

# Sidergas

professional welding wires

## WELDING CONSUMABLES STORAGE AND HANDLING RECOMMENDATIONS



*SOLID MIG/MAG WIRES, TIG RODS  
STEEL AND ALUMINIUM ALLOYS*

## INTRODUCTION

As a leading provider of high-quality welding solutions, we recognize the critical importance of maintaining the integrity of our products from production to application.

In this document, we outline essential instructions to safeguard our welding consumables against potential damages and moisture, ensuring optimal performance and longevity.

By adhering to these guidelines, users can maximize the efficiency and effectiveness of Sidergas products, ultimately achieving superior welding results.

## STORAGE CONDITIONS

- Welding consumables should be stored on their delivery pallets or on warehouse racking in clean dry conditions.
- Stacking of full or semi-loaded pallets, one on top of another is not recommended as this may cause damage to both the packaging and the welding consumables.
- The packaging should not be stored in direct sun light or in direct contact with walls or floors.
- Products should be stored in their original unopened packaging which should be placed to ensure that the product labelling is clearly visible.
- Products should be issued for use on a date rotation basis.



## STORAGE ENVIRONMENT

Welding consumables are generally sensitive to moisture pick up, during storage the following environment conditions are recommended:

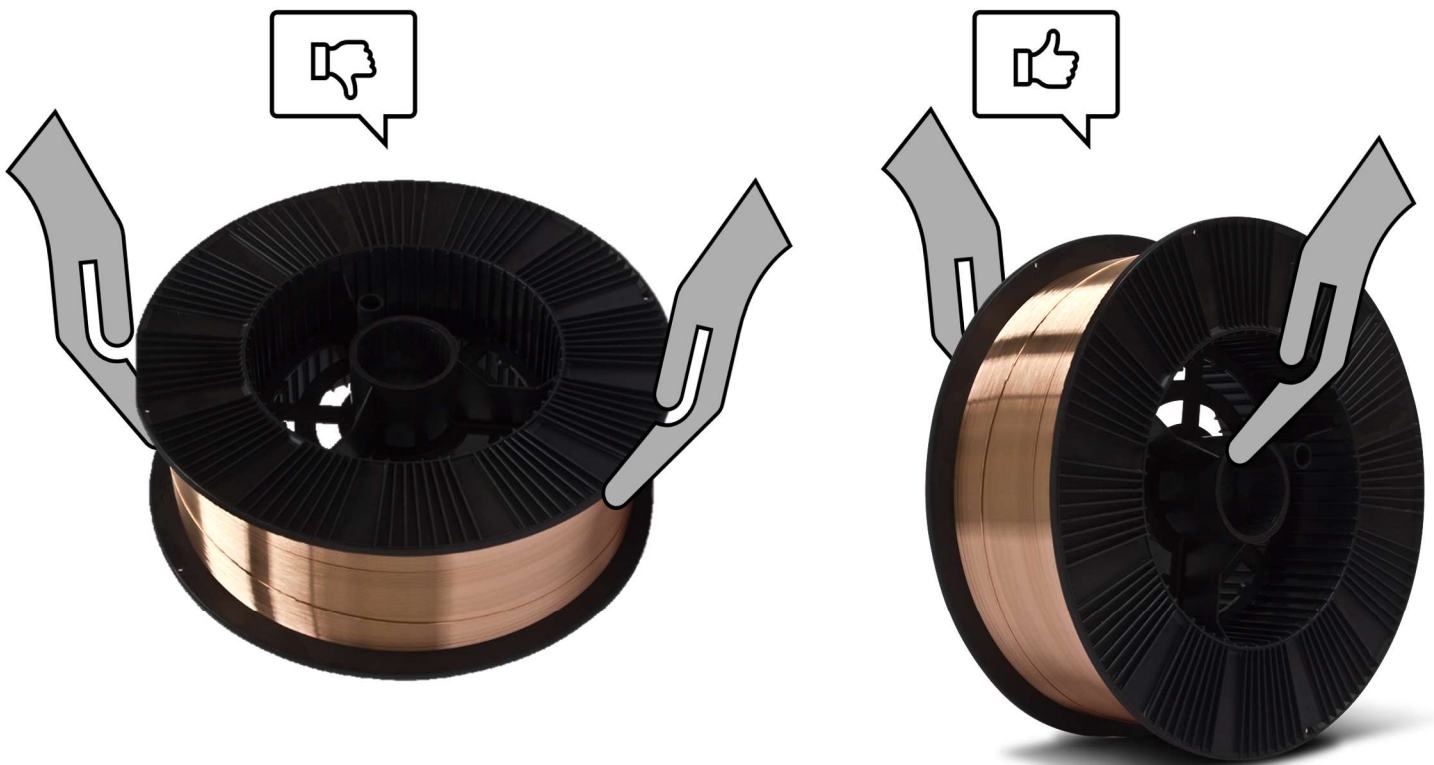
Grams of vapor/ kg of dry air		Temperature [°C]							
		5°	10°	15°	20°	25°	27°	30°	35°
Relative humidity [%]	40	2	3	4	6	8	9	11	14
	45	2	3	5	7	9	10	12	16
	50	3	4	5	7	10	11	13	18
	55	3	4	6	8	11	12	15	20
	60	3	5	6	9	12	13	16	21
	65	4	5	7	10	13	15	17	23
	70	4	5	7	10	14	16	19	25
	75	4	6	8	11	15	17	20	27
	80	4	6	9	12	16	18	22	29
	85	5	7	9	13	17	19	23	31
	90	5	7	10	13	18	20	24	33
		Satisfactory storage conditions			Marginal storage conditions			Unsatisfactory storage conditions	

