CIFA
A ZOOMLION COMPANY

TRUCK PUMP CONTROL SYSTEM

Marketing, 2016.10

ZOOMLION CIFA

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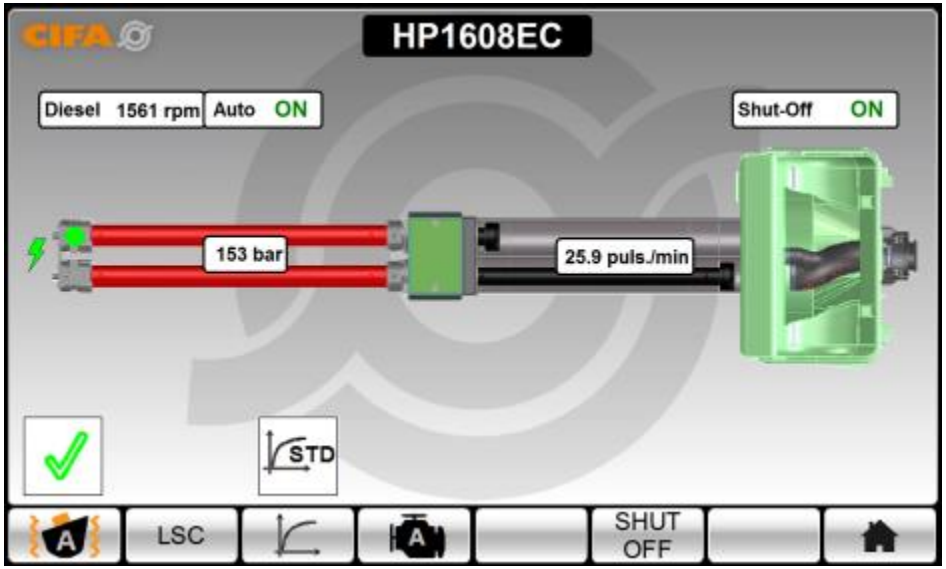
Smartronic

ONLY FOR CLOSED LOOP PUMPING UNIT

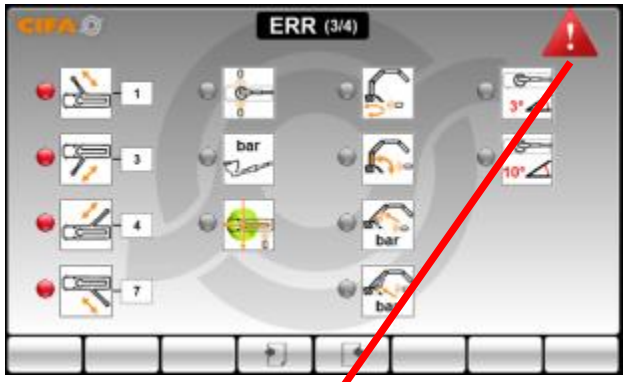
PUMPING UNIT MANAGEMENT



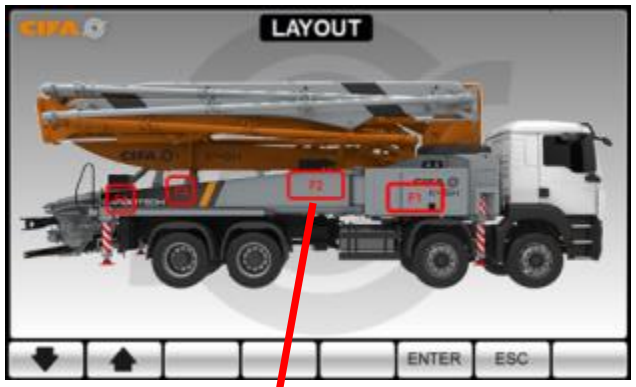
CIFA Electronic pumping system main functions:

- Main cylinders speed regulated by ramps to increase pumping efficiency
- Very soft electronic Power cut-off calculated to strongly reduce pumping vibrations
- Electronic management of S-Valve depending on actual pumping unit pressure
- Change pistons function: allows to easy move the cylinders in the change pistons position

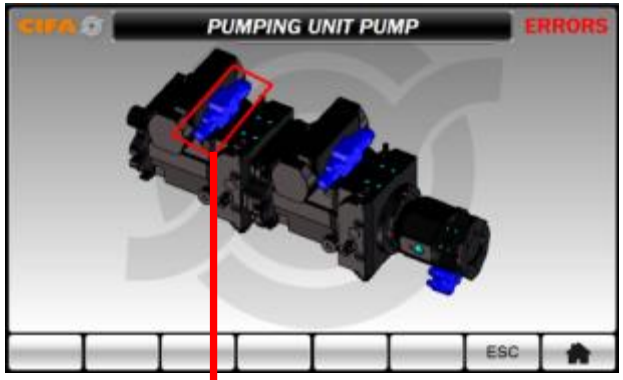
DIAGNOSTICS



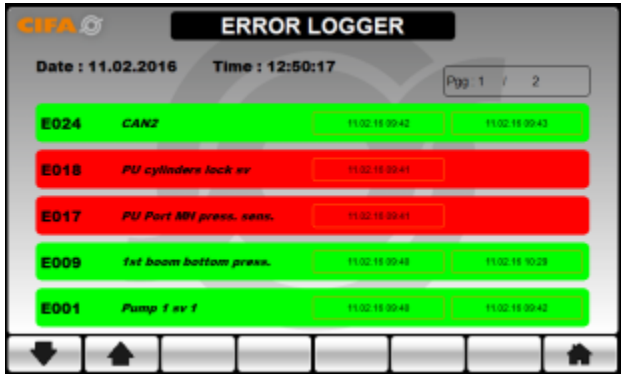
Information about failure



Fault component localization



Subpart involved



Machine parameters status

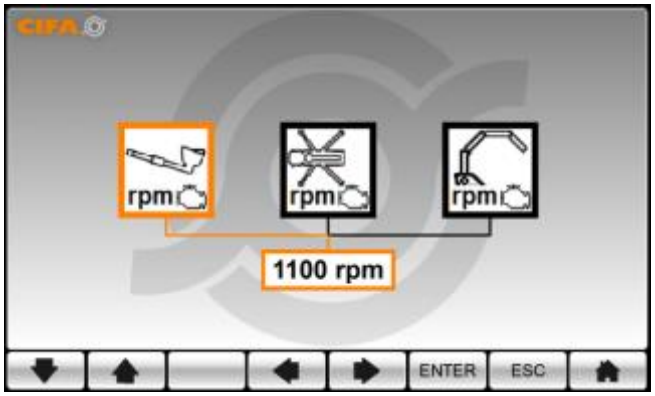
TRUCK PUMP CONTROL SYSTEM
WHY ADVANCED CONTROL SYSTEM

Rear panel main focus:

