



EJOT ALtracs® Plus

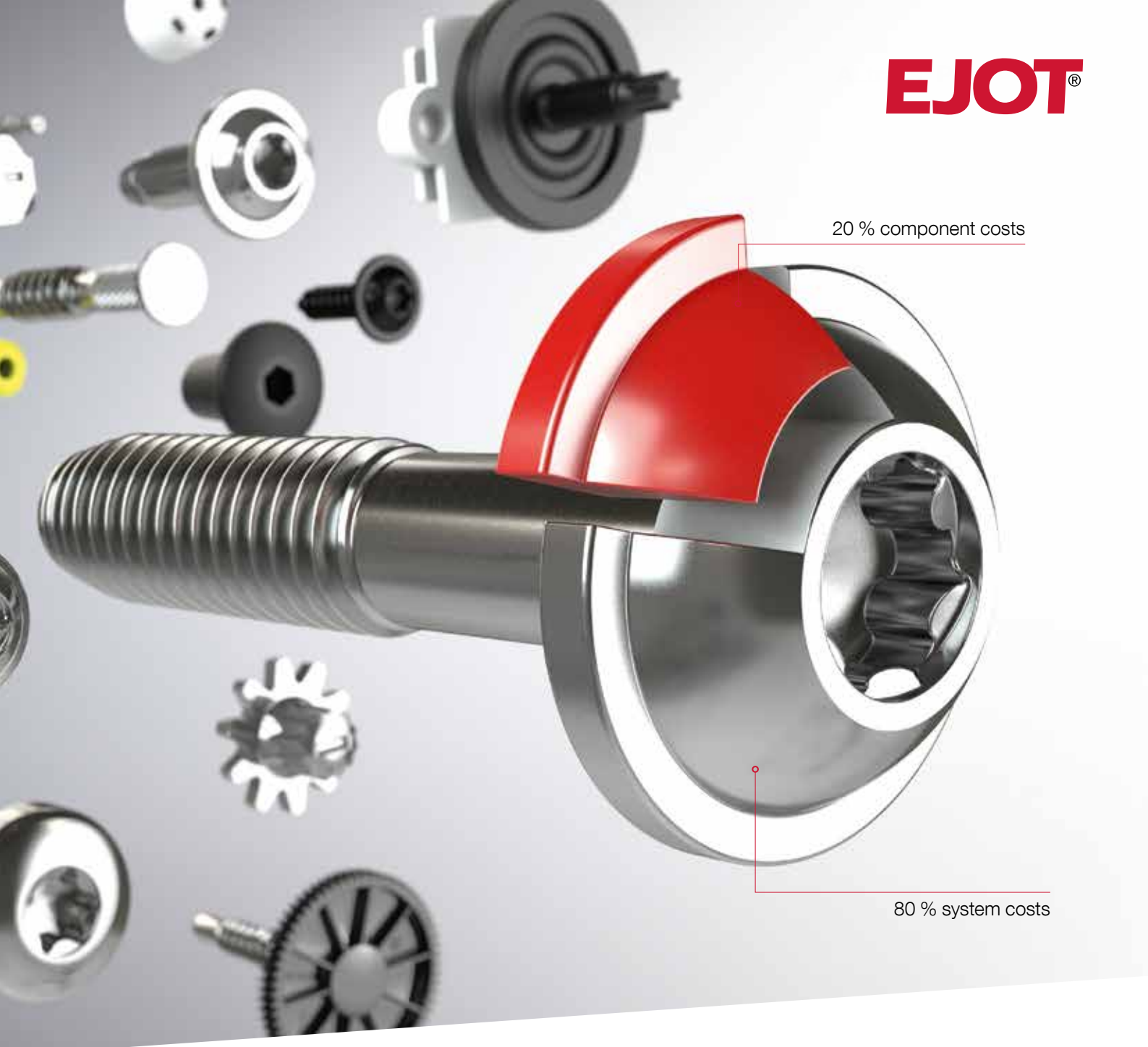
The self-tapping screw for light metal



... Always a Good Connection



Further information concerning the
ALtracs® Plus screw can be found here!



20 % component costs

80 % system costs

Globally, the EJOT group of companies specialises in advanced fastening and forming technology. Historically, EJOT customers are mainly from the automotive and supply chain industry, telecommunications and consumer electronics in addition to the building and construction industry.

EJOT's Market Unit Industry offers a wide range of innovative fastening elements, above all self-tapping screws for metals and plastic materials, multifunctional cold-formed components, individual assembly groups made of metal and plastic materials, engineered plastic components as well as special fastening solutions.

Working alongside our customers, EJOT develops individual solutions for their joining applications as well as appropriate assembly parts. The goal is to use "intelligent" products to secure the outstanding quality of the joint and at the same time reduce the overall costs permanently. The savings potential offered by this optimisation approach is much higher compared to the component costs, which are usually only 10 - 20 percent of the total costs.

EJOT - with over 90 years of company history and about 3,500 employees in more than 30 subsidiaries, assures quick global availability of our products and fast, personal contact with our customers.

