



# WELDING TRAINING & CERTIFICATION™: STEEL (GMA) MIG WELDING (WCS03)

## TEST WELDS (THIN: 22 GAUGE THICK: 16 GAUGE)

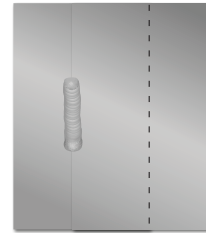
### 1. FILLET THIN-THIN

#### Vertical

Overlap halfway along length

Visual: 25–38 mm long  
3–8 mm wide

Destructive: Tearout from top coupon for the length of the weld



### 2. OPEN BUTT THIN-THIN

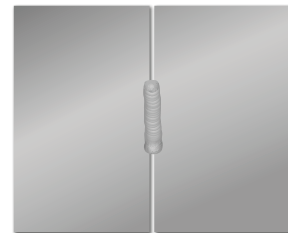
#### Vertical

Butt 2 coupons along length

Visual: 25–38 mm long  
3–8 mm wide

Backside: Evidence of complete fusion

Destructive: Fold faces onto each other, no cracking in weld backside along length

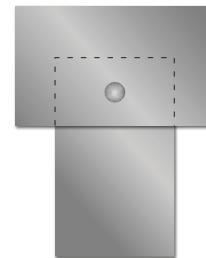


### 3. PLUG THIN-THICK

#### Vertical

Overlap coupons halfway to form a "T," 6 mm hole in top thin coupon

Visual: 8–10 mm nugget diameter / backside melt-through  
5-8 mm diameter



### 4. PLUG THIN-THIN

#### Vertical

Overlap coupons on corner,  
90°, 6 mm hole in top coupon

Visual: 8–10 mm nugget diameter

Destructive: 3–8 mm hole in bottom coupon



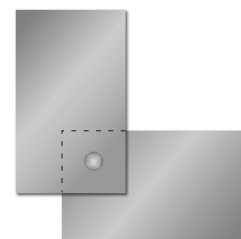
### 5. PLUG THICK-THICK

#### Vertical

Overlap coupons on corner,  
90°, 8 mm hole in top coupon

Visual: 10–13 mm nugget diameter

Destructive: 5–10 mm hole in bottom coupon



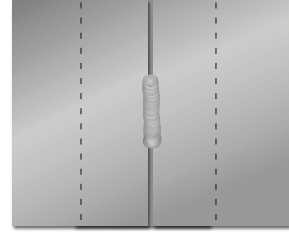
## 6. BUTT WITH BACKING THICK-THICK

### Vertical

Butt 2 coupons along length with backing of same thickness

Visual: 25–38 mm long  
5–10 mm wide

Destructive: Tearout from top coupons for the length of the weld



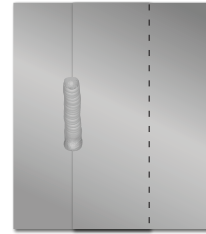
## 7. FILLET THIN-THIN

### Overhead

Overlap 2 coupons halfway along length

Visual: 25–38 mm long  
3–8 mm wide

Destructive: Tearout from top coupon for the length of the weld



## 8. OPEN BUTT THIN-THIN

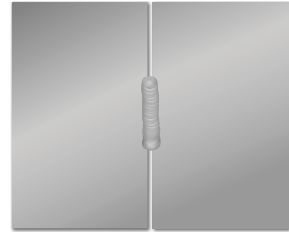
### Overhead

Butt 2 coupons along length

Visual: 25–38 mm long  
3–8 mm wide

Backside: Evidence of complete fusion

Destructive: Fold faces onto each other, no cracking in weld backside along length

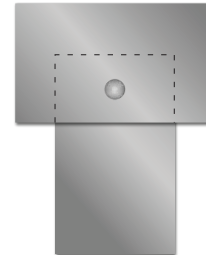


## 9. PLUG THIN-THICK

### Overhead

Overlap coupons halfway to form a "T," 6 mm hole in top thin coupon

Visual: 8–10 mm nugget diameter / backside melt-through  
5–8 mm diameter



## 10. BUTT WITH BACKING THIN-THIN

### Overhead

Butt 2 coupons along length with backing of same thickness

Visual: 25–38 mm long  
3–8 mm wide

Destructive: Tearout from top coupons for the length of the weld

