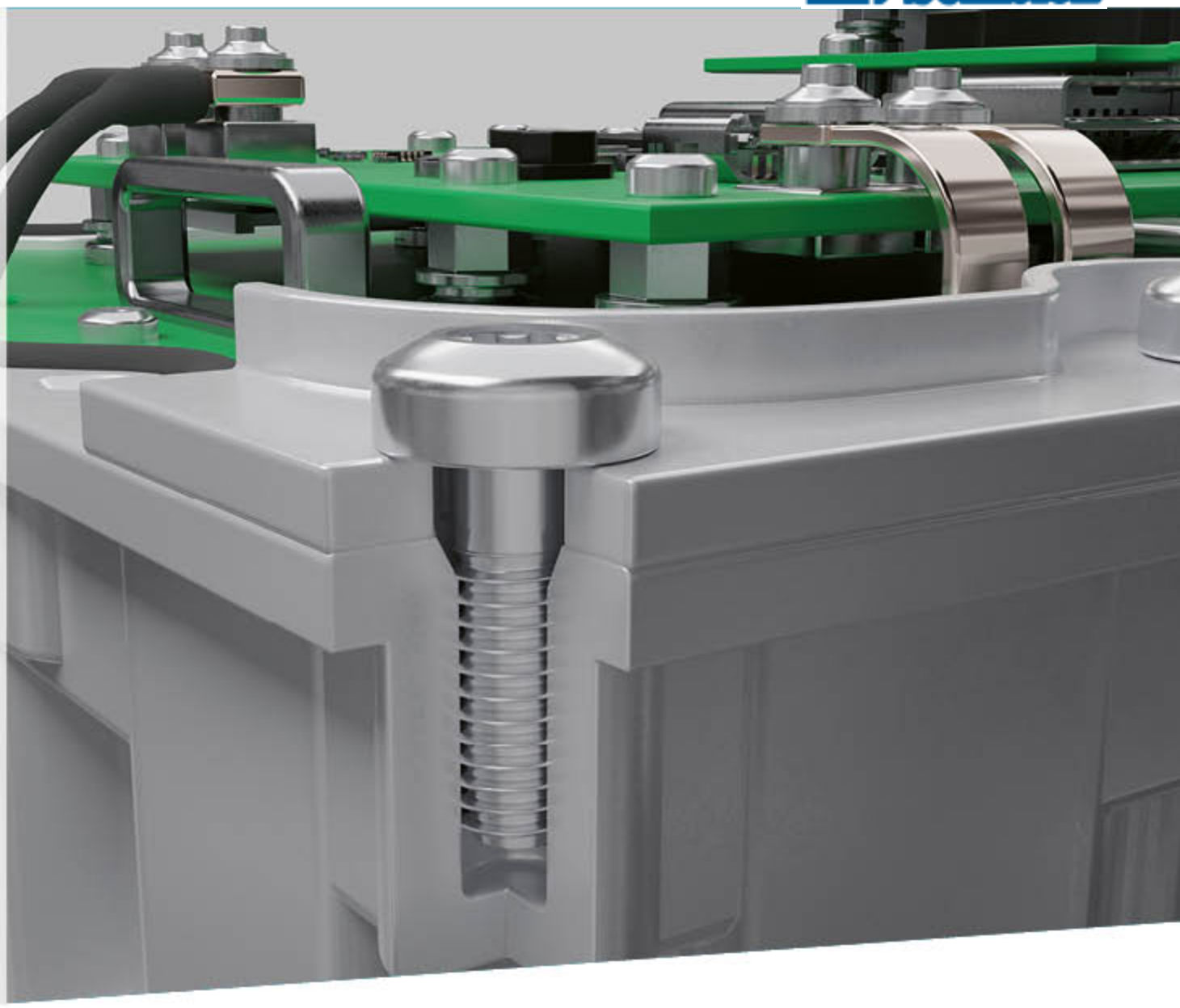
XtCALC®

EJOT® Semblex

ECONOMIC – SMART – COMPACT



Project: Sample Test

Creator: Russell D. Hendee

Bringing it together.

