# 2020

### MAQUINARIA A. TRIGINER S.L.





www.triginer.com

# About Us

#### MAQUINARIA A. TRIGINER S.L.



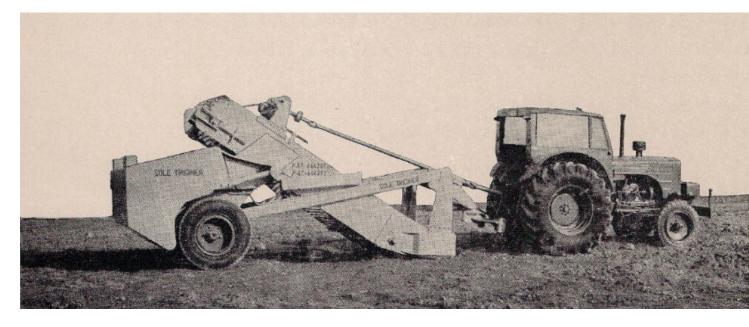
### **ABOUT TRIGINER**

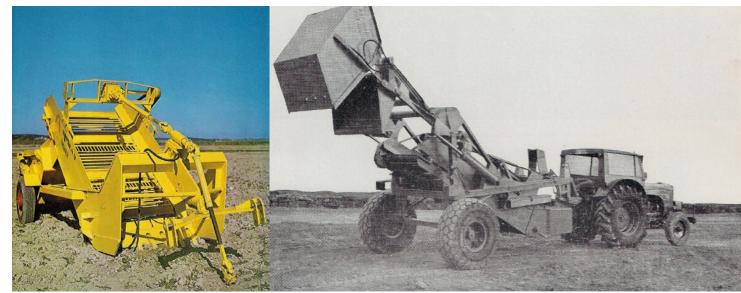
Since 1968, we have developed a wide variety of machines, both in agriculture and Public Works sector.

At present our main products are rock pickers and tree pruners.

Our company is commited to providing you with cuttingedge solutions in the way you work.

We guarantee full support to help you take decisions at any level.





# About Us

### MAQUINARIA A. TRIGINER S.L.



## ROCK PICKING AT HIGHEST LE-VEL

The rock pickers TRIGINER are machines designed to work in extreme conditions, always offering the best performance. Collect stones and rocks from 1.7cm to 160cm up to 40cm deep.





# Exports

### MAQUINARIA A. TRIGINER S.L.



**SPAIN** PORTUGAL **MEXICO** VENEZUELA EGYPT SOUTH AFRICA **SWAZILAND** POLAND **BULGARY** CHILE **CHINA** VIETNAM CANADA FRANCE **GUADALUPE UNITED STATES** ARGELIA MOROCCO **IRELAND** 



# Advantages



$\left[ \right]$	

## LONG-TERM EXPERIENCE

With more than four decades of experience in rock extraction systems, we possess a high level of know-how in combination with a reliable service. We owe this competence to long-term business relationships with suppliers and partners.



### **HIGH RELIABILITY**

Customer satisfaction is one of our top priorities and a term we make seriously. TRIGINER products are therefore covered by a 12 month warranty.



## SERVICE

Our wide range of radily aviable spare parts and parts subjects to wear, allows us to meet your needs in a punctual and accurate manner.



# EXPERT ADVICE

Our qualified technical staff will ensure you receive the right advice about the most appropriate machines for your application.

# Headquarters

#### MAQUINARIA A. TRIGINER S.L.





## **AGRAMUNT - SPAIN**

OFFICE SHOW ROOM SPARE PARTS STORAGE REPAIR SHOP

Triginer headquarters ere located in Agramunt.

Boasting 4000m<sup>2</sup> of space.

Triginer headquarters is the first stop for all our customers.

Also located in Agramunt you can find our large spare part storage and repairing shop.







# Technology

#### MAQUINARIA A. TRIGINER S.L.



### **ALWAYS IMPROVE**

At Triginer, we constantly improve and design new products.

We upgrade and invest in our facility with the latest technology, such as computerized and controlled equipment that mechanized steel, drill holes and mill with precision.

In addition, our research and development facility and design team is located right beside our manufacturing facility. So, if we hear from our costumers of any problems in the field with our products, we react right away and fix the problem at the source.









