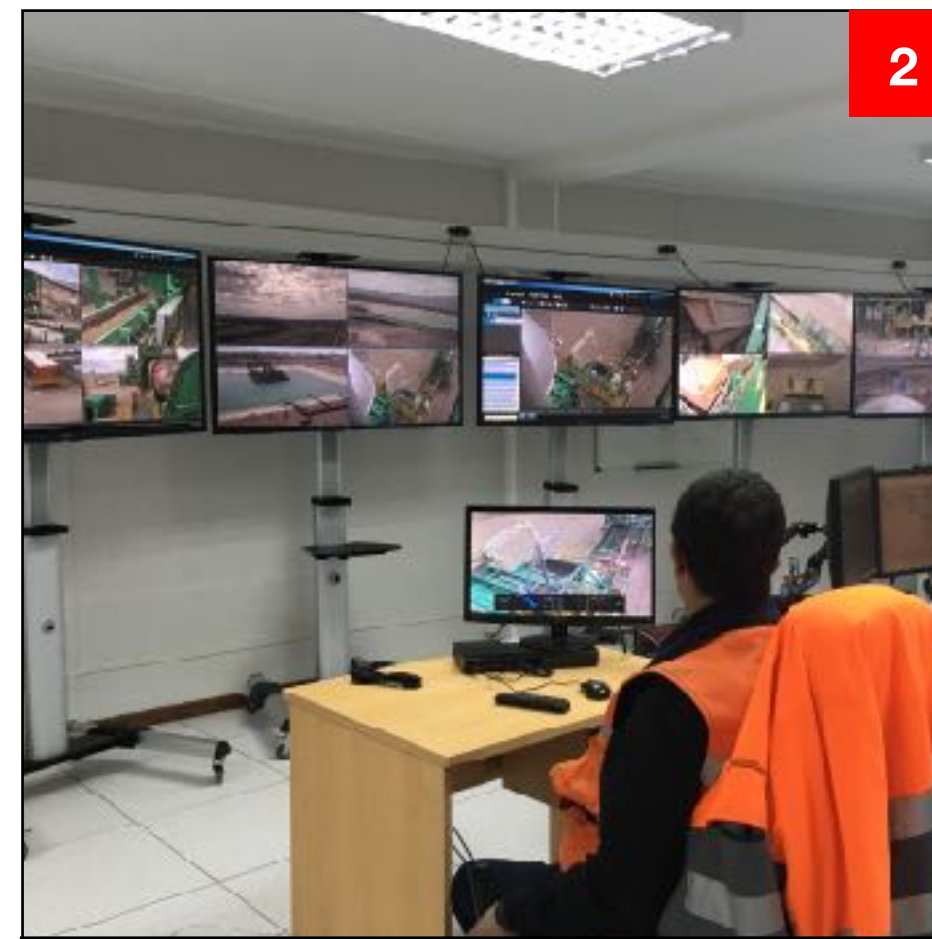




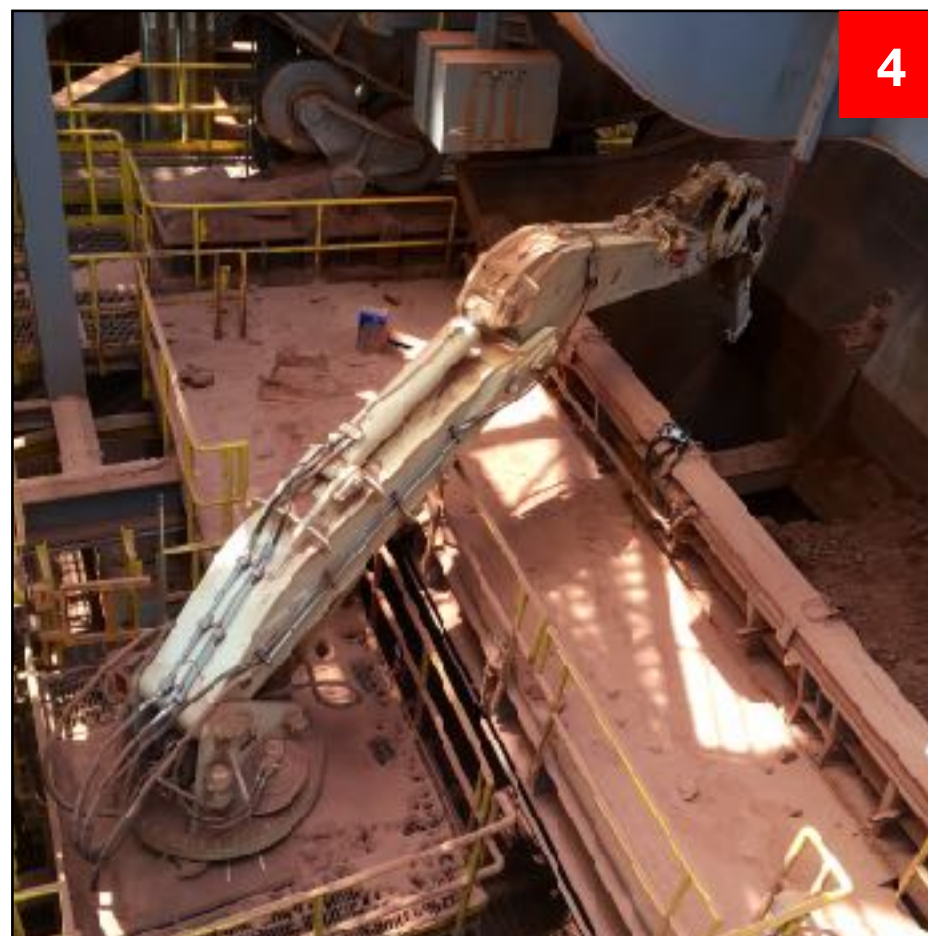
Multiple Controls



Ethernet long range control



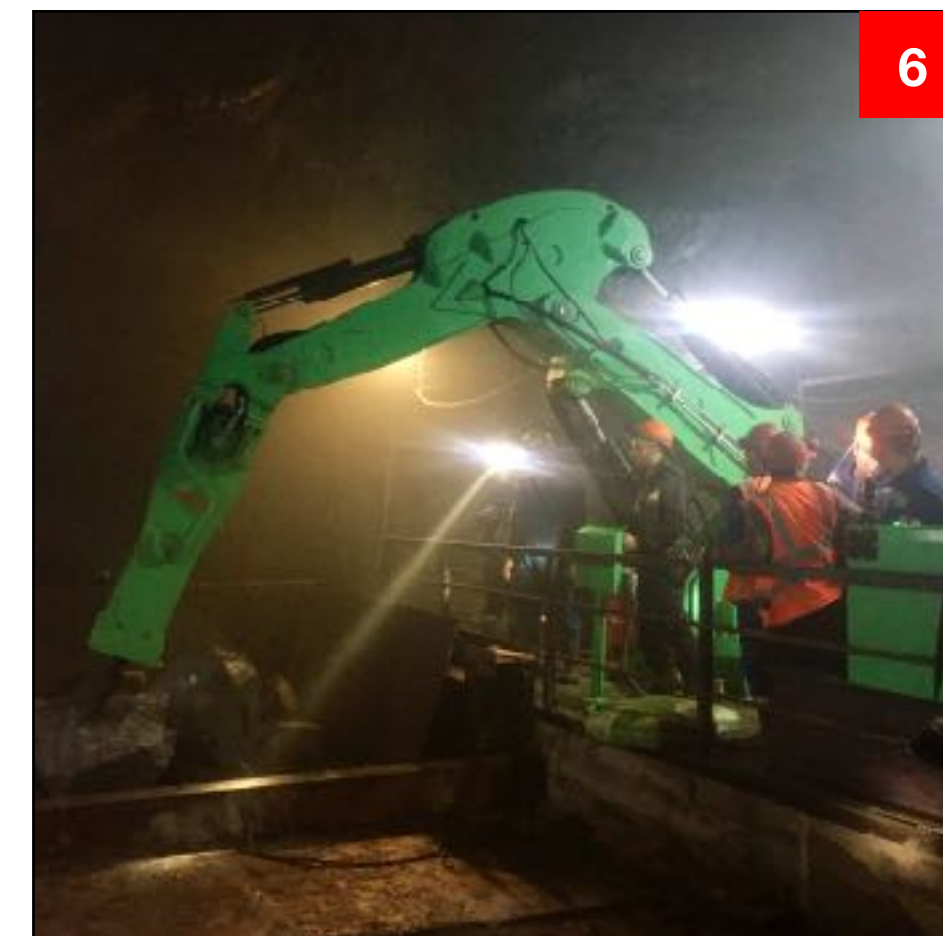
Translation Mode



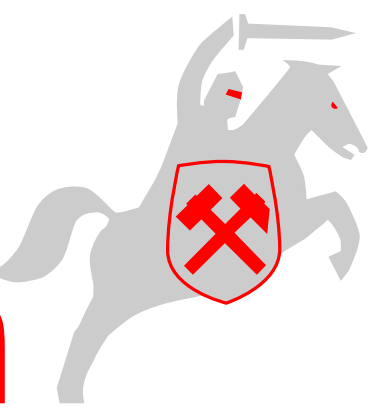
Anticollision



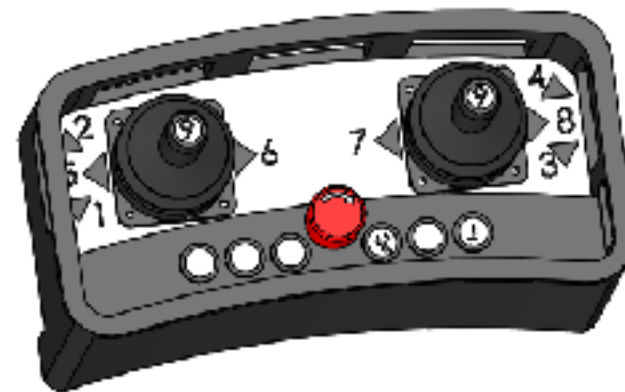
Automatic Parking



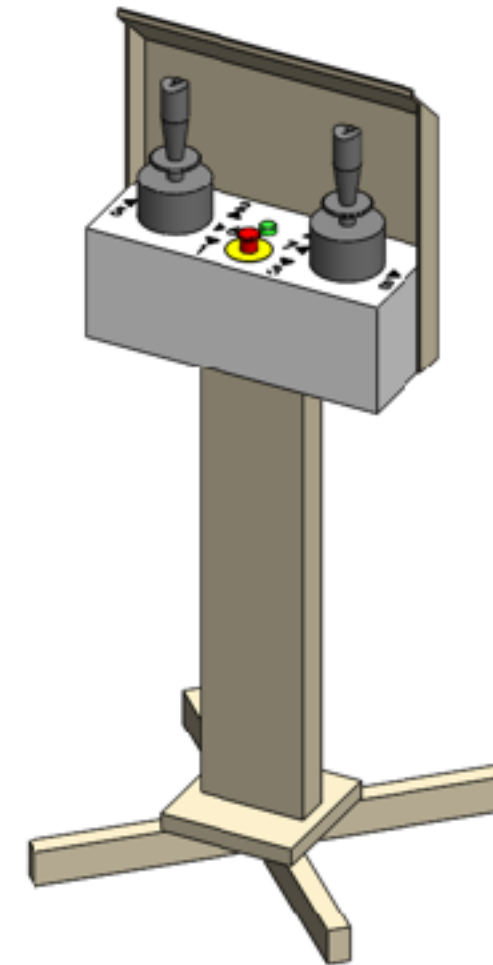
Autonomous Robot



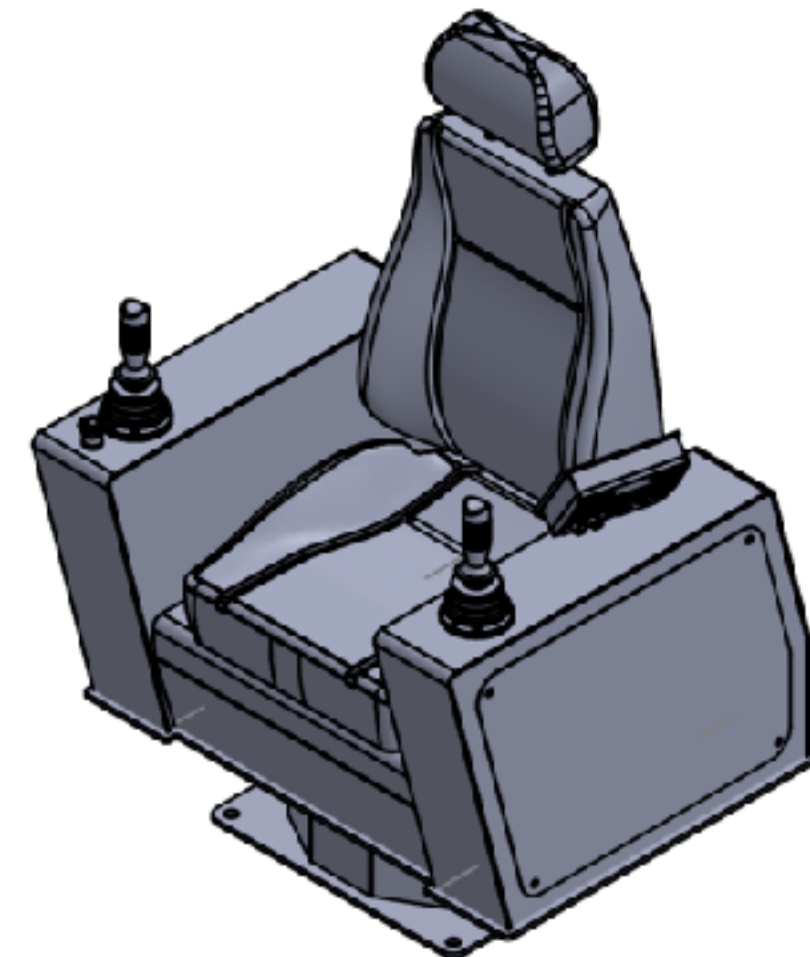
MULTIPLE CONTROLS



