EJOT®

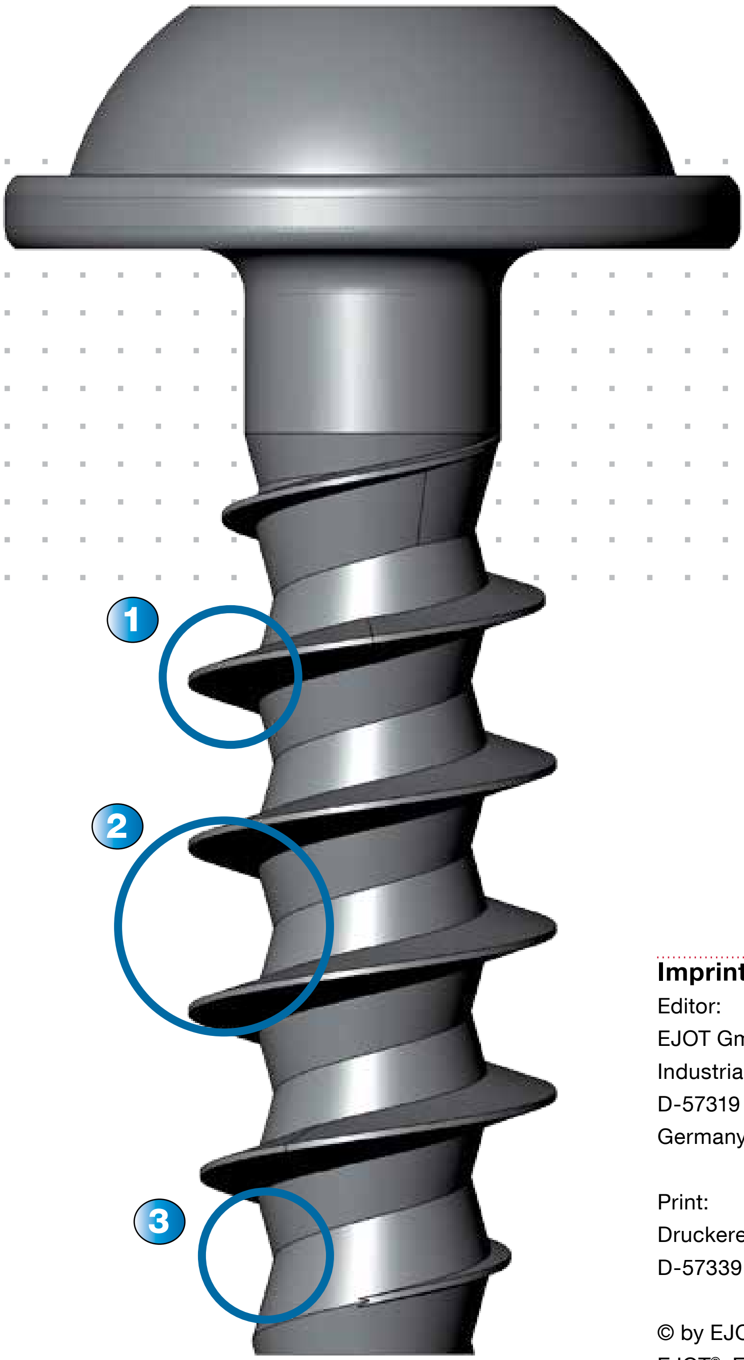
The EJOT PT® Screw

The proven fastener for thermoplastics

EJOT® The Quality Connection

- Fasteners for Plastics

PT® is a special fastening element for easy and reliable fastening into thermoplastics



4 Standard: material properties PT 10

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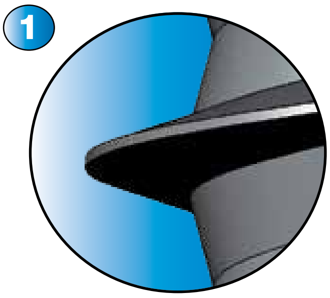
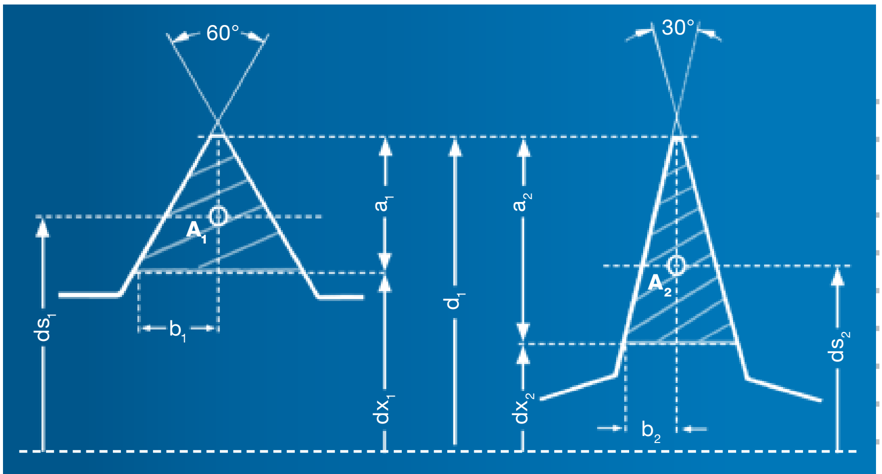
All technical data may be subject to technical improvements.



PT® with 30° flank angle

Displacement volume

- larger thread bearing depth - results in larger load-carrying capacity
- lower installation torques - smaller lever arms but the same displacement volume



