



MTECH



Stability Control System





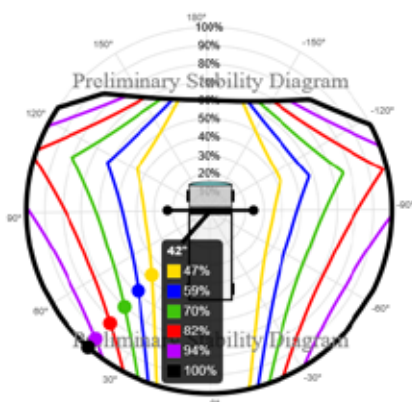
Stability Control System (SCS) is a system adopted to enhance crane safety operation.

It is developed to protect operators, people in the vicinity as well as the crane and vehicle by ensuring adequate stability in operation while handling loads.

The SCS automatically regulates the crane lifting capacity in relation to the actual stabilizer which is deployed while working with the crane. The position of each stabiliser leg is monitored to allow safe lift and position in operation.

Outrigger and Stabilizers Control System

The system calculates and detects the left & right sector of the working zone and ensures the lifting is performed in a safe way. It also manages and maximizes the lifting capacity, based on the stabilizer deployed that helps to determine the stability of the truck.



Note: Diagram to explain control system regulates the lifting capacity with stabilizer deploys

Monitoring Device



The system has pre-warning, overload alarm, and overload control output functions. Stabiliser position, Crane pressure during lifting, Auto diagnostic system and Error code information for fault directions will all be displayed by the 4.3 inch with colour TFT LCD display. Said display:

- Has a User-friendly interface
- Allows Calibrations to be done
- Shows various graphical crane operation data

The System Sensors



Slewing Sector sensor

On the crane base/column, this sensor detects the crane working sector. (slewing zone). This tells the safety controller which particular side of the outrigger sensor input should be active.

Pressure sensor

Installed at the main boom cylinder, it will be taking a measurement of the active pressure while the crane in operation, this measurement is sent over to the system to make calculations based on the logic set.



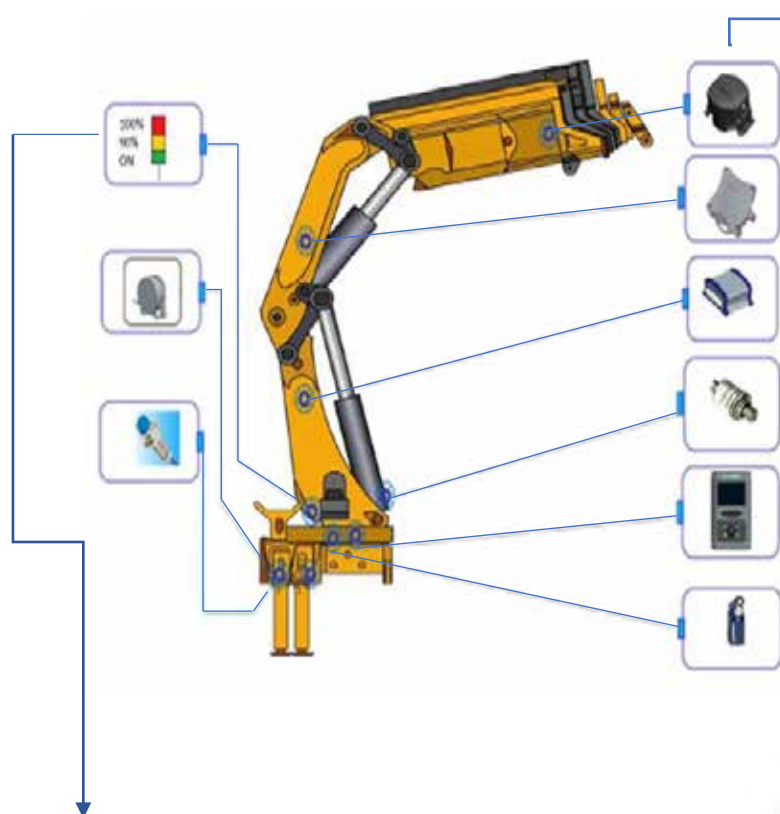
Outrigger sensor

Outrigger beams on both sides will be installed with this sensor to determine if the stabilizer legs are properly applied onto the ground

Stabilizer Length sensor

Installed on each side of the outrigger leg to detect how far the outrigger legs have been extended. This in turn determines how much lifting capacity is able to be used





Boom Length Sensor(Premium set*)


On the 2nd boom for taking measurement of the extension, whereby this measurement will feedback data to the system allowing them to make more detailed calculations with the extra data.


Angle sensor (Premium set*)

Installed on the 1st boom for taking measurements of the boom angle, whereby this measurement is to feedback data to the system to make calculations based on the logic set.

Tower traffic light with buzzer

3 stage tower light to provide visual warning on the pressure capacity.

 (Non blinking) Indicates the crane lifting capacity is has reached 100% lifting capacity.

 (Blinking) Indicates that the stabilizer on the opposite side of lifting is not touching the ground. (for warning only)

 Indicates the crane lifting capacity reaches 90%.

 Indicates system is powered up.



These parts are part of the premium set only
We reserve the right to introduce changes in design**



Please contact us for a quotation today!

E: sales@engr.steelcore.com.sg / T: 6898 1055

STEELCORE ENGINEERING PTE. LTD.

Op. Add. : 7 Gul Road, Singapore 629364

T : (65) 6898 1055

F : (65) 6898 0211

For circulation in Singapore Only.