# SCI HCR

## COUNTERSUNK SCREW

#### MAXIMUM CORROSION PERFORMANCE

Rated in the highest corrosion resistance class by EN 1993-1-1:2006/A1:2015 (CRC V), it offers the highest atmospheric corrosion (C5) and wood (T5) resistance.

#### HCR: HIGH CORROSION RESISTANCE

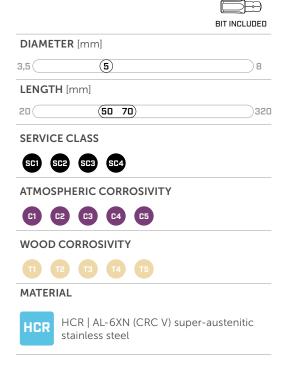
Austenitic stainless steel. It is characterised by its high molybdenum and nickel content for maximum corrosion resistance, while the presence of nitrogen ensures excellent mechanical performance.

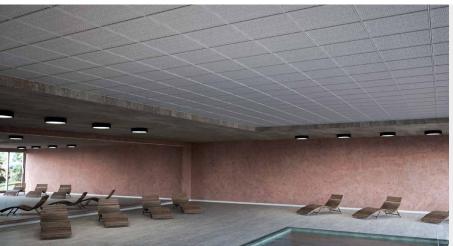
## **INDOOR POOLS**

The chemical composition, in particular the high nickel and molybdenum content, confers strength to chloride pitting and, hence, stress corrosion cracking. This is the reason why it is the only category of stainless steel suitable for use in indoor swimming pools according to Eurocode 3.









## FIELDS OF USE

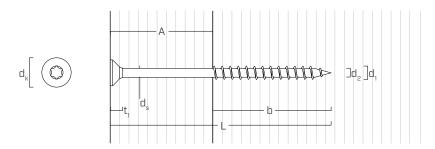
Outdoor and indoor use in extremely aggressive environments.

- indoor pools
- façade
- very wet areas
- oceanic climate

# ■ CODES AND DIMENSIONS

| $d_1$      | CODE      | L    | b    | Α    | pcs |
|------------|-----------|------|------|------|-----|
| [mm]       |           | [mm] | [mm] | [mm] |     |
| 5<br>TX 20 | SCIHCR550 | 50   | 30   | 20   | 200 |
|            | SCIHCR560 | 60   | 35   | 25   | 200 |
|            | SCIHCR570 | 70   | 42   | 28   | 100 |

# ■ GEOMETRY AND MECHANICAL CHARACTERISTICS



## **GEOMETRY**

| Nominal diameter                          | $d_1$ | [mm] | 5    |
|-------------------------------------------|-------|------|------|
| Head diameter                             | $d_K$ | [mm] | 9,80 |
| Thread diameter                           | $d_2$ | [mm] | 3,20 |
| Shank diameter                            | $d_S$ | [mm] | 3,60 |
| Head thickness                            | $t_1$ | [mm] | 4,65 |
| Pre-drilling hole diameter <sup>(1)</sup> | $d_V$ | [mm] | 3,0  |

 $<sup>^{(1)}</sup>$  For high density materials, pre-drilled holes are recommended based on the wood specie.

## CHARACTERISTIC MECHANICAL PARAMETERS

| Nominal diameter                | $d_1$               | [mm]                 | 5    |
|---------------------------------|---------------------|----------------------|------|
| Tensile strength                | f <sub>tens,k</sub> | [kN]                 | 4,9  |
| Yield moment                    | $M_{y,k}$           | [Nm]                 | 3,4  |
| Withdrawal resistance parameter | $f_{ax,k}$          | [N/mm <sup>2</sup> ] | 12,5 |
| Associated density              | ρ <sub>a</sub>      | [kg/m <sup>3</sup> ] | 350  |
| Head-pull-through parameter     | $f_{\text{head},k}$ | [N/mm <sup>2</sup> ] | 9,4  |
| Associated density              | $\rho_{\text{a}}$   | [kg/m <sup>3</sup> ] | 350  |

Mechanical parameters from experimental tests.



# SAUNAS AND WELLNESS CENTRES

Ideal in environments with very high moisture and the presence of salts and chlorides.