Project

Project name	Sample Test
Customer	ABC
Contact person	
Adress	
Phone	
E-mail	
Creator	Russell D. Hendee
Phone	682-286-1020
E-mail	rhendee@semblex.com
Remarks	
Report printed at	21. March 2025

Warranty

Our application engineering advice and all information is provided on the basis of today's state of technology. You are receiving information on our products and their methods of application. Certain characteristics or the qualification for certain application purposes cannot be guaranteed. As there may be different fastening criteria between our laboratory tests and your serial application, we recommend to check our indications for your special application. We kindly ask you to understand that our statements are without obligation and that we cannot give a guarantee for correctness.

Screw Information	
Screw	ALtracs® Xt 50x10
Head style	WN 3152 pan head / internal drive
Base layer	ISO 4042 /Zn8/An
Top layer	none
Lube	Microgleit DF 921
Thread diameter (d1)	5 mm
Head diameter (dk)	10 mm
Material	ALtracs Xt [AT10]

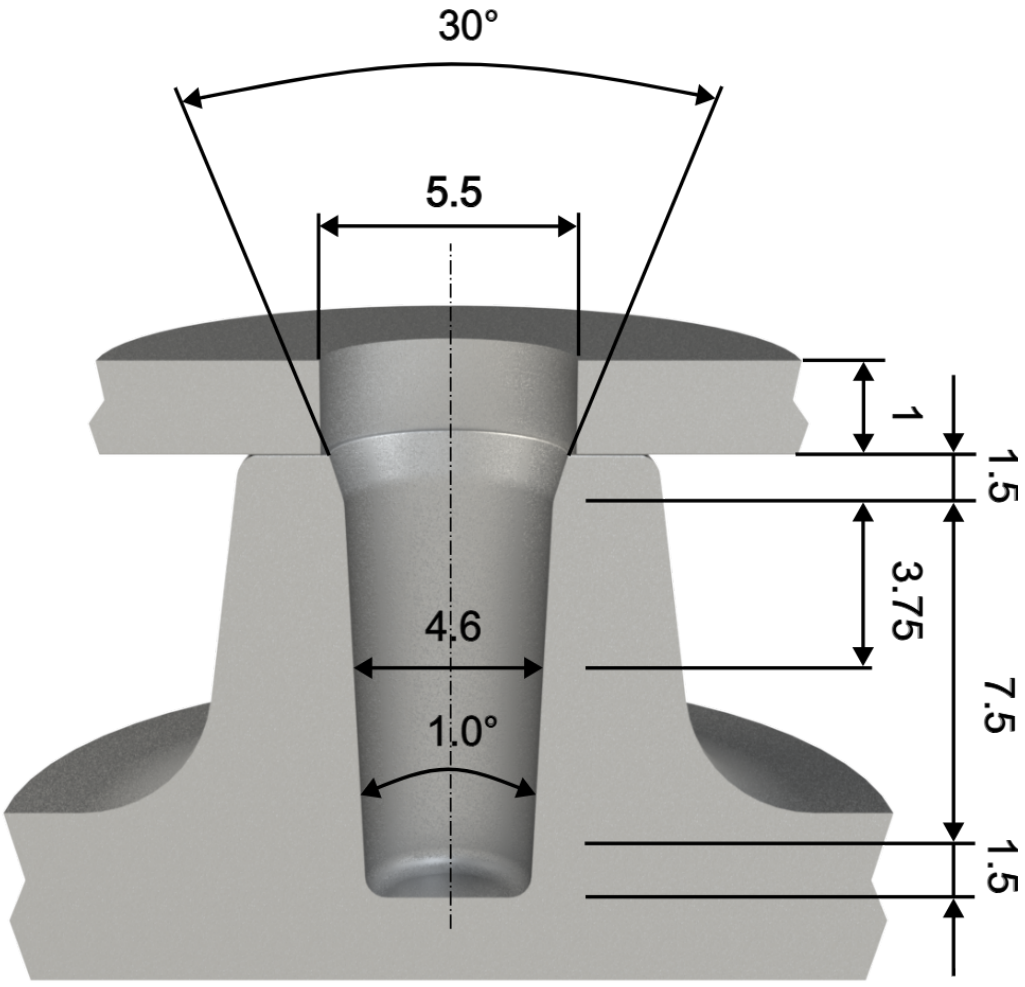
Installation part	
Installation material	Al die casting
Trade name	EN AC-46000
Hardness	80 HB
Installation depth (te)	7.5 mm
Draft angle	1°
Average hole diameter (dm)	4.6 mm
External boss diameter (dT)	9 mm
Relief angle	30°
Relief depth (ts)	1.5 mm
Relief diameter (de)	5.47 mm
Type of fastening	Blind hole

