

SIMOCRANE Final Landing System (FLS)

Safe operations with superior performance

[siemens.com/cranes](https://www.siemens.com/cranes)

Accuracy for high performance

Siemens has taken the next step in advanced automation developing an efficient system to support remote landing operations. The SIMOCRANE Final Landing System (FLS) assists the operator to use the cranes' full capacity at the same time achieving safe and accurate operations.

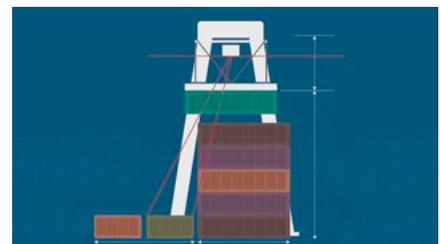
FLS assists remote operator guidance when positioning in auto mode. Using the latest camera or laser technologies together with an innovative assistance via automatic functions, the operator has high control for pick-up and set-down operations.

FLS system assists the operator to land the spreader with high precision by means of multiple accurate container recognition functions. For different scenarios, the system contributes for a superior cranes' performance and accurate stacking.

Reducing cycle time

The landing is guided and actively controlled in six degrees of freedom allowing movements in three-dimensional space to stack accurately based on specified ground gradient. The sensors provide velocity and height measurements defining all objects positions.

FLS integrates all this data for gantry, trolley, trim, list, skew and hoist allowing the operator to easily find the best angle to stack accurately. On that way, FLS contributes to shorten the cycle time of automatic container handling resulting in superior crane performance.



FLS supports the operator to execute safe and accurate movements resulting in a consistent crane performance.



Innovative technology improving productivity

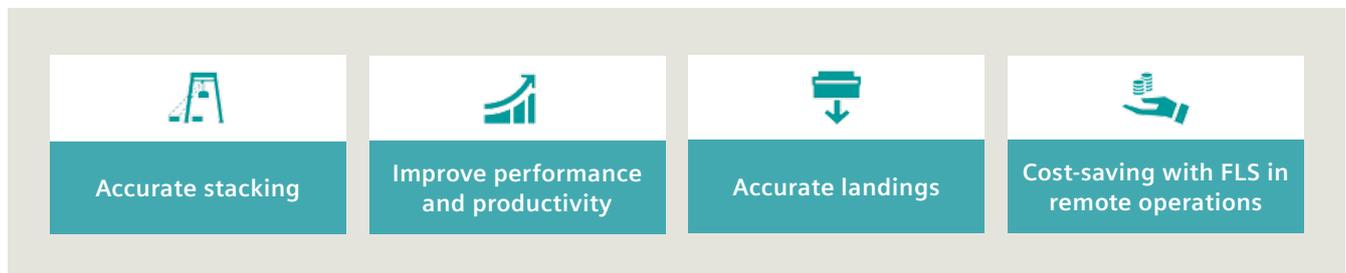
Add-on functionality

Siemens Final Landing System is able to use cameras to recognize the top corners of the container underneath at which the empty spreader shall land on. The cameras used for remote

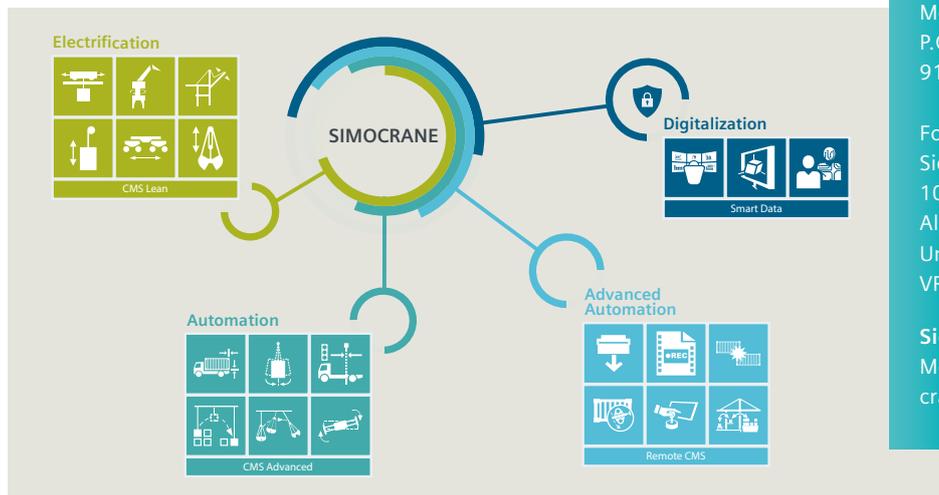
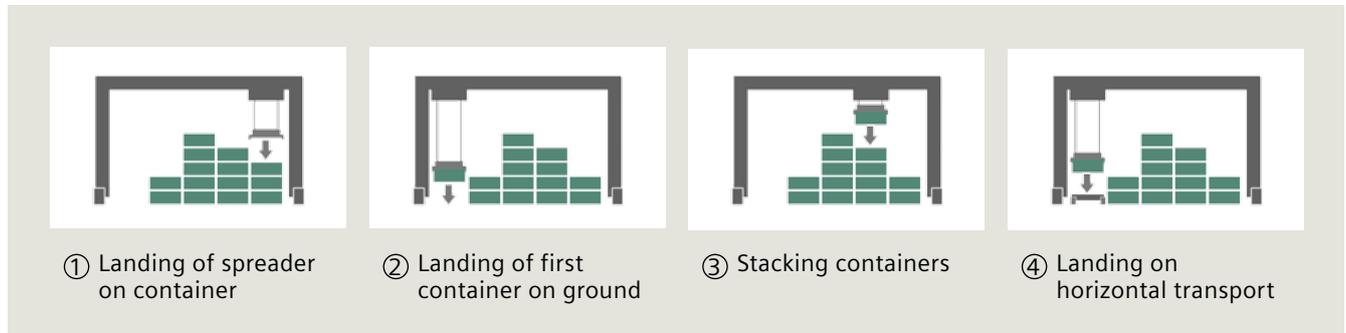
operations can also be used for FLS avoiding extra investments.

FLS offers valuable benefits for improving stacking. These advantages are built by offering the state-of-

the-art technology, with a system designed taking into consideration the daily reality in container terminals around the world. The main benefits terminals can achieve with FLS:



FLS contributes for a superior cranes' performance and accurate stacking in different operational scenarios:



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