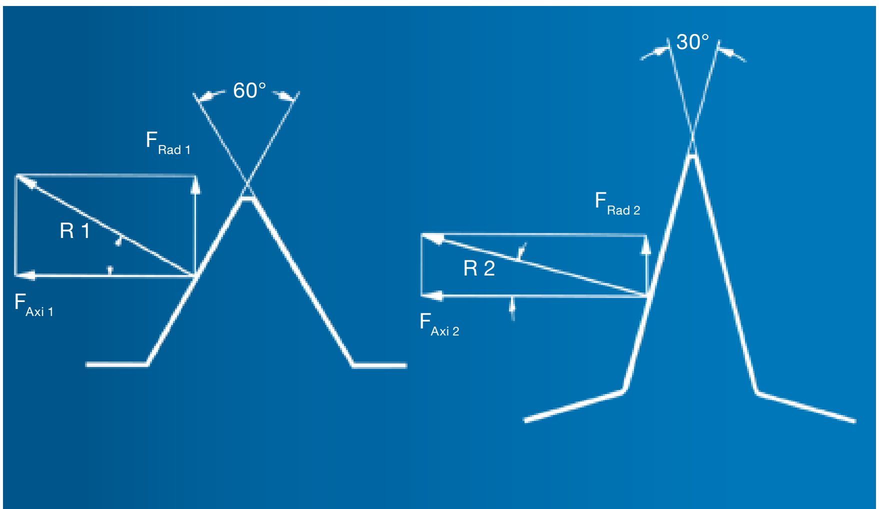
A = cross-sectional area (results in the displaced volume over d_s)

d_s = center of gravity-diameter

$$A_1 = A_2$$
$$a_1 \cdot b_1 = a_2 \cdot b_2$$
$$\tan 30° \cdot a_1^2 = \tan 15° \cdot a_2^2$$
$$\sqrt{\frac{\tan 30°}{\tan 15°}} = \frac{a_2}{a_1}$$
$$1{,}468 \cdot a_1 = a_2$$

$$ds_1 = d_1 - \tfrac{4}{3} \cdot a_1$$
$$d_1 - 1{,}333 \cdot a_1$$

$$ds_2 = d_1 - \tfrac{4}{3} \cdot a_2$$
$$d_1 - \tfrac{4}{3} \cdot 1{,}468 \cdot a_1$$
$$d_1 - 1{,}952 \cdot a_1$$

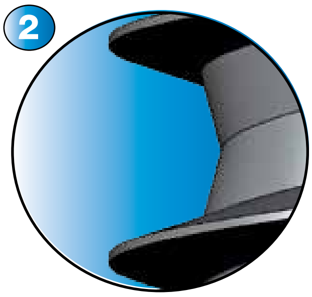


$F_{Rad\,1} = 0{,}500\ R$
$F_{Axi\,1} = 0{,}867\ R$

$F_{Rad\,2} = 0{,}259\ R$
$F_{Axi\,2} = 0{,}966\ R$

Radial forces

- low radial forces - result in low radial stress
- large axial component - results in optimum material flow into the recessed thread root



PT® with optimum pitch

- good self-locking of the screw thread
- balanced load ratio between plastic and steel

F = shearing stress in the plastic material / flexural stress on the screw thread

P = thread pitch

A = shearing diameter $= d_1 \cdot \pi \cdot P$

W = resisting torque of the thread root

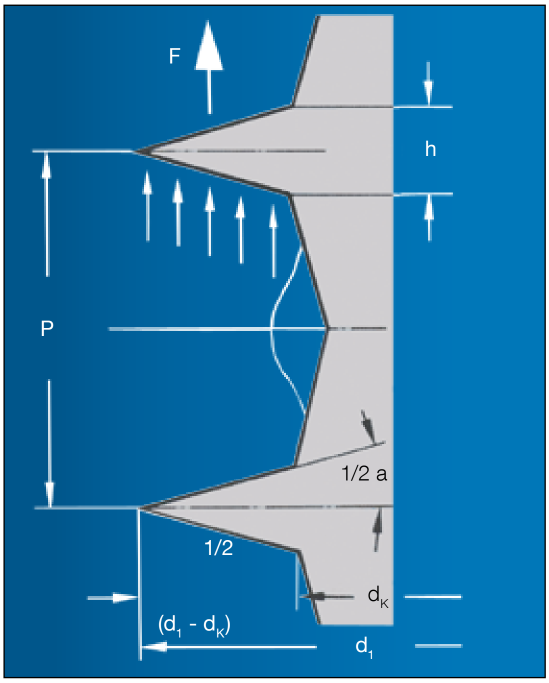
$= h^2 \cdot d_K \cdot \pi = \tan^2 \frac{\alpha}{2} \, (d_1 - d_K)^2 \cdot d_K \cdot \pi$

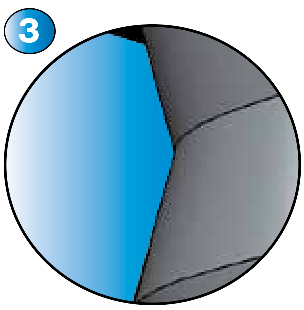
τ_B = shearing fracture stress of the plastic material

σ_B = bending fracture stress of the screw material

$= \frac{\tau_B}{\sigma_B} = \frac{F}{A} \cdot \frac{W}{M_B}$

$$\frac{\tau_B}{\sigma_B} = \frac{2 \tan^2 \frac{1}{2} \alpha \cdot (d_1 - d_K) \cdot d_K}{p \cdot d_1}$$





PT® with recessed thread root

Optimum material flow during thread-cutting

- low radial stress
- no material jam in the core area
- no material stress through plasticisation
- increased load-carrying capacity and best possible resistance against relaxation with optimum boss design

