine and should always remain with it.

If you have any questions, please call Mace Industries.

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SAFETY RULES

[SCREENA]



Danger

Failure to obey the instructions and safety rules in this manual will result in death or serious injury.

Do NOT operate this equipment unless:

- ✓ You learn and practice the principles of safe machine operation contained in this operator's manual:
 1. **Avoid hazardous situations.**
Know and understand the safety rules before going on to the next section.
 2. Always perform a pre-operation inspection.
 3. Always perform functional tests prior to use.
 4. Inspect the workplace.
 5. Only use the machine as it was intended.
- ✓ You read, understand and obey the manufacturer's instructions and safety rules (consisting of the safety rules, operator's manual(s) and machine decals)
- ✓ You read, understand and obey Employer's safety rules and worksite regulations
- ✓ You read, understand and obey all applicable governmental regulations.
- ✓ You are properly trained to safely operate the machine



Electrocution Hazards

This machine is not electrically insulated and will not provide protection from contact with or proximity to electrical current.

Maintain safe distances from electrical power lines.

Do not operate the machine during lightning or storms.

Do not use the machine as a ground for welding.



Setup Hazards

Do not use when under the influence of alcohol or drugs.

Do not alter or disable machine components that in any way affect safety and stability.

Do not replace items critical to machine stability with items of different weight or specification.

Be aware of ground surface prior to installation.

Do not place ladders or scaffolds against any part of this machine.

Do not use the machine on a moving or mobile surface or vehicle.

Ensure all tyres are in good condition and cotter pins are properly installed.

Do not ride on machine.

Do not alter or disable switches.

When erecting the machine, ensure shackles and/or ties are secure



Explosion and Fire Hazards

Do not start the Screena if you smell or detect liquid petroleum gas (LPG), gasoline, diesel fuel or other explosive substances.

Do not operate the machine in hazardous locations or locations where potentially flammable or explosive gases or particles may be present.



Bodily Injury Hazard

Use common sense and planning when installing and operating the machine.

Keep hands and limbs away from moving components, especially oscillating mounts and discharge chute.

Always wear correct PPE.

Component Damage Hazards

Do not use machine as a ground for welding.

Do not attempt to clear excavator bucket by hitting the Screena hopper.

Do not overload the machine - 250kg **MAX** load.

Damaged Machine Hazards

Do not use a damaged or malfunctioning machine.

Conduct a thorough pre-operation inspection of the machine and test all functions before each work shift. Immediately tag and remove from service a damaged or malfunctioning machine.

