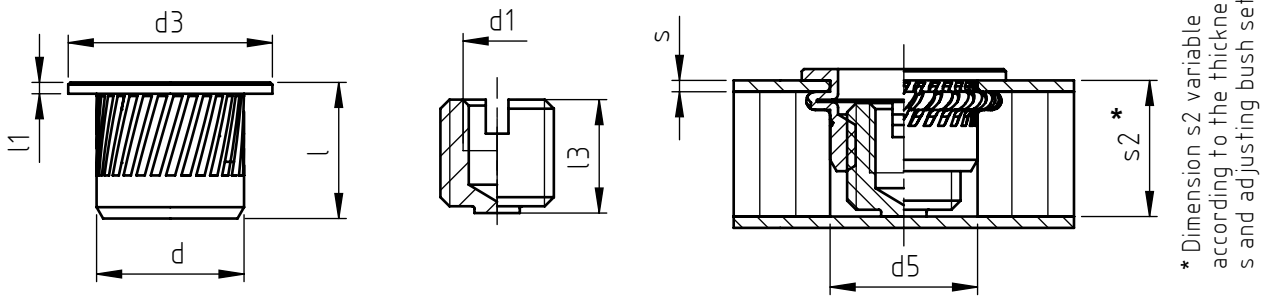
specialinsert®	THREADED TUBULAR RIVET NUT FOR SANDWICH PANEL	Deform-nut series TC/SC/1 -Patented-

Application: on sandwich panel.
Assembly: by manual or pneumatic tools.



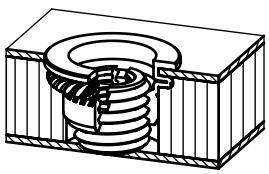
* Dimension s2 variable according to the thicknesses s and adjusting bush setup.

code	d1 6H	s skin thickness	s2 * min.	s2 * max	l3	l	d	d3	l1	d5 +0,15/0
TC/DM10XZI-M6/10X	M6	0,5 ÷ 2,0	9,5	13,0	10	10,5	13	18	1	13
TC/DM10XZI-M6/12,5X			12	15,5	12,5					
TC/DM10XZI-M6/15X			14,5	18,0	15					
TC/DM10XZI-M6/17,5X			17,0	20,5	17,5					
TC/DM10XZI-M6/20X			19,5	23,0	20					
TC/DM10XZI-M6/22,5X			22,0	25,5	22,5					
TC/AM10XZI-M6/20X	M6	0,5 ÷ 3,5	20	28	20	21	13	16	1,5	13
TC/AM10XZI-M6/22,5X			22	30	22,5					
TC/BM10XZI-M6/20X	M6	3,0 ÷ 6,0	22,5	34	20	23,5	13	16	1,5	13
TC/BM10XZI-M6/22,5X			25	36	22,5					
TC/DM12XZI-M8/15X	M8	0,5 ÷ 2,0	17,5	20	15	18,5	15	18	1,5	15
TC/DM12XZI-M8/20X			20	25	20					
TC/AM12XZI-M8/25X	M8	0,5 ÷ 3,5	25	35	25	25	15	18	2	15
TC/BM12XZI-M8/25X	M8	3,0 ÷ 6,5	28	40	25	28	15	18	2	15

Non binding dimensions, expressed in mm.
Other shapes and threads are available on demand, for more information please contact Specialinsert technical department.
For an optimal use of the product is recommended to perform some tests in order to figure out the proper type of adhesive and positioning of the adjusting bush.

Standard On demand ---- Not manufactured

Material: stainless steel nr. 1.4305
Finishing: natural
Tolerance: where not specified, according to UNI standards EN 22768-1.
Thread: ISO 6 H metric
Example: blind threaded tubolar insert for sandwich panel grip 18,5 mm, thickness 1,5 mm (s2), M 6 thread, hole ⌀13mm, stainless steel:
TC/DM10XZI-M6/15X



Patented system

specialinsert®
www.specialinsert.it - export@specialinsert.it

Headquarter and Export department:
Via Monfalcone 144 - 10136 - Turin - IT - Tel. +39.011.700301 - Fax +39.011.702947
Milan branch:
Via E.Cialdini 37 - 20161 - Milan - IT - Tel. +39.02.646.8476 - Fax +39.02.662.00275
Production and purchase departments:
Via E. Pavanello 1 - 30030 - Maerne di Martellago (Venice) - IT - Tel. +39.041.503.0100
Fax +39.041.503.0110

specialinsert®	Installation instructions and safety information	Deform-nut TC/SC/1 -Patented-

WHAT IS IT FOR:
The deform-nut SC/1 is used to create threaded seats on sandwich panel materials (with honeycomb or composite internal structure).

