

# GUIDE TO INTERPRETING ABBREVIATIONS ON AWS CERTIFIED WELDER CARD

## EXAMPLE

| Supplement | Code | Process | Gas (optional)  | Filler Metal | Base Metal | Position (s) | Thickness, Backing<br>- or - |
|------------|------|---------|-----------------|--------------|------------|--------------|------------------------------|
|            |      |         |                 |              |            |              | Thickness, Pipe OD & Backing |
| G          | D1.1 | GTAW    | Ar 100%         | ER70S-2      | A106B      | 4G           | L: 1/8-3/4": 4" OD: WB       |
|            |      | FCAW    | CO <sub>2</sub> | E71T-1       |            | 4G           | L: 1/8-3/4": 4" OD: WB       |

## AWS SUPPLEMENTS

|      |  |
|------|--|
| C    | Sheet Metal Welding (AWS D9.1)                                     |
| F    | Chemical Plant and Petroleum Piping (ASME B31.3 and Sec. IX)       |
| G    | Generic Supplement (Company-furnished WPS and acceptance criteria) |
| B2.1 | SWPS   |

**CODES:** *(For Supplement G only, reference appropriate acceptance criteria.)*

|         |   |
|---------|---|
| B2.1    | AWS B2.1, Standard for Welding Procedure and Performance Qualification  |
| D1.1    | AWS D1.1, Structural Welding Code - Steel   |
| D1.2    | AWS D1. 2, Structural Welding Code - Aluminum   |
| D9.1    | AWS D9.1, Sheet Metal Welding Code  |
| ASME IX | ASME Section IX, Qualification Standard for Welding and Brazing Procedures, Welders, Brazers, and Welding and Brazing Operators |
| D15.1   | AWS D15.1, Railroad Welding Specification - Cars and Locomotives  |
| API     | API 1104, Welding of Pipelines and Related Facilities   |
| CUST    | Other customer may be used as indicated on the employer supplied WPS  |

*\*Other standards/codes may be used as indicated on the employer supplied – WPS*

### PROCESSES:

|        |                                       |
|--------|---------------------------------------|
| SMAW   | Shielded Metal Arc Welding (SMAW)     |
| GMAW   | Gas Metal Arc Welding (GMAW)          |
| GMAW-S | Gas Metal Arc Welding - Short Circuit |
| FCAW   | Flux Cored Arc Welding (FCAW)         |
| GTAW   | Gas Tungsten Arc Welding (GTAW)       |
| SAW    | Submerged Arc Welding (SAW)           |
| BZ     | Brazing                               |

### GAS:

|                    |                      |
|--------------------|----------------------|
| AR                 | Argon                |
| HE                 | Helium               |
| Ar/CO <sub>2</sub> | Argon/Carbon Dioxide |
| CO <sub>2</sub>    | Carbon Dioxide       |
| Other - specify    |                      |

### FILLER METAL (AWS CLASSIFICATION NUMBER)

|           |
|-----------|
| ER309-L   |
| E7018-A1L |
| ER70S-2   |

### BASE METAL

|       |                               |
|-------|-------------------------------|
| AXXX  | ASTM Designations (i.e., A36) |
| M     | Material Numbers from B2      |
| SAXXX | (SA106, SA105, SA304L, etc.)  |
| PX    | (P1, P8, P44, etc.)           |

### POSITION

|     |  |
|-----|--|
| 1G  | Groove Weld, Flat                            |
| 2G  | Groove Weld, Horizontal                      |
| 3G  | Groove Weld, Vertical                        |
| 4G  | Groove Weld, Overhead                        |
| 5G  | Groove Weld, (Pipe) Vertical                 |
| 6G  | Groove Weld, (Pipe) 45° Vertical             |
| 6GR | Groove Weld, (Pipe) 45 with Restriction Ring |
| 1F  | Fillet Weld, Flat                            |
| 2F  | Fillet Weld, Horizontal                      |
| 3F  | Fillet Weld, Vertical                        |
| 4F  | Fillet Weld, Overhead                        |
| V   | Vertical Progression Up                      |
| D   | Vertical Progression Down                    |
| A   | All  |

### THICKNESS

|       |  |
|-------|--|
| U     | Unlimited (ex. 1/8" to Unlimited)                |
| L     | Limited (ex. 1/8-3/4")                           |
| xx-xx | Range in sheet gauges (ex. 11 - 18)              |
| x/x   | Thickness in fractions of an inch (ex. 3/8")     |
| SCH   | Schedule listing for pipe thickness (ex. Sch 40) |
| WB    | With backing                                     |
| WOB   | Without backing                                  |
| OD    | Outside Diameter (pipe)                          |