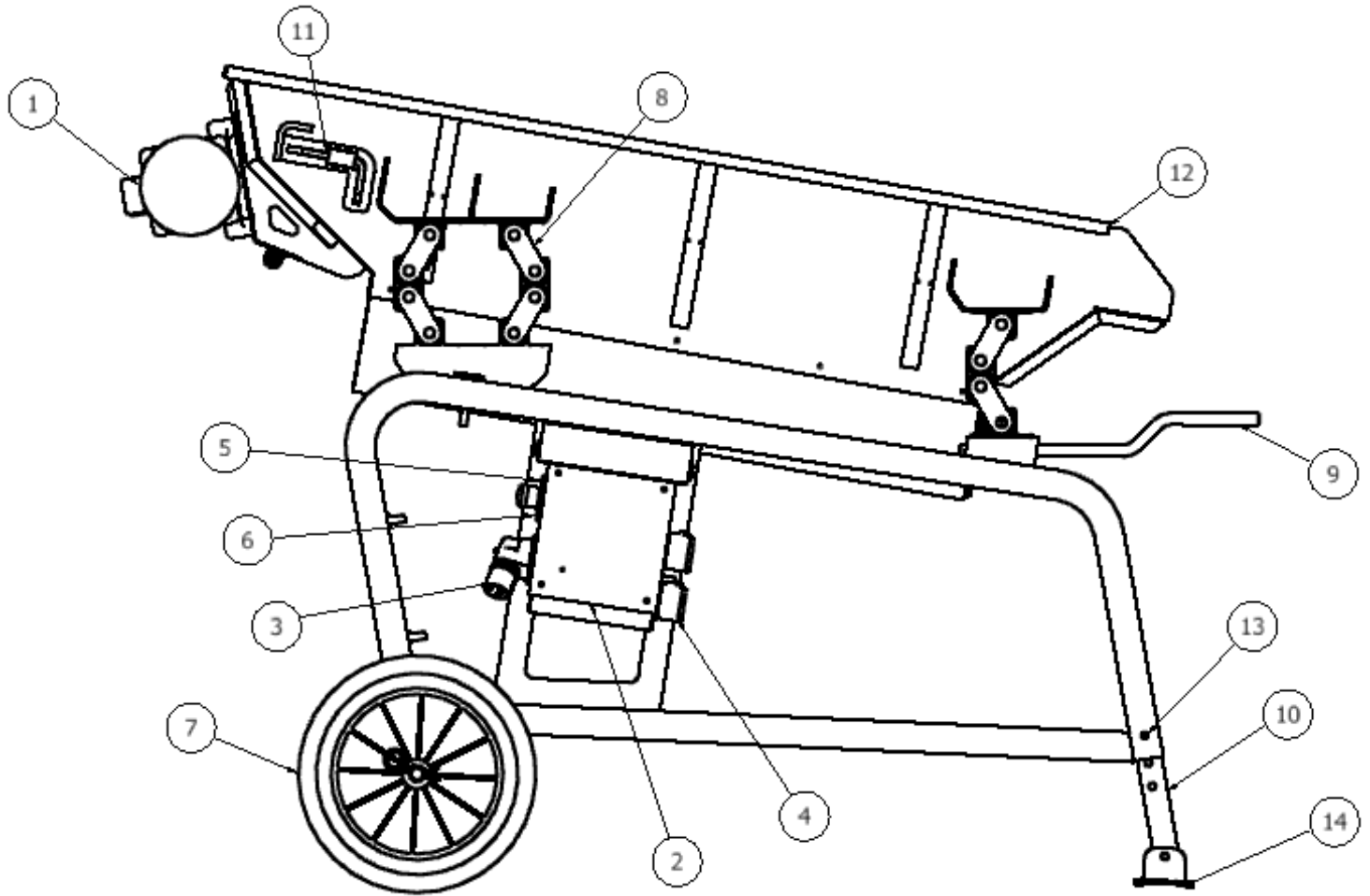
Be sure all maintenance has been performed as specified in this manual and the appropriate Mace Industries service manual.

Be sure all decals are in place and legible.



LEGEND

[SCREENA]



1. Motor

2. Control Box

3. Power In Connector

4. Power Out Connectors

5. Start Button

6. Stop Button

7. Wheels

8. Vibratory (Oscillating) Mounts

9. Machine Handles

10. Adjustable Feet

11. Mesh Tensioner

12. Mesh Hook

13. Foot Pin

14. Pivoting Foot

PRE-OPERATION INSPECTION

[SCREENA]



Do NOT operate this equipment unless:

- ✓ You learn and practice the principles of safe machine operation contained in this operator's manual:
 1. Avoid hazardous situations.
 2. **Always perform a pre-operation inspection.**
Know and understand the pre-operation inspection before going on to the next section.
 3. Always perform functional tests prior to use.
 4. Inspect the workplace.
 5. Only use the machine as it was intended.
- ✓ You read, understand and obey the manufacturer's instructions and safety rules (consisting of the safety rules, operator's manual(s) and machine decals)
- ✓ You read, understand and obey Employer's safety rules and worksite regulations
- ✓ You read, understand and obey all applicable governmental regulations.
- ✓ You are properly trained to safely operate the machine

Pre-operation Inspection

Fundamentals

It is the responsibility of the operator to perform a pre-operation inspection and routine maintenance.

The pre-operation inspection is a visual inspection performed by the operator prior to each work shift.

The inspection is designed to discover if anything is apparently wrong with a machine before the operator performs the function tests.

The pre-operation inspection also serves to determine if routine maintenance procedures are required. Only routine maintenance items specified in this manual may be performed by the operator.

Refer to the list on the next page and check each of the items and locations for modifications, damage or loose or missing parts.

A damaged or modified machine must never be used. If damage or any variation from factory delivered condition is discovered, the machine must be tagged and removed from service.

Repairs to the machine may only be made by a qualified service technician, according to the manufacturer's specifications. After repairs are completed, the operator must perform a pre-operation inspection again before going on to the function tests.