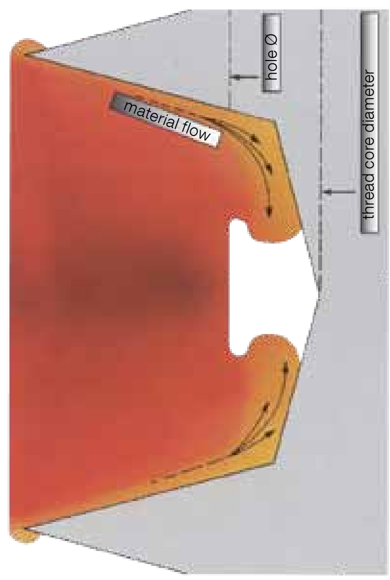
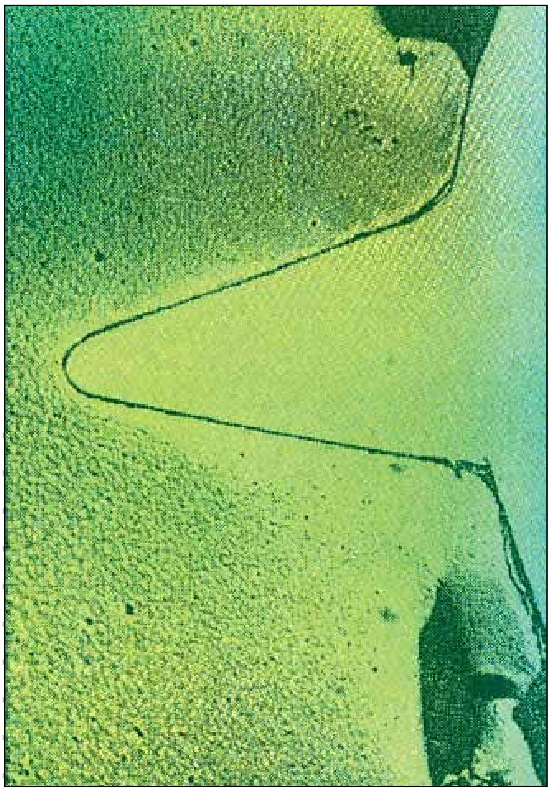
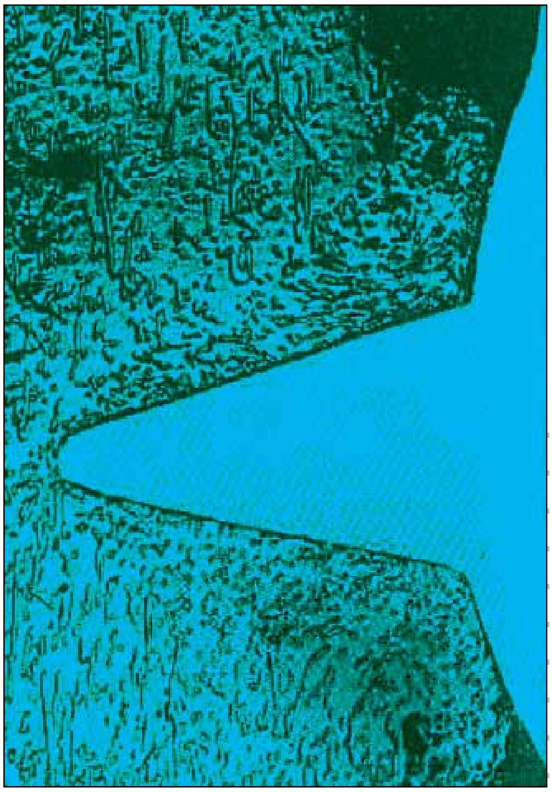


Diagram of the material flow in the recessed thread root



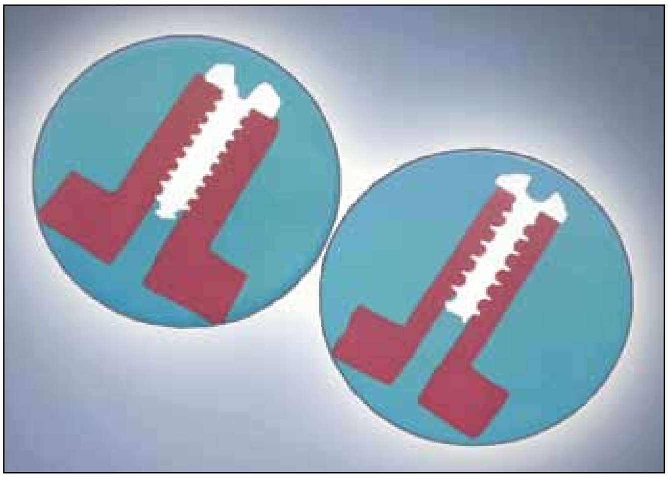


Microtome section in different materials

4 Standard: material properties PT® 10

Due to their geometry, material and the production process, PT® Screws offer outstanding safety against hydrogen induced, delayed brittle fracture.

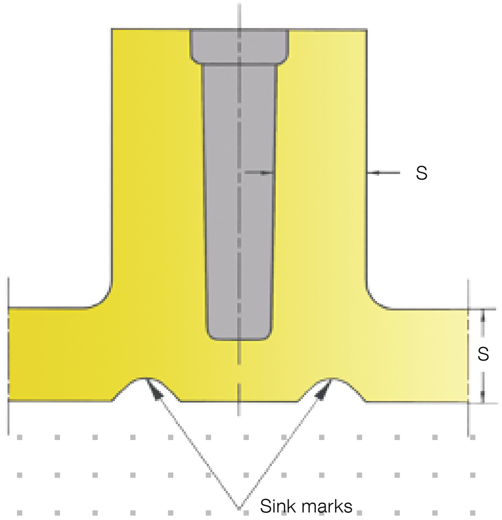
For increased demands on corrosion protection, the PT® Screw is also available in A2 or A4 stainless steel.



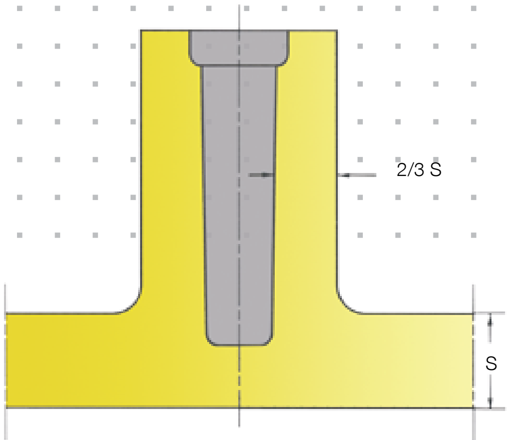
Comparison of microsections: sheet metal screw (left) and PT® (right)

Economic efficiency of PT® joints

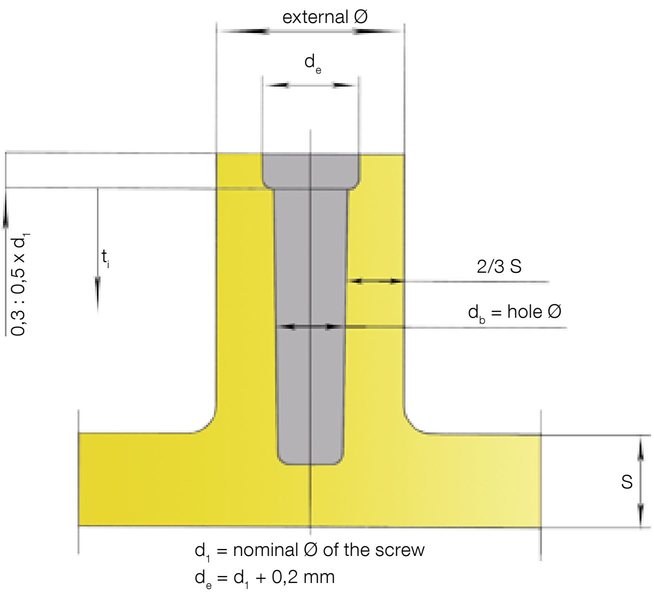
PT® joints facilitate the design of thin-walled flat structures. The result are material saving and cycle time reduction during injection moulding. If the overall joint costs of a component are examined, considerable cost saving potentials can be realised with the PT® joint.



