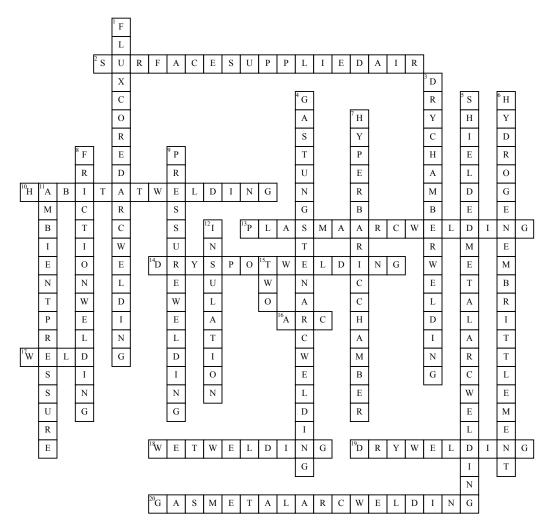
Underwater Welding



Across

2. Welder-divers usally use a particular type of air when they dive down to the correct depth, in full diving gear

10. Before entering, the chamber displaces its water into the surrounding ocean or lake.

13. Uses an electric arc but constricts the arc. It allows for high arc speed and intense heat to the weld site.

14. It's placed on the weld site and the welder-diver inserts his or her electrode inside the habitat, which seals around it

16. Underwater wet welds use this type of welding to create an electric arc between the electrode and the metals.

17. The deeper down in water the welding is the harder it is to create a good what

18. Welding with water directly surrounding the welding site in a wet environment

Word Bank

Flux-cored Arc Welding Gas Metal Arc Welding Gas Tungsten Arc Welding insulation two **19.** Welding at higher pressure with insulation from water around the weld site.

20. Also known as "Mig." Known for its diverse metal transfer methods.

<u>Down</u>

1. Contains a spool that provides a continuous feed of filler metal for welders.

3. The chamber holds the head and shoulders of a welder-diver (dressed in diving gear) and is open at the bottom for the diver to fit in.

4. Also known as "TIG"

5. The most common type of welding in the underwater and topside industry.

6. Wet welds experience this, a process where large amounts of hydrogen (formed from surrounding water vapor) dissolve into the weld.

7. All dry welds involve this type of chamber around the structure needing welded.

8. Fuses metal together through high friction and heat 9. Working in a pressure vessel measuring one atmosphere unit of pressure (same as pressure at sea level).

11. Habitat, dry chamber and dry spot welding all work on the basis of a particular type of pressure.

12. Underwater welders wear rubber suits and gloves to create this between their bodies and the electricity generated by their surface power supply

15. If welder-divers must perform an extensive weld deep underwater in a large hyperbaric habitat, they'll usually work with how many workers

Habitat Welding arc Dry Spot Welding Shielded Metal Arc Welding Dry Welding Hydrogen Embrittlement Pressure Welding Hyperbaric Chamber Weld Surface-Supplied Air Dry Chamber Welding Ambient Pressure Wet Welding Friction Welding Plasma Arc Welding