

DEPARTMENT J22
◆ FFA AGRICULTURAL MECHANICS ◆

ENTRIES CLOSE → Friday, May 15, 5:00 pm (11:59 pm online)
 ENTRY LIMIT → Two (2) entries per class per exhibitor
 ENTRY FEE → \$2.00 per entry per class, **EXCEPT Farm Equipment Large Projects – \$4.00**
 ENTER ONLINE → www.sonoma-marinfair.org Click "Enter The Fair"
 DROP-OFF AT → Community Building
See Drop-off Schedule for receiving/release of exhibits.

RULES:

1. Only projects made in school under the supervision of an Industrial Education/Agricultural Teacher may be entered. The teacher must sign entry form and the name of the school must be listed.
2. Students entering exhibits in Agricultural Mechanics must be regularly enrolled in a high school that is following the California State plan for vocational agriculture.
3. Although the exhibits need not be owned by the exhibitor, all must be the products of students as a regular part of their instruction in Agriculture Mechanics for the past year. The student exhibitor must have been at least the major contributor to the building or repairing of the exhibit.
4. No entry may be shown for more than one calendar year.
5. An article may not be entered in more than one class and an exhibitor may not enter more than one article from the same pattern.
6. **NOTE:** In classes for "Any Item", item must be identified on entry form.
7. State Rule IV-7 will apply.
8. **NOTE:** Entries in the Garden Art Category will have the ability to be purchased during the fair. Please list a price on your entry form, or NFS (not for sale) if you do not want to sell your entries.

WELDING

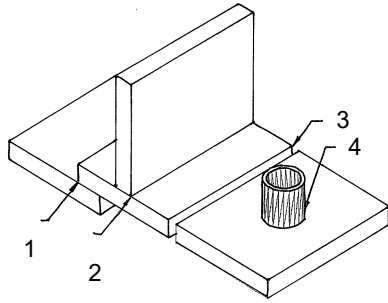
DANISH SYSTEM OF JUDGING – CASH AWARDS OFFERED PER CLASS

1st	2nd	3rd
\$7.00	\$5.00	\$3.00

RULES:

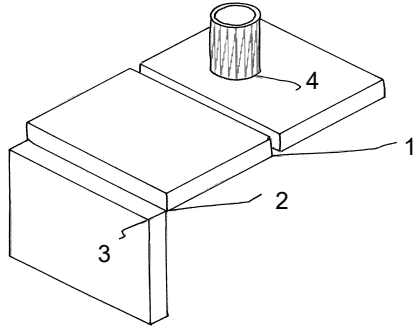
1. Each entry (weld coupon) must be on metal 5" long.
2. The weld must be a minimum of 4" long.
3. The start and stop on the weld must show.
4. The metal can be of any thickness.
5. The pipe or tubing is to be 2" long.
6. The weld can be done in any position.

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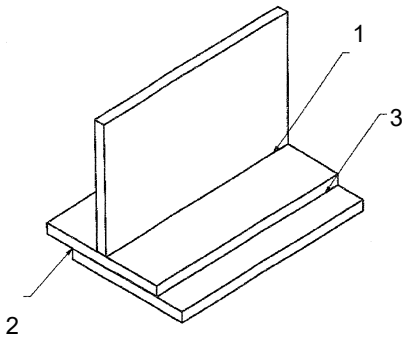
**OXYACETYLENE WELDING (OAW)
BRONZE & STEEL FILLER METAL**

- 1 Lap Joint
- 2 Tee Joint
- 3 Butt Joint (weld 1 side only steel only)
- 4 Pipe to flat & or Tubing to flat
(round, square, rectangular material only)



SHIELDED METAL ARC WELDING (SMAW)
Use any of the following electrodes: AWS
E6010, E6011, E6013, E7014, E7024, E7018

- 1 Butt Joint (100% Penetration)
weld 1 side only
 - 2 Fillet Weld
 - 3 Outside Corner Joint
 - 4 Pipe or Tubing to flat
- *Gas metal arc welding (GMAW) use solid
hard wire only. Coupon same as SMAW



**GAS TUNGSTEN ARC WELDING (GTAW)
STAINLESS STEEL**

- 1 Lap Joint – Filler metal required
- 2 Lap Joint – No Filler Rod
- 3 Tee Joint – Filler metal required