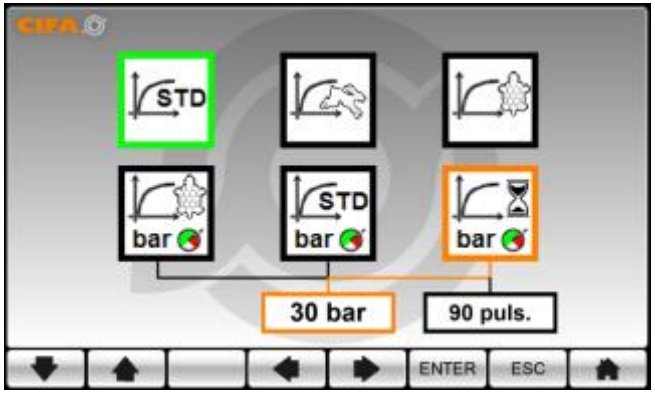
All electromechanical components (buttons) removed from the panel
Clear information about machine commands and status through LED
Possibility to easy develop new functions
Easy cleaning

2017 UPGRADES

FUEL SAVING. Auto rpm for the automatic adjustment of rpm, depending on the performance required by the operator



Working ramps kit for the pumping unit, developed to reduce noise and vibration of the machine and Pressure limiter to control the pumping pressure



TRUCK PUMP CONTROL SYSTEM
UPDATE 2017

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REMOTE CONTROL HETRONIC WITH DISPLAY 4.3” FROM JAN. 2017

AVAILABLE ONLY FOR CLOSED LOOP PUMPING UNIT

Allows at the operator to check main parameters of truck mounted pump directly by the display on remote control

REMOTE CONTROL HBC WITH DISPLAY AVAILABLE FROM JUNE 2017

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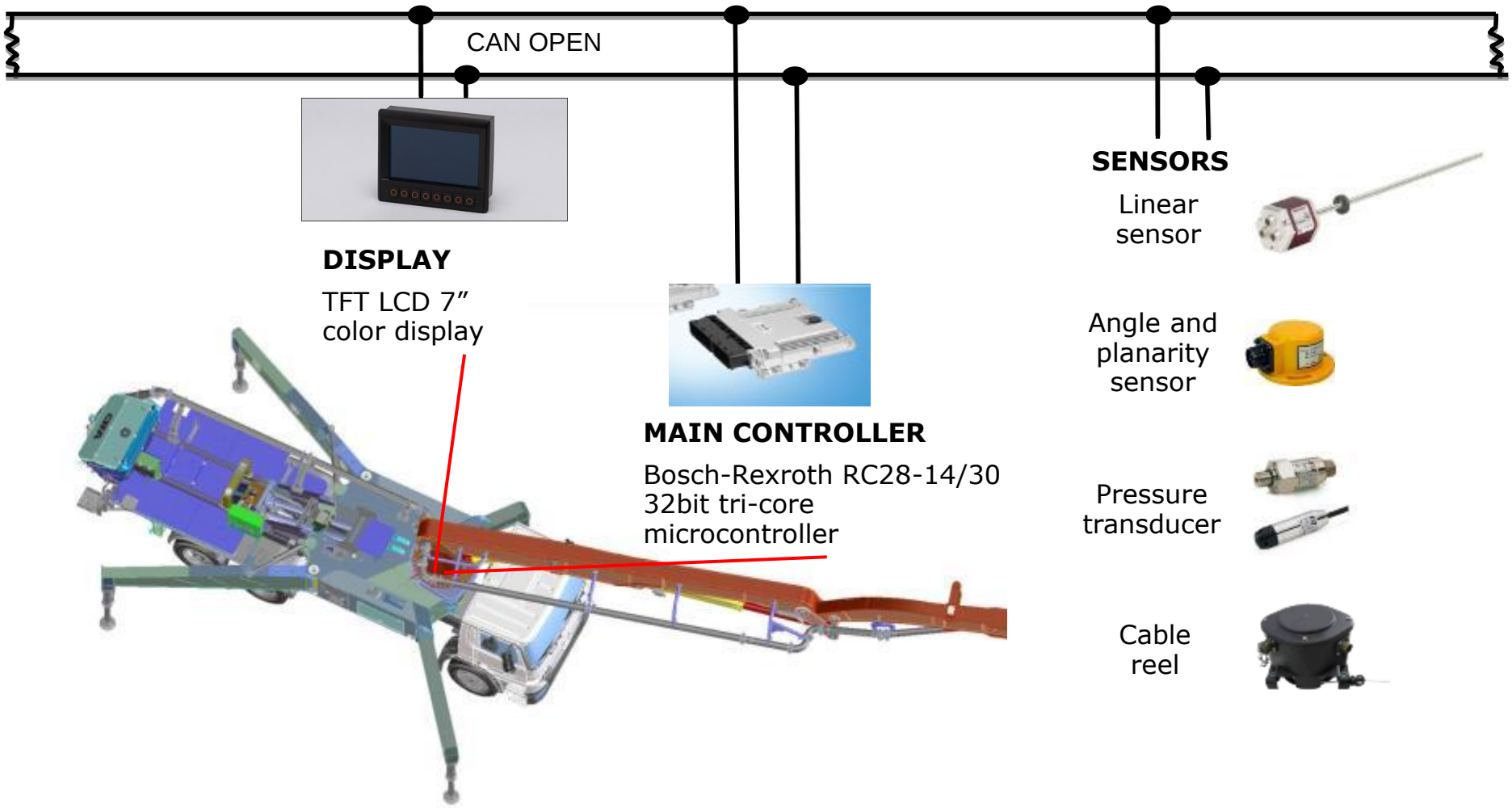
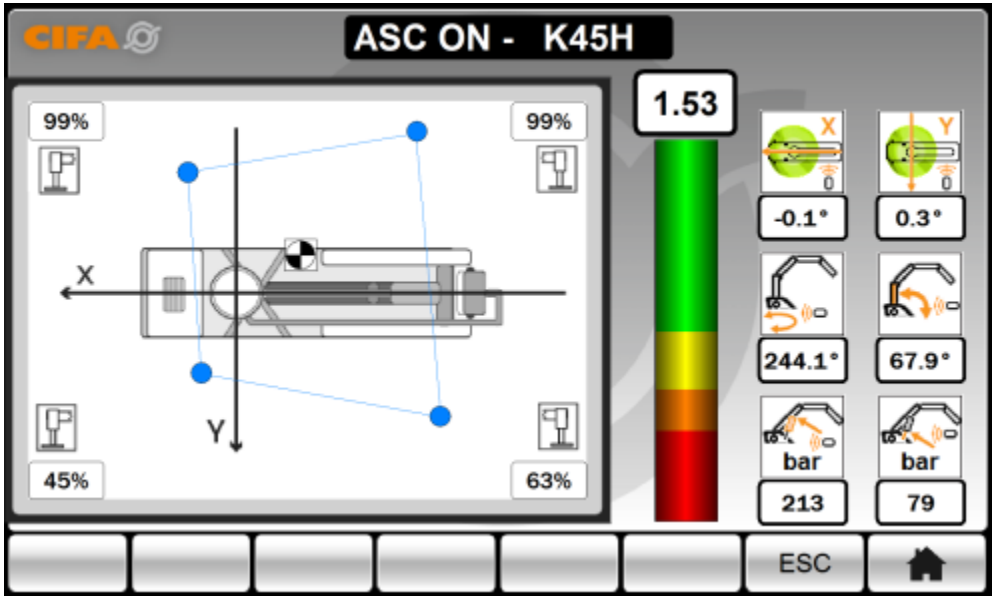
STABILISATION CONTROLS

