



NORTH DAKOTA

Name: \_\_\_\_\_

Chapter: \_\_\_\_\_

Contestant #: \_\_\_\_\_

## ND FFA - Intermediate Agricultural Technology & Mechanical Systems

### Welding Practicum Rubric - Weld size required (2X metal thickness)

	Needs Improvement (3 Pts)	Average (5 Pts)	Good (7 Pts)	Excellent (10 Pts)	# of Pts.	Comments
<b>Weld Size:</b> Weld is uniform in width throughout the entire weld.	Weld has little to no consistency in diameter.	Majority of the weld is narrower or wider than the specified size.	Majority of the weld is equal to the specified size.	Weld is uniform in width throughout the entire weld.		
<b>Weld Contour:</b> Weld is uniform in contour shape throughout the entire length of the weld.	Weld has little to no consistency in contour.	Majority of the weld is too convex or concave in shape with lack of fusion on the toes of the weld.	Majority of the weld has adequate convexity without being excessive.	Weld is uniform in contour shape throughout the entire length of the weld.		
<b>Weld Crater:</b> Weld crater is filled.	Weld crater is not filled.	Weld crater is slightly filled.	Weld crater is filled but not to the full throat thickness.	Weld crater is filled.		
<b>Weld Bead Area:</b> Surrounding weld bead are free of spatter or slag.	Bead is mostly spatter lack of actual bead.	Weld bead area has excessive amounts of spatter.	Majority of the weld is free of spatter.	Surrounding weld bead are free of spatter or slag.		
<b>Weld Bead Discontinuities:</b> Weld is free of undercut, overlap, porosity.	Little to no bead present.	Majority of the bead has discontinuities listed below.	Majority of the bead is free of discontinuities listed below.	Weld is free of undercut, overlap, porosity.		

Total Points: \_\_\_\_\_ /50

Porosity  
Underfill

Undercut  
Overlap

Incomplete fusion  
Concave root

Incomplete penetration  
Improper Leg size

Excessive reinforcement  
Slag Inclusions/arch strikes