Wireless radiocontrol
Range up to 500m



Pedestal with cable
Range up to 800m



Control Ethernet Seat
Unlimited range

- **MODULARITY**
- **RELIABILITY**
- **SAFETY**
- **MULTIPLEX**

As many controls as desired can be installed on a rock breaker

In case of failure of 1 control, other controls let you operate the machine

Only 1 control is enabled at the same time. Controls can be disabled if required

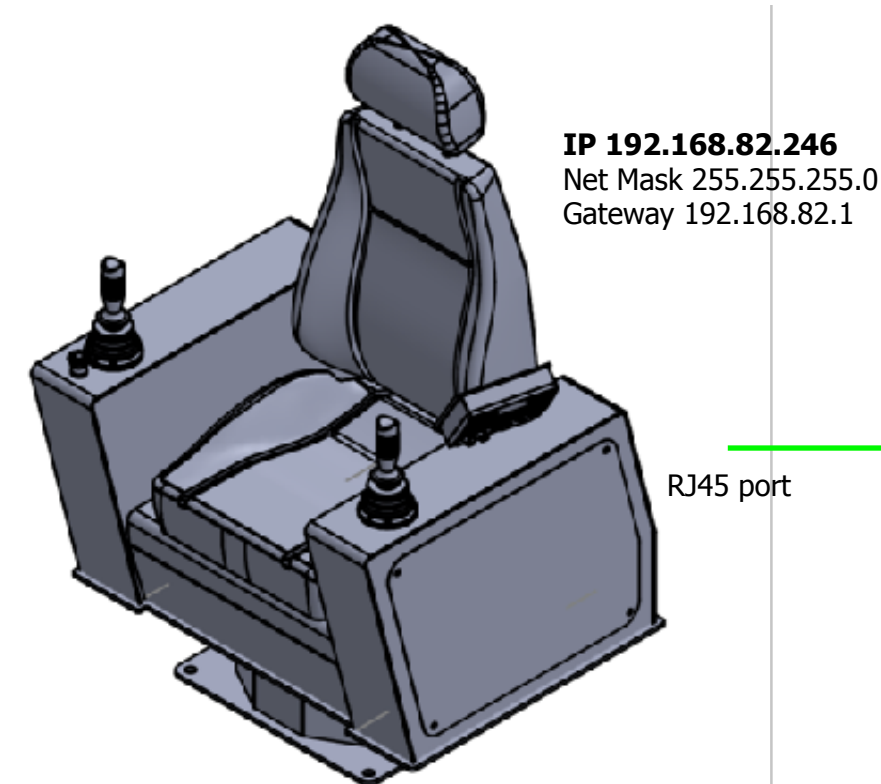
Several rockbreakers can be controlled from 1 single control



ETHERNET LONG RANGE CONTROL

Any TECMAN rockbreaker can be equipped with Ethernet Remote Control option. The control seat as well as the powerpack of the machine have a dedicated IP address, and communicates with an Internet protocol through the Ethernet network of the mine.

Provided the quality of the network, the distance between the control seat and the machine is unlimited.