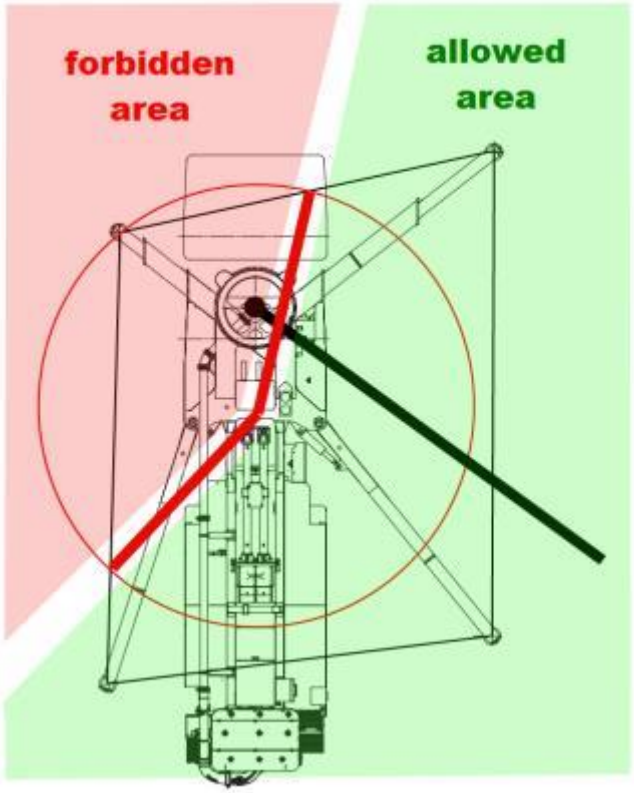
LAYOUT


CAN OPEN
DISPLAY
TFT LCD 7”
color display
MAIN CONTROLLER
Bosch-Rexroth RC28-14/30
32bit tri-core
microcontroller
SENSORS
Linear
sensor
Angle and
planarity
sensor
Pressure
transducer
Cable
reel

ASC Advanced Stability Control
(according to EN 12001:2012)

For all partial outrigger extensions

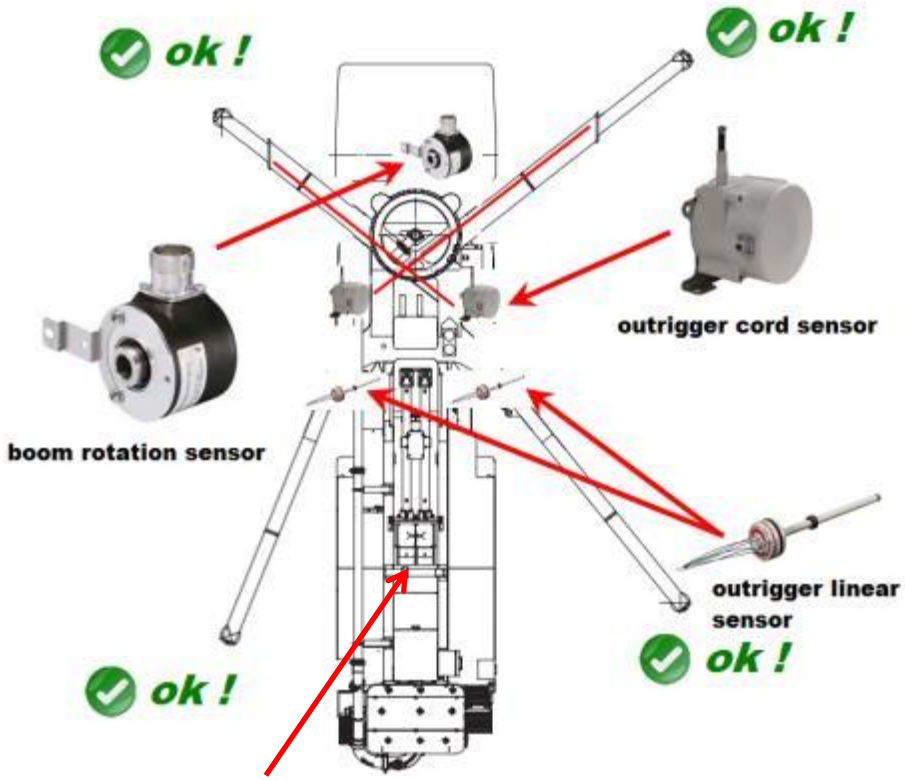




Depending on the real outrigger position, ASC allows only safe boom movement

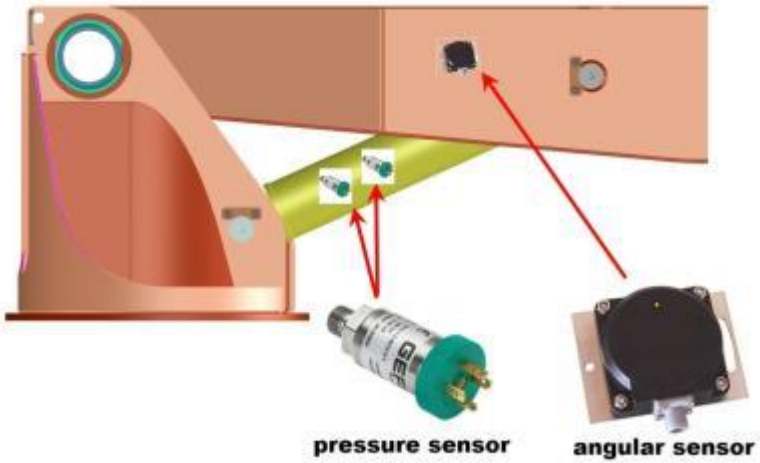
ASC Advanced Stability Control
(according to EN 12001:2012)

