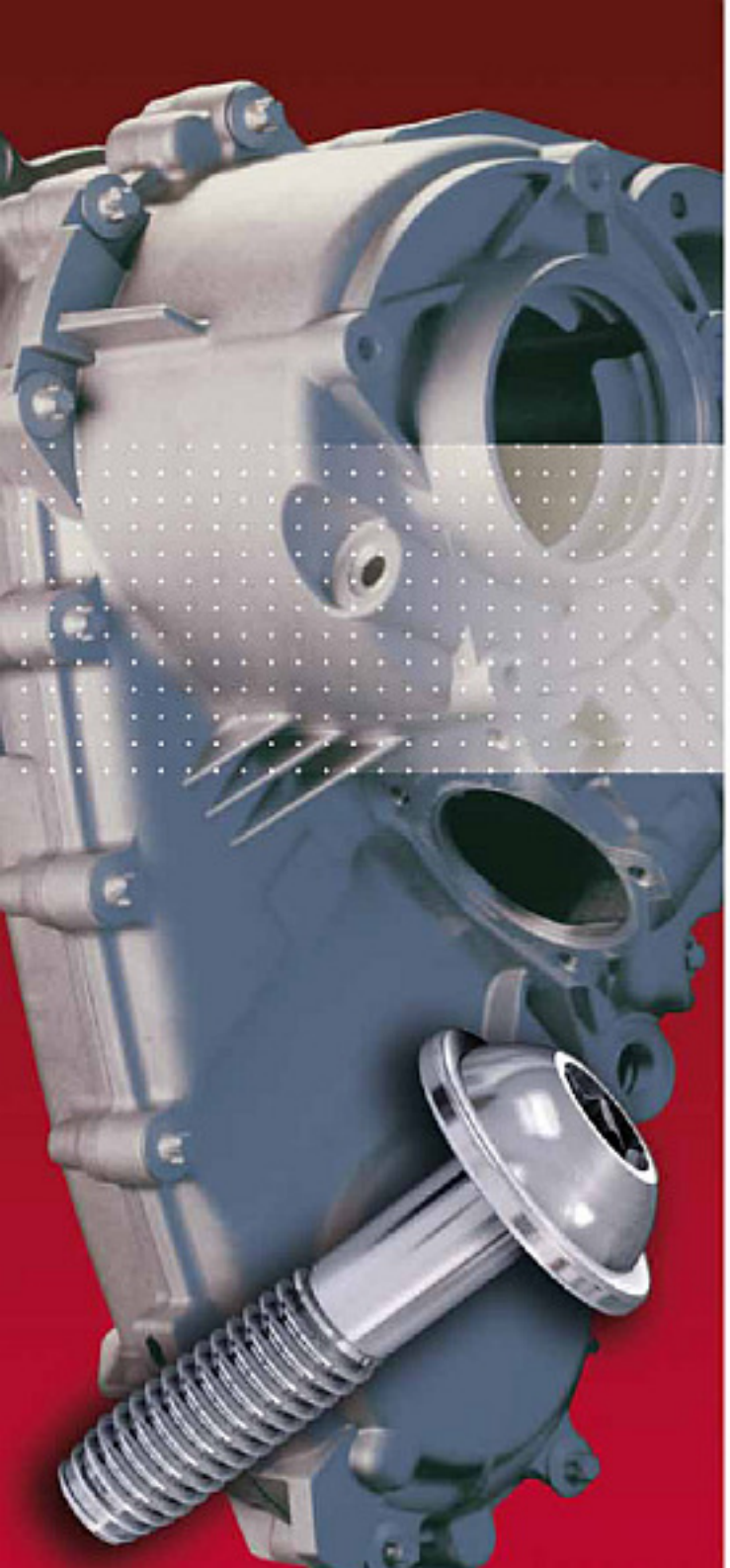


EJOT ALtracs® Plus

The Self-Tapping

Fastener for

Light Alloys

EJOT® The Quality Connection

EJOT Semblex

ALtra CALC [v1.4]

