



# **Welding Inspection Duties & Responsibilities**

Course Reference WIS 5

# Main Responsibilities

---

- Code compliance
- Workmanship control
- Documentation control

# Personal Attributes

---

- **Honesty**
- **Integrity**
- **Knowledgeable**
- **Good communicator**
- **Physically fit.**

# Duties of a Welding Inspector

- **Before Welding.**  
before assembly.  
after assembly.
- **During welding.**
- **After welding.**

# Duties Before Welding

- Check all documentation
- Check all consumables
- Check materials, dimensions and condition
- Preheating, method and temperature
- Check fit and set-up.
- Ensure no undue stress is applied to the joint
- Check welding equipment

# During Welding

---

- Check amperage, voltage, polarity
- Ensure the correct technique, run sequence.
- Check run out lengths, time lapses.
- Cleaning between passes
- Interpass temperatures
- Consumable control
- Maintenance of records and reports

# After Welding

---

- Post cleaning
- Visual inspection of completed welded joint
- Check weld contour and width
- PWHT
- Dimensional accuracy
- Weld reports
- Tie up with NDT
- Monitor any repairs



# Summary

It is the duty of a Welding Inspector to ensure all the welding and associated actions are carried out in accordance with the specification and any applicable procedures.

**A Welding Inspector must:**

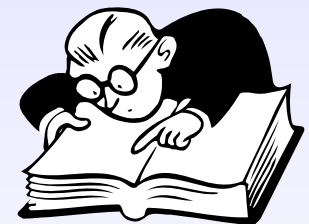
## **Observe**

To observe all relevant actions related to weld quality throughout production.



## **Record**

To record, or log all production inspection points relevant to quality, including a final report showing all identified imperfections



## **Compare**

To compare all recorded information with the acceptance criteria and any other relevant clauses in the applied application standard





# Welding Inspectors .

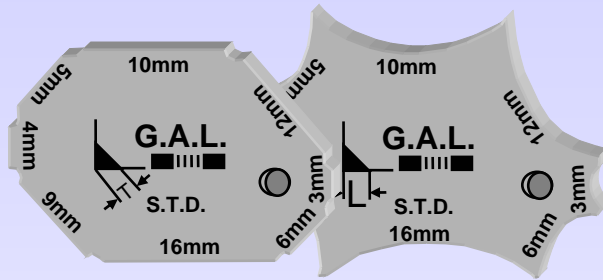
---

## Equipment

- Measuring device e.g flexible tape, steel rule
- Temperature indicating crayons
- Welding gauges e.g. TWI multi-purpose gauge
- Voltmeter
- Ammeter
- Magnifying glass
- Torch/flash light