Main components



MAIN CONTROLLER
Bosch-Rexroth RC28-14/30
32bit tri-core microcontroller

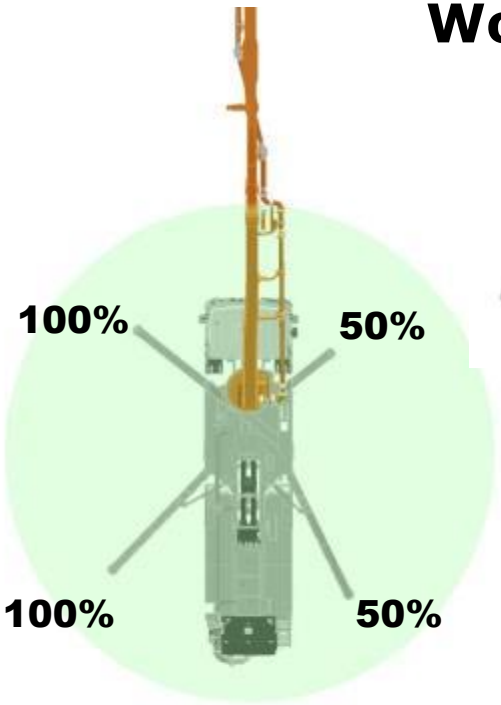
Transponder sensor increases the safety level of machine because the outriggers movement is allowed only when the boom is in on rest position.



ASC Advanced Stability Control

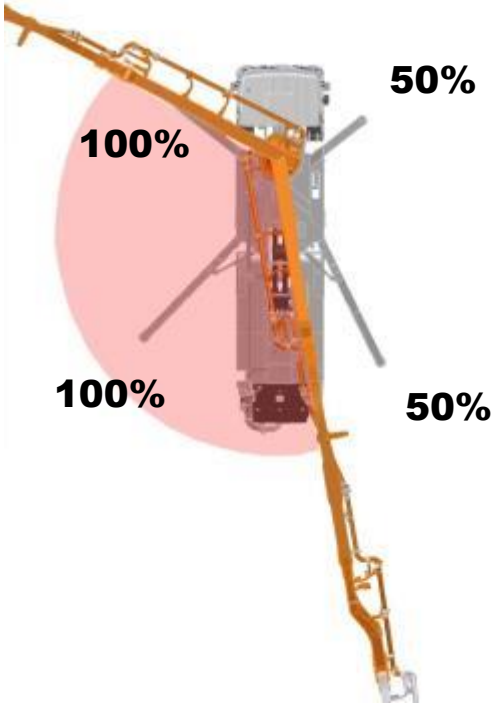
(according to EN 12001:2012)

Working area (100% + 50%)



ASC

Using outrigger linear sensors, ASC allows a wider working area, with the same stabilization and boom position

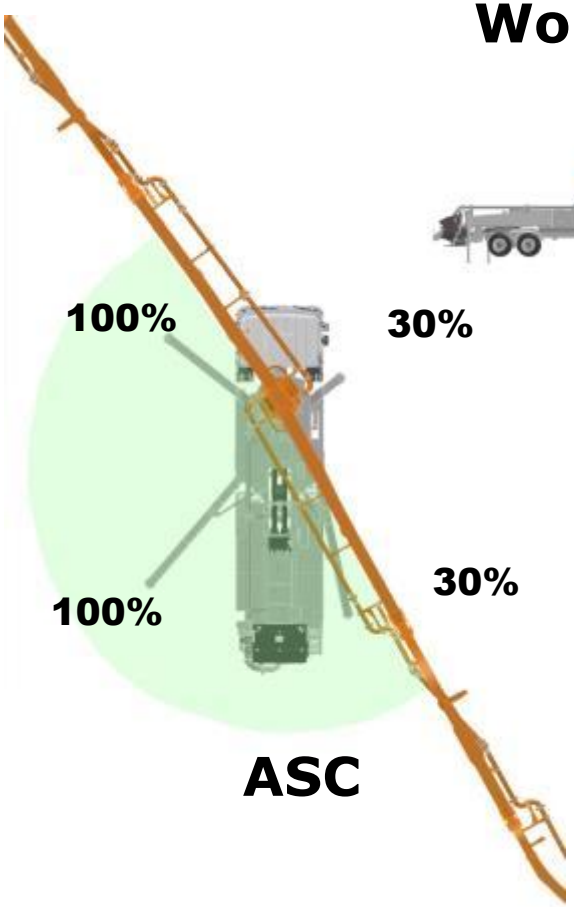


OTHER CONTROL SYSTEM

ASC Advanced Stability Control

(according to EN 12001:2012)

Working area (100% + 30%)



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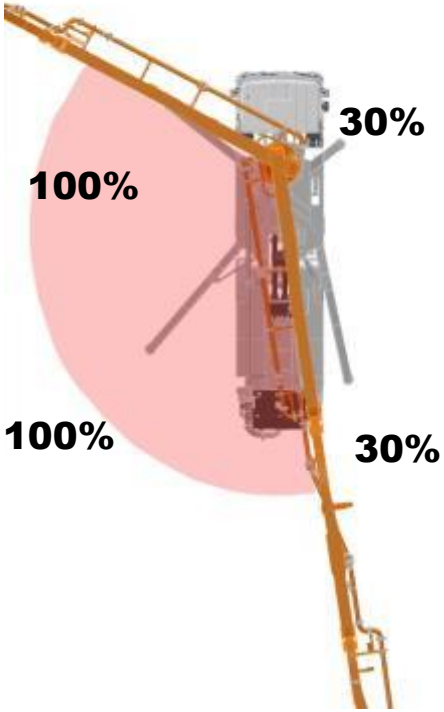

OTHER CONTROL SYSTEM

TRUCK PUMP CONTROL SYSTEM

WHY SMARTRONIC

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CARBOTECH Series

FOR CLOSED LOOP PUMPING UNIT

Smartronic™ GOLD

STANDARD FEATURES

- PUMPING UNIT CONTROL
- FAULT COMPONENT LOCALIZATION
- MACHINE PARAMETERS STATUS
- CAP SENSE REAR PANEL
- ASC ADVANCED STABILITY CONTROL