ADVANTAGES
In order to create threaded seats on sandwich panel materials often are used expensive or complex solutions such as resin potting or bonding of bushes and tie rods.
With the Deform-nut SC/1 you have some important advantages:
-The Deform-nut SC/1 allows you to use the same type of product also for a wide range of thicknesses of sandwich panel materials.
-The deformation of the insert ensures an immediate mechanical fastening without the delay for the drying of resins and adhesives.
-The Deform-nut SC/1 is easy and quick to install, it doesn't require specialized personnel and no further processes (injection of resin) or finishing.
The Deform-nut SC/1can be used for any composite material panel, resins, carbon fiber, light alloy, and more.
- The installation can be also made using automatic or pneumatic tools

RECOMMENDATIONS FOR A CORRECT ASSEMBLY

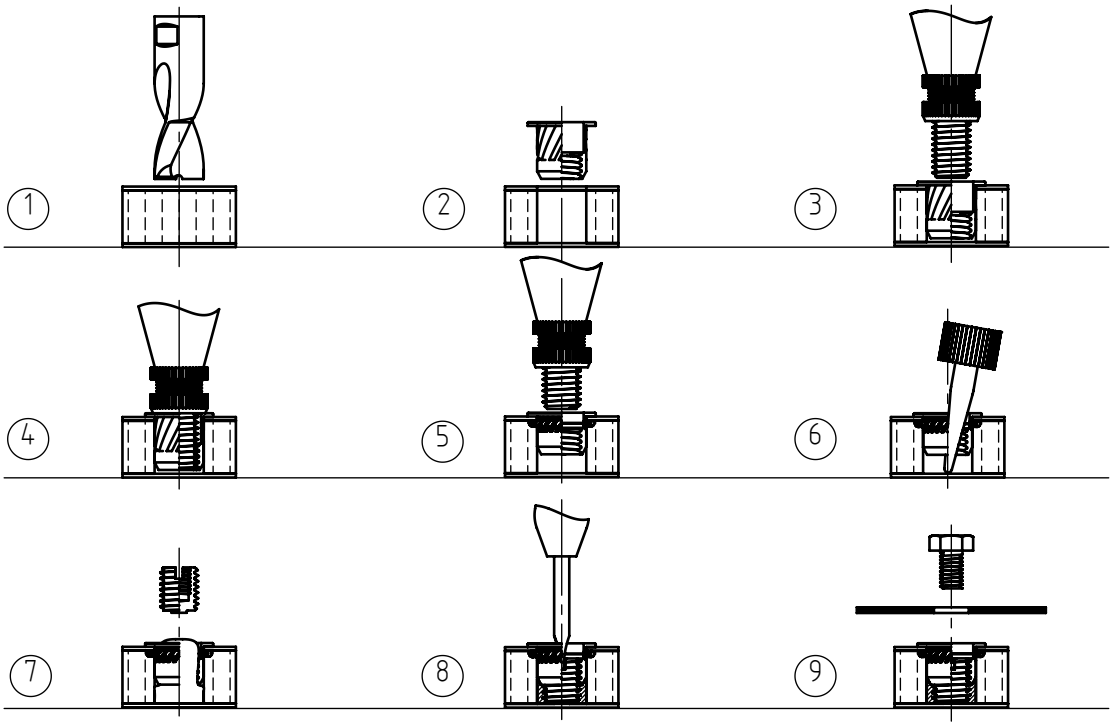
⚠ STRUCTURAL FASTENING ADHESIVE
The adhesive that joins the honeycomb and the insert shall be properly chosen to be compatible to the used materials in order to achieve a structural fixing.

⚠ INJECTION OF ADHESIVE
The injection of the adhesive shall be accurate in order to ensure the complete filling of the internal cells of the honeycomb including the section of the threaded insert Deform-Nut SC/1 already deformed on the skin of the sandwich.
It's not possible to define the right quantity of adhesive needed since it depends on the shape of the internal cells of the honeycomb after drilling.

The correct combination of the various elements, panel, adhesive and insert, it has been defined by laboratory tests, that shall not be replicable in different conditions.
On application already tested, where some changes of components has been introduced it will be needed to repeat lab test to verify the suitability of the system.

⚠ HOW IS INSTALLED
Choose the rivet nut, the adjusting threaded bush and the adhesive according to features of the receiving material:
thread size, thicknesses of the panel (skin and internal core), material etc..

1) Drill the correct hole from one side of the panel (blind hole) in order to receive the tubular rivet and threaded adjusting bush
2) Insert the tubular rivet inside the hole
3) Insert the spindle of the deformation tool inside the tubular rivet
4) Activate the tool in order to deform the tubular rivet, which therefore will clamped on the skin of the sandwich panel.
5) Unscrew the tool from the deformed tubular rivet
6) Inject the structural adhesive inside the tubular rivet
7) Insert the threaded adjusting bush inside the tubular insert
8) Using a tool, screw the adjusting bush until it reaches the skin on the other side of the sandwich panel
9) Withdraw the tool and use the anchoring threaded obtained for the assembly of the detail as required



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