Clamping part	
Clamping part material	EN AC-46000
Trade name	
Clamping part thickness (lk)	1 mm
Clearence hole diameter (dh)	5.5 mm
Type of clearence hole	Round hole

Specifications

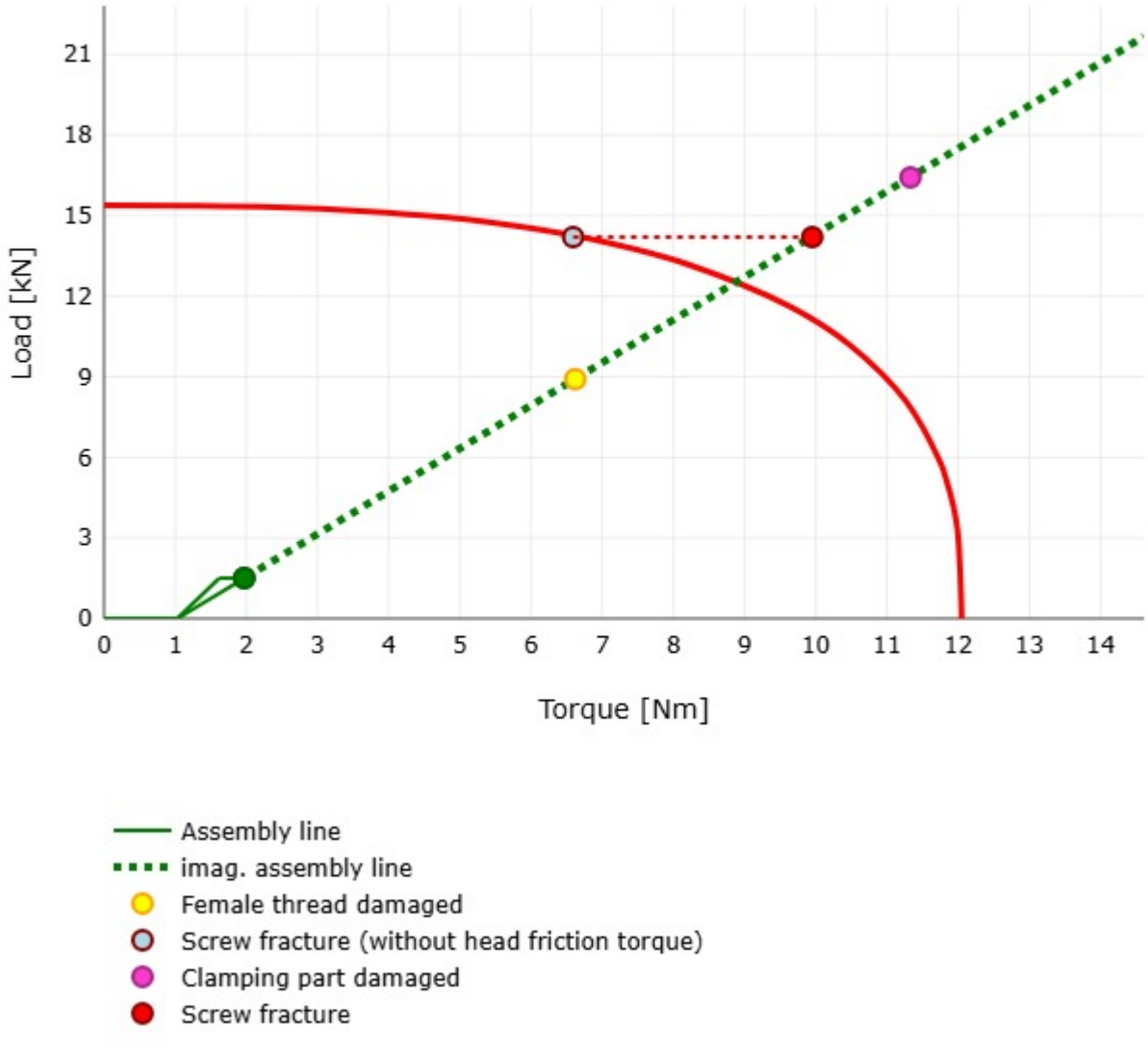
Clamp load (Fcl)	1.5 kN
Axial operating load (Fa)	0 kN
Screwdriver speed (forming)	500 rpm
Screwdriver speed (tightening)	50 rpm
Screwdriver tolerance	10 %