IP 192.168.82.246
Net Mask 255.255.255.0
Gateway 192.168.82.1

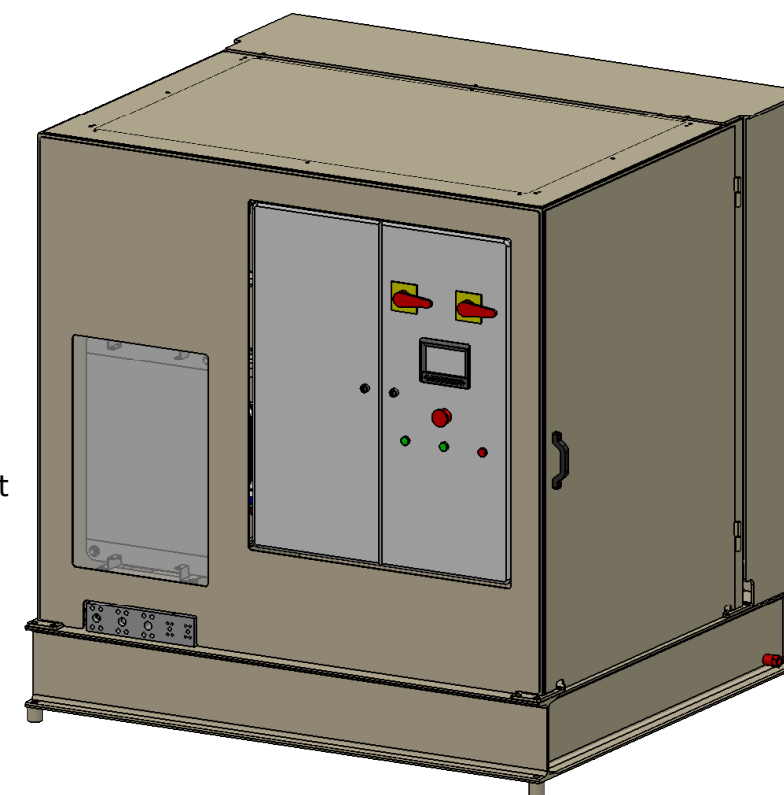
RJ45 port

**Ethernet Remote Control
Operator Seat**

Ethernet connexion

UNLIMITED DISTANCE

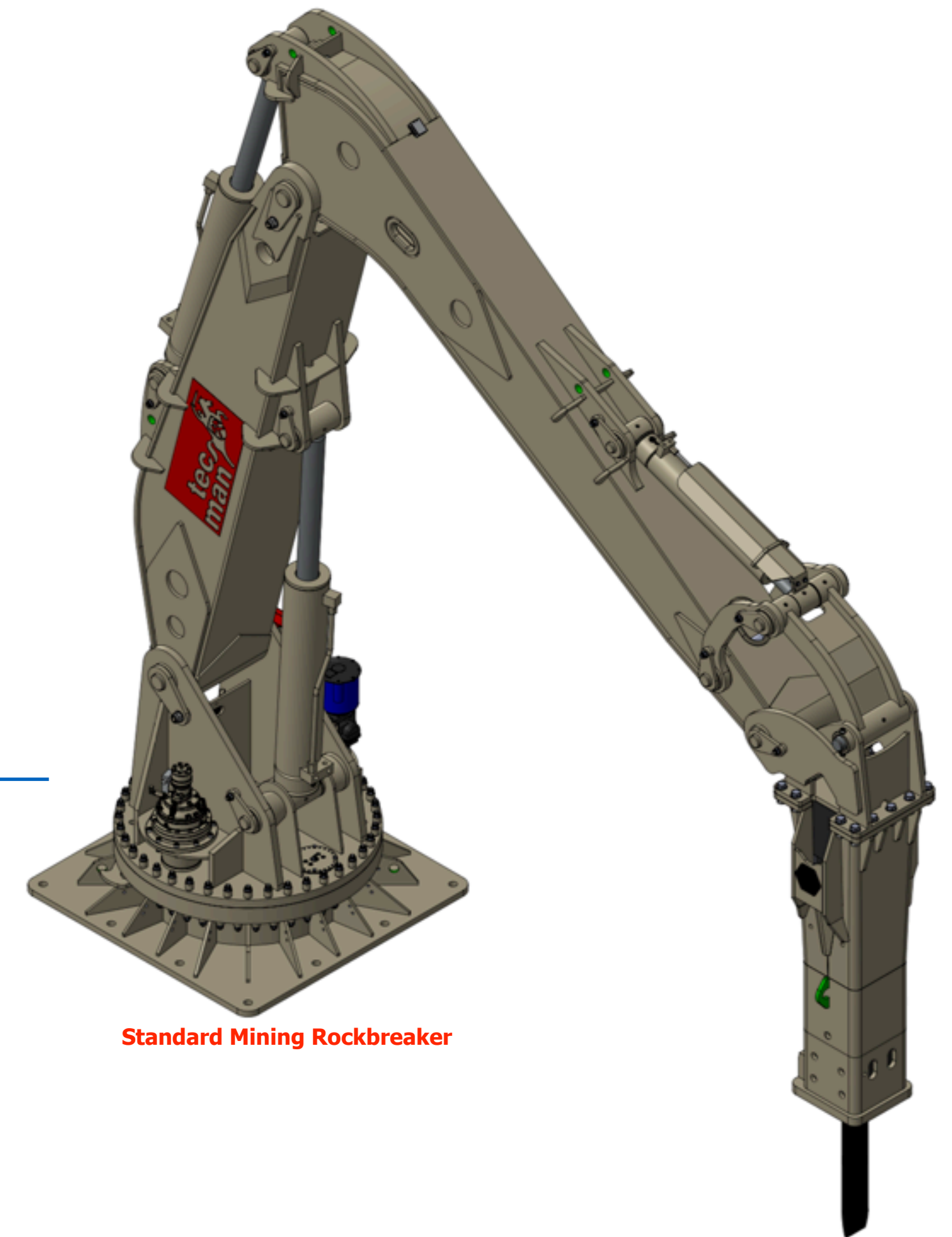
RJ45 port



**Powerpack equipped with
Ethernet modem**

IP 192.168.82.247
Net Mask 255.255.255.0