ALUMINUM METAL

- 1 Lap Joint – Filler metal required
- 2 Lap Joint – No Filler Rod
- 3 Tee Joint – Filler metal required

SECTION 204 – WELDING (See Diagrams on Pg. 80)

Class

- 1 Oxyacetylene Welding Coupon – Steel Filler Rod
- 2 Oxyacetylene Welding Coupon – Bronze Filler Rod
- 3 Shielded Metal Arc Welding – (SMAW) Coupon
- 4 Gas Metal Arc Welding – (GMAW) Coupon
- 5 Gas Tungsten Arc Welding – (GTAW) Coupon Stainless Steel Base Metal
- 6 Gas Tungsten Arc Welding – (GTAW) Coupon Aluminum Base Metal
- 7 **NEW!** Garden Art – Any materials may be used, please list sale price
(see rule #8)

SECTION 205 – ELECTRICAL WIRING SKILLS

DANISH SYSTEM OF JUDGING – CASH AWARDS OFFERED PER CLASS

	1st	2nd	3rd
	\$5.00	\$3.00	\$2.00

NOTE: Covers must not be placed on boxes in order to make judging easier.
If you enter classes 1 through 4 you may mount all 4 on one display board.

Class

- 1 Single pole switch controls one-half of a duplex receptacle, the other half of the receptacle is "hot".
- 2 A "Loop Switch" circuit, PLUS a "Hot" receptacle beyond the Switch
- 3 A 3-way Switch System.
- 4 A 4-way Switch System.
- 5 Other Electrical Wiring Skills

SECTION 206 – FARM EQUIPMENT CONSTRUCTED – SMALL PROJECTS
(Under 12" – try squares, bookends, etc.)

DANISH SYSTEM OF JUDGING – CASH AWARDS OFFERED PER CLASS

	1st	2nd	3rd
	\$5.00	\$3.00	\$2.00

Class

- 1 Cold Metal
- 2 Sheet Metal
- 3 Woodwork
- 4 Other materials
- 5 Welding & Forging
- 6 Any Other (please describe)

SECTION 207 – FARM EQUIPMENT CONSTRUCTED – MEDIUM PROJECTS
(12"-36" - Dust pans, tool boxes, plasma cut signs, etc.)

DANISH SYSTEM OF JUDGING – CASH AWARDS OFFERED PER CLASS

	1st	2nd	3rd
	\$8.00	\$6.00	\$4.00

Class

- 1 Cold Metal
- 2 Sheet Metal
- 3 Woodworking

Class

- 4 Welding & Forging
- 5 Plumbing display
- 6 Any Other (please describe)

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WELDING CONTINUED

**SECTION 208 – FARM EQUIPMENT CONSTRUCTED – LARGE PROJECTS
(36” and larger)**

ENTRY FEE: \$4.00 per entry per class

AMERICAN SYSTEM OF JUDGING – CASH AWARDS OFFERED PER CLASS

	1st	2nd	3rd	4th	5th
	\$40.00	\$30.00	\$20.00	\$10.00	\$5.00
Class					
1	Livestock Feeding & Handling Equip.				
2	General Farm Equipment, metal - (BBQ etc.)				
3	General Farm Equipment , wood – (benches, tables, etc)				
4	Any Other, please specify				

SECTION 209 – AGRICULTURAL MECHANICS AWARDS (Do Not Enter)

SWEEPSTAKES FOR AGRICULTURAL MECHANICS

Sweepstakes will be calculated as follows: 1st place - 5 points; 2nd place - 3 points; 3rd place - 1 point (See State Rule IV-7).

Class		
1	1 st	\$50 & Rosette
	2 nd	\$30 & Rosette
	3 rd	\$20 & Rosette
	Sponsored by Marin County Farm Bureau	
2	Best Of Show Interm. Electrical Wiring	\$50 & Rosette
3	Best Of Show Adv. Electircal Wiring	\$50 & Rosette
4	Best Of Show Oxyacetylene Welding	\$25 & Rosette
	Sponsored by Pam Torliatt	
5	Best Of Show Electric Arc Welding	\$25 & Rosette
	Sponsored by Hansel Auto Group	
6	Best Of Show Farm Equipment	\$25 & Rosette
	Sponsored by M Maselli & Sons, Inc.	