STEELTECH Series

FOR CLOSED LOOP PUMPING UNIT

Smartronic SILVER

STANDARD FEATURES

- PUMPING UNIT CONTROL
- FAULT COMPONENT LOCALIZATION
- MACHINE PARAMETERS STATUS
- CAP SENSE REAR PANEL

OPTION

- ASC ADVANCED STABILITY CONTROL

TRUCK PUMP CONTROL SYSTEM
SMARTRONIC vs EASYTRONIC

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FOR CLOSED LOOP PUMPING UNIT

↓

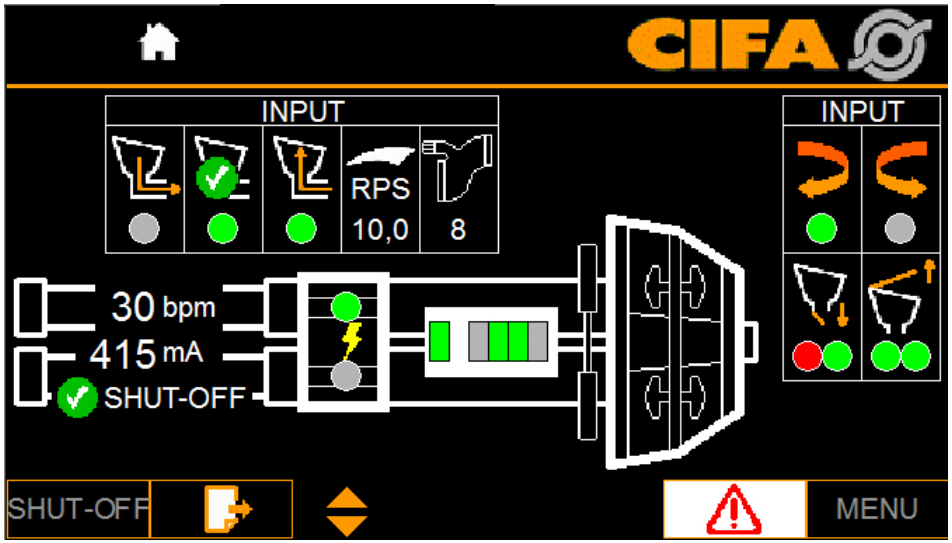
Smartronic

FOR OPEN LOOP PUMPING UNIT

↓

Easytronic

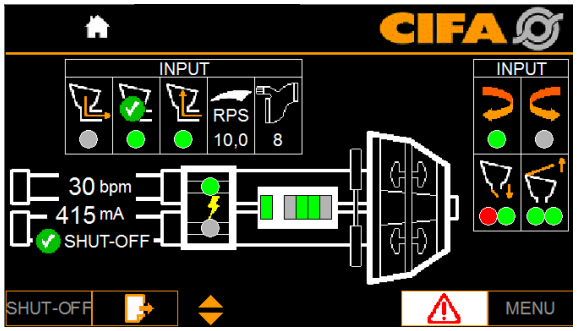
Easytronic



FOR OPEN LOOP PUMPING UNIT

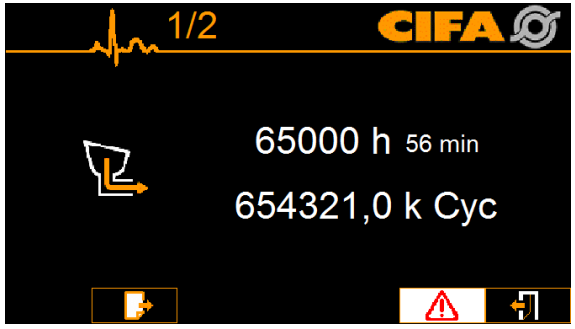
PUMPING UNIT MANAGEMENT

The system manage the pumping unit