Boss geometry for conventional fastening elements



Boss geometry for EJOT PT® joints



The balancing hole is of special importance as it ensures a favourable distribution of edge stress.

Boss design for EJOT PT® Screws

The precondition for a reliable screw joint is the functional design of the components.

Based on laboratory trials with models, the following design engineering recommendations were established (see chart on the right).
Deviation from these recommendations might be necessary in practice. Possible reasons for this are:

- processing conditions of the material
- design of the injection moulding tools
- distance from the injection point
- the formation of flow lines at the convergence of material flows
- local textures caused by additives and fillings
- materials with the same description are often composed differently, for example in terms of the proportion of virgin material and reclaimed material

For that reason rotation speed dependent control installations should be carried-out. For this purpose EJOT operates its own application laboratory, the EJOT APPLITEC.

Notes for the design engineer

The boss geometry should correspond to the illustrated design recommendation. If internal stress, cavities, sink marks, expanded injection cycles etc. have to be feared, due to different wall thicknesses, the tube cross-section has to be changed from the following recommendation.

The shear stress occurring in the boss during the assembly may not inadmissibly expand, and for that reason the following sequence should be adhered to:

- decrease the external boss diameter
- increase the screw hole diameter. This leads to a decline of the axial load carrying capacity, which can be

compensated by

- increasing the installation depth in order to transfer the required strength values.

With these changes a part evaluation should be carried-out in all cases.

Design recommendations for EJOT PT® Screws

Material	Hole Ø d_b	External Ø d_A	Installation Depth t_i
ABS	0,80 x d	2,00 x d	2,00 x d
ABS PC Blend	0,80 x d	2,00 x d	2,00 x d
ASA	0,78 x d	2,00 x d	2,00 x d
PA 4.6	0,73 x d	1,85 x d	1,80 x d
PA 6	0,75 x d	1,85 x d	1,70 x d
PA 6.6	0,75 x d	1,85 x d	1,70 x d
PBT	0,75 x d	1,85 x d	1,70 x d
PE - LD	0,70 x d	2,00 x d	2,00 x d
PE - HD	0,75 x d	1,80 x d	1,80 x d
PET	0,75 x d	1,85 x d	1,70 x d
PET - GF 30	0,80 x d	1,80 x d	1,70 x d
POM	0,75 x d	1,95 x d	2,00 x d
POM - GF 30	0,80 x d	1,95 x d	2,00 x d
PP	0,70 x d	2,00 x d	2,00 x d
PP - GF 30	0,72 x d	2,00 x d	2,00 x d
PP - TV 20	0,72 x d	2,00 x d	2,00 x d
PS	0,80 x d	2,00 x d	2,00 x d
PVC (hart)	0,80 x d	2,00 x d	2,00 x d
SAN	0,77 x d	2,00 x d	1,90 x d

Use of the EJOT DELTA PT® for very high strength materials with high torques

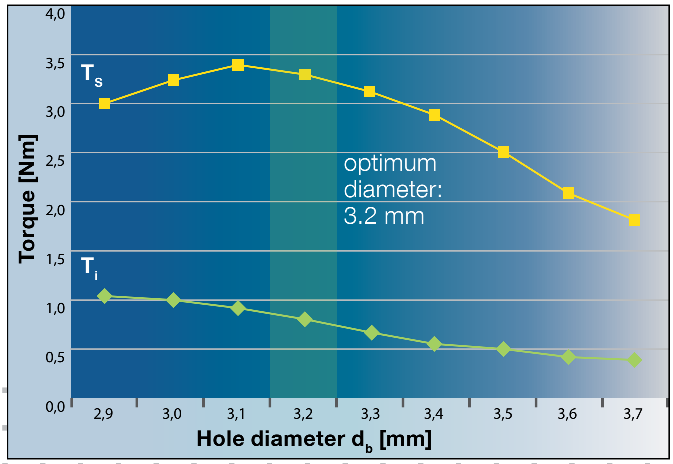
Material
PA 4.6 - GF 30
PA 6 - GF 30
PA 6.6 - GF 30
PBT - GF 30
PC
PC GF 30
PMMA
PPO
PEEK
PPS

Boss design
The maximum clamp load is the criterion for the optimal boss design. The favourable hole diameter is usually at the ratio:

$$d_b = 0,8 \times d_1$$

For materials with high filler content or high internal strength, the optimum hole diameter can be increased up to $d_b = 0,88 \times d_1$.

You can find more information about this topic in the brochure:
„The EJOT DELTA PT® Screw“



Determination of the optimum hole diameter

The following values result from the the test:

Optimum screw hole diameter $d_b$opt = 3,2 mm

Installation torque (average value)	M_i = 0,79 Nm
Stripping torque (average value)	M_s = 3,37 Nm

Material: PA6 GF30, installation depth = 6 mm
Screw: EJOT PT® K 40 x 10 WN 1442

Notes on the assembly technique

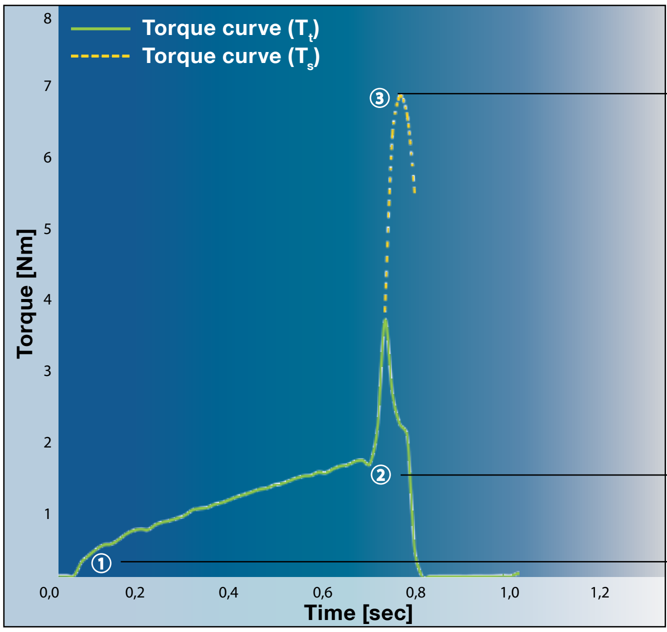
The following chart shows the dependence of the installation and stripping torques on the screw hole diameter with the example of an EJOT PT® Screw K 40 in PA6 GF 30. Average values of the test results are charted.

