

100 SERIES SATURATION DIVING SYSTEM



CLUMP WEIGHT TECHNICAL OVERVIEW FD36-0006

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1 Scope

This document describes the main features and function of the Clump Weight, the stabilization unit of the diving bell.

2 Utility

Clump weight for saturation diving bell

3 Clump Weight Physical Description

The clump weight is a welded pipe frame structure with a minimal surface area so as to decrease the effects of underwater currents and drag.

The Clump Weight has two sheaves in the lower part and four rollers in the upper part wire through which the guide wire passes.

The clump weight can be ordered in varying dimensions, with divers' tool kit, with a ladder for entrance/exit of the bell and can also contain the bell man excursion umbilical depending on the needs of the diving company.

When not in operative conditions, the clump weight must be fixed properly on its support on the ship. In moon pool system configurations, Drass can supply the relative support for the clump weight.

4 Clump Weight Function

The Drass Clump Weight safely leads the bell to working depth, stabilizing its descent / ascent, thereby ensuring the safety of the divers. It ensures alignment of the diving bell and the bell cursor during entry/exit of the moon pool and can allow emergency recovery of the diving bell.

The Clump weight allows the divers safe entrance / exit having two openings, perpendicular to the guide wire devices in order to avoid possible interference.

The arrangement of the Drass diving bell & clamp weight avoids diver excursion umbilical damage by having two possible operative positions:

- Diving bell positioned onto clump weight. In this position, stability is improved due to the additional weight and the main wire acts as a back-up to the guide wire in the case of guide wire damage, thereby preventing bell fall.

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- Diving bell and clump weight positioned at a reasonable distance apart. In this position, the two objects cannot come into contact and therefore safe conditions for the divers are ensured.

5 Recommendations

For correct use of the Clump Weight it is recommended:

- that clump weight be released before the diving bell and stopped at the working depth or at a significant depth, in order to not interfere with the launch of the diving bell. During launching activities, the distance between the clump weight and the diving bell shall be always maintained within acceptable safety levels.
- that clump weight should only be positioned on the seabed if the sea conditions are extremely calm.
- that the clump weight be recovered after the diving bell during the lifting phase.

6 Conclusion

The standard Drass clump weight for saturation diving systems ensures diver safety and

- avoids possible diver excursion umbilical damage;
- ensures safe diver entrance and exit to/from the diving bell;
- can be used as a diver platform;
- can be equipped with various tools.