optimizing the performance



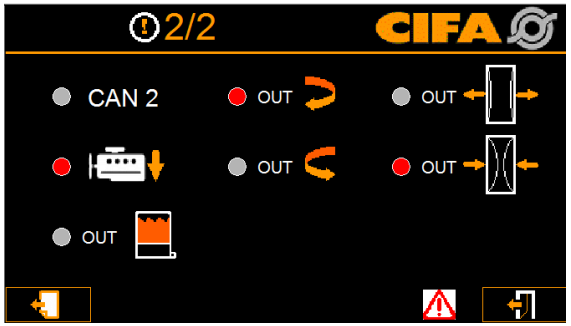
COUNTERS

The system collects and shows main data



DIAGNOSTICS

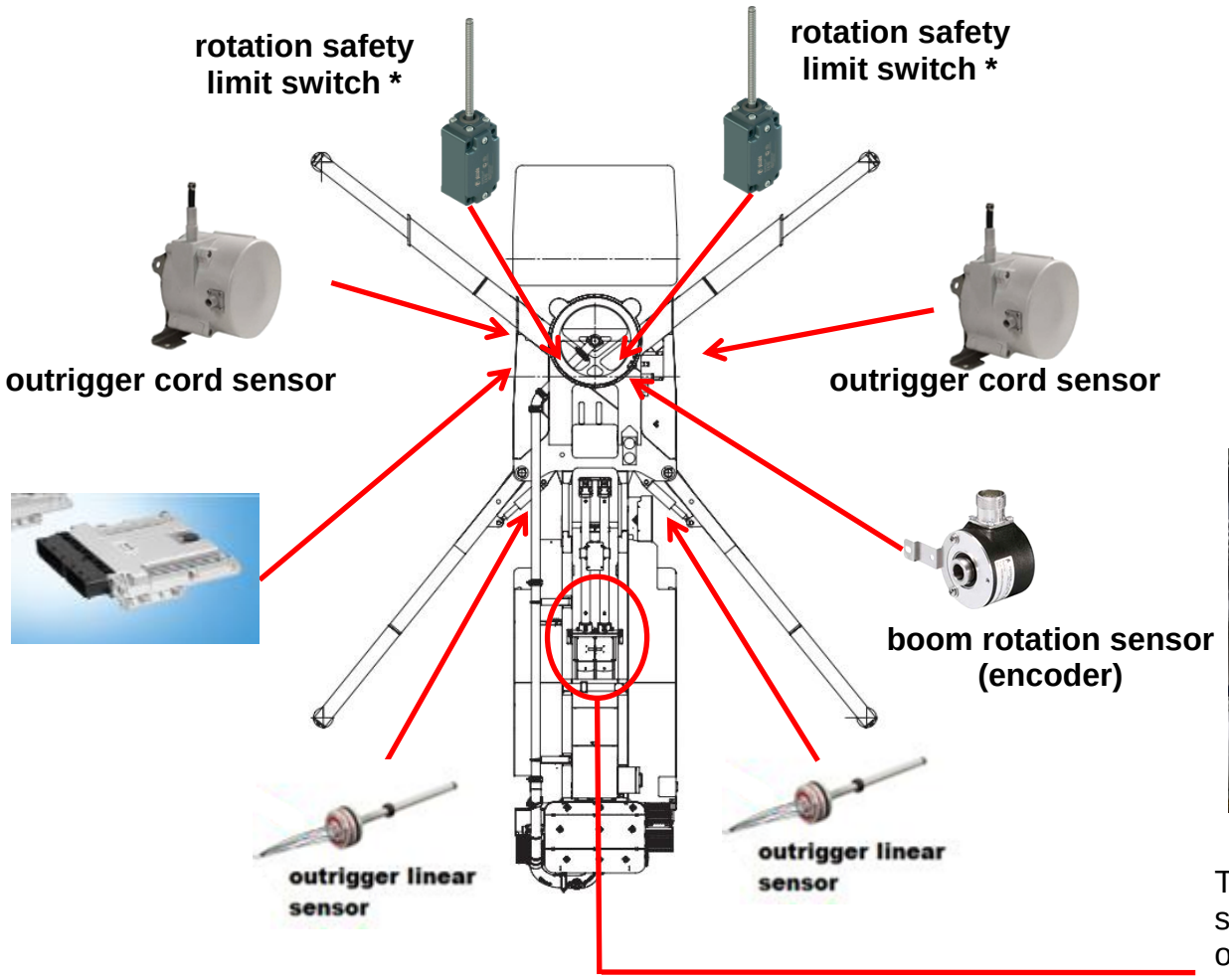
The system provides a
detailed analysis of the working phase



STABILISATION CONTROLS

LSC Light Stability Control

(according to EN 12001:2012)



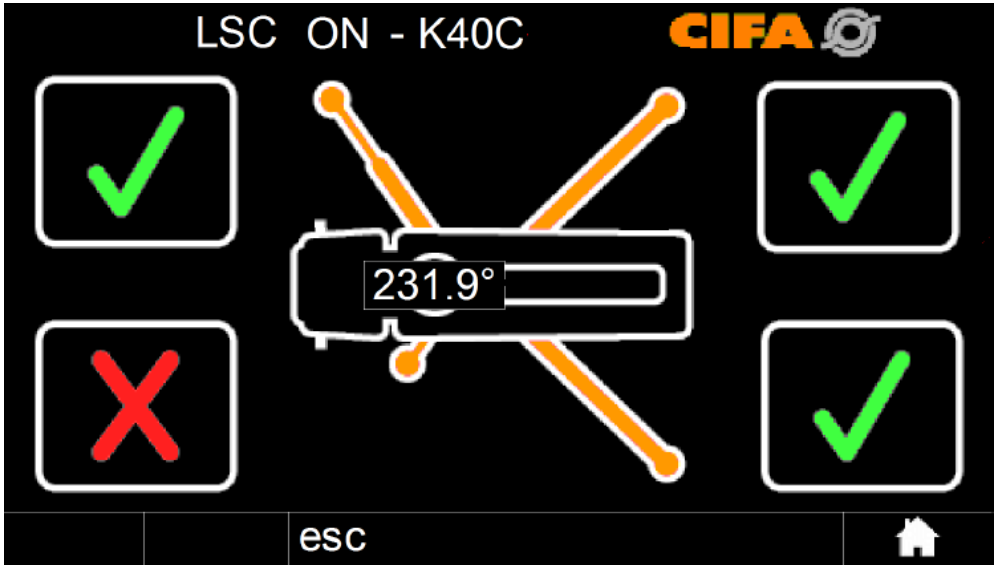
* *used only in case of encoder failure*

transponder

This transponder sensor increases the safety level of machine because the outriggers movement is allowed only when the boom is in on rest position.

LSC Light Stability Control

(according to EN 12001:2012)