Construction recommendation



Torques / Forces	
Installation torque (Ti)	1.03 Nm
Tightening torque (Tt)	1.97 Nm
Clamp load (Fcl)	1.5 kN
Stripping torque (Ts)	6.64 Nm
Failure at Ts	
Clamp load (Fcl) at failure	8.92 kN
Pull out load (Fz)	9.18 kN

Torques / Forces Diagram



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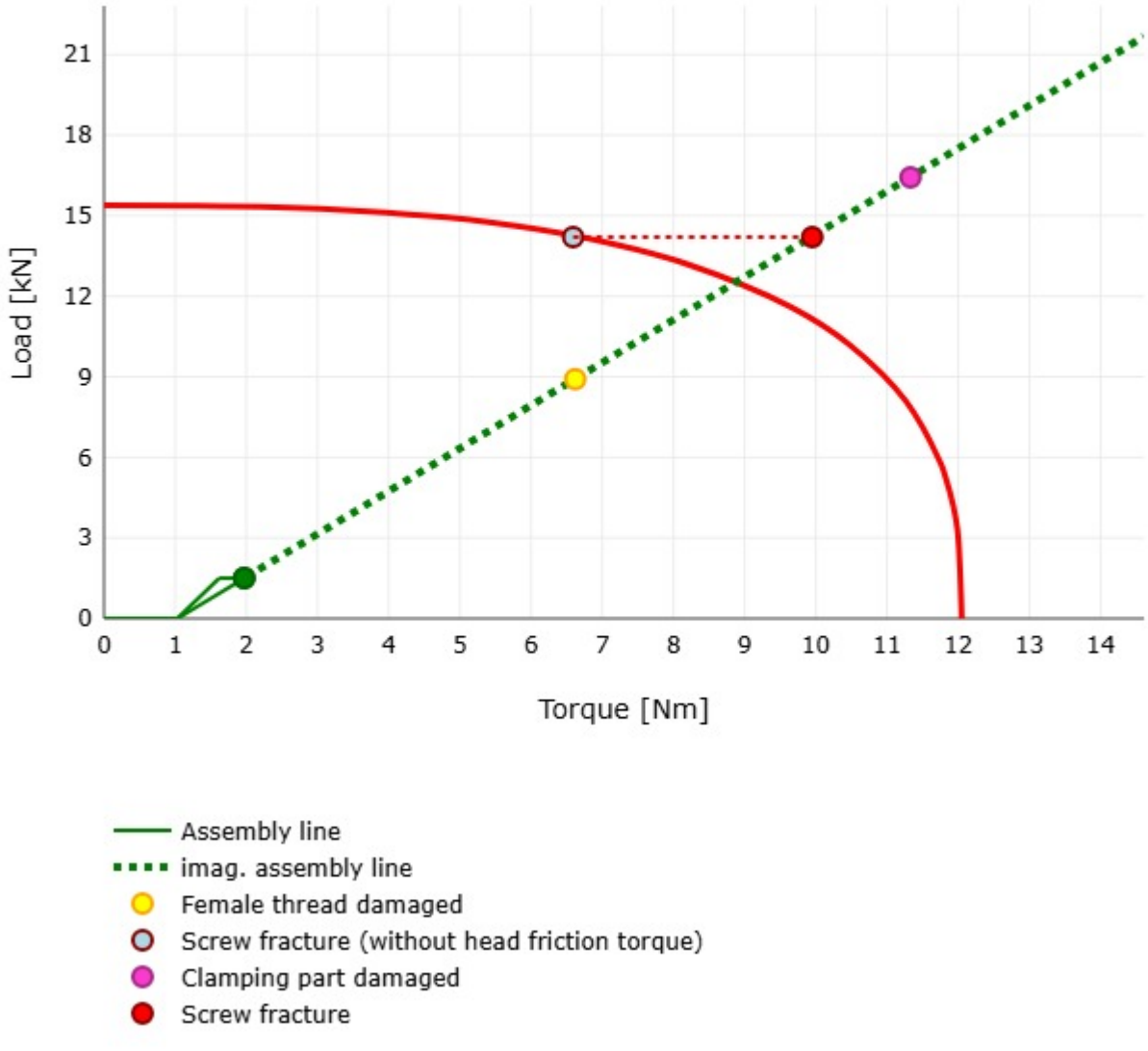
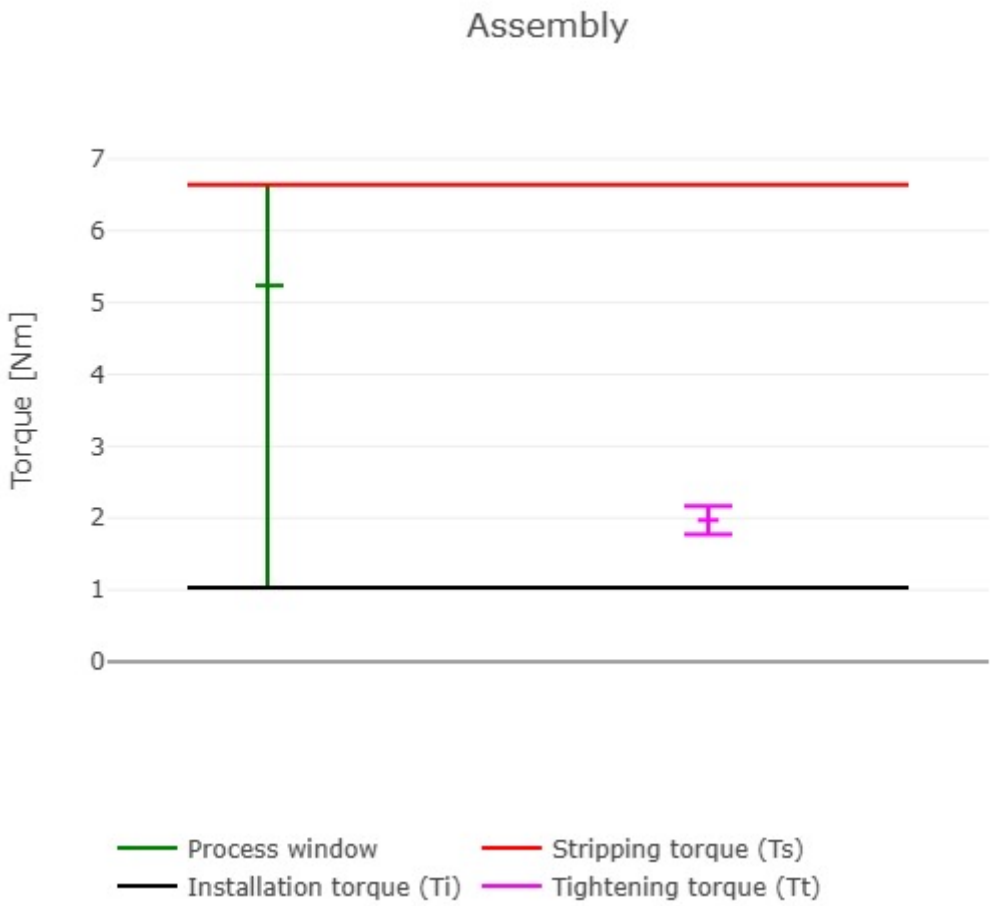


