

■ What is welding gauge

Welding gauge is used to measure and check size of welded part throat thickness required strength split that may casue damage irregularity of under-cut and overlap etc..

● Terms of welding ●

■ Throat thickness

The thickness from welded portion at triangular cross-section when welding two faces at 90°.

■ Arc strike

The arc that occurred to parts other than welding base metal when working on arc welding.

■ Pit

Blow hole on surface due to poor welding.

■ Bead

A belt shape rises after working on welding.

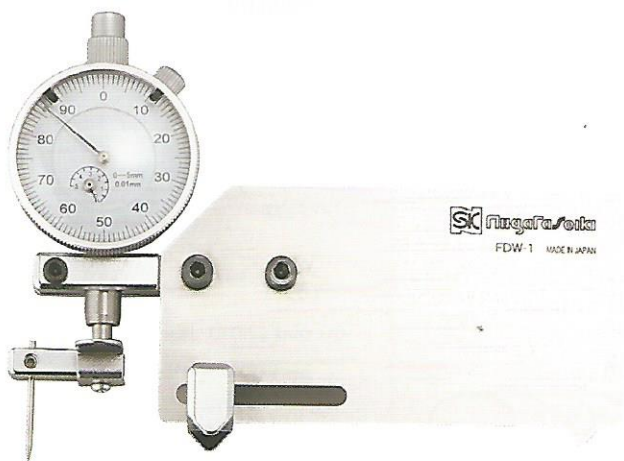
■ Under-Cut

The irregular groove at the toe of a rod in the welding base metal.

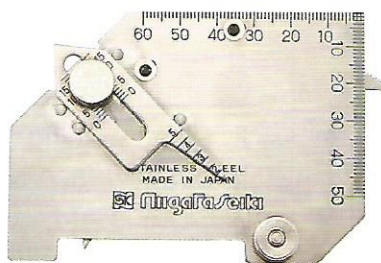
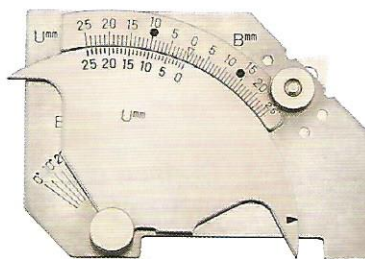
■ Overlap

The heap results from miss welding of the base metal.

● Exclusive use for measuring under-cut



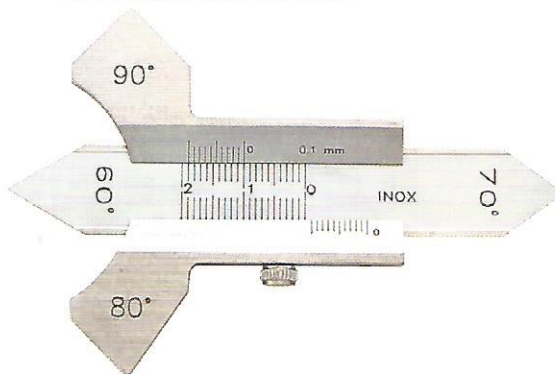
● Use for measuring throat thickness, bead and under-cut



● For measuring throat thickness, foot length and height of fillet



● For measuring thickness of corner fillet



Block gauge

Pin gauge

Pin vise

Ring gauge

Thread gauge

Thread ring gauge

Limit plug gauge


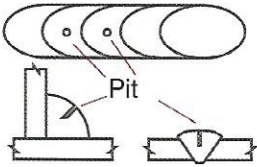

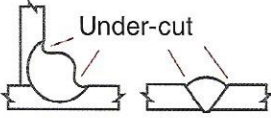
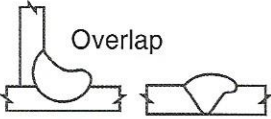
Thickness gauge

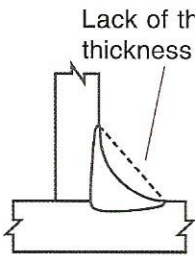
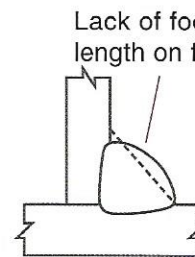
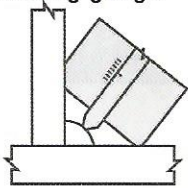
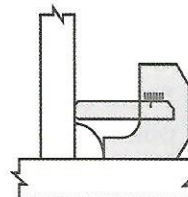
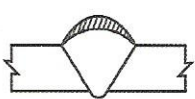
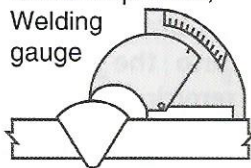
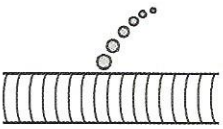
Taper gauge

Welding gauge

Protractor

● Instructions for inspection

| | Inspection items | Picture | Instruction for measuring |
|--|---------------------------------------|--|---------------------------------------|
| Reasons of welding crack | 1. Surface crack on bead |  <p>Horizontal cracks Vertical cracks Crater cracks</p> | Visual inspection in principle |
| Inspection of exterior and shape on welding bead | 2. Pit on welding bead surface |  <p>Pit</p> | Visual inspection |
| | 3. Unevenness on welding bead surface |  <p>Unevenness on bead connection etc.</p> | Visual inspection, Welding gauge |
| | 4. Under-cut |  <p>Under-cut</p> | Visual inspection, Under-cut gauge |
| | 5. Overlap |  <p>Overlap</p> | Visual inspection |

| | Inspection Items | Picture | Instruction for measuring |
|--|---|---|--|
| Inspection of exterior and shape on welding bead | 6. Size of corner buds (Lack of throat thickness · foot length of fillet) | <p>Lack of throat thickness</p>  <p>Lack of foot length on fillet</p>  <p>Size of design -----</p> | <p>Visual inspection, Welding gauge</p>   |
| | 7. Excessive buds from groove welding |  | <p>Visual inspection, Welding gauge</p>  |
| Others | 8. Arc strike |  | <p>Visual inspection</p> |

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Ring gauge
Thread gauge
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Thickness gauge
Taper gauge
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