BST106-N59 Wheel Loader Weigher

Operating Principle

Wheel Loader Weigher is a dynamic weighing and auto-totalizing equipment installed on wheel loader without changing the original structure of wheel loader.
When the lift-arm of wheel loader lifted to a certain height, the position sensor will trigger the weighing process, and the weighing indicator will collect the oil pressure signal from lower and upper oil chambers of arm-lifting oil cylinder. After signal processing and compensating, Single-bucket-loading-weight will be got and totalized to Totalized Loading Weight automatically, and the Deviation Value between Totalized Loading Weight and Setpoint, alarm messages will be displayed. The operator can judge if the present Single-bucket-loading-weight is valid according to the alarm messages, and confirm the loading weight of last bucket according to Negative Deviation Value for avoiding overloading. After Totalized Loading Weight reached

Weighing Indicator [Printer] [Ip65]

Main Features

* EMC design with high anti-jamming capability, suitable for industrial environment.
* DC24V power input circuit with reverse polarity protection function.
* 32-bit ARM CPU with 72MHz & higher arithmetic speed.
* Dust-proof stainless Steel shell with protection level IP65.
* 640×480 TFT color display screen for English, Simplified/Complex Chinese character display.
* The display information of Bucket Lifting/Declining state, Single-bucket-loading-weight, Totalized Loading Weight, Positive/Negative Deviation Value, Alarm state, Date/Time and other auxiliary data are used for adjusting if Single-bucket-loading-weight is valid and the loading process should be stopped.
* English/Simplified Chinese/Complex Chinese keypad with controllable backlight.
* Number, English Alphabet, Simplified/Complex Chinese can be inputted.
* The information of User Name, Car.No., Goods No. and Operator No. can be inputted.
* Upper/Lower Limit of Single-bucket-loading-weight, Setpoint of Totalized Loading Weight and Date/Time can be set.
* Operating Time, Single-bucket-loading-weight, Totalized Loading Weight and Alarm Information can be recorded automatically.
* Using two oil pressure sensors for getting higher weighing accuracy than using one.
* 24-bit ◘-△ADC with internal resolution 1/1,000,000 and sampling frequency 400Hz.
* High sampling frequency, anti-vibration digital filter and acceleration compensation algorithm for ensuring high weighing accuracy in the lifting process of the bucket.
* 10000 Loading Records can be saved, queried and printed, and each record can contain 50 Single-bucket-loading-weight value.
* 1000 Reload Records can be saved and open for reloading.

Oil Pressure Sensor [Ip67]

Position Sensor [Ip67]

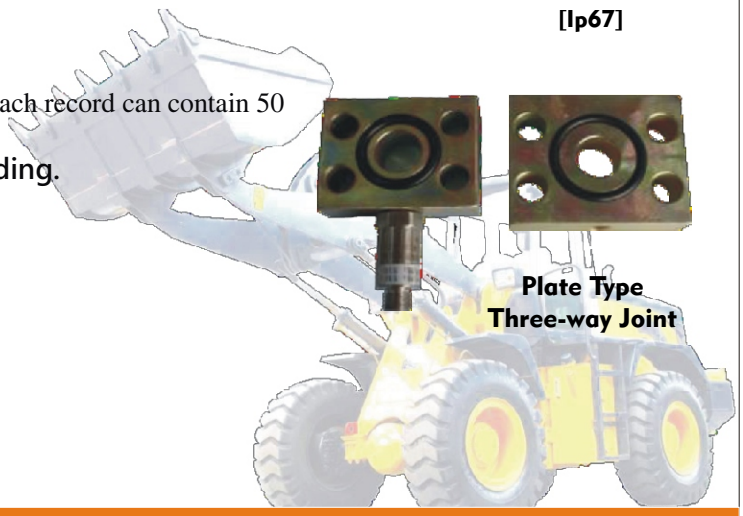

Plate Type Three-way Joint

System Accuracy

* Accuracy Grade: III.
* Verification Accuracy of Controller: 0.02%.
* Accuracy of Single-Bucket-Weight: 0.5%~1.0%.
* Accuracy of Totalized Loading Weight: ±1.0%.

High-Frequency Sampling | Anti-Vibration Digital Filter | Acceleration Compensation | High Accuracy&Stablity