



Basic information

Model

FK-STS 50T

Max lifting capacity

50 T

Track width (gauge)

18m

Max lifting height of
spreader on rail head

40 m

Max lifting distance (total
vertical travel of spreader)

56m



Technical Specification

1. Crane Brakes - Pintsch Bubenzer Germany
2. Bearings - SKF INA FAG
3. Electric grabs - Bromma Malaysia ELME Sweden
4. PLC - Siemens Germany
5. PLC Distributed I/O - Siemens & Phoenix Contact Germany
6. frequency converter - Danfoss Finland
7. cable products - Prysmian Germany/Tratos Italy
8. electrical components (relays, automatic circuit breakers, contactors)
- Siemens Germany, Schneider Electric Germany
9. control levers - Gessmann Germany
10. positioning system - precise tilting and rotation of the grab
11. crane direct drive mechanism (without chain and universal joint drive)
12. Crane without hydraulic system
13. Loading and unloading equipment - automatic grabs for handling standard 20' and 40' ISO containers with mechanical flaps (fully electric). The flap does not protrude when in the raised position within the outside dimensions of the main frame of the grab.
14. Cat's Whisker Collision Sensors - 4 sensors mounted at the point of maximum protruding dimension of each gantry of the crane.
15. ultrasonic collision sensors for objects in the crane's path of travel - 4 sensors, mounted at the corners of each gantry.
16. sensors for collisions with adjacent cranes in the crane's path of travel
- 2 sensors (ultrasonic or laser), mounted on the crane's gantry.
17. grab sensor - removable connection.
18. Crane traveling mechanism rotating the hub by means of an electric motor
19. Crane cab with PLC display.
20. monitor showing main and important crane operating parameters (position of truck/crane mechanism, status of end switches, status of emergency stop button chain, etc.)
21. Air-conditioning systems for cabs and electrical installations
22. Differential steering systems for cranes
23. authorized software license laptop for diagnostics and adjustment of crane units and mechanisms - for one-to-one cranes
24. remote support during the warranty period
25. crane operator's room - modern ergonomic, equipped with grapple lock status traffic light system. The trainee seat is equipped with a two-point safety belt. The lower glass window of the operator's cab is equipped with a removable protective net.
26. Dome mounted IP cameras in cab and electrical facility with remote access - Full HD video 1920x1080, stereo audio, two way communication capability. One camera is mounted on the truck towards the cargo handling area.
27. detachable auxiliary genset for moving between stacks, but not for lifting heavy loads, with emergency drop rated weight function
28. automatic guidance system (autosteer)
29. high-precision automatic steering system that keeps the crane on a pre-programmed path
- no steering operation is required by the crane operator.
30. air-conditioning packages



Technical Specification

31. LED lighting
32. Preparation of crane mounting terminal operating system screen - bracket, power cables, automatic circuit breakers for protection, fuses
33. 500kg rated capacity service bench crane mounted on truck - The service bench crane should be positioned in the middle of the truck so that all elements of the cargo handling area can be accessed. The electric hoist shall move freely over the entire service bench. The bottom of the cargo handling area shall be equipped with a 700mm*1400mm technical hatch.
34. 19-inch display for the operator's cab showing external video surveillance signals - 2
35. cable guidance to the truck by means of a suspension cable system
36. Centralized lubrication system for crane truck unit components
37. Platforms, passages, ladders and platforms set up to ensure safe and quick access to elements requiring frequent technical maintenance
38. lighting system - 10 projector lights under the main beam, 4 projector lights under the wagons, 2 projector lights from the bottom of the side of the loading path, 2 spotlights to illuminate the manhole covers of the forklift crates, 4 corner lights on the wagons used for service maintenance, 2 spotlights to illuminate the corners of the crane's travel path. The projector lights on the main crossbeam can be accessed without going beyond the guarding of the railings. All projector lights and lighting bulbs use LED technology.
39. Air conditioning system for cab operators and electrical installations - manual activation.
40. PLC displays in the electrical installations for monitoring the parameters of the crane operation - Frequency converters (VFDs) are equipped with monitors capable of displaying the crane parameters and operating modes, and allow the adjustment of these VFDs.
41. remote control (with cable connection) that allows wireless remote control (with cable connection) to control the crane mechanism separately, during technical maintenance
42. power supply to the crane - through a cable reel mounted on the crane, 1000V AC 3-phase 50Hz supply. The control and switching circuits must have 220V AC and 24V DC. The length of cable spooled on the cable reel is 230 meters. The cable must contain at least 8 single mode optical fibers.
43. Coatings - resistant to aggressive environments. Coating shall be applied to exterior surfaces of metal structures as well as interior and concealed spaces. Warranty shall be for a minimum of 60 months.
44. Coating Color - Yellow RAL and logo as negotiated with the customer.
45. modular display showing current status in real time - all information is displayed in real time based on the performance of the computer. The module also displays the historical status (in Russian).
46. remote monitoring - all data of the crane is collected in the server executive system.
47. crane control positions - crane cab (all feasible actions); electrical installations (service control and mechanism opening); cable reel (winding/unwinding of power cables); wireless remote control (service remote control) - all feasible actions.
48. Metal Structures and Crane Mechanisms - Have convenient lifting points or other special devices during installation or removal.
49. safety lighting - 2 spot lights and 2 flange lights
50. spare parts - 2 sets of grab controls, 2 sets of PLC I/O modules, 1 set of VFDs, 1 set of drives, 1 set of transformers, 1 set of main cable reels, 2 sets of control levers



Technical Specification

- 51. 5 hydraulic cylinders mounted hydraulic units - 2 lateral support bearings
- 52. Cable system consisting of 40 cable bundles
- 53. 2 emergency hydraulic pumps for grabs