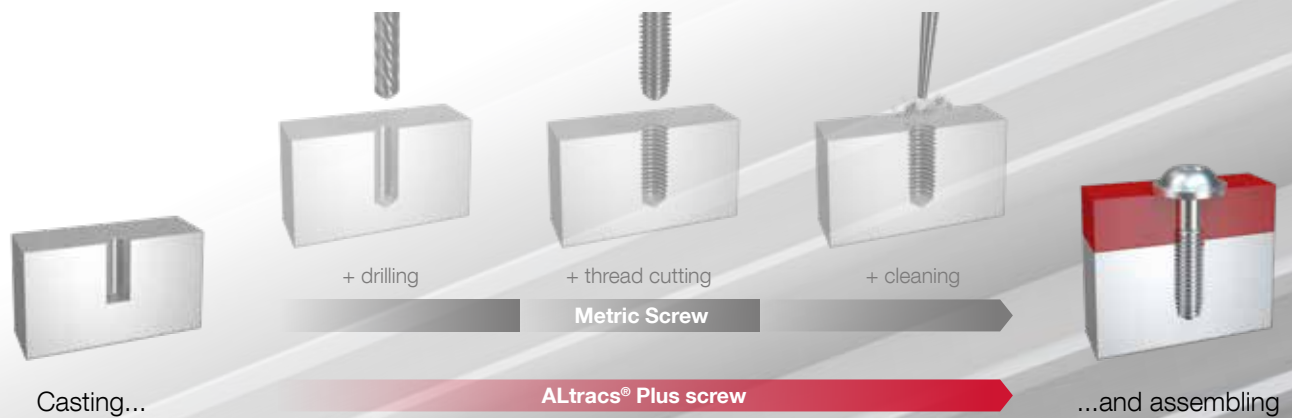
The challenge

EJOT ALtracs® Plus

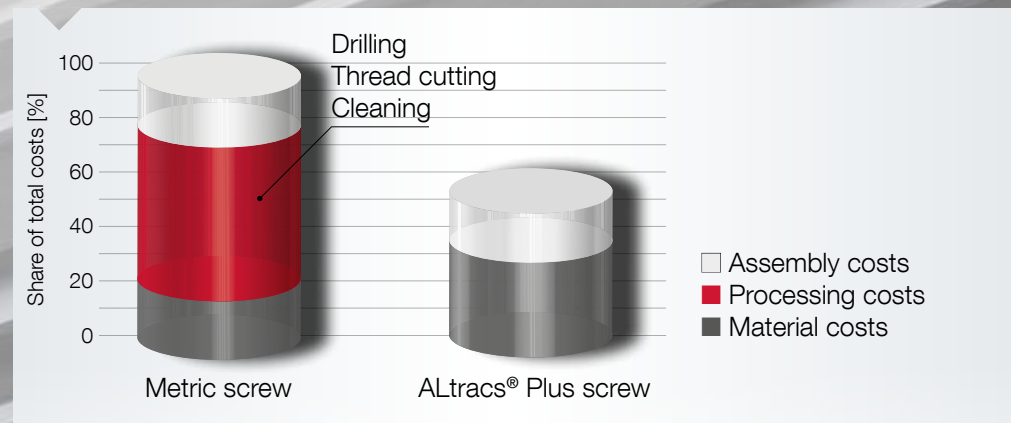
The self-tapping screw for faster assembly

When using metric screws, holes must first be drilled, threads pre-cut and then cleaned. Every single step takes time and is costly.

The EJOT ALtracs® Plus is a self-tapping screw and can be directly fastened into cast holes - without drilling, thread cutting and cleaning. The strength of the joint, which is achieved by respective design engineering, corresponds to the strength class 10.9. By eliminating three steps, the use of ALtracs® Plus screws offers a cost-saving potential of 40 % and more over a metric screw joint.



Comparison of total costs





The solution

EJOT ALtracs® Plus

A thread geometry for high joint strengths

The different material strengths of steel and alloy require a specific design of the steel screw for use in light alloy. The strength ratio between a steel screw of the strength class 10.9 ($R_m \geq 1040$ MPa) and a typical light metal alloy (R_m approx. 330 MPa) is 3:1. Due to the size ratio of the screw flank of ALtracs® Plus to the female flank of 1:3, the strength difference is geometrically balanced. The result is greater strength of the screw joint as a whole.

The ALtracs® Plus is a self-tapping screw for use in light metal materials and other non-ferrous metals such as zinc, copper, brass etc. up to a hardness of 140 HB and a tensile strength of 470 MPa. The screw was specially developed for this application and convinces with clear advantages.

- 1 With a screw flank angle of 33° instead of 60° , the ALtracs® Plus achieves higher joint strength by geometrically increasing the load bearing capacity of the female thread. Due to the smaller displacement volume of the 33° flank, smaller installation torques are required.
- 2 A flat load flank of 22° causes a large axial force component (clamp load) and low radial stress. The 11° back flank prevents an early failure of the thread flank under high clamp load. The flank root support realises a stable connection of the thread flank to the screw core.
- 3 In addition, the ALtracs® Plus screw is compatible with metric screws. For example, in case of repairs, metric screws can be used in the thread formed by an ALtracs® Plus. Due to the higher thread friction, the repair screw connection also shows a high dynamic safety.
- 4 The circular thread cross-section of the screw allows a maximum surface coverage for even load distribution and has a positive influence on load capacity and fatigue strength.
- 5 A centered application and easy fastening of the screw is ensured by a non-circular self-tapping zone.

Characteristics at a glance

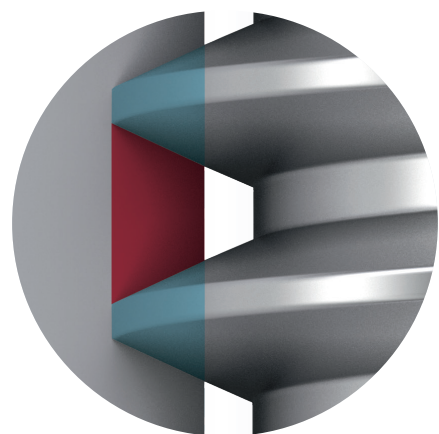
- Flank angle of 33°
- Metric compatibility
- Circular thread cross section
- Non-circular self-tapping point



