

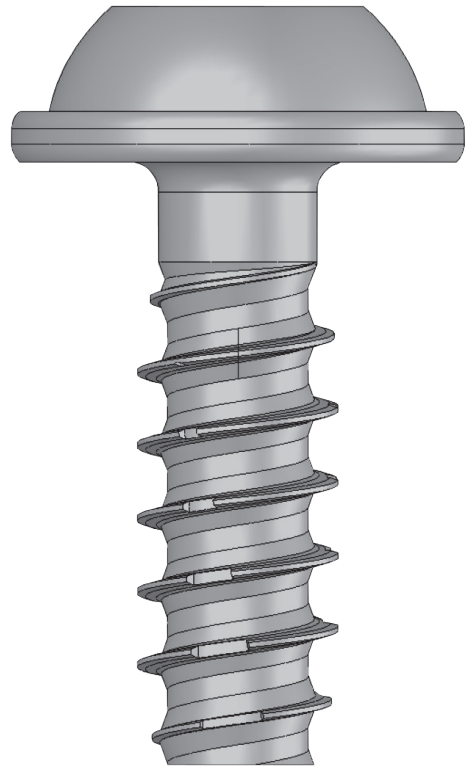
EJOT DELTA PT® DS

Reliable direct assembly into thermosets

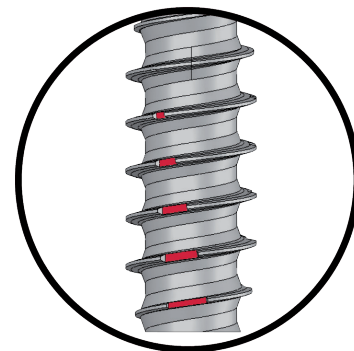
The EJOT **DELTA PT®** screw facilitates reliable joints in the area of direct assemblies into plastic.

Some designs require the use of thermosets, which pose special demands on the direct assembly because of their hardness and brittleness. Slightly modified thread ends are necessary to make a direct assembly with these especially demanding materials possible.

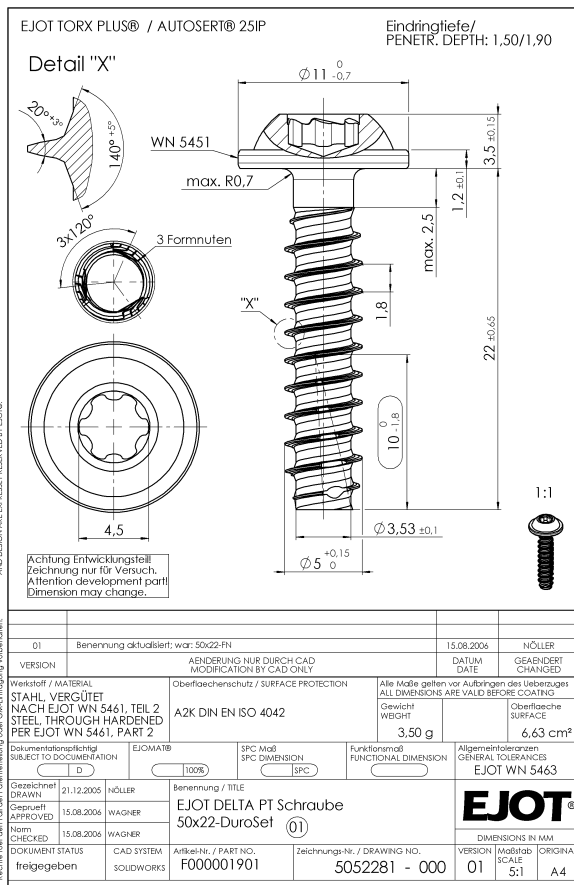
With the thread form DS (DuroSet) EJOT responded to these challenging conditions. For the EJOT DELTA PT® DS screw special grooves, which help to cut the female thread, are applied to the thread geometry of the established DELTA PT®. These grooves are especially distinct at the tip of the thread and taper off towards the screw head. This thread forming zone enables a installation torque and a high stripping torque.