report from 09.11.2020

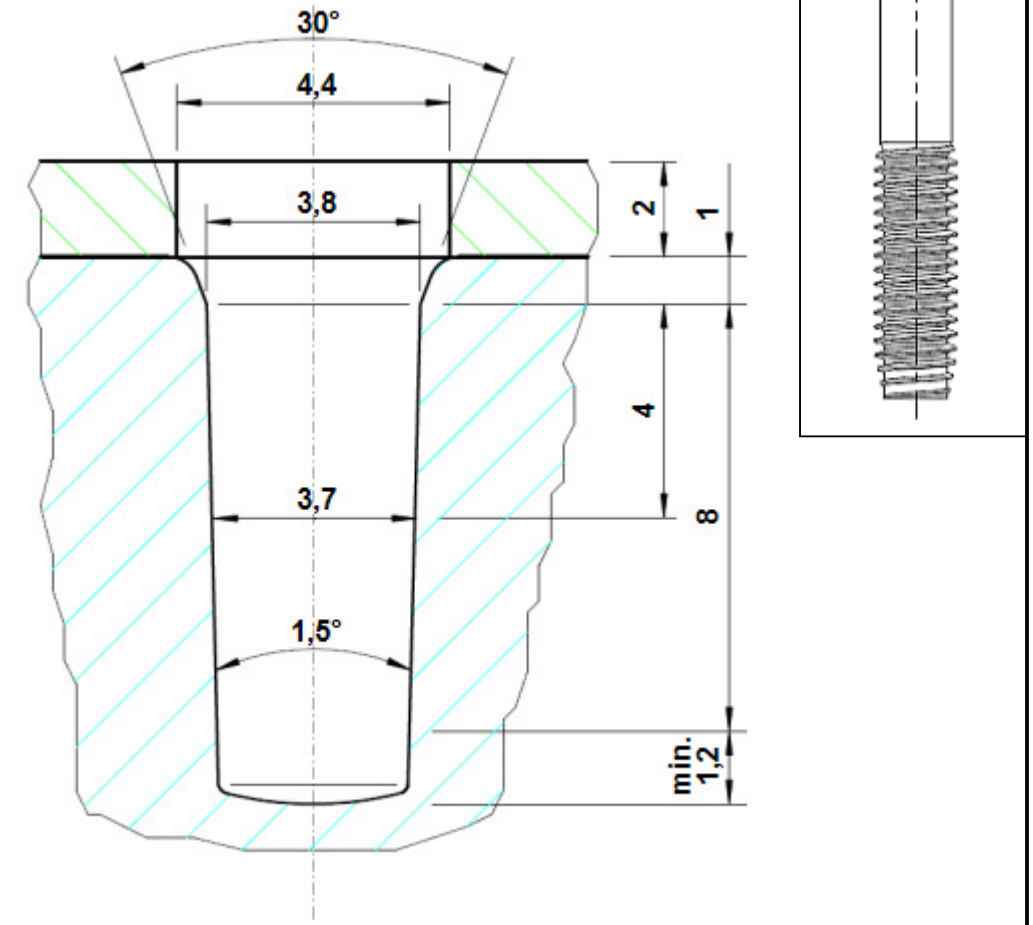
project	
project name	123456789
customer	Customer
contact person	
phone	
e-mail	

contact person	
name	
phone	
e-mail	

ALtra CALC

calculation parameters

EJOT Semblex



screw (ALtracs Plus AP 40x11)	
screw [material]	ALtracs Plus [AT10]
head style	WN 5151
screw surface	A3K DIN EN ISO 4042 (EJOSEAL 4C)
lubricant	microGleit DF 921
thread diameter [mm]	4
length [mm]	11
head diameter [mm]	10

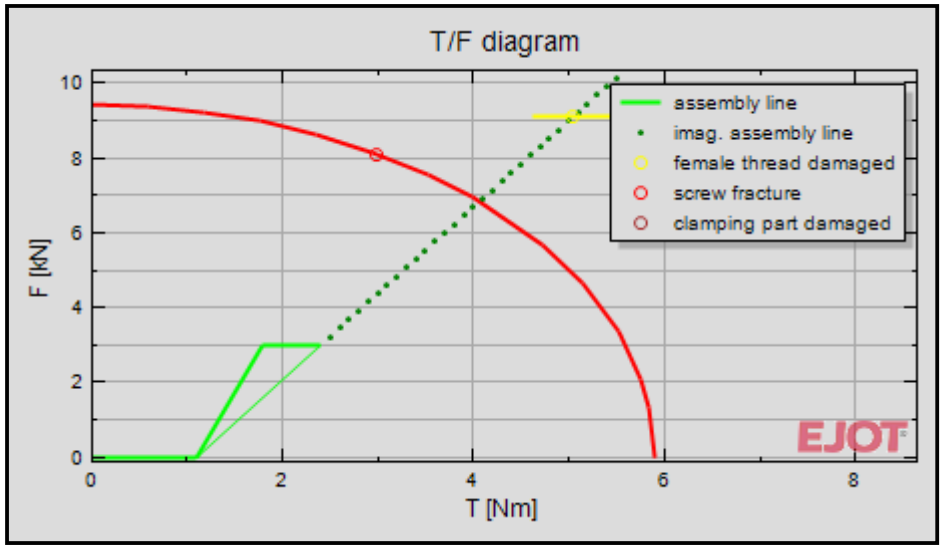
boss	
boss material	Al wrought
trade name / condition	EN AW-6082 / T6
hardness [HB]	105
installation depth [mm]	8
draft angle [°]	1,5
average hole diameter [mm]	3,7
external boss diameter [mm]	7,2
counter-bore depth [mm]	1
counter-bore diameter [mm]	4,38
type of fastening	blind hole

clamping part	
clamping part material	Aluminium
trade name	
clamp thickness [mm]	2
screw elongation length [mm]	3
through hole diameter [mm]	4,4

other inputs	
clamp load (Fcl) [kN]	3
axial operating load (Fa) [kN]	0
screwdriver tolerance [%]	10

