OPERATING INSTRUCTIONS

CHAIN TESTING GAUGES

TWN 1946



1 DESCRIPTION AND INTENDED USE

THIELE chain testing gauges according to TWN 1946 are used for quick control of the dimensional accuracy of THIELE sling chains XL200 according to TWN 0072 and XL400 according to TWN 1805 or TWN 1805A.

Like the identification tags, they can be attached directly to the associated chain slings and are thus at hand at any time.

The chain testing gauges support the following controls:

- diameter control
- pitch control
- · elongation control

2 SAFETY NOTES

The safety instructions of the chain slings must be observed.

Do not perform controls with chains under load.

THE CHAIN TEST GAUGES DO NOT SUBSTITUTE THE INSPECTIONS TO BE CARRIED OUT AND DOCUMENTED REGULARLY.

Working under the influence of drugs, medications impairing the sense and/or alcohol is strictly forbidden!

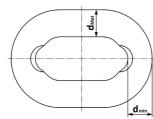
3 DATA

Chain size	Article no.
6-10	F01690
8-10	F01691
10-10	F01692
13-10	F01693
16-10	F01694

4 USAGE

4.1 Diameter control, dimension dmin

The control only refers to the diameter wear in the curves.

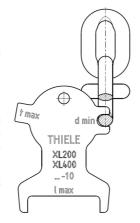


Control criteria is a remaining diameter dimension $d_{min} = 0.9 \ x \ d_{Mat}.$

The control arrangement is made according to the sketch beside. A correction dependent on the nominal size due to the thickness influence of the gauge is taken into account.

As soon as the chain testing gauge can be passed over the contour of the chain link as shown, the chain is ready for rejection due to the reduction in diameter.

In this case, a detailed inspection must be carried out and documented BEFORE the chain is used again.



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THIELE

XL200

XL400

... -10

l max

d min (

max

4.2 Pitch control, dimension t_{max}

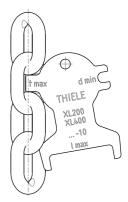
The dimension t indicates the distance between two next but one chain links.

Control criteria is the elongation of a single link according to DIN 685 by a maximum of 8 %.

The control arrangement is as shown in the sketch

As soon as the chain testing gauge can be inserted between the outer curves of the chain links as shown, the chain is ready for rejection due to excessive pitch wear or excessive elongation due to overloading.

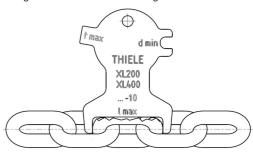
In this case, a detailed inspection must be carried out and documented BEFORE the chain is used again.



4.3 Elongation control, dimension lmax

The dimension I indicates the outer length of a chain link. Control criteria is elongation due to ductile deformation in accordance with DIN 685 by a maximum of 3 %.

The control arrangement is shown in the following sketch.



As soon as the chain testing gauge can NO LONGER be passed over the outer curves of individual chain links as shown, the chain is ready for rejection due to excessive pitch wear or excessive elongation due to overloading.

In this case, a detailed inspection must be carried out and documented BEFORE the chain is used again.

5 MISCELLANEOUS

5.1 Inspection service

THIELE offers inspection, maintenance and repair services for chain slings and components performed by trained and competent personnel.

5.2 Disposal

All components and accessories of steel taken out of service are to be scrapped in line with local regulations and provisions.

5.3 Storage

Chain testing gauges have to be stored in dry locations at temperatures ranging between 0 $^{\circ}\text{C}$ and +40 $^{\circ}\text{C}$.

6 THIELE OPERATING AND MOUNTING INSTRUCTIONS

Current operating and mounting instructions are available as a PDF download on the homepage.

7 IMPRINT

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