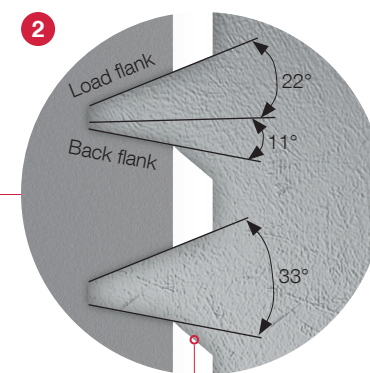
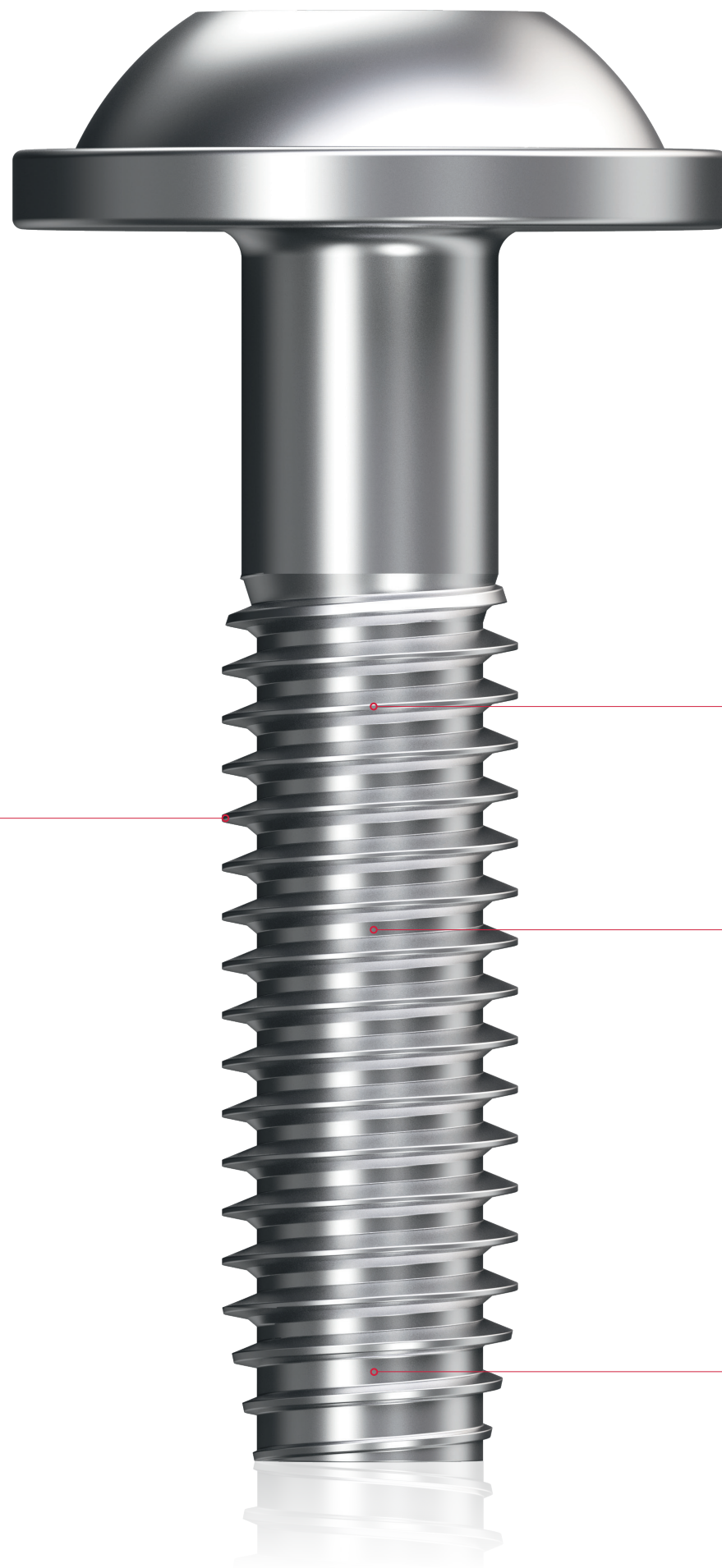
ALtracs® Plus thread

- Low material displacement due to a small 33° flank
- Larger female thread root
- Higher load carrying capacity of every single ALtracs® Plus turn of thread
- Smaller installation depth possible

Comparison: 60° thread



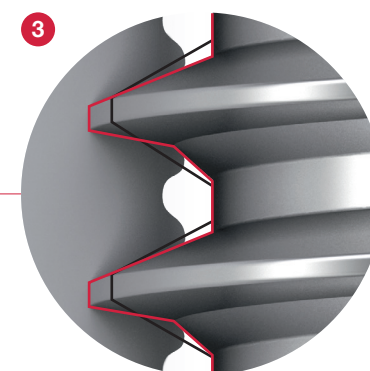
- Smaller female thread root than ALtracs® Plus
- Lower load carrying capacity of every single turn of thread
- Larger installation depth necessary



33° thread

- Small 22° load flank generates high clamp load
- Additional stability due to 11° back flank for absorbing high clamp loads
- Stable connection of the 33° thread flank to the screw core due to flank root support

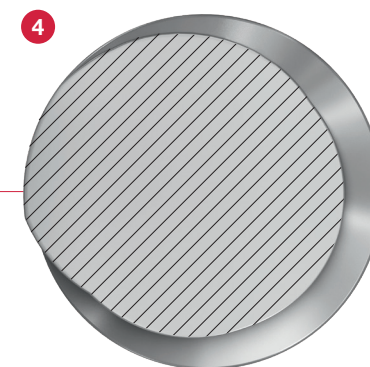
Flank root support



Metric compatibility

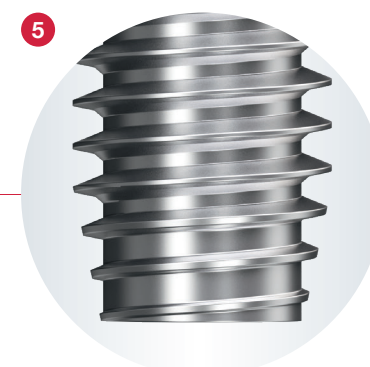
- Metric screw can be fastened into thread formed by ALtracs® Plus

— ALtracs® Plus thread
— Metric thread



Core cross section

- Maximum flank engagement
- Larger drilling tolerances possible



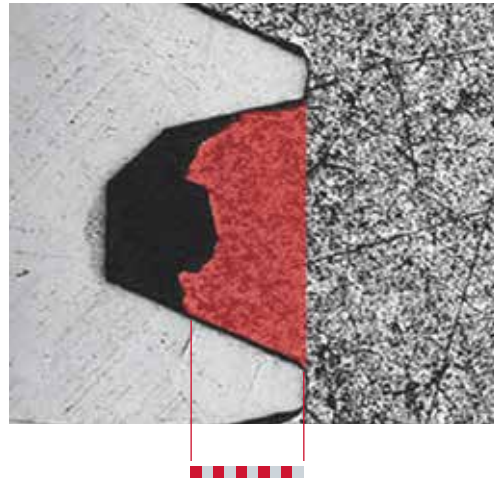
Thread forming zone

- Non circular self-tapping zone
- Easy and simple locating of the screw
- Reliable penetration into the material
- Reliable penetration of possible casting skin