In order to prevent stress cracks or relaxation the smallest possible axial load should be targeted.

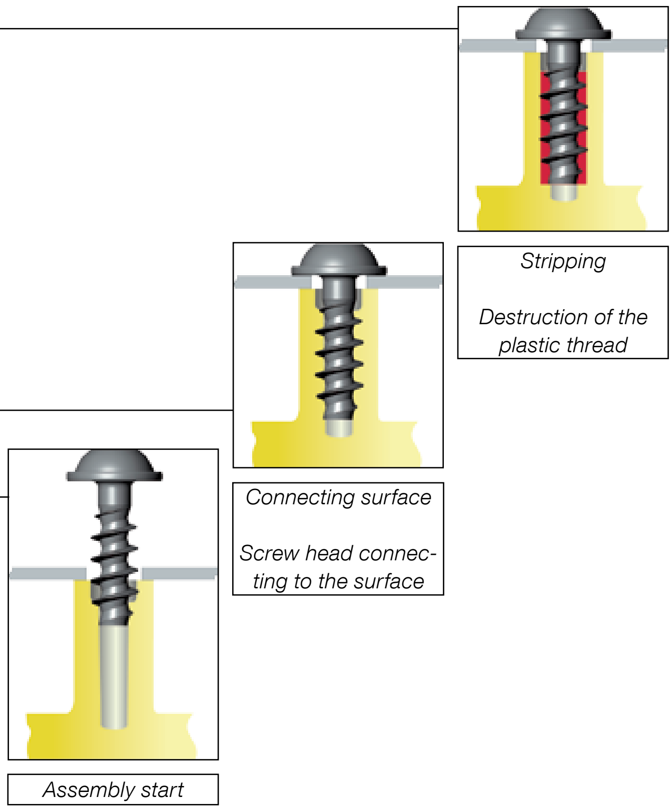
The most favourable terms for this arise over the hole diameter, where the ratio
$M_s$min / $M_i$max reaches the highest value.

Furthermore a reliable assembly is only guaranteed if the scatter range of the expected tightening torques lies clearly between the limit values of the installation and stripping torques.

For the direct assembly of plastics, a large variation of the installation and stripping torque is usually noticed, which is caused by geometric influences or varying texture of the material. For this reason the statistical view of the assembly process is necessary.



Example curve PT® joint

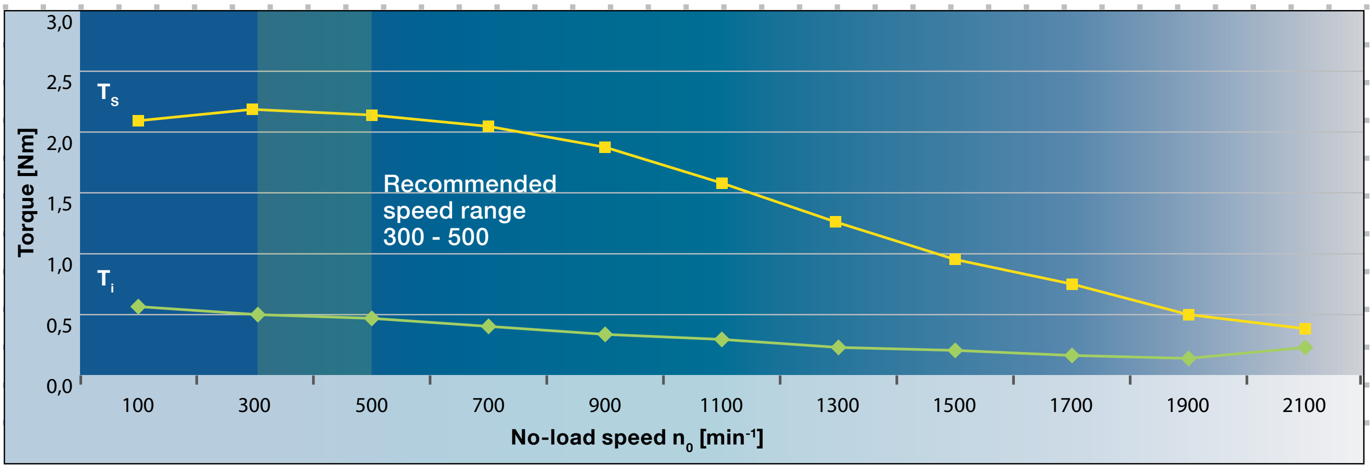


Tightening torques and repeatability

Excessively high clamp loads can cause relaxation or stress cracks depending on the kind of plastic. For that reason the tightening torque has to be kept as low as possible.

In order to guarantee reliable screw joints and trouble-free installations, a maximum of possible influences should be determined.

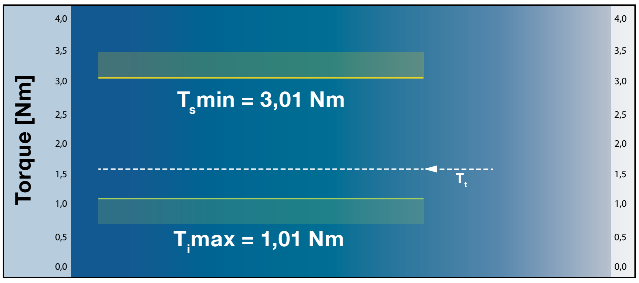
For this reason EJOT has a modern test laboratory (APPLITEC), in order to determine the optimum fastening parameters for you.
Please contact the EJOT hotline:
phone: (02751) 529-123, E-Mail: hotline@ejot.de



Influence of the driver rotation speed

Material: ABS, installation depth = 8 mm
Screw: EJOT PT® K 40 x 16 WN 1451

The screwdriver speed should be max. 500 min$^{-1,}$ in order to prevent damage of the plastic material and to enable a process reliable installation. The resulting tightening torque should be tested with regards to the repeat accuracy of the assembly tool.