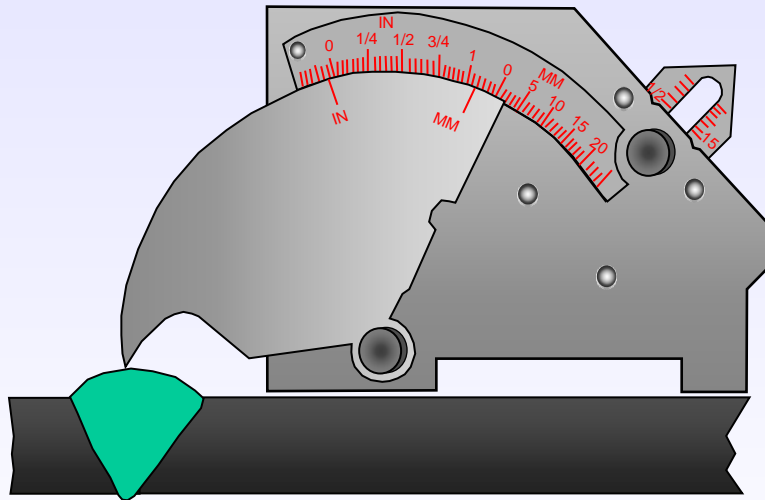
# Welding Inspection Gauges

TECHNOLOGY

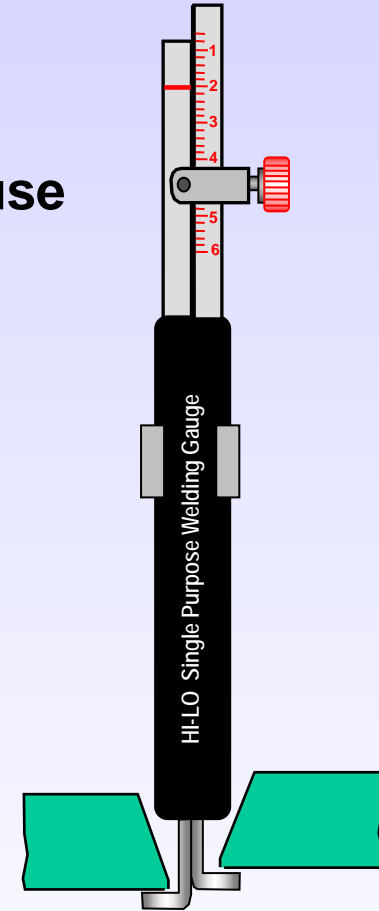


Fillet Weld Gauges

An explanation on the use of these gauges will be give in the practical sessions

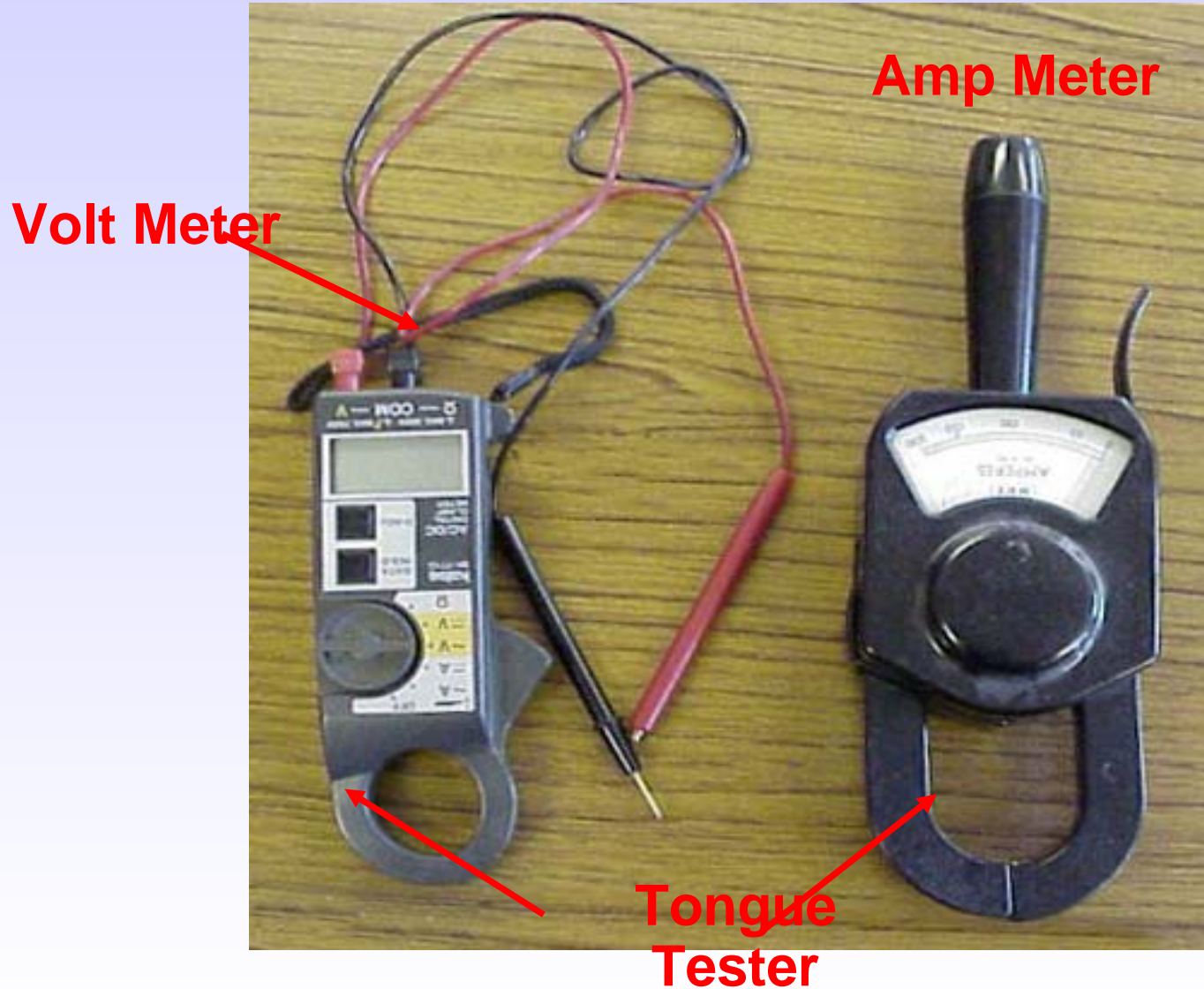


TWI Multi-purpose Welding Gauge



Misalignment Gauges

# Amp ~ Volt Meter





# Any Questions

TECHNOLOGY



# Questions

---

- QU 1. Give the three main responsibilities of a Welding Inspector
- QU 2. Give the main attributes, which all Welding Inspectors must possess
- QU 3. A Welding Inspector should refer to What documents and records
- QU 4. Give six main duties of a Welding Inspector before welding
- QU 5. Give six main duties of a Welding Inspector during welding
- QU 6. Give six main duties of a Welding Inspector after welding