# Design

#### MAQUINARIA A. TRIGINER S.L.

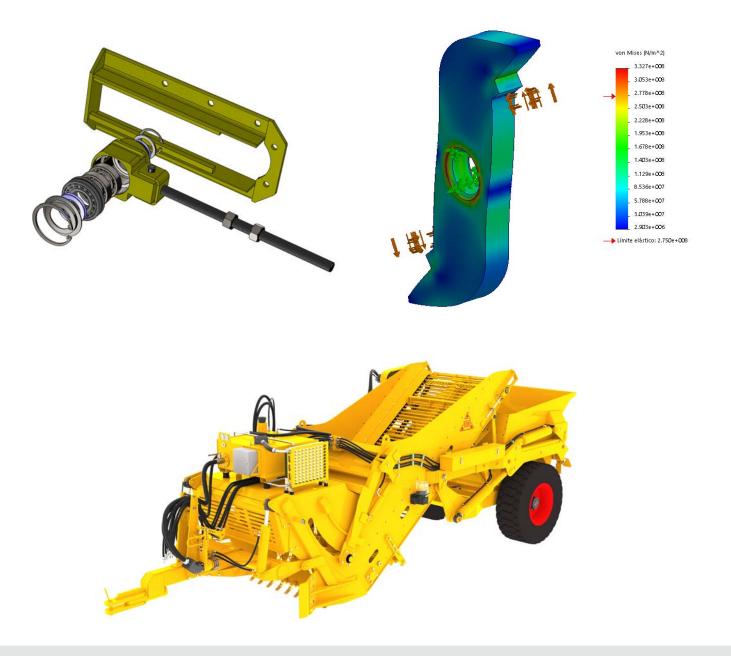


#### **RESEARCH & DEVELOPMENT**

Experience and state-of-the-art tools make for world's best rock picker machines.

Triginer R&D engineering design teams use the most advanced software, measuring devices and testing standards to design our equipment.

We take precise measurements to ensure optimum configuration. We use the latest 3D software to build all our products to achieve the most accurate and strongest fits.



# **Our Machines**

#### MAQUINARIA A. TRIGINER S.L.



## ROCK PICKERS UNLOAD TO TRAILER: DAM SERIES

The DSR SERIES are high performance rock pickers due to the unload system. Similar unload system as DAM SERIES, but you can unload to a truck or trailer. So the machine doesn't move for the unload. Available in different load capacities and working width.







# **Our Machines**

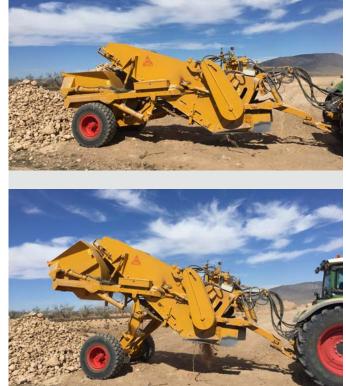
MAQUINARIA A. TRIGINER S.L.



### ROCK PICKERS UNLOAD TO TRAILER: DSR SERIES

The DSR SERIES are high performance rock pickers due to the unload system. Similar unload system as DAM SERIES, but you can unload to a truck or trailer. So the machine doesn't move for the unload. Available in different load capacities and working width.







# How it works



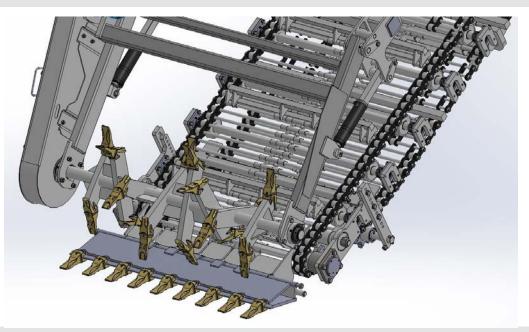
The rock picker is pulled by the tractor while the front blade in the machine penetrates the soil, as much as desired.

All the soil and stones are collected into the main chain, while the rotor helps this operation, it pushes the soil and the stones to the main chain. This procedure screens the stones from the soil.

If a big rock or some medium stones are collected by the front blade and are entering inside the machine, the rotor will lift by itself in order to load the big rock. This will not cause any damage to any part of the machine.

The rotor and the main chain are moved by hydraulic motors. The motors are moved by a hydraulic pump attached to the tractor's PTO.

Speed and soil conditions are factors to have in count, as the correct operation will load only stones into the stone tank.







# Points to consider

MAQUINARIA A. TRIGINER S.L.



### **STONE TANK**

We manufacture rock pickers unload to ground with different stone tank sizes. From 2m<sup>3</sup> to 5m<sup>3</sup>.

As bigger the stone tank is, less times the rock picker will have to unload and more field is cleaned.

\*The stone tanks from 6m<sup>3</sup> to 8m<sup>3</sup> are only available in Europe.

### ELEVATOR

As longer the main chain is, the better screening you get.

There are two width sizes to choose in all rock pickers:

1500mm: This is the average size,

enough to work with small, medium to big size stones.

1700mm: This size gives you 20cm more width in order to collect very big rocks (up to 1,4m of diameter rocks). Of course this elevator can collect medium and small stones.

### ROTOR

It is the main mechanism to push the stones into the chain.

It is auto-floatated and also contoled by a hydraulic cylinder. Can be adjusted in height hydraulically, but also moves up and down depending on the stone size and stones volume.







