



The gauge is designed according to the elastic materials, that is to say, when the tension force does not exceed the material elastic limit, the material tensile deformation is in direct proportion with the tension force. It has the advantages such as pleasing and elegant appearance, small bulk, light weight, simple structure, high indicating precision, fine stability, impact resistance, shock proof, large panel, clear read-out, easy and comfortable etc.

PURPOSE

The mechanical type tension gauge is widely used in the fields of petroleum, coal, geology prospect, national defense, chemical engineering, etc. It can measure the pull of the mechanism in transportation and construction and strap transporter, it can test pull-push force of the railway electric switch lock after restored, and measure other weight. It also can be provided to measure the instantaneous value of the traction resistance on the basis of static load and dynamical load, and used in other physical tests. Products of this series are also equipped with attached pointer indicating mechanism which can read the max pull value in the measuring process.

STRUCTURE AND WORKING THEORY

When the pull works on the two rings, it brings the distortion a corresponding radian. With the pulling bar fixed on one head of the distortion working, the gear sector turns an angle and drives the cylindrical gearing which is meshed with the working gear sector by mechanical enlargement, and lets the working pointer and instantaneous pointer fixed on the cylindrical gear indicate instantaneous value of measured pull.

When the measured pull is removed, the working pointer sets zero, and the instantaneous pointer still stays at the position of the max instantaneous value, that is the read value during the measuring process.

Set the instantaneous pointer zero by hand. If do not need to use instantaneous pointer during the measuring process, you can dial it to the full scale by hand, and it doesn't affect the normal working of the working pointer.

THE MAIN TECHNICAL PARAMETER

1. Accuracy Grade: 2.0
2. Fundamental Error: $\leq \pm 2.0\%$ Full Scale
3. Measure Range (kN): 0~5 0~10 0~30 0~50 0~80 0~120 0~160 0~200 0~300 0~500

USE AND MAINTENANCE

1. Avoid using it under wet or strong shock surroundings.
2. The tested pull should work on the centre line of the gauge.
3. The tested pull should be within the limited range of the gauge. The tension gauges are designed without especial insurance system but with a system that only enlarges the safety factor on a certain extent when the burthen is over the range. So it is forced not to exceed 30% of the limited value when using them or their using life will be cut down.
4. You can use the set point bar attached with the gauge to make sure the pointer to return to zero if it doesn't set on zero.
5. The tension gauges should be sent to the measure department to be inspected. The period of the inspected is a half year or one year.