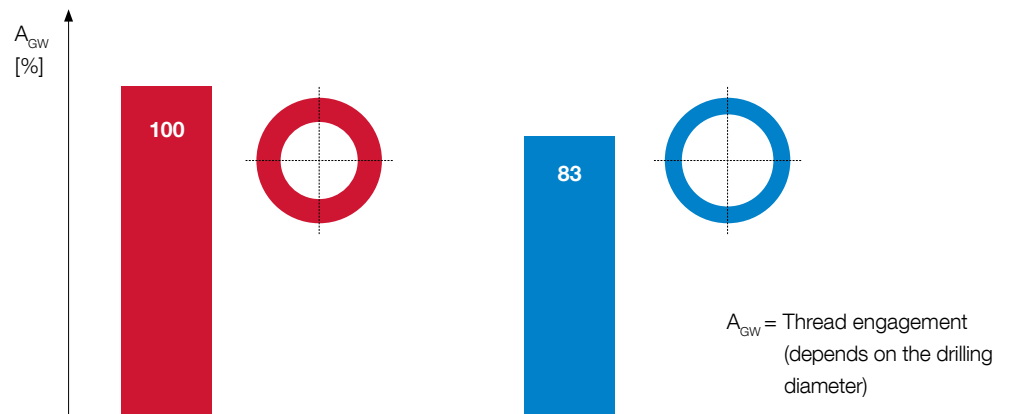
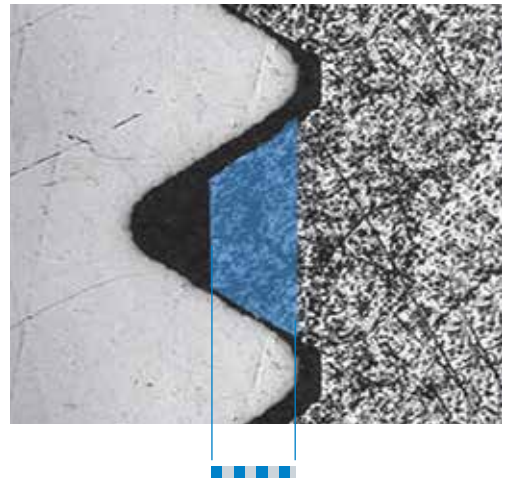
Load capacity of the screw joint

Compared to metric screws

ALtracs® Plus



Metric screw



The ALtracs® Plus screw forms a tight fitting female thread in light metal. Together with the geometrically strengthened female thread tooth and the effect of strain hardening when forming the threads, a high load capacity of the screw joint is achieved, even under thermal stress. The formed ALtracs® Plus thread also achieves a high level of dynamic safety, without additional measures such as polyamide patch, microencapsulation or under-head profile, due to the clamping torque generated in the formed thread.

The ALtracs® Plus offers the following characteristic values:

Compared to a metric screw joint, property class 8.8

- Higher clamp loads
- As a result, smaller screw dimensions possible
- Comparable long-term behavior
- Higher loosening torques
- Higher axial pull-out forces

Compared to a metric screw joint, property class 10.9

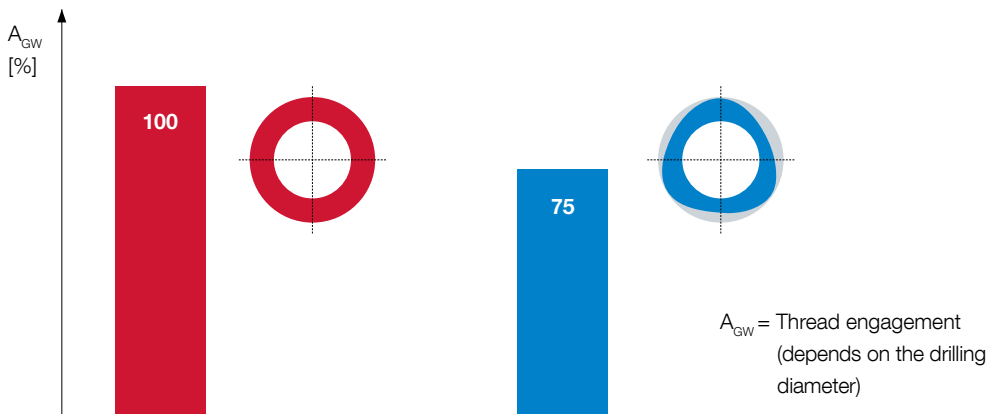
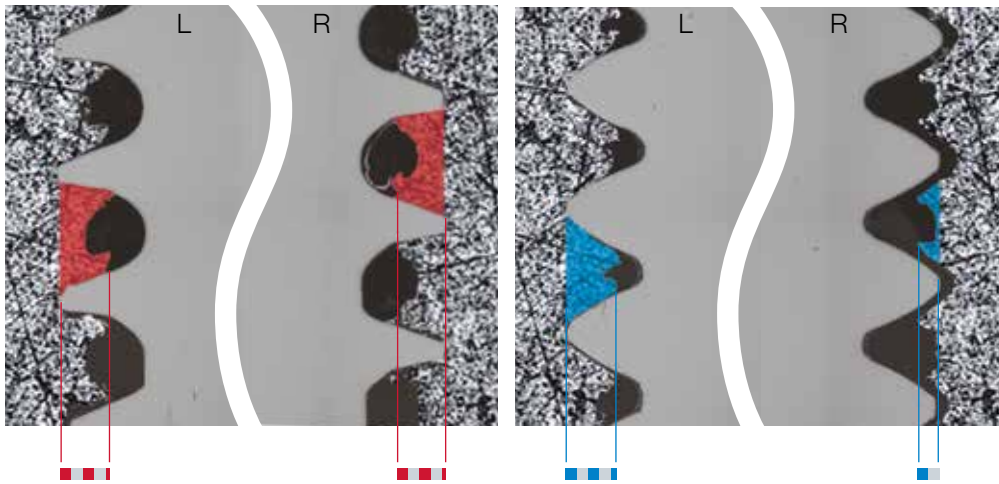
- Comparable clamp load
- Comparable long-term behavior
- Higher loosening torques
- Higher axial pull-out forces

Load capacity of the screw joint

Compared to non-circular screws

ALtracs® Plus

Non-circular screw



The design of the ALtracs® Plus thread geometry results in optimum utilization of the material properties.