EJOT DELTA PT® WN 5451 50x16 DS



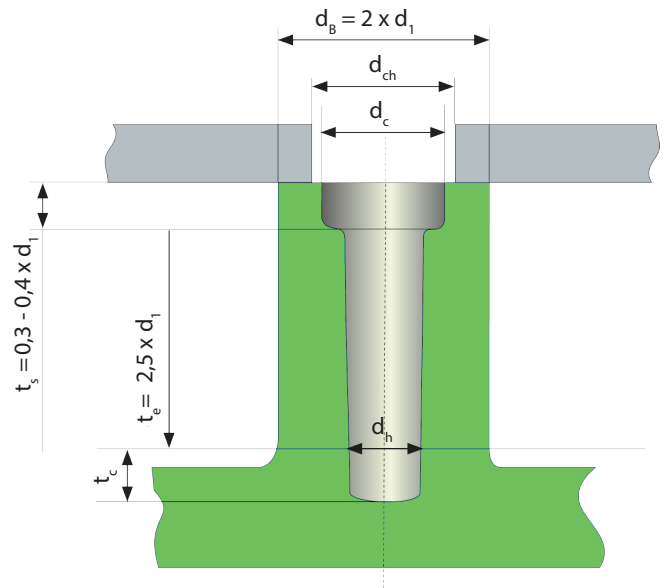
Detailed view with formed grooves



Advantages of EJOT DELTA PT® DS compared to screws with machine milled cutting edge:

- smaller hole depth possible because less chipping space is required compared to screws with a traditional cutting edge
- cost saving potential though standardisation - only one screw for thermosets and thermoplastics
- safe assembly with lead in
- wider production range regarding screw diameter and length
- larger thread engagement area for the same insertion depth

Hole geometry recommendations for EJOT DELTA PT® DS



d_h = Hole- \varnothing = $0,83 - 0,90 \times d_1$
 d_1 = Nominal \varnothing of the screw
 d_c = counterbore diameter = $d_1 + 0,2$ mm
 t_c = chip space = $0,8$ bis $1,2 \times d_1$

production matrix of the EJOT DELTA PT® DS screw

Δ	22	25	30	35	40	45	50	60	70	80	90	100
nominal- \varnothing	2,2	2,5	3,0	3,5	4,0	4,5	5,0	6,0	7,0	8,0	9,0	10,0
tolerance js16	nominal length l [mm]											
$\pm 0,375$												
	6											
$\pm 0,45$	7/5	7										
	8/5	8/6	8									
	9	9/6	9/7	9								
	10/8	10	10	10/8	10							
$\pm 0,55$	11/8	11/9	11/9	11	11/9	11						
	12/8	12/9	12	12/10	12	12/10	12					
	13/8	13/9	13/11	13/10	13/11	13/10	13/11					
	14/8	14/9	14/11	14	14/11	14	14/11					
	15/8	15/9	15/11	15/13	15/11	15/13	15	15				
	16/8	16/9	16/11	16/13	16	16/13	16/14	16/13				
	17/8	17/9	17/11	17/13	17/15	17/13	17/14	17/13	17			
	18/8	18/9	18/11	18/13	18/15	18	18/14	18	18/15			
$\pm 0,65$	20/8	20/9	20/11	20/13	20/15	20/17	20	20/16	20/15	20		
	21/8	21/9	21/11	21/13	21/15	21/17	21/19	21/16	21	21/18		
	22/8	22/9	22/11	22/13	22/15	22/17	22/19	22/16	22/19	22/18		
		23/9	23/11	23/13	23/15	23/17	23/19	23/16	23/19	23/18	23	
		24/9	24/11	24/13	24/15	24/17	24/19	24	24/19	24	24/20	
		25/9	25/11	25/13	25/15	25/17	25/19	25/22	25/19	25/22	25/20	25
			28/11	28/13	28/15	28/17	28/19	28/22	28	28/22	28/25	28/22
			30/11	30/13	30/15	30/17	30/19	30/22	30/26	30/22	30/25	30/27
$\pm 0,8$				32/13	32/15	32/17	32/19	32/22	32/26	32	32/25	32/27
				35/13	35/13	35/17	35/19	35/22	35/26	35/30	35/25	35/27
					36/15	36/17	36/19	36/22	36/26	36/30	36	36/27
					40/15	40/17	40/19	40/22	40/26	40/30	40/33	40
						45/17	45/19	45/22	45/26	45/30	45/33	45/37
				l max			50/19	50/22	50/26	50/30	50/33	50/37
$\pm 0,95$							60/22	60/26	60/30	60/33	60/37	
								70/26	70/30	70/33	70/37	
									80/30	80/33	80/37	
$\pm 1,1$										90/33	90/37	
											100/37	

X / X manufacturing only with partial thread (screw length / thread)

X manufacturing with complete thread