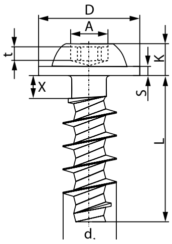
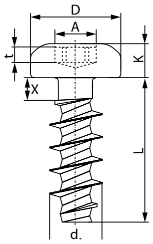
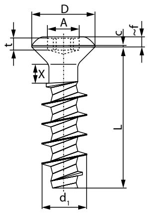
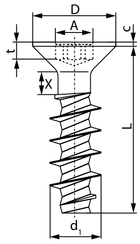


Determination of the tightening torque

Material: PA6 GF 30
Hole diameter: 3,2 mm
Screw: EJOT PT® K 40 x 10 WN 1442
Installation depth: 6,0 mm

With the limiting values $T_i$max und $T_s$min the tightening torque T_t can be determined with the following formula:

$T_t = 0{,}5 \cdot (0{,}5 \cdot T_s\text{min} + 1{,}5 \cdot T_i\text{max}) = 1{,}51$ Nm

WN 1451	WN 1452	WN 1453	WN 1423
			

Nominal Ø			K30	K 35	K 40	K 50	K 60	K 70	K 80	K 100
External thread Ø		d_1	3,0	3,5	4,0	5,0	6,0	7,0	8,0	10,0
Thread core Ø		d_2	1,66	1,91	2,17	2,68	3,19	3,7	4,21	5,23
Thread pitch		P	1,34	1,57	1,79	2,24	2,69	3,14	3,59	4,49
Thread run-out X_{max}	Standard L >	$3 \cdot d_1$	3,0	3,5	4,0	5,0	6,0	7,0	8,0	10,0
	Shortened L ≤	$3 \cdot d_1$	1,5	1,8	2,0	2,5	3,0	3,5	4,0	5,0

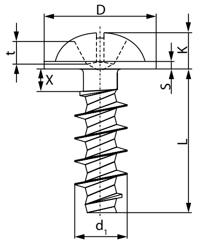
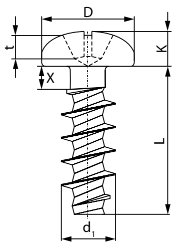
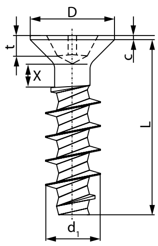
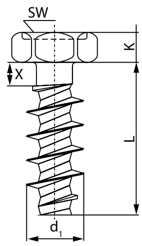
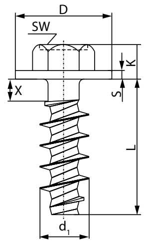
WN1451	Head Ø		D	6,0	7,0	8,0	10,0	12,0	14,0	16,0	20,0*
	Head height		K	2,1	2,4	2,6	3,3	3,6	4,2	4,8	5,5
			TORX®	T10	T 10	T 20	T 20	T 25	T 30	T 40	T40
		A	max.	2,80	2,80	3,95	3,95	4,50	5,60	6,75	6,75
	Depth	t	min.	1,00	1,10	1,25	1,40	1,60	2,00	2,70	2,70
			max.	1,30	1,40	1,70	1,80	2,00	2,40	3,20	3,20
	Washer thickness		S	0,60	0,70	0,80	1,00	1,20	1,40	1,60	2,00

WN1452	Head Ø		D	5,6	6,9	7,5	8,2	10,8	12,5	14,0	16,0
	Head height		K	2,1	2,3	2,6	2,9	3,8	4,4	5,0	6,0
			TORX®	T10	T10	T20	T20	T25	T30	T40	T40
		A	max.	2,80	2,80	3,95	3,95	4,50	5,60	6,75	6,75
	Depth	t	min.	1,00	1,10	1,25	1,40	1,60	2,00	2,40	2,70
			max.	1,30	1,40	1,70	1,80	2,00	2,40	2,90	3,20

WN1453	Head Ø		D	5,6	6,5	7,5	9,2	11,0	12,5	14,5	14,5
	Head height		c	0,55	0,55	0,65	0,75	0,85	0,85	0,90	0,90
	Crown height		~f	0,75	0,90	1,00	1,25	1,00	1,80	2,00	2,00
			TORX®	T10	T 15	T20	T 25	T 30	T 40	T40	T40
		A	max.	2,80	3,35	3,95	4,50	5,60	6,75	6,75	6,75
	Depth	t	min.	1,00	1,20	1,40	1,60	2,00	2,70	2,70	2,70
			max.	1,30	1,50	1,80	2,00	2,40	3,20	3,20	3,20

WN1423	Head Ø		D	5,5	7,3	8,4	9,3	11,3	13,6	15,8	18,3
	Head height		c	0,55	0,65	0,70	0,75	0,85	0,90	0,95	1,10
			TORX®	T 8	T 15	T20	T20	T 30	T 40	T40	T50
		A	max.	2,40	3,35	3,95	3,95	5,60	6,75	6,75	8,95
	Depth	t	min.	0,80	1,00	1,25	1,25	1,75	2,25	2,40	2,9
			max.	1,00	1,30	1,70	1,70	2,20	2,70	2,90	3,5

*

WN 1411	WN 1412	WN 1413	WN 1446	WN 1447
				

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External thread Ø		d_1	3,0	3,5	4,0	5,0	6,0	7,0	8,0	10
Thread core Ø		d_2	1,66	1,91	2,17	2,68	3,19	3,7	4,21	5,23
Thread pitch		P	1,34	1,57	1,79	2,24	2,69	3,14	3,59	4,49
Thread run-out X_{max}	Standard L >	$3 \cdot d_1$	3,0	3,5	4,0	5,0	6,0	7,0	8,0	10
	Shortened L ≤	$3 \cdot d_1$	1,5	1,8	2,0	2,5	3,0	3,5	4,0	5,0

WN1411	Head Ø		D	6,0	7,0	8,0	10,0	12,0	14,0		
	Head height		K	2,1	2,4	2,5	3,2	4,0	4,6		
	Washer thickness		S	0,7	0,8	0,9	1,1	1,3	1,5		
	H cross recess (A)	Width / size	~m	2,9/1	3,5/2	4,2/2	4,8/2	6,4/3	7,0/3		
		Depth t	min.	1,15	1,07	1,33	1,98	2,24	2,84		
			max.	1,61	1,70	1,96	2,61	2,90	3,50		
	Z cross recess (B)	Width / size	~m	2,8/1	3,8/2	4,1/2	4,7/2	6,3/3	7,0/3		
		Depth t	min.	1,26	1,08	1,40	2,01	2,27	2,91		
			max.	1,51	1,54	1,86	2,47	2,73	3,37		