This means:

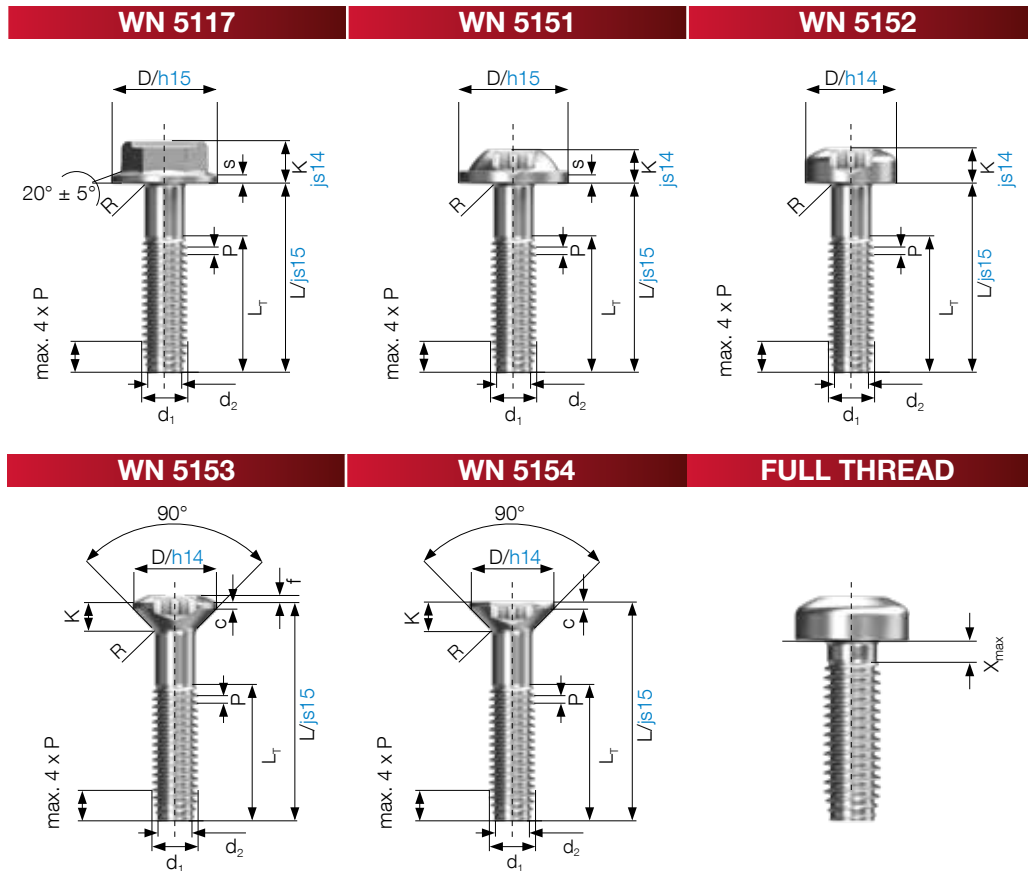
- High installation safety due to high stripping torque
- High and stable clamp loads due to strengthened female thread flank
- Minor tendency to creep due to larger thread flank engagement under thermal and/or dynamic stress
- Possible reduction of installation depth, resulting in shorter screws, smaller component sizes, less weight, and reduced wear and tear of the die casting tools
- Good repeat assembly properties
- Excellent vibration resistance

Unlike various other thread designs, the ALtracs® Plus thread with its circular cross section is completely engaged and can be fully loaded.

In combination with the higher load capacity of the geometrically strengthened female thread this results in:

- Higher clamp loads for smaller installation depths
- Improved long-term behavior (remaining clamp load, fatigue strength)
- Higher pull-out load
- Castable drilling tolerances

Technical specifications
Designs



TORX PLUS®/AUTOSERT® is used as a standard recess. All TORX® recesses from size 8 are also available as combi recess.



Hexagon head with washer



TORX PLUS®/AUTOSERT®



TORX®



TAMPER RESISTANT TORX PLUS®

ALtracs® Plus	14	16	18	20	22	25	30	35	40	50	60	70	80	100
External Ø d ₁ [mm]	1.4	1.6	1.8	2.0	2.2	2.5	3.0	3.5	4.0	5.0	6.0	7.0	8.0	10.0
External Ø tolerance	± 0.04	± 0.04	± 0.04	± 0.04	± 0.04	± 0.05	± 0.05	± 0.05	± 0.06	± 0.06	± 0.07	± 0.07	± 0.07	± 0.09
Core Ø tolerance	+ 0.12	+ 0.12	+ 0.12	+ 0.12	+ 0.12	+ 0.14	+ 0.14	+ 0.14	+ 0.16	+ 0.16	+ 0.18	+ 0.18	+ 0.18	+ 0.22
Partial thread L-tolerance	- 0.70	- 0.70	- 0.70	- 0.80	- 0.90	- 0.90	± 0.50	± 0.60	± 0.70	± 0.80	± 1.00	± 1.00	± 1.25	± 1.50

Order example

Designation of an EJOT ALtracs® Plus screw with TORX PLUS®/AUTOSERT® drive, nominal Ø 6.0 mm, shaft length = 25 mm and thread length = 18 mm according to WN 5151:

EJOT ALtracs® Plus screw WN 5151, AP 60 x 25/18

ALtracs® Plus		14	16	18	20	22	25	30	35	40	50	60	70	80	100
External thread Ø	d ₁	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
Thread core Ø	d ₂	0.99	1.12	1.32	1.45	1.61	1.88	2.30	2.66	3.02	3.87	4.59	5.56	6.23	7.86
Thread pitch	P	0.30	0.35	0.35	0.40	0.45	0.45	0.50	0.60	0.70	0.80	1.00	1.00	1.25	1.50
Thread run-out	X _{max}	0.60	0.70	0.70	0.80	0.90	0.90	1.00	1.20	1.40	1.60	2.00	2.00	2.50	3.00

