STAINLESS STEEL FOR LOAD CELLS

Arising from several enquiries on the type of stainless steel used in our load cells, here follows an information as clarification.

- There exist a great number of types of alloys or references for the stainless steel.

- Each alloy has a different composition in order to obtain different performances: chemical performances as high resistance to corrosion and mechanical performances as high elastic limit, high fatigue life, high linearity, etc.

- There are some common stainless steel alloys used in metallic constructions of tanks and hoopers as the AISI 304 and the AISI 316, that “do not attract magnets”, they are called Austenitic type that have a high chemical resistance to corrosion; but there are also other types of stainless steel alloys as Martensitic and Precipitation Hardening types, that “attract magnets”, and are used for the highest mechanical demands .

- **For the manufacture of the load cells of stainless steel it is not possible to use the common AISI 304 or AISI 316 because they will not have enough mechanical performances. UTILCELL uses a special stainless steel alloys inside the group of Martensitic and Precipitation Hardening types that guarantees the highest mechanical performances, allowing tempering or thermal treatment, and which due to its high iron contents “does attract magnets” and this characteristic should not be confused as a non stainless steel alloy.**

- **The chemical protection degree of stainless steel used for load cells, or their resistance to corrosion, has an equivalent among the well known alloys AISI 304 and AISI 316.**

Hoping this has served as a clarification, we remain at your disposal for any further enquiries.