Gateway 192.168.82.1

Proportional
Controls



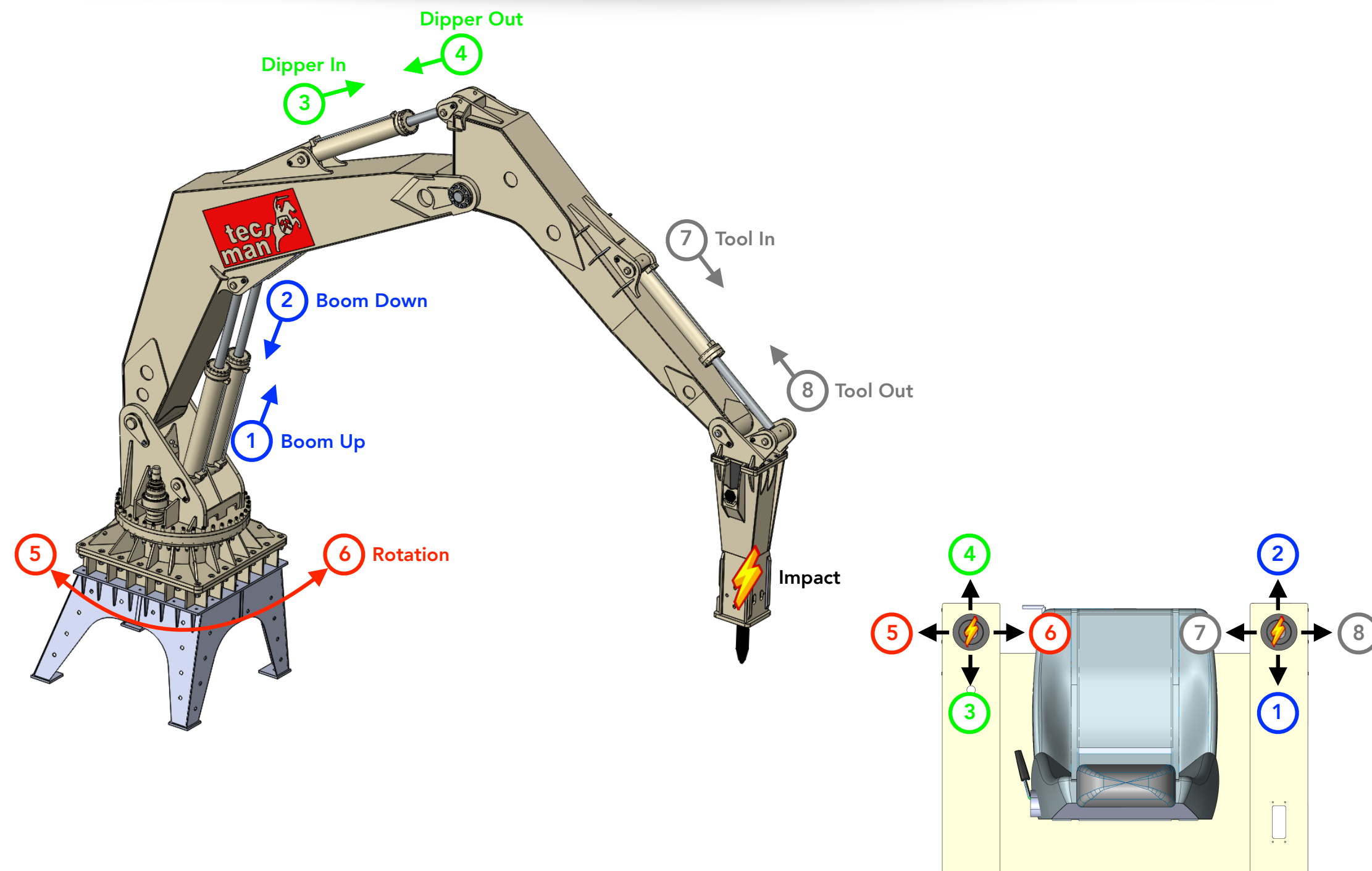
Standard Mining Rockbreaker



TRANSLATION MODE



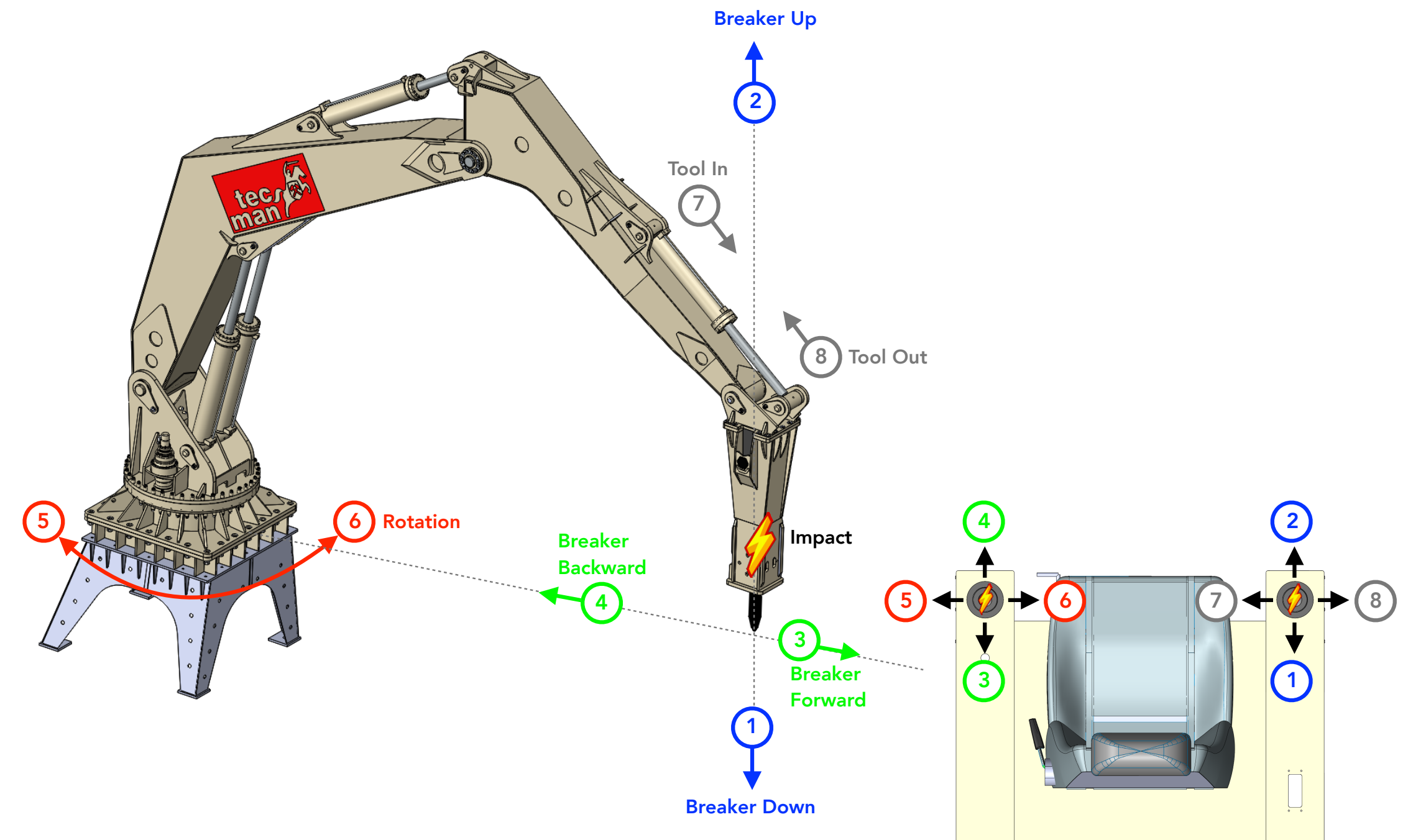
STANDARD CONTROLS



With standard controls, each movement from the joysticks create 1 single movement on the machine



TRANSLATION CONTROLS