# Stone

#### MAQUINARIA A. TRIGINER S.L.



### **ALL TYPES**

For all kind and rock sizes (up to 1,6m)

Rocky grounds processed into crop fields.

Stone free of soil for aggregates.



#### **VOLCANIC STONE**



LIMESTONE





PEBBLE STONE



# The work to do

### MAQUINARIA A. TRIGINER S.L.

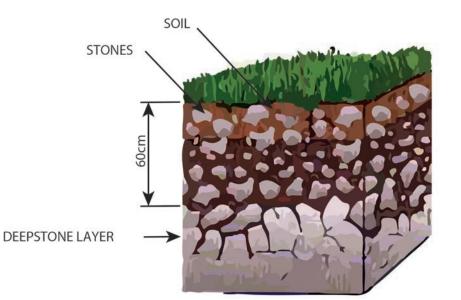


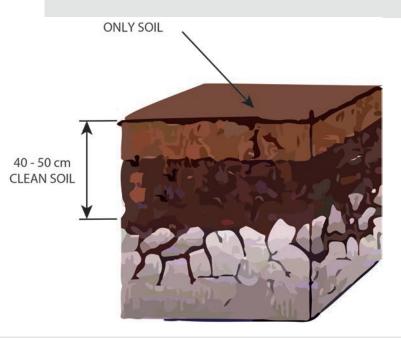
### **INITIAL STATE**

- A first layer of soil with stones small and medium size
- A bed rock at 50-60 cm deep

### **OBTAINED RESULT**

- Rock picking will remove all stones (<17-48mm) from the first layer
- The bed rock will remain intact. Unless you decide to pass the ripper





# The work to do

### MAQUINARIA A. TRIGINER S.L.













# **Benefits of rock picking**



#### **REMOVE ALL STONES**

All stones from 17mm and above, will be removed from the soil. In one single pass.

#### LESS WEAR IN MACHINERY

As all the stone mass has been removed, the soil now is less abrasive. The works as tillage or plowing will be not affected by wear. Reducing costs in spare parts and machinery.

#### TO PREVENT TOP LAYER STONES

When it rains or you work the field, the stone tends to come out to the surface. Making the work of the soil more difficult. It is important to remove all the stone mass as much as possible, specially for sugar cane.

#### SOIL CAN HOLD MORE WATER

#### **BETTER GERMINATION**

This is the most important benefit from rock picking.

Think as the soil as a big sponge to hold water.

If you have a thin sponge it will only hold a little water, a thick one will hold more. Now if you have a sponge that has a lot of rocks in it will hold less water. So you will have to irrigate more often or the crop will suffer. Experience in rock picking in sugar cane fields has demonstrated that the sticks of cane wich have soil in contact, germinate much better and before than the ones with stones.



# **The Execution**



### **PERFORMANCE IN DAM SERIES**

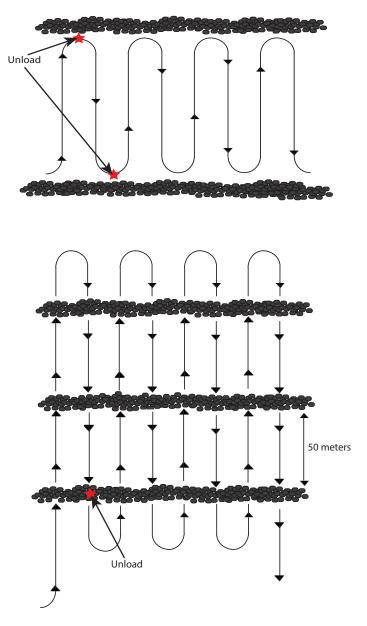
Our proposal is to make rows of stone piles and then eliminate these rows with front loaders.

2 working modes are used: end to end or parallel rows. The most used by our customers is the end to end.

If the field to be cleaned has stones no larger than 1 meter, productivity can reach 2 to 3 hectares per day (10 hours)

If the field has stones of 1 meter and 1.5 meters, productivity can go down to 1-2 hectares per day (10 hours)





# **The Execution**



### PERFORMANCE IN DSR SERIES

Our proposal is to unload the stone tank directly to trailers. 2 stone tanks full of stones can fit into a trailer of 12 Tn.

Every 3-5 minutes a stone tank can get full. The unload to trailer process takes 30 seconds.

If the field to be cleaned has stones no larger than 1 meter, productivity can reach 3 to 4 hectares per day (10 hours) If the field has stones of 1 meter and 1.5 meters, productivity can go down to 2-3 hectares per day (10 hours)









#### MAQUINARIA A. TRIGINER S.L.





Pol. Ind. Navesma Avda. Generalitat, 12 25310 AGRAMUNT (Lleida) SPAIN Phone +34 973 392 676 +34 973 390 430

triginer@triginer.com Skype: MATriginer Youtube: MATriginer

www.triginer.com