This table relates data for relative humidity (percentage %), and temperature (°C) to show the weight of water vapour in grammes per kg of dry air. The packaging materials specified for welding consumables, stored in atmospheric containing <11g absolute water content, results in a satisfactory storing condition.

- For **frost prevention**, thermostatically controlled electrical heating is recommended.
- **Space heating using a direct flame is not recommended** as this will increase the moisture content of the air.
- For tropical ambient conditions, **de-humidification can be used to control the ambient conditions** within the warehouse.
- When issuing welding consumables from storage for welding where there is a significant difference in temperature between the two areas, **products should be allowed to reach the ambient temperature of the welding fabrication area before the packaging is opened**. This will avoid possible contamination with condensation.

## SPOOLS HANDLING

- When removed from box and sealings, wire spools become subjected to environment conditions, be sure to open boxes and sealing in a way that permit to re-seal the unused products before returning it to the welding supply stock area.
- Products should be handled with safety gloves, to protect operators from scratch and punctures caused by the end of the wire but also to protect the consumables from the moisture of bare hands which can oxidize the surface of wires (especially for aluminium).
- Avoid lifting spools by the flanges as they may break or deform (especially plastic spools), or the wire may get tangled.



## BULK PACKS HANDLING

To **start using a bulk pack** please follow the instructions reported on the pack lid and labels, failure to comply with these instructions could negatively affect the product performance. Some of the information are here reported below:

1. Completely remove the outer plastic wrapping from around the pac.
2. Remove the lid.
3. Cut and remove the bag-sealing strap.
4. Paying attention to not rip or tear the inner plastic bag, stretch the bag carefully along the pack outer side walls.
5. Cut and remove all the sealing straps which tie the wire retainer plates together with the top strands of the wire coil.
6.
  - a. (Only for Steel) Always leave the black plastic retainer plate on the wire coil.
  - b. (Only for Aluminium) Always remove the black plastic retainer plate and leave only the transparent flexible retainer plate on the wire coil.
7. Do not remove the cardboard conical or cylindric shaped structure placed at the centre of the wire coil.

Packs predisposed for the **24/7 endless wire feed system**, have two ends labelled as "START and "END", always use the START wire to feed the welding machine; If you are not using the 24/7 system, do not move or pull the END wire, leave it exactly as positioned by the manufacturer. For use as 24/7, contact Sidergas for further instructions.

If the pack will not be used for a long time, always re-seal the inner bag and re-close the lid before returning the pack to the welding supply stock area.

When opened, the pack should be maintained in place or transported softly to prevent the coil to move inside the pack, if there was a need to move for longer trips an already opened pack, position the wire retainer plates on the top of the coil and fix them together with the top strands of the coil using plastic ties.

## PACKAGING DAMAGE

On entry to the final fabrication store, product should be inspected for damage to packaging and contents.

- Sidergas products are supplied in a wide variety of packaging formats and no re-conditioning is required for any of these wires: they are used straight from the packaging or delivery system.
- If the packaging alone is damaged and a re-conditioning treatment is appropriate, consult Sidergas. If re-conditioning is required but no re-conditioning facilities are available, the product should be scrapped.
- If the welding consumable has been damaged, or if corrosion is evident because of damaged packaging, then the product should be scrapped.
- Products with significant damage, such as distorted coils, pierced sacks, and punctured tins should be scrapped.

### SIDERGAS QUALITY MANAGER

Salvatore Ceraso