WN 5117

Head Ø	D	not produceable										11.50	14.00	18.00
Width across flats	SW	not produceable										8.00	10.00	13.00
Head height	K	not produceable										4.80	5.50	7.50
Washer thickness	s	not produceable										1.00	1.10	1.20
Radius	R	not produceable										0.40	0.50	0.70

WN 5151

Head Ø	D	3.50	4.00	4.50	5.00	5.50	6.00	7.50	9.00	10.00	11.50	14.50	19.00
Head height	K	1.15	1.20	1.35	1.50	1.60	2.00	2.25	2.50	2.90	3.40	4.40	5.70
Washer thickness	s	0.50	0.60	0.60	0.60	0.60	0.60	0.70	0.80	1.00	1.20	1.60	2.00
Radius	R	0.20	0.25	0.25	0.30	0.30	0.30	0.40	0.40	0.50	0.50	0.60	0.80
TORX PLUS®/AUTOSERT®		3IP**	5IP**	6IP	6IP	7IP	8IP	10IP	15IP	20IP	25IP	30IP	40IP

WN 5152

Head Ø	D	2.80	3.20	3.60	4.00	4.40	5.00	6.00	7.00	8.00	10.00	12.00	16.00
Head height	K	1.05	1.20	1.30	1.50	1.60	2.00	2.40	2.70	3.10	3.80	4.60	6.00
Radius	R	0.20	0.25	0.25	0.30	0.30	0.30	0.40	0.40	0.50	0.50	0.60	0.80
TORX PLUS®/AUTOSERT®		3IP**	6IP**	6IP**	6IP	7IP	8IP	10IP	15IP	20IP	25IP	30IP	40IP

WN 5153

Head Ø	D	2.80	3.35	3.65	3.80	4.40	4.70	5.60	6.50	7.50	9.20	11.00	14.50
Head height	K	1.20	1.40	1.50	1.50	1.80	1.90	2.10	2.40	2.80	3.30	3.80	4.80
Cylinder head height	c	0.30	0.35	0.35	0.35	0.45	0.55	0.55	0.55	0.65	0.75	0.85	0.90
Calotte height	≈ f	0.20	0.30	0.30	0.50	0.60	0.60	0.75	0.90	1.00	1.25	1.00	2.00
Radius	R	0.30	0.40	0.40	0.50	0.60	0.70	0.80	1.00	1.00	1.30	1.60	2.00
TORX PLUS®/AUTOSERT®		3IP**	5IP**	6IP**	6IP	7IP	8IP	10IP	15IP	20IP	25IP	30IP	40IP

WN 5154

Head Ø	D	2.80	3.35	3.65	3.80	4.40	4.70	5.50	7.30	8.40	9.30	11.30	15.80
Head height	K	1.20	1.40	1.50	1.50	1.80	1.90	2.10	2.90	3.30	3.30	4.00	5.50
Cylinder head height	c	0.30	0.35	0.35	0.35	0.45	0.55	0.55	0.65	0.70	0.75	0.85	0.95
Radius	R	0.40	0.50	0.50	0.50	0.60	0.70	0.80	0.95	1.00	1.30	1.60	2.00
TORX PLUS®/AUTOSERT®		3IP**	5IP**	6IP**	6IP	7IP	8IP	10IP	15IP	20IP	25IP	30IP	40IP

ALtracs® Plus AP120 and 140 upon request.

** without AUTOSERT®

Technical specifications

Coatings & materials

Material

- Through hardened steel AT 10 per WN 5161, part 2 (analog strength class 10.9 of a metric screw)
- Austenitic stainless steel A2/A4 (CrNi steel)
- Ferritic stainless steel (chromium steel)

Chrome VI-free coatings

- Zinc-plated, blue passivated*
- Zinc-plated, thick-film passivated*
- Zinc flake coatings
- ZnFe or ZnNi, transparent passivated*
- ZnFe or ZnNi, black passivated*

All surface coatings are generally waxed

*with or without sealing/top coat



zinc-plated,
blue passivated



zinc-plated, thick-film
passivated + sealer



Zinc flake coatings



ZnFe, ZnNi,
transparent passivated
(with or without sealing/
top coat)



ZnFe, ZnNi,
black passivated
(with or without sealing/
top coat)

Further materials and coatings are available upon request.
When requesting technical cleanliness (EJOCLEAN®), only electrolytic surface systems or stainless steel screws can be selected.

Special designs

Examples



Manufacturing range

ALtracs® Plus	14	16	18	20	22	25	30	35	40	50	60	70	80	100
Ø d _i [mm]	1.4	1.6	1.8	2.0	2.2	2.5	3.0	3.5	4.0	5.0	6.0	7.0	8.0	10.0
Length L	Thread length L _T													
3	3													
3.5	3.5	3.5												
4	4	4	4	4										
4.5	4.5	4.5	4.5	4.5	4.5									
5	5	5	5	5	5	5								
6	5	5	6	6	6	6	6							
7	5	6	6	6	7	7	7	7						
8	5	5	6	6	7	8	7	8	8					
9	5	5	6	6	7	8	7	9	9					
10	5	5	6	6	7	8	9	9	10	10				
12	5	5	6	6	7	8	9	11	10	12	12			
14	5	5	6	6	7	8	9	11	12	12	14	14		
16		5	6	6	7	8	9	11	12	15	14	16	16	
18			6	6	7	8	9	11	12	15	14	16	18	
20				6	7	8	9	11	12	15	18	16	19	20
22					7	8	9	11	12	15	18	21	19	22
25						8	9	11	12	15	18	21	24	23
30							9	11	12	15	18	21	24	23
35								11	12	15	18	21	24	30
40									12	15	18	21	24	30
50										15	18	21	24	30
60											18	21	24	30
70												21	24	30
80													24	30
90														30
100														30

ALtracs® Plus AP120, 140 and special lengths upon request.

Manufacturing range does not necessarily indicate in-stock items (delivery times vary).



