



DESIGN GUIDELINE

„reduce workload“

„use resources to adapt competences“

Design Guideline Arguments

- **harmonize work result**
 - **“Cooperate Identity”**
 - **quality**
 - **content**
- **harmonize processes**
 - **user oriented software**
 - **usages optimized functionalities**
- **enhance data quality**
 - **enhance 3-D model handling**
 - **enhance 2-D drawing handling**
- **external engineering process basics**

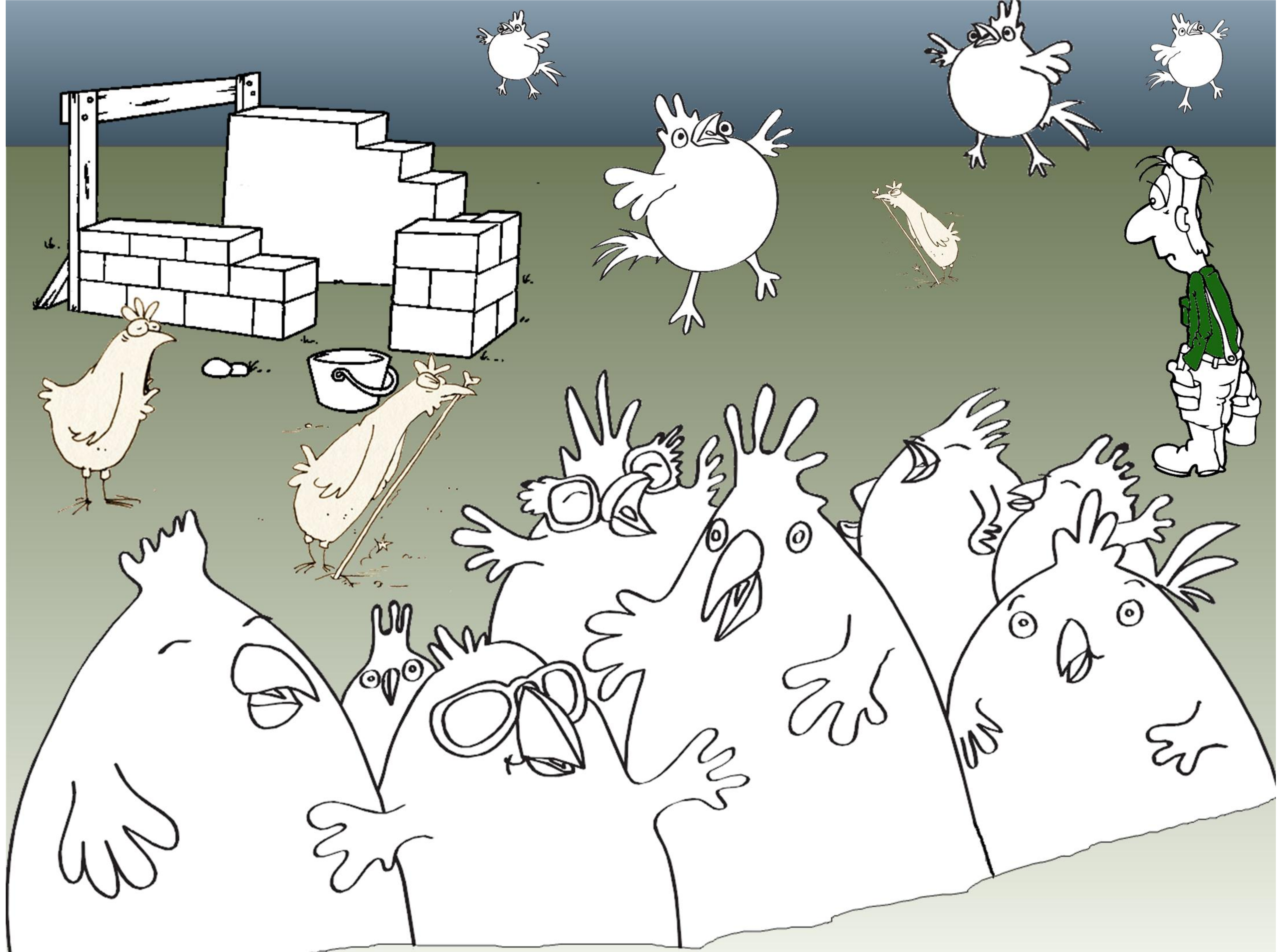
Design Guidelines Counter-Argument

- **not needed – why now?**
- **no time to spend**
- **a lot of work**
- **no resources**
- **Implemented processes are efficient**
- **“everything” is defined**