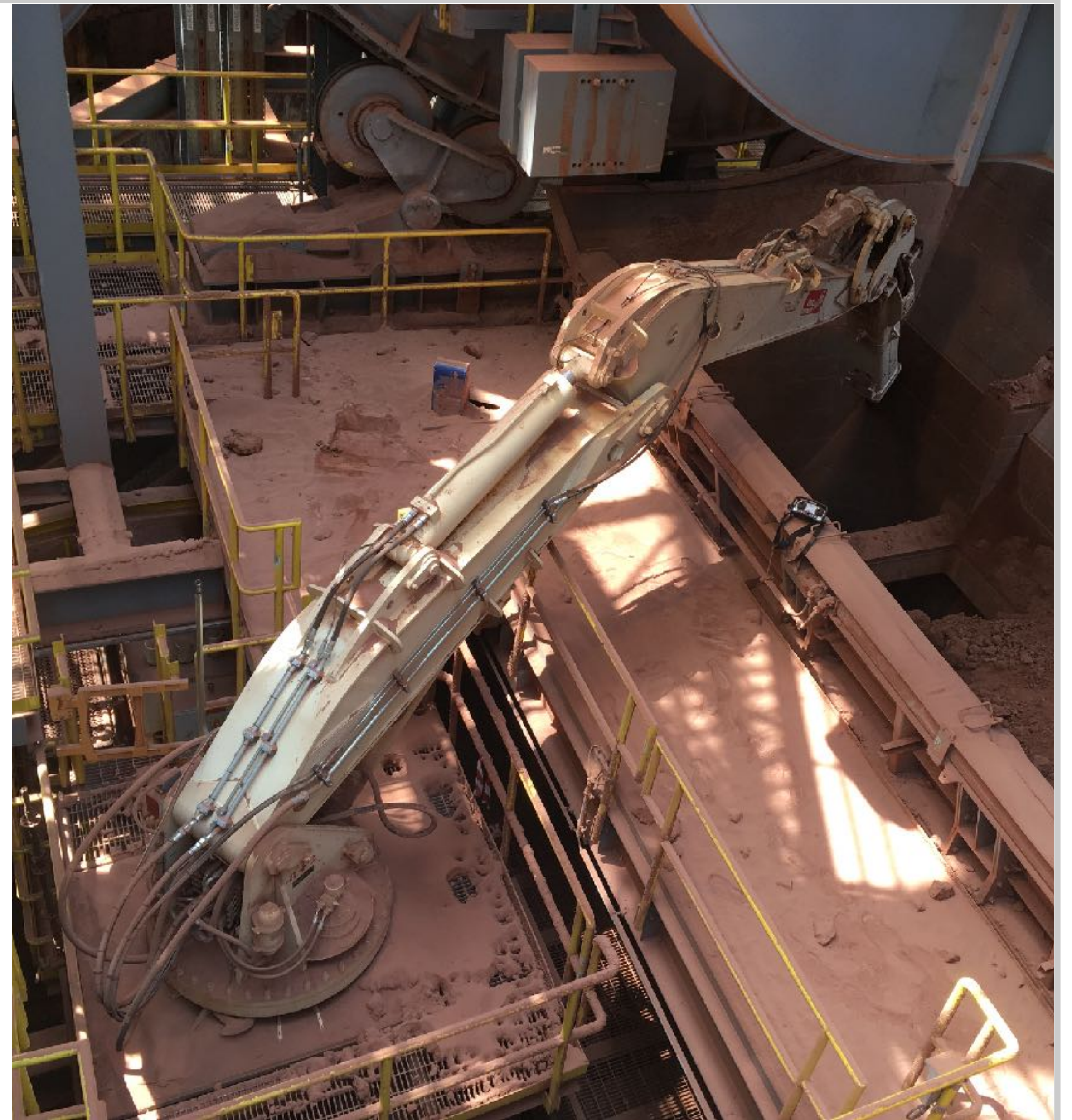
In translation mode, the movement of the joystick indicates the direction where the machine needs to go. As a result several movements are created by the machine for 1 movement of the joysticks
This option is very popular for grizzly applications where the breaker needs to translate above the grizzly bars



ANTI-COLLISION

With Anti-collision system the customer determines NO-GO zones where the machine is not allowed to go. When the operator does a manipulation that leads the machine to the NO-GO zone, the movement stops at the edge of the zone, and only the movements that let you out are enabled.