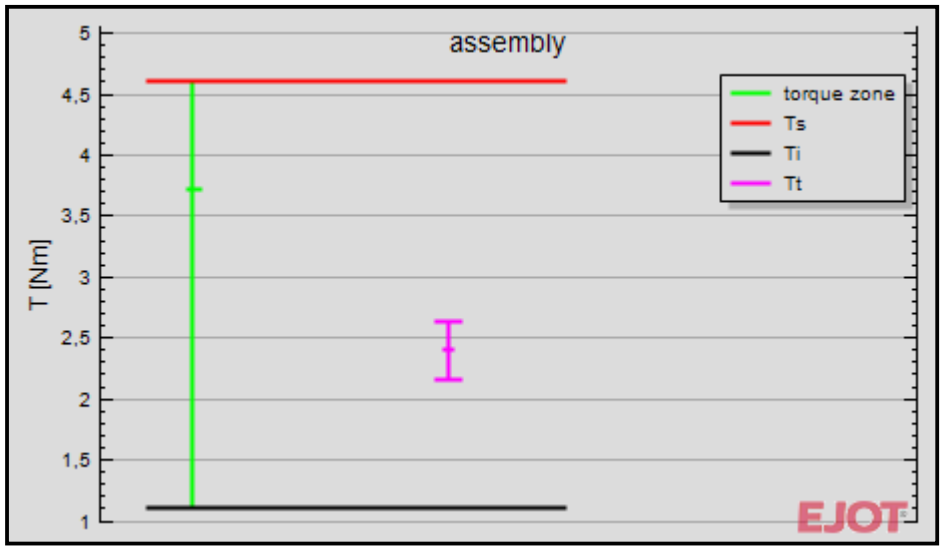
torques / forces (failure)	
installation torque (Ti) [Nm]	**1,1**
tightening torque (Tt) [Nm]	**2,4**
stripping torque (Ts) [Nm]	**4,6 (SB)**
clamp load at failure [kN]	**8,1**
pull-out load [kN]	**9,4 (SB)**

failure:
empty = female thread damaged
(SB) = screw fracture
(DK) = clamping part damaged

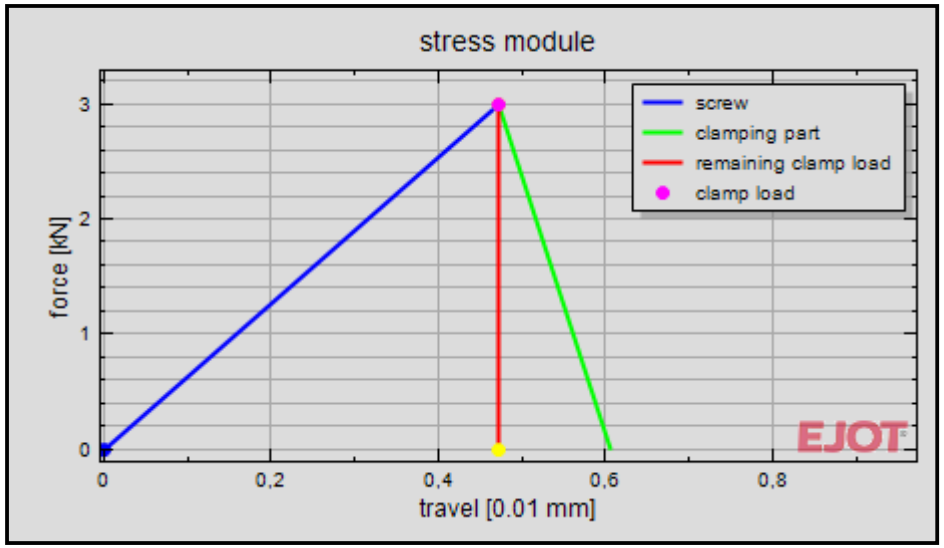


assembly	
average tightening torque (Tt) [Nm]	**2,4 (±0,2)**
average clamp load (Fv) [kN]	**3 (±0,6)**
use of torque zone [%]	**37**

tensions	
tension thread [N/mm²]	**120 (max: 340)**
tension head [N/mm²]	**47 (max: 340)**
tension counter-bore [N/mm²]	**118 (max: 340)**



stress module	
clamp load + operating load component screw [kN]	---
clamp load (Fcl) [kN]	**3**
remaining clamp load [kN]	**3**



messages (no warnings or errors)