Scheduled maintenance inspections shall be performed by qualified service technicians, according to the manufacturer's specifications.

Operators must

1. Be sure that all decals are legible and in place. See Decals section.
2. Be sure the mesh screen is properly tensioned and in good condition.
3. Be sure the vibratory/oscillating mounts are secure and in good condition.
4. Be sure the correct accessories are present. See parts list.
5. Check the following components or areas for damage, modifications and improperly installed or missing parts:
 - Emergency stop button
 - Control box
 - Wiring
 - Motor and cables
 - Tyres and wheels
 - Nuts, bolts and other fasteners
6. Check entire machine for:
 - Cracks in welds or structural components
 - Dents or damage to the machine
 - Be sure that all structural and other critical components are present, and all associated fasteners and pins are in place and properly tightened.



Observe and Obey:

Only routine maintenance items specified in this manual shall be performed by the operator.

Scheduled maintenance inspections shall be completed by qualified service technicians, according to the manufacturer's specifications and requirements only.

Maintenance symbols legend:

NOTICE

The following symbols have been used in this manual to help communicate the intent of the instructions. When one or more of the symbols appear at the beginning of a maintenance procedure, it conveys the meaning below.



Indicates tools will be needed to carry out this operation.



Check mesh tension

Maintaining the proper mesh tension is essential to good machine performance and service life. Operating the machine with an improper mesh tension can damage machine components.

NOTICE

Check mesh tension whilst power is off.

1. When machine is turned off, ensure the mesh is fitted correctly.
2. Turn the Screena on. If the mesh rattles on the centre brace. Turn off and tighten tensioner bolts evenly both sides.
3. Repeat as necessary until rattle ceases.



Check all fasteners for tightness

Maintaining the proper fastener tightness is essential to good machine performance and service life.

NOTICE

Check all fasteners whilst power is off.

1. Start from the motor towards the base of the Screena unit.
2. Check motor mounting bolts are tight and nylon lock nuts are functioning properly.
3. Complete this process throughout the machine.

Scheduled Maintenance

Maintenance performed quarterly and annually must be completed by a person trained and qualified to perform maintenance on this machine according to the procedures found in the service manual for this machine.

Machines that have been out of service for more than three months must receive the quarterly inspection before they are put back into service.

FUNCTIONAL TESTS

[SCREENA]



Do NOT operate this equipment unless:

- ✓ You learn and practice the principles of safe machine operation contained in this operator's manual:
 1. Avoid hazardous situations.
 2. Always perform a pre-operation inspection.
 3. **Always perform functional tests prior to use**
Know and understand the functional tests before going on to the next section.
 4. Inspect the workplace.
 5. Only use the machine as it was intended.
- ✓ You read, understand and obey the manufacturer's instructions and safety rules (consisting of the safety rules, operator's manual(s) and machine decals)
- ✓ You read, understand and obey Employer's safety rules and worksite regulations
- ✓ You read, understand and obey all applicable governmental regulations.
- ✓ You are properly trained to safely operate the machine

Functional Tests

Fundamentals

The function tests are designed to discover any malfunctions before the machine is put into service.

The operator must follow the step-by-step instructions to test all machine functions.

A malfunctioning machine must never be used. If malfunctions are discovered, the machine must be tagged and removed from service.

Repairs to the machine may only be made by a qualified service technician, according to the manufacturer's specifications.

After repairs are completed, the operator must perform a pre-operation inspection and function tests again before putting the machine into service.

Tests:

Operational test:

1. Supply power to the Screena machine.
2. Press Start button on control box
3. Screena should start vibrating
4. Press Stop button on control box
5. Screena should stop vibrating

Set-up / Mesh exchange:

1. Select an area that is firm, level and free of obstruction.
2. To attach screen mesh, loosen tensioner bolts at top of machine.
3. Lay new mesh onto tensioner bars
4. Tension until tight
5. Press Start button on control box
6. If mesh rattles: Stop Screena and re-tighten tensioner bolts evenly.
7. Repeat as necessary until rattle stops



Do NOT operate this equipment unless:

- ✓ You learn and practice the principles of safe machine operation contained in this operator's manual:
 1. Avoid hazardous situations.
 2. Always perform a pre-operation inspection.
 3. Always perform functional tests prior to use.
 4. **Inspect the workplace.**
Know and understand the workplace inspection before going on to the next section.
 5. Only use the machine as it was intended.
- ✓ You read, understand and obey the manufacturer's instructions and safety rules (consisting of the safety rules, operator's manual(s) and machine decals)
- ✓ You read, understand and obey Employer's safety rules and worksite regulations
- ✓ You read, understand and obey all applicable governmental regulations.
- ✓ You are properly trained to safely operate the machine

Workplace Inspection

Fundamentals

The workplace inspection helps the operator determine if the workplace is suitable for safe machine operation. It should be performed by the operator prior to moving the machine to the workplace.