- Minimum length (for versions with countersunk head + 0.6 x d_i)
- Maximum length
- - - Can be produced with an alternative forming zone

Tolerances

Tolerance ranges	Nominal size ranges (mm)							
	up to 3	more than 3 up to 6	more than 6 up to 10	more than 10 up to 18	more than 18 up to 30	more than 30 up to 50	more than 50 up to 80	more than 80 up to 120
h 14	0 - 0.25	0 - 0.30	0 - 0.36	0 - 0.43	0 - 0.52	-	-	-
h 15	0 - 0.40	0 - 0.48	0 - 0.58	0 - 0.70	0 - 0.84	-	-	-
js 14	± 0.12	± 0.15	± 0.18	-	-	-	-	-
js 15	± 0.20	± 0.24	± 0.29	± 0.35	± 0.42	± 0.50	± 0.60	± 0.70

Design recommendations

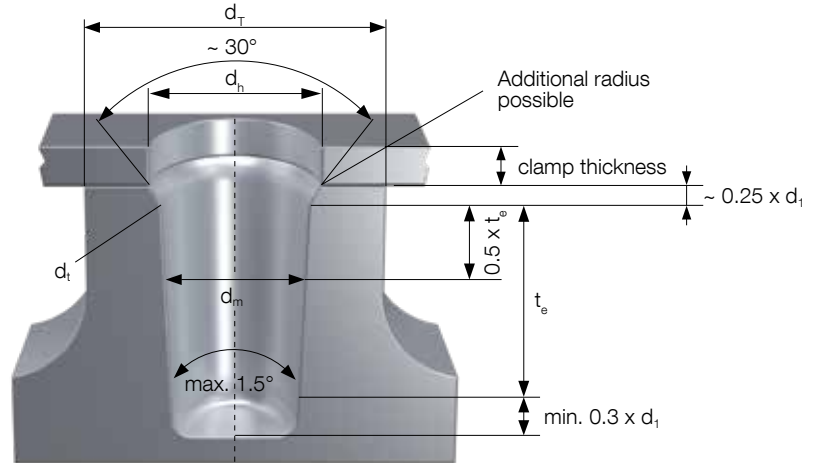
Fastening into closed profiles and drill holes

Installation depths

- **min. 0.5 x d₁**
save assembly
(plus forming zone of the screw)
- **min. 1.5 x d₁**
vibration-proof screw connection
(including screw forming zone)
- **min. 2.0 x d₁**
high-strength screw-joint
(including screw forming zone)

Installation depths > 2.5 x d₁
are not recommended.

The hole diameter recommendations given in the table apply to light metal and other non-ferrous metals with a strength of ≤ 470 MPa and a hardness of ≤ 140 HB. For higher material hardness we recommend inductively hardened ALtracs® Plus screws or other thread geometries. The values are based on laboratory tests, so the assembly parameters, especially the influence of the screw surface, should be checked before starting production. The EJOT APPLITEC centre provides the required application technology for this.



Hole recommendations for cast and drilled holes with alloys of aluminum, magnesium, zinc and copper

Hardness	Al, Zn, Cu up to 55 HB Mg (up to 90 HB)			Al, Zn, Cu 55 - 115 HB				Al, Zn, Cu 115 - 140 HB		
	1.0 x d ₁ [mm]	1.5 x d ₁ [mm]	2.0 x d ₁ [mm]	0.5 x d ₁ [mm]	1.0 x d ₁ [mm]	1.5 x d ₁ [mm]	2.0 x d ₁ [mm]	0.5 x d ₁ [mm]	1.0 x d ₁ [mm]	1.5 x d ₁ [mm]
t _e [mm]	d _m	d _m [d ₁]*	d _m [d ₁]*	d _m	d _m	d _m [d ₁]*	d _m [d ₁]*	d _m	d _m	d _m [d ₁]*
1.6	1.46	1.48 [1.51]	t _{emax} =1.5 x d ₁	1.46	1.48	1.49 [1.52]	t _{emax} =1.5 x d ₁	1.48	1.49	1.51 [1.54]
1.8	1.63	1.65 [1.69]	t _{emax} =1.5 x d ₁	1.63	1.65	1.67 [1.71]	t _{emax} =1.5 x d ₁	1.65	1.67	1.68 [1.72]
2.0	1.83	1.85 [1.89]	t _{emax} =1.5 x d ₁	1.83	1.85	1.87 [1.91]	t _{emax} =1.5 x d ₁	1.85	1.87	1.89 [1.93]
2.2	1.98	2.00 [2.04]	2.03 [2.09]	1.98	2.00	2.03 [2.07]	t _{emax} =1.5 x d ₁	2.00	2.03	2.05 [2.09]
2.5	2.20	2.25 [2.30]	2.30 [2.37]	2.20	2.25	2.30 [2.35]	2.35 [2.42]	2.25	2.30	2.35 [2.40]
3.0	2.65	2.70 [2.76]	2.75 [2.83]	2.65	2.70	2.75 [2.81]	2.80 [2.88]	2.70	2.75	2.80 [2.86]
3.5	3.10	3.15 [3.22]	3.20 [3.29]	3.10	3.15	3.20 [3.27]	3.25 [3.34]	3.15	3.20	3.25 [3.32]
4.0	3.55	3.60 [3.68]	3.65 [3.75]	3.55	3.60	3.65 [3.73]	3.70 [3.80]	3.60	3.65	3.70 [3.78]
5.0	4.40	4.50 [4.60]	4.60 [4.73]	4.40	4.50	4.60 [4.70]	4.70 [4.83]	4.50	4.60	4.70 [4.80]
6.0	5.30	5.40 [5.52]	5.50 [5.66]	5.30	5.40	5.50 [5.62]	5.60 [5.76]	5.40	5.50	5.60 [5.72]
8.0	7.00	7.20 [7.36]	7.40 [7.61]	7.00	7.20	7.40 [7.56]	7.50 [7.71]	7.20	7.40	7.50 [7.66]
10.0	8.80	9.00 [9.20]	9.20 [9.46]	8.80	9.00	9.20 [9.40]	9.40 [9.66]	9.00	9.20	9.40 [9.60]

ALtracs® Plus AP120 and 140 upon request.

d₁ = nominal screw diameter d_m = hole diameter centre d_T = hole diameter top t_e = installation depth
d_h = diameter through hole (ca. 1.1 x d₁) d_T = minimum boss diameter: ca. 2 x d₁ *d₁ calculated with 1.5°