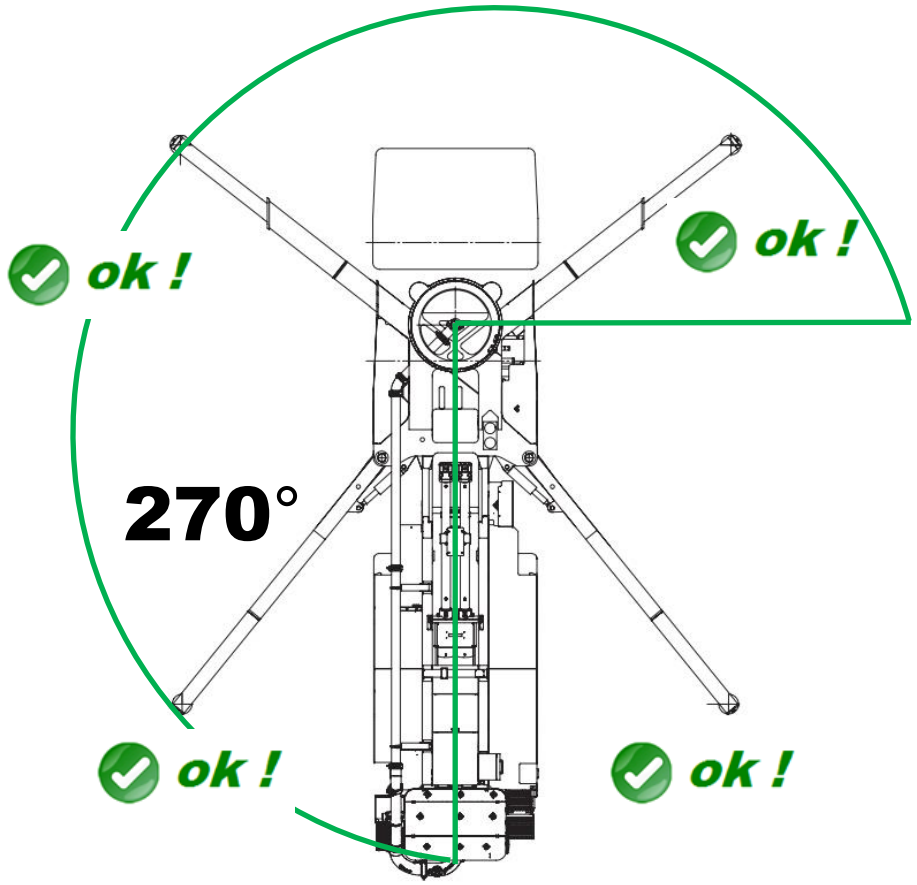


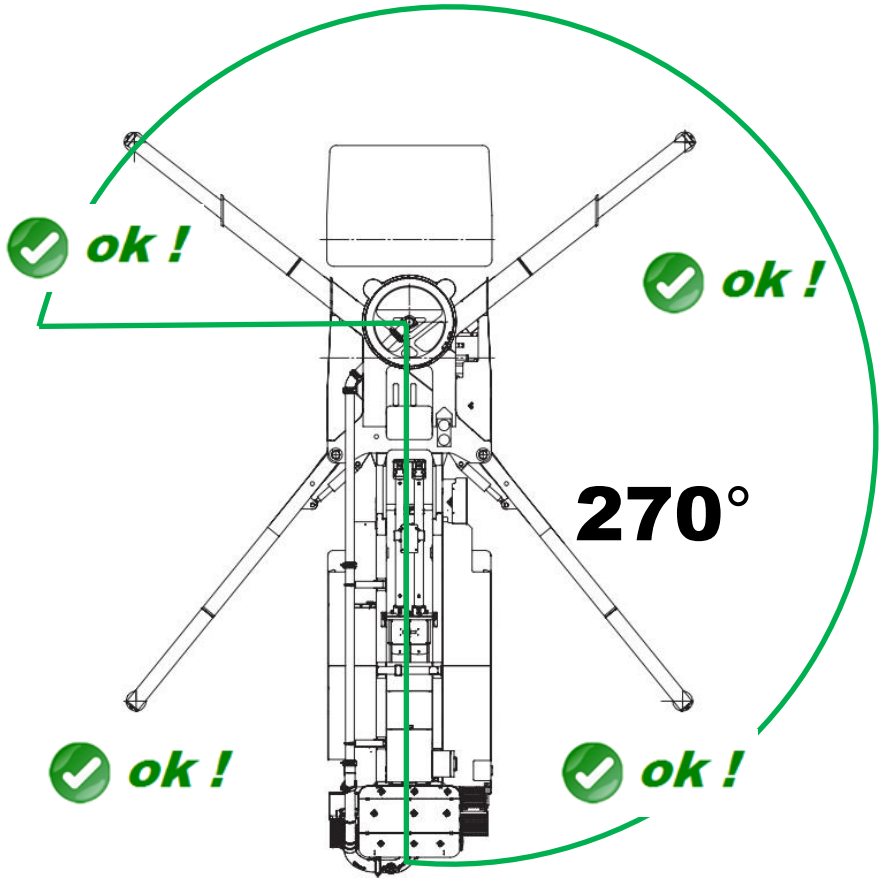
The system works when 2, 3 or 4 outriggers are fully open

LSC Light Stability Control

(according to EN 12001:2012)

4 outriggers fully open: it's **allowed** to move the boom on both sides by 270°

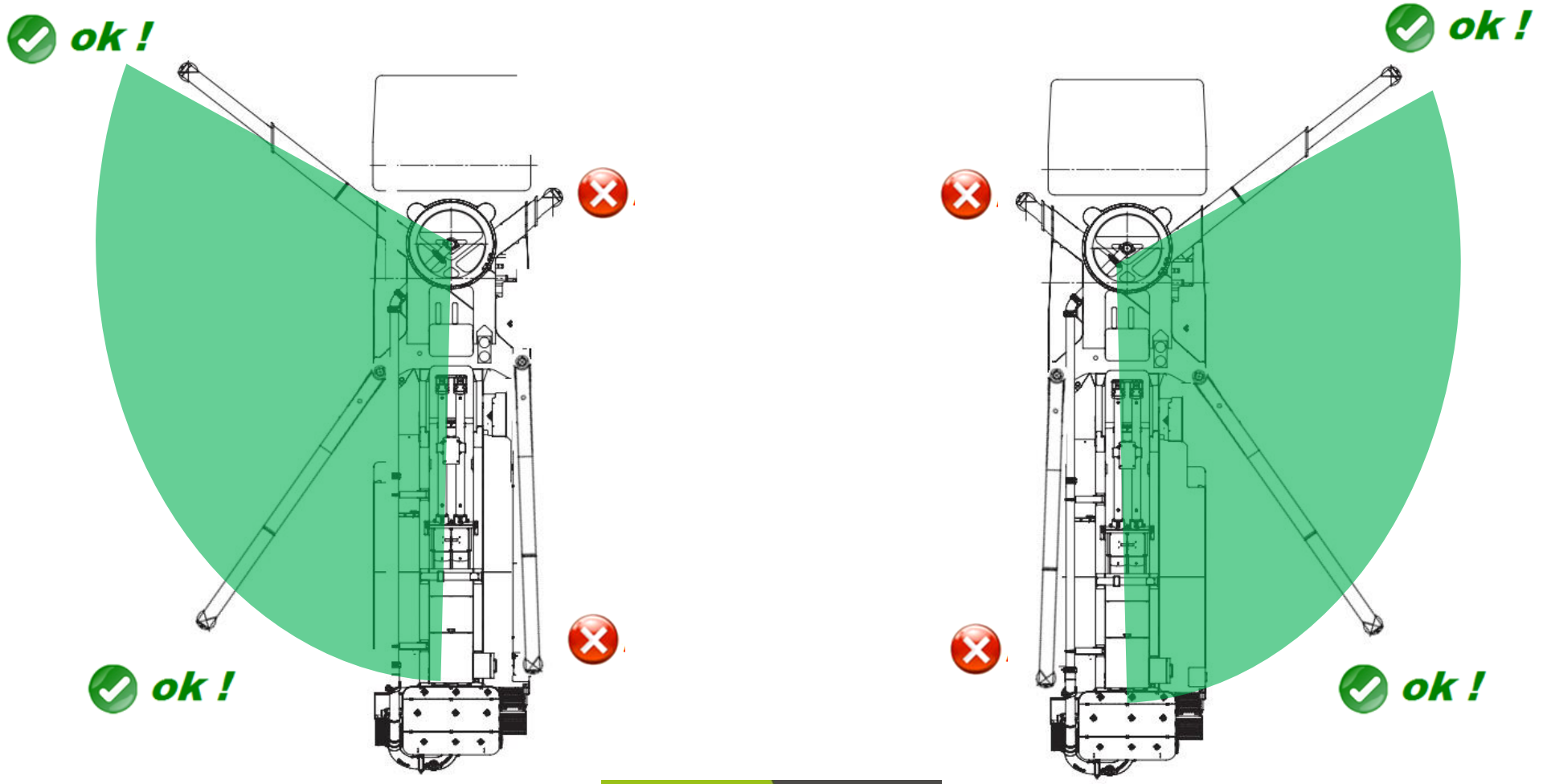




LSC Light Stability Control

(according to EN 12001:2012)