It is the operator's responsibility to read and remember the workplace hazards, then watch for and avoid them while moving, setting up and operating the machine.

Inspection:

Be aware of and avoid the following hazardous situations:

- Bumps, floor obstructions or debris
- Slopes
- Unstable or slippery surfaces
- Overhead obstructions and high voltage conductors
- Hazardous locations
- Inadequate surface support to withstand all load forces imposed by the machine
- Wind and weather conditions
- The presence of unauthorized personnel
- Other possible unsafe conditions

OPERATING INSTRUCTIONS

[SCREENA]



Do NOT operate this equipment unless:

- ✓ You learn and practice the principles of safe machine operation contained in this operator's manual:
 1. Avoid hazardous situations.
 2. Always perform a pre-operation inspection.
 3. Always perform functional tests prior to use.
 4. Inspect the workplace.
 5. **Only use the machine as it was intended.**
- ✓ You read, understand and obey the manufacturer's instructions and safety rules (consisting of the safety rules, operator's manual(s) and machine decals)
- ✓ You read, understand and obey Employer's safety rules and worksite regulations
- ✓ You read, understand and obey all applicable governmental regulations.
- ✓ You are properly trained to safely operate the machine

Operating Instructions

Fundamentals

The Operating Instructions section provides instructions for each aspect of machine operation. It is the operator's responsibility to follow all the safety rules and instructions in the operator's, safety and responsibilities manuals.

Using the machine for anything other than screening raw materials is unsafe and dangerous.

Only trained and authorized personnel should be permitted to operate a machine. If more than one operator is expected to use a machine at different times in the same work shift, they must all be qualified operators and are all expected to follow all safety rules and instructions in the operator's safety and responsibilities manuals. That means every new operator should perform a pre-operation inspection, function tests, and a workplace inspection before using the machine.

Fine tuning

First, test the Screena with a test load of the required screening material.

If the material stays on the mesh

Too long – increase the angle of the screening by extending the legs at the rear of the unit. This will increase the spill speed.

Not long enough – decrease the angle of the screening by lowering the legs at the rear of the unit.

This will reduce the spill speed and increase the chance of breaking up the material.

Instructions

1. Before starting a new task with the Screena, plan a safe route to manoeuvre the machine into position. This can be done by one person. However, if the terrain is bumpy and loose, use another person at the motor end of the Screena to help balance the weight.
2. Once the Screena is in position. Ensure that the surface is flat and stable enough to sustain the load of not only the Screena, but also that of the material being dumped onto it.
3. With the Screena in position. Plan the removal of materials from under the mesh. This can easily be done with a Shifta conveyor placed under the unit. If a conveyor is not available, a wheelbarrow will suffice.
4. After the Screena is set up and the removal of materials has been planned, route the power cables to the unit. These should be routed in such a way to avoid materials falling onto them and causing damage.
5. With the power supplied to the Screena, complete the functional tests within this manual. (Test on/ off functions).
6. The Screena is now set up.
7. Begin screening.
For fine tuning of screening characteristics see box to the left.
8. Once the task has been completed. Remove power to the Screena. Clean down the unit and inspect for any damage during the operating period.

TRANSPORT INSTRUCTIONS

[SCREENA]



Observe and Obey:

Common sense and planning must be applied to control the movement of the machine when moving it with a forklift.