Assembly	
average tightening torque (Tt avg)	1.97 Nm ±0.2 Nm
Clamp load (Fcl)	1.5 kN ±0.31 kN
Process window	17 %



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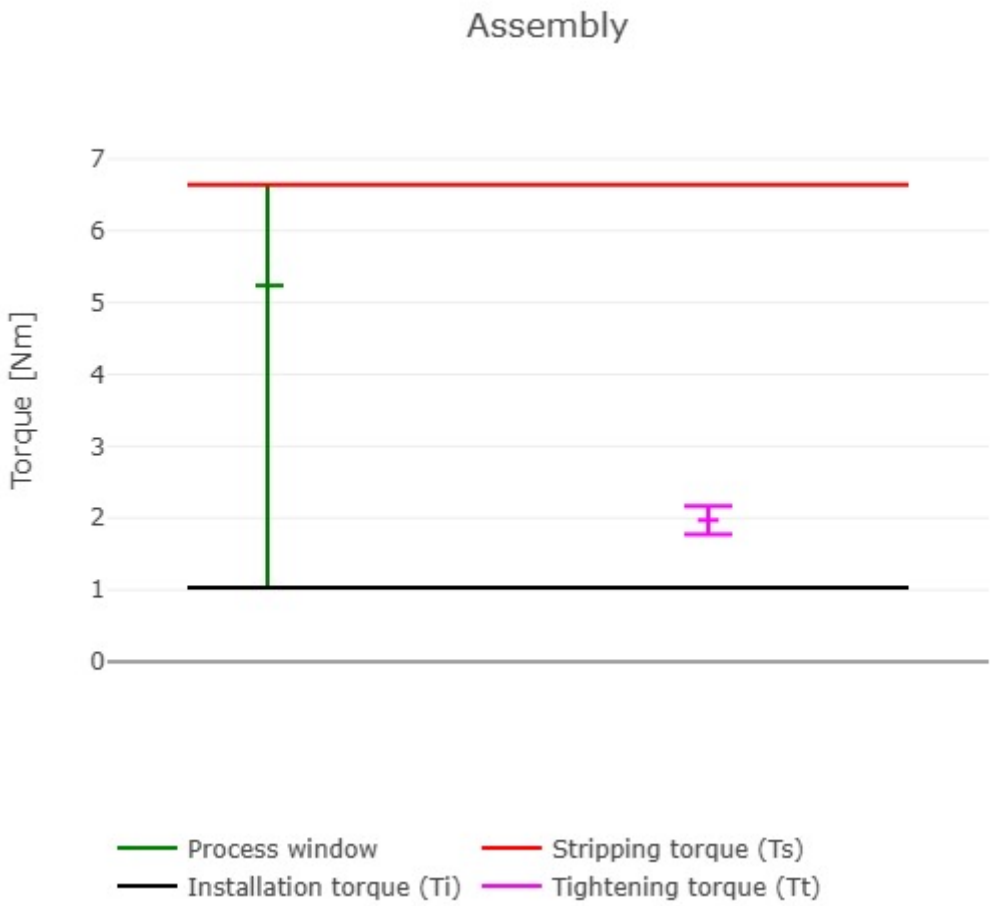

Stresses

Thread	42 N/mm² (Max. 300)
He	
Co	

Di

Cl	
Cl	
Re