2 outriggers fully open: it's **allowed** to move the boom in the following configuration



TRUCK PUMP CONTROL SYSTEM

EASYTRONIC

CLASSIC Series

AVAILABLE

STEELTECH Series

FOR OPEN LOOP PUMPING UNIT

AVAILABLE FROM JUNE 2017

Easytronic

STANDARD FEATURES

PUMPING UNIT MANAGEMENT

COUNTERS

DIAGNOSTICS

OPTION

LSC LIGHT STABILITY CONTROL

TRUCK PUMP CONTROL SYSTEM
SMARTRONIC ASC Vs EASYTRONIC LSC

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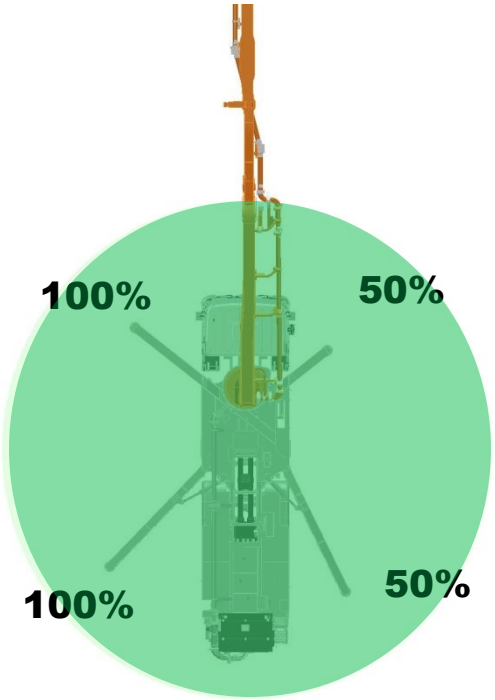
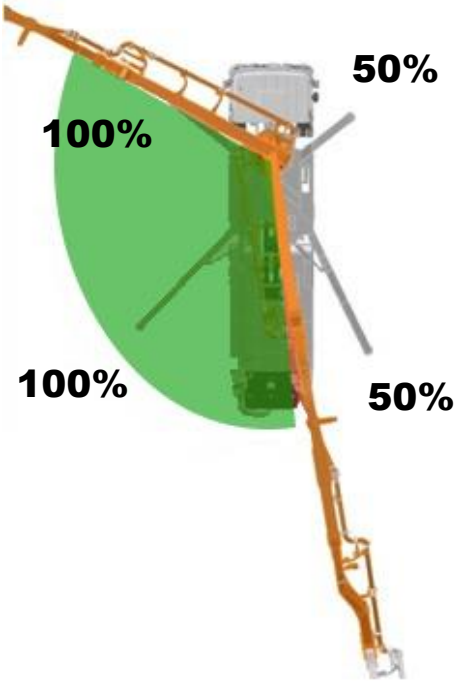
ASC



ADVANCED CONTROL
INCREASE WORKING AREA

Example boom configuration

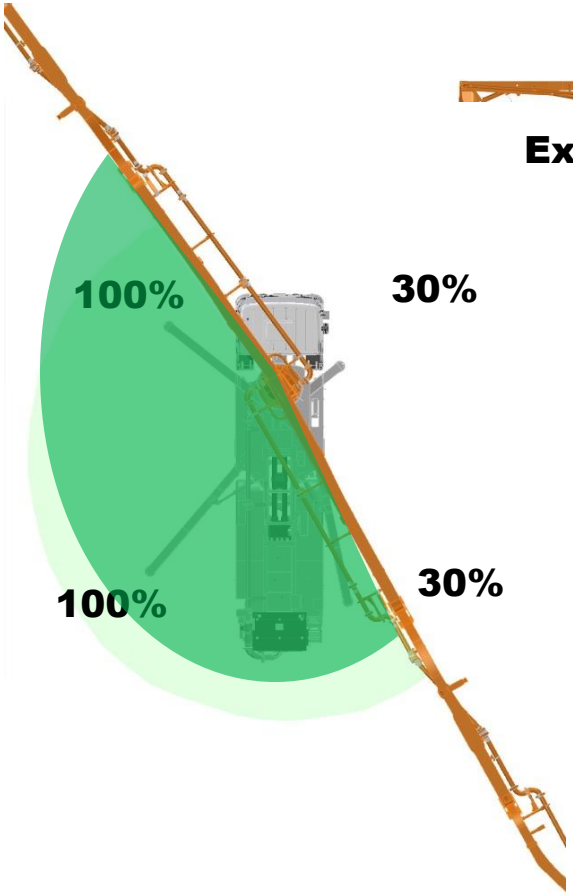
LSC



LIGHT CONTROL

TRUCK PUMP CONTROL SYSTEM
ASC Vs LSC stabilisation system

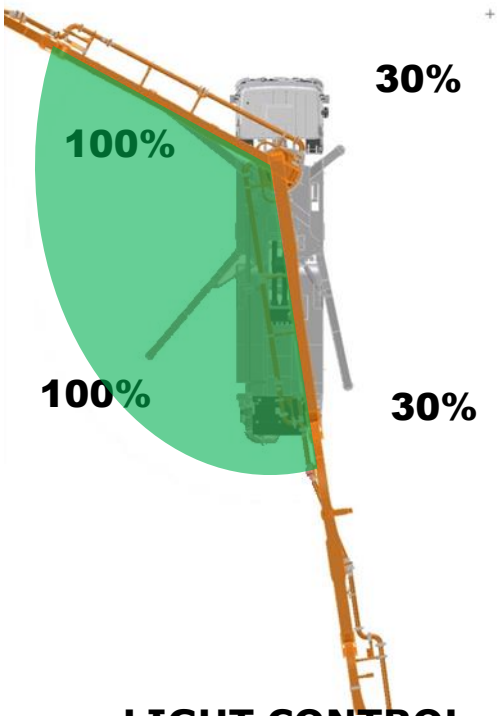
ASC



ADVANCED CONTROL
INCREASE WORKING AREA

Example boom configuration

LSC



LIGHT CONTROL

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