WN1412	Head Ø		D	5,3	6,1	7,0	8,8	10,5	12,3		
	Head height		K	2,0	2,5	2,7	3,4	4,0	4,5		
	H cross recess (A)	Width / size	~m	2,9/1	4,0/2	4,3/2	4,9/2	6,5/3	7,1/3		
		Depth t	min.	1,19	1,23	1,51	2,12	2,44	3,00		
			max.	1,65	1,86	2,14	2,75	3,10	3,66		
	Z cross recess (B)	Width / size	~m	2,9/1	3,9/2	4,3/2	4,9/2	6,6/3	7,1/3		
		Depth t	min.	1,36	1,26	1,62	2,23	2,57	3,14		
			max.	1,61	1,72	2,08	2,67	3,03	3,61		

WN1413	Head Ø		D	5,5	7,3	8,4	9,3	11,3	13,6		
	Head height		c	0,55	0,65	0,70	0,75	0,85	0,90		
	H cross recess (A)	Width / size	~m	2,7/1	3,9/2	4,2/2	4,6/2	5,2/2	6,9/3		
		Depth t	min.	1,10	1,33	1,59	2,04	2,59	3,02		
			max.	1,56	1,96	2,22	2,67	3,22	3,68		
	Z cross recess (B)	Width / size	~m	2,7/1	4,0/2	4,2/2	4,6/2	5,1/2	6,8/3		
		Depth t	min.	1,20	1,47	1,70	2,06	2,60	3,01		
			max.	1,45	1,93	2,16	2,52	3,06	3,47		

WN1446	Wrench size	A/F	5,0	5,5	7,0	8,0	10,0	10,0	13,0	13,0
	Head height	K	1,5	2,3	2,3	3,0	3,5	4,8	5,3	5,8

WN1447	Wrench size	A/F	5,0	5,5	5,5	7,0	8,0	8,0	10,0	13,0
	Head height	K	2,3	2,8	2,8	3,5	4,2	5,0	6,0	7,0
	Washer Ø	D	6,5	7,0	8,0	10,0	12,0	14,0	16,0 *	18,0
	Washer thickness	S	0,6	0,7	0,8	0,8	1,0	1,2	1,2	1,5

*

EJOT® Micro Screws

Nominal Ø			K 12	K 14	K 16	K 18	K 20	K 22	K 25
External thread Ø		d_1	1,2	1,4	1,6	1,8	2,0	2,2	2,5
Thread core Ø		d_2	0,74	0,84	0,92	1,04	1,15	1,25	1,40
Thread pitch		P	0,53	0,62	0,67	0,80	0,89	0,98	1,12
Thread run-out X_{max}	Standard L >	$3 \cdot d_1$	1,2	1,4	1,6	1,8	2,0	2,2	2,5
	Shortened L ≤	$3 \cdot d_1$	0,6	0,7	0,8	0,9	1,0	1,1	1,3

WN1411				K 12	K 14	K 16	K 18	K 20	K 22	K 25
Head Ø			D					4,0	4,4	5,0
Head height			K					1,4	1,6	1,8
Washer thickness			S					0,5	0,5	0,6
H cross recess (A)	Width / size		~m					2,3/1	2,4/1	2,6/1
	Depth	t	min.					0,51	0,68	0,82
			max.					0,97	1,14	1,28
Z cross recess (B)	Width / size		~m					2,4/1	2,5/1	2,6/1
	Depth	t	min.					0,73	0,86	1,01
			max.					0,98	1,11	1,26
C cross recess	Width / size		~m							
	Depth	t	min.							
			max.							

WN1412				K 12	K 14	K 16	K 18	K 20	K 22	K 25
Head Ø			D	2,2	2,4	2,6	3,2	3,5	3,9	4,4
Head height			K	0,9	1,0	1,1	1,2	1,4	1,5	1,7
H cross recess (A)	Width / size		~m	1,4/0	1,6/0	1,6/0	1,8/0	2,3/1	2,4/1	2,6/1
	Depth	t	min.	0,40	0,47	0,55	0,70	0,64	0,74	0,92
			max.	0,60	0,77	0,85	1,00	1,10	1,20	1,38
Z cross recess (B)	Width / size		~m			1,7/0	1,8/0	2,4/1	2,4/1	2,6/1
	Depth	t	min.			0,55	0,70	0,82	0,92	1,08
			max.			0,80	0,95	1,07	1,17	1,33
C cross recess	Width / size		~m	1,5/0	1,6/0	1,6/0				
	Depth	t	min.	0,50	0,55	0,55				
			max.	0,75	0,85	0,85				

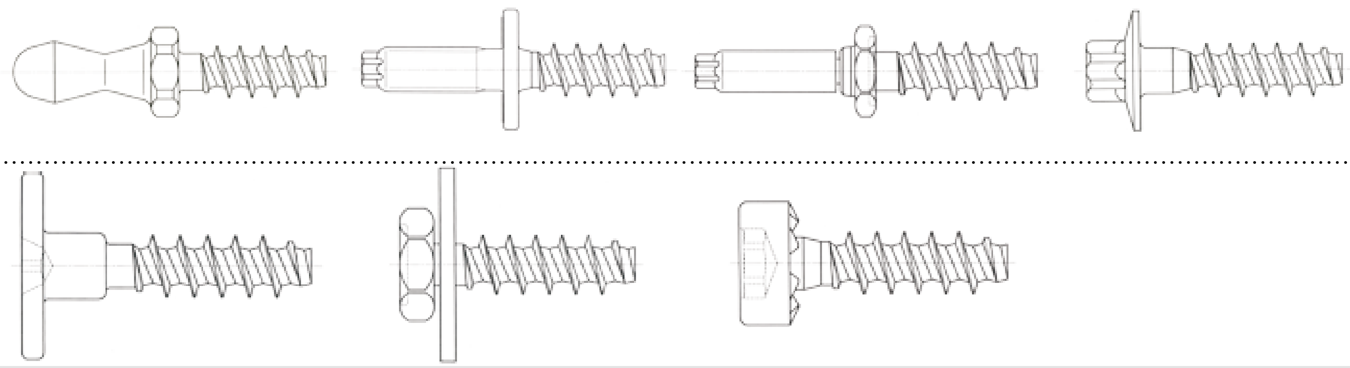
WN1413				K 12	K 14	K 16	K 18	K 20	K 22	K 25
Head Ø			D				3,0	3,8*	3,8*	4,7
Head height			c				0,3	0,35	0,35	0,55
H cross recess (A)	Width / size		~m				1,6/0	2,35/1	2,35/1	2,6/1
	Depth	t	min.				0,55	0,95	0,95	0,97
			max.				0,85	1,25	1,25	1,43
Z cross recess (B)	Width / size		~m				1,6/0	2,2/1	2,2/1	2,6/1
	Depth	t	min.				0,56	0,92	0,92	1,09
			max.				0,81	1,17	1,17	1,34
C cross recess	Width / size		~m							
	Depth	t	min.							
			max.							

