

► SELF-TAPPING AND SELF-DRILLING SCREWS

You will find on this page information about the implementation of these products.

In light of the diversity of the materials and alloys, a preliminary test is advised. (Any known value for an assembly on stainless steel, so we don't recommend the utilisation of these grades).

	ALU	MILD STEEL*
S.S. A2	X	
S.S. 410	X	X
Bi-metal	X	X
Zinc-plated steel	X	X

* between 0,10 and 0,20% of carbon

► FOR SELF-DRILLING SCREWS

Minimum useful length* of self drilling screws (without winglets)

		DIAMETER / mm							
		Ø 2,9	Ø 3,5	Ø 3,9	Ø 4,2	Ø 4,8	Ø 5,5	Ø 6,3	
LENGTH / mm	9,5	3,25	2,85	NON-STANDARDIZED					
	13	6,60	6,20		4,30	3,70			
	16	9,60	9,20		7,30	5,80	5		
	19	12,50	12,10		10,30	8,70	8	7	
	22		15,10		13,30	11,70	11	10	
	25		18,10		16,30	14,70	14	13	
	32				23	21,50	21	20	
	38				29	27,50	27	26	
	45					34,50	34	33	
	50					39,50	39	38	

* distance from the first full thread to the support face - ISO 15480 / 15481 / 15482 / 15483

Self-drilling screws are for non-structural assemblings (low tightening effort and low or not service solicitations). For an optimal drilling:

- No percussion function
- No installation with pneumatic tools

Rotation speed less than 2000 tr/min (see norm of the piece).

► FOR SELF-TAPPING SCREWS

This table is extract from the ISO 3506-4 standard, it corresponds to the tests of tapping.

It can be used to determine the correct drilling of sheet steels.

The test of tapping of the austenitic and ferritic steel screws is executed in a trial plate constituted by an alloy of aluminum having a hardness between 80 HV 30 and 120 HV 30.

The test of tapping of the martensitic steel screws is executed in a trial plate constituted by steel with content in carbon not exceeding 0.23 % having a hardness between 130 HV 30 and 170 HV 30.

Threading	Thickness of test plate (mm)		Diameter of the hole (mm)	
	min.	max.	min.	max.
ST 2,2	1,170	1,300	1,905	1,955
ST 2,6	1,170	1,300	2,185	2,235
ST 2,9	1,170	1,300	2,415	2,465
ST 3,3	1,170	1,300	2,680	2,730
ST 3,5	1,850	2,060	2,920	2,970
ST 3,9	1,850	2,060	3,240	3,290
ST 4,2	1,850	2,060	3,430	3,480
ST 4,8	3,100	3,230	4,015	4,065
ST 5,5	3,100	3,250	4,735	4,785
ST 6,3	4,670	5,050	5,475	5,525
ST 8	4,670	5,050	6,885	6,935