PVD

Physical Vapor Deposition (PVD) is a superficial metal coating using a vacuum deposition methods to produce thin films and coatings. PVD is characterized by a process in which the material goes from a condensed phase to a vapor phase and then back to a thin film condensed phase. The metal film is obtained by a complete physical process and therefore possesses higher technical characteristics than any other chemical or electro - chemical process. PVD coating is par ticularly recommended for all those innovative quality products which require high chemical and technical features (resistance to abrasion, scratches, and corrosion) and at the same time offers a wide choice of chromatic colors.
The most interesting aspect is the quality and durability of the product over time. In fact, the PVD process represents a special treatment (High Protection System) and is used to offer stable color shades over time and to ensure products with high surface hardness, inalterability to UV rays, resistance to wear, abrasion and corrosion.
The PVD process is safe, clean and eco-sustainable: no pollutants and toxic residues that can poison the environment are produced at any stage of the processing.

STAINLESS STEEL AISI 316L

The stainless steel AISI 316L is an austenitic alloy. It is distinguished from others inoxidizable steels by the high percentage of molybdenum which gives it a special resistance to pitting corrosion and stress corrosion. In this kind stainless steel the nickel's presence is increased in order to guarantee stability. Further, the "L" stays for low carbon and in fact the quantity is less or equal to 0,03%. This feature prolongs the chrome carbides precipitation's time and avoids the risk of intergranular corrosion during the welding process.

Chemical compositions of AISI stainless steel grades

Material - Stainless steel	*C %*	*Cr %*	*Ni %*	*Mo %*
AISI 430 (1.4016)	0,12 max	14.0-18.0	/	/
AISI 304 (1.4301)	0,08 max	18.0-20.0	8.0-10.5	/
AISI 316 (1.4401)	0,08 max	16.0-18.0	10.0-14.0	2.00-3.00
AISI 316L (1.4404)*	**0,03 max**	**16.0-18.0**	**10.0-14.0**	**2.00-3.00**

***Standard Pba**

Estimated pit coorrosion time – time to penetrate 1 mm (years) by steel type

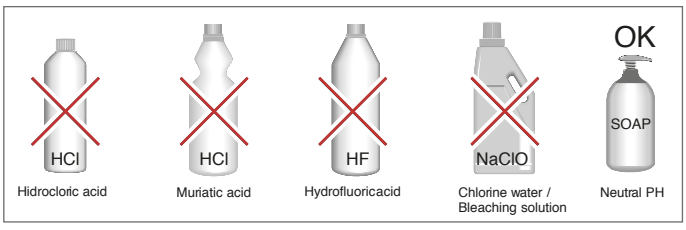
Location - Stainless Steel	*Marine*	*Semi-industrial*	*Rural*
Stainless steel AISI 430 (1.4016)	N/A	85	250
Stainless steel AISI 304 (1.4301)	145	135	770
Stainless steel AISI 316 (1.4401)	**260**	**525**	**1200**

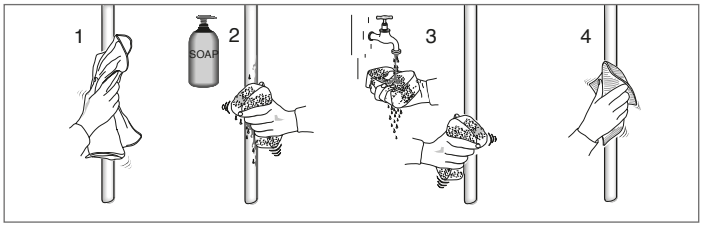
Source: The British Stainless Steel Association [BSSA]

MATERIAL CERTIFICATION

The AISI 316L stainless steel (1) steel used by pba, meets the requirements of UNI EN 1670, the ultimate quality standard for ensuring resistance to corrosion.
pba has been awarded a certificate for successfully salt spray testing the stainless steel in accordance with UNI ISO 9227.
(1)X2CrNiMo 17-12-2 as per EN 10088-3.

MAINTENANCE





MATERIALS AND FINISHING

MATERIAL	FINISHES		.XX	* indicative colors
PVD	Standard:	Satin gold	**.80**	
		Bright gold	**.81**	
		Satin black	**.83**	

PVD finish not available for all products. Dimensional limitation feasibility.