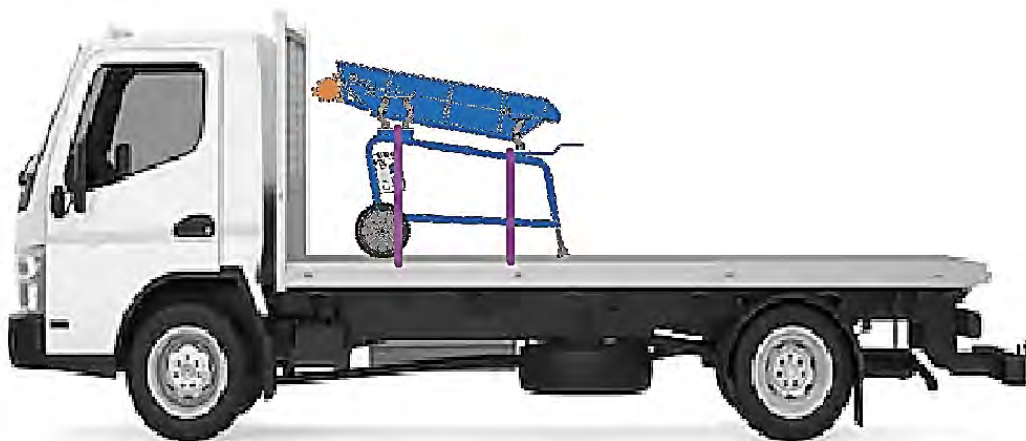
The transport vehicle must be parked on a level surface.

Securing to Truck or Trailer for Transit

Use chains or straps of ample load capacity.

Inspect the entire machine for loose or unsecured items.

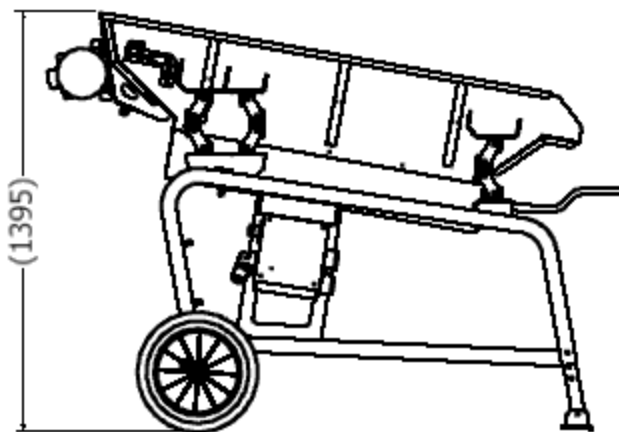
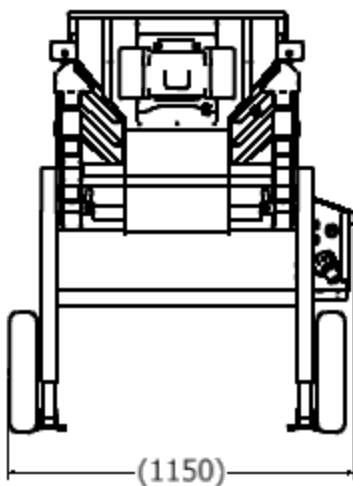
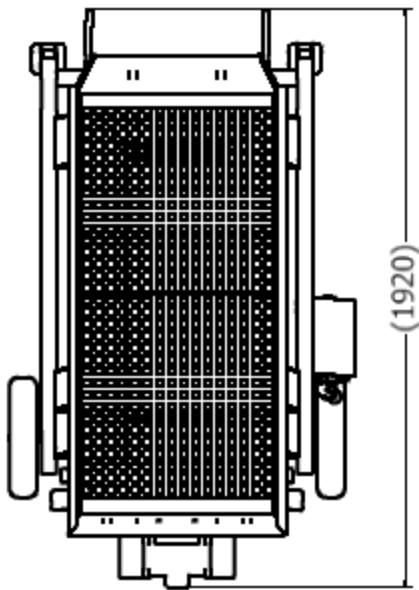
DO NOT OVER TIGHTEN STRAPS.



SPECIFICATIONS

[SCREENA]

Model	[SCREENA]
Maximum payload	250kg
Machine self-weight	180kg
Motor frequency	50hz
Electric motor power	0.55kw
Storage dimensions	1.95m x 1.65m x 1.2m
Noise emissions (A weighted)	<75dB
Supply Voltage	110v / 240v (see data plate on machine)



GET IN CONTACT WITH US

WE'RE HAPPY TO TAKE ANY QUESTIONS
ABOUT WHAT WE CAN DO FOR YOU SO
DON'T HESITATE TO DROP US A LINE!



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