Design recommendations

Fastening into open profiles



Hole recommendations for aluminum profiles

Profile type	60° open		90° open		U-track	
	d_m [mm]	t_e [mm]	d_m [mm]	t_e [mm]	d_m [mm]	t_e [mm]
ALtracs® Plus 16	1.47	max. 2.4	1.47	max. 2.4	1.46	max. 2.4
18	1.65	max. 2.7	1.65	max. 2.7	1.63	max. 2.7
20	1.85	max. 3.0	1.85	max. 3.0	1.83	max. 3.0
22	2.00	max. 2.7	2.00	max. 2.7	1.98	max. 2.7
25	2.30	3 - 5	2.30	3 - 5	2.20	3 - 5
30	2.75	4 - 6	2.75	4 - 6	2.65	4 - 6
35	3.20	5 - 7	3.20	5 - 7	3.10	5 - 7
40	3.65	6 - 8	3.60	6 - 8	3.55	6 - 8
50	4.65	7 - 10	4.60	7 - 10	4.40	7 - 10
60	5.55	9 - 12	5.50	9 - 12	5.30	9 - 12
80	7.45	12 - 16	7.40	12 - 16	7.10	12 - 16
100	9.30	15 - 20	9.20	15 - 20	8.80	15 - 20

Further recommendations on request.

d_m = hole diameter

t_e = installation depth

Installation data

EJOT ALtracs® Plus screws should be fastened with pneumatic or EC screwdrivers, the recommended speed depends on the screw diameter (following guide values: $\leq \text{Ø } 3 \text{ mm} \sim 700 \text{ U/min}$, $\text{Ø } 5 \text{ mm} \sim 500 \text{ U/min}$, $\geq \text{Ø } 8 \text{ mm} \sim 300 \text{ U/min}$). Slower or faster speeds should be tested separately beforehand, assembly with common fastening technique is possible. Common assembly modes are possible and control variables such as torque, torque/rotation angle, gradient and yield point can be used depending on the specific requirement. For all over-elastic tightening methods (above Rp 0.2 of the screw) the connection must fail with screw breakage (VDI 2230). This can be determined by an appropriate choice of installation depth and hole diameter. Since different surfaces have different coefficients of friction, it is always advisable to check the fastening parameters with screw surfaces intended for serial production.

d_1	Pre-hole tolerance
1.4 - 2.0	± 0.03
2.2 - 3.5	± 0.04
4.0 - 5.0	± 0.05
6.0 - 7.0	± 0.07
8.0 - 14.0	± 0.10

Prognosis program ALtra CALC®

For a perfect pre-dimensioning

The ALtra CALC® prognosis program developed by EJOT, provides optimal support for the prediction of direct fastening. Depending on materials and design parameters, the fastening parameters are reliably calculated. In addition, ALtra CALC® allows the prediction of torques, clamp load and pull-out forces as well as failure modes. Based on VDI 2230, this innovative software tool enables clamp load oriented design. The results are documented in the form of a detailed report, the practical review can then be done in the EJOT APPLITEC.

Online access to the particularly user-friendly "**Light Version**" can be requested at www.ejot.com/CAD_and_more. Various alloys, hole diameters and screw-in depths for galvanized and waxed ALtracs® Plus screws are considered.



Online-Version ALtra CALC® Light



A calculation in the **full version** can be requested via www.ejot.com/CAD_and_more or from the responsible EJOT application engineer. The following details are included in this version:

- Alloys: magnesium, aluminum, zinc and copper
- Dimensions: available for ALtracs® Plus AP 25 - 80
- Screw material: A2 stainless steel, steel grade 10.9
- Screw surfaces: zinc-plated, zinc-nickel, zinc-iron, zinc flake, each with or without additional sealing and/or wax



EJOCLEAN®

Technical cleanliness becomes measurable

Technical cleanliness has established itself as a quality-assuring feature in many industries. With future-oriented cleaning technologies, investments in state-of-the-art cleanroom technology as well as innovative packaging and coating systems, the EJOCLEAN® concept delivers confidence and reassurance.



EJOCLEAN® Concept

Using state-of-the-art micro-cleaning equipment, unwanted particle contamination is removed from the screws. An innovative packaging concept makes it possible to preserve the resulting high level of cleanliness. The use of EJOCLEAN® parts reliably prevents contamination of clean assembly equipment. This results in decreasing maintenance and cleaning intervals as well as significantly higher process stability. The failure frequency of fully assembled components and manufacturing costs are significantly reduced.

EJOT SpringHead®

Screw head with integrated spring element

Every screw connection loses clamp load after assembly due to subsidence. Dynamic and/or thermal stress increases this effect. If the clamp load falls below a critical level, the connection fails, for example through loosening, separation or a loss of electric contacting.



Increasing the elasticity in the screw connection reduces this effect.

This can be achieved, amongst other things, if spring elements are integrated into the screw connection. The EJOT SpringHead® head offers this rebounding property to compensate for subsidence. Additional, conventional spring elements, such as spring washers, are not necessary.

The EJOT SpringHead® concept includes a screw head with integrated spring for better clamp load retention under dynamic and thermal stress and for permanent electrical contact. For clamping parts with a low admissible surface pressure (e.g. plastics or copper), an additional captive washer is recommended for a better load distribution.



With washer



Without washer



Service and support

Always perfect advice and assistance

The EJOT concept of total quality goes far beyond outstanding product features. You can expect best performance and service from us. Our goal is always to benefit the customer through added value service. We want you to be successful.



Engineering advice

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. 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. In this laboratory components are checked thoroughly and the customer has the possibility to have an individual examination of his application done. Following the analysis, they receive professional proposals concerning the best possible fastening solution.



Online service

Besides the possibility to have components tested in our laboratory, we offer our customers several prognosis programs to pre-design direct assemblies in thermoplastics and light metals. Practical examples prove that considerable cost savings are already possible during the development phase by using these programs. After the required registration on the EJOT homepage these calculation tools as well as downloads of CAD data and product information are also available online.



Logistics 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 regards to simplified procurement 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.



EJOT sales structure

In addition to the international EJOT companies, a growing number of licensees and members of the Global Fastener Alliance all over the world ensure the global availability of products and local support.

For further information concerning the EJOT license management, please contact Mrs. Jasmin Hegener, Global License Management (phone +49 2752 109-1488, e-mail: jhegener@ejot.com).



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Subject to technical changes.