WN1451			K 12	K 14	K 16	K 18	K 20	K 22	K 25
Head Ø		D					4,0	4,5	5,0
Head height		K					1,3	1,4	1,5
		TORX plus®					6 IP	6 IP	6 IP
	A	max.					1,75	1,75	1,75
Depth	t	min.					0,50	0,65	0,65
		max.					0,65	0,80	0,80
Washer thickness		S					0,40	0,50	0,50

WN1452			K 12	K 14	K 16	K 18	K 20	K 22	K 25
Head Ø		D	2,4	2,8	3,2	3,6	3,6	4,0	4,2
Head height		K	0,9	1,0	1,1	1,3	1,5	1,4	1,6
		TORX plus®	3 IP	5 IP	6 IP	6 IP	6 IP	6 IP	8 IP
	A	max.	1,20	1,45	1,75	1,75	1,75	1,75	2,40
Depth	t	min.	0,40	0,50	0,50	0,50	0,65	0,65	0,70
		max.	0,55	0,65	0,65	0,65	0,80	0,80	0,90

WN1423			K 12	K 14	K 16	K 18	K 20	K 22	K 25
Head Ø		D				3,4	3,8	3,8	4,7
Head height		c				0,35	0,35	0,35	0,55
		TORX plus®				6 IP	6 IP	6 IP	8 IP
	A	max.				1,75	1,75	1,75	2,40
Depth	t	min.				0,50	0,50	0,65	0,70
		max.				0,65	0,65	0,80	0,90

Special designs / examples



Special designs are available.
Please contact the EJOT application engineers to realise your individual design.

Chrome VI-free platings

- zinc plated, blue passivated
- zinc-plated, blue / thick film passivated + EJOSEAL
- zinc-plated, thick film passivated
- ZnFe, ZnNi, transparent passivated
  (with and without sealing / Top Coats)
- ZnFe, ZnNi, black passivated
  (with and without sealing / Top Coats)
- zinc flake coating
  (with or without sealing / Top Coats in silver and black)
- other surface coatings upon request

Material

- through hardened steel with material properties PT 10 (WN 1461, part 2)
- other materials upon request

For further information:
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fax +49 2751 529 98-123
E-mail: hotline@ejot.de

Manufacturing range of the EJOT PT® Screws

EJOT PT® Screw	K 10	K 12	K 14	K 16	K 18	K 20	K 22	K 25	K 30	K 35	K 40	K 50	K 60	K 70	K 80	K 100
Nominal Ø [mm] / Length [mm]	1,00	1,20	1,40	1,60	1,80	2,00	2,20	2,50	3,00	3,50	4,00	5,00	6,00	7,00	8,00	10,00
3 ± 0,30																
3,5 ± 0,38																
4 ± 0,38																
4,5 ± 0,38																
5 ± 0,38																
6 ± 0,38																
7 ± 0,45																
8 ± 0,45																
10 ± 0,45																
12 ± 0,55																
14 ± 0,55																
16 ± 0,55																
18 ± 0,55																
20 ± 0,65																
22 ± 0,65																
25 ± 0,65																
30 ± 0,65																
35 ± 0,80																
40 ± 0,80																
50 ± 0,80																
60 ± 0,95																
70 ± 0,95																
80 ± 0,95																
90 ± 1,10																
100 ± 1,10																

Upper stepped line = min. length
(Counter sunk head production length „l“ + 2 mm)

Lower stepped line = max. length

Fertigung nur mit Teilgewinde möglich

EJOT

Your system partner

Test bench at EJOT APPLITEC

Training

Design Consultation

A major consideration of today‘s product manufacture is the basic need to be cost competitive.

The cost structure of the manufactured product is significantly influenced by the design engineering.

Generally speaking, the development of a product, which represents about 10% of the overall costs, determines about 70% of the costs for the final product. Here the cost responsibility of the design engineer becomes evident, because he should think about the adequate fastening technology already during the product conception stage. It is known that an alteration of the part during the production stage is much more expensive than an optimisation during the design conception stage.

To assist our customers in this process EJOT offers support during the design stage by comprehensive application engineering services. These services provide accurate information on product performance and result in design recommendations that can be used safely on the product line.

Consequent Application Engineering

The daily work with our customers and their application queries greatly influences our understanding of fastening technology and opens up possibilities for innovation. This way we consequently improve our products to meet customer demands and needs.

In addition to highly-qualified engineers and application engineering consultants our application laboratory, the EJOT APPLITEC, is at your disposition. Here we carry out a series of tests on the customer components and also develop new fastening solutions.

Our knowledge is passed on to our customers and this way supports their effort towards more rational fastening and assembly.

Detailed test reports, technical advice on site, acknowledged seminars and technical publications show our Know-How.

Test report

Logistic and Data Exchange

It is our aim to keep procurement and warehousing costs as low as possible by simultaneously offering product availability and quality.

With respect to simplified procuring processes, EJOT offers a variety of cost reducing procedures and services. The continued analysis of our customers' demands and advanced logistics procedures lead to high availability of our products.

Quality for Automated Assembly

Successful assembly automation means high utilisation of the equipment. The quality of the screw used for fastening can be a decisive factor for machine uptimes and a more efficient assembly process. Standard quality is not sufficient anymore.

The grade of purity offered by EJOMAT® Quality is 10 times higher than the usual standard quality which means increased availability of assembly machines and decreased assembly costs:
EJOMAT® Quality that pays for itself.

EJOT Sales Organisation

In addition to EJOT companies throughout Europe
a growing number of Licensees
in North & South America and Asia
ensure the global availability of products and local support.

Contact details can be found on our
homepage www.ejot.com.

GFA
GLOBAL FASTENER ALLIANCE

Modern PPS-systems lead to high accuracy in supply and short through put times

*EJOMAT®
for fully-automated assembly*

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EJOT® The Quality Connection

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