This options is popular when the rock breaker area is dense and full of beams, cables,, that makes the manual operation of the machine difficult.





AUTOMATIC PARKING

Automatic parking option allows the machine to go automatically from parking position to work position. When Rock-breaking is finished, with the press of one button, the equipment automatically goes back to parking and stops.

This option is popular on big equipment where translation from parking and work is time consuming. Automatic positioning saves lots of time to operator, and prevent the plant from wrong operations.





AUTONOMOUS ROBOT



CYLINDER ENCODERS
Get the exact position of each cylinder in real time

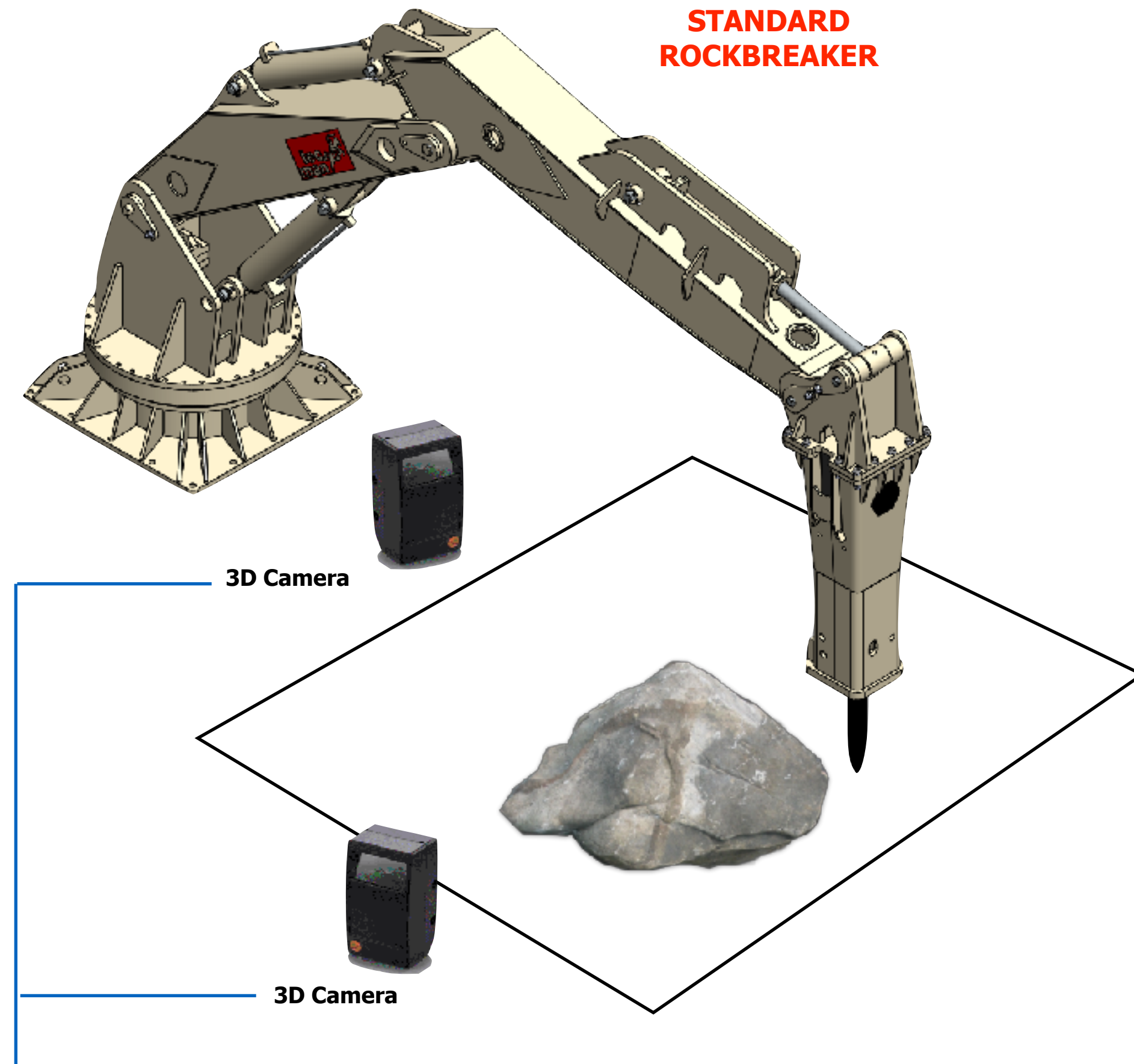


PRESSURE SENSORS
Constant check of system and cylinders pressures in order to verify the loads applied by the machine

STANDARD CONTROL VALVES



PLC
with powerful computing capacity, calculates the position of the machine, where it needs to go and send the correct instructions to the control valves



STANDARD ROCKBREAKER

3D Camera

3D Camera

POSITIONING X,Y,Z
Automatic detection of the biggest object in the defined range. Up to 15 meters.