Late night at Friday a farmer complains at his group of regulars

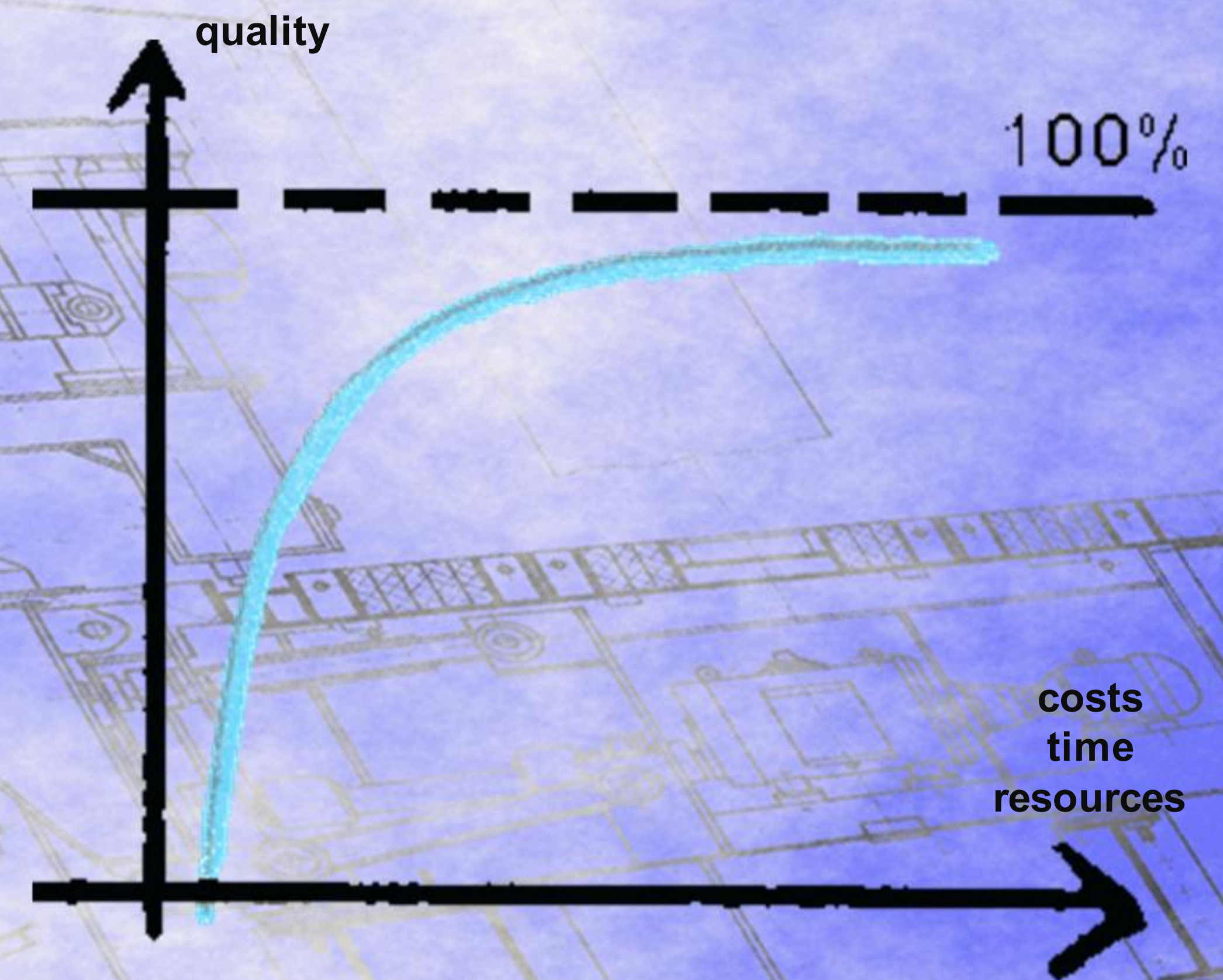
- **has too much time to pay attention on his chicken**
- **no time to build up his chicken compound**





Process optimization

- **new working method**
- **new processes**
 - **infrastructure**
- **new functionalities**
- **new Software / Tools**
 - **CAD / CAx / PDM / PLM / ERP**



Definition to implement new Requirements

- **new Software requires new implementations**
- **user oriented software / processes**
- **infrastructural requirements**
- **process change**

Special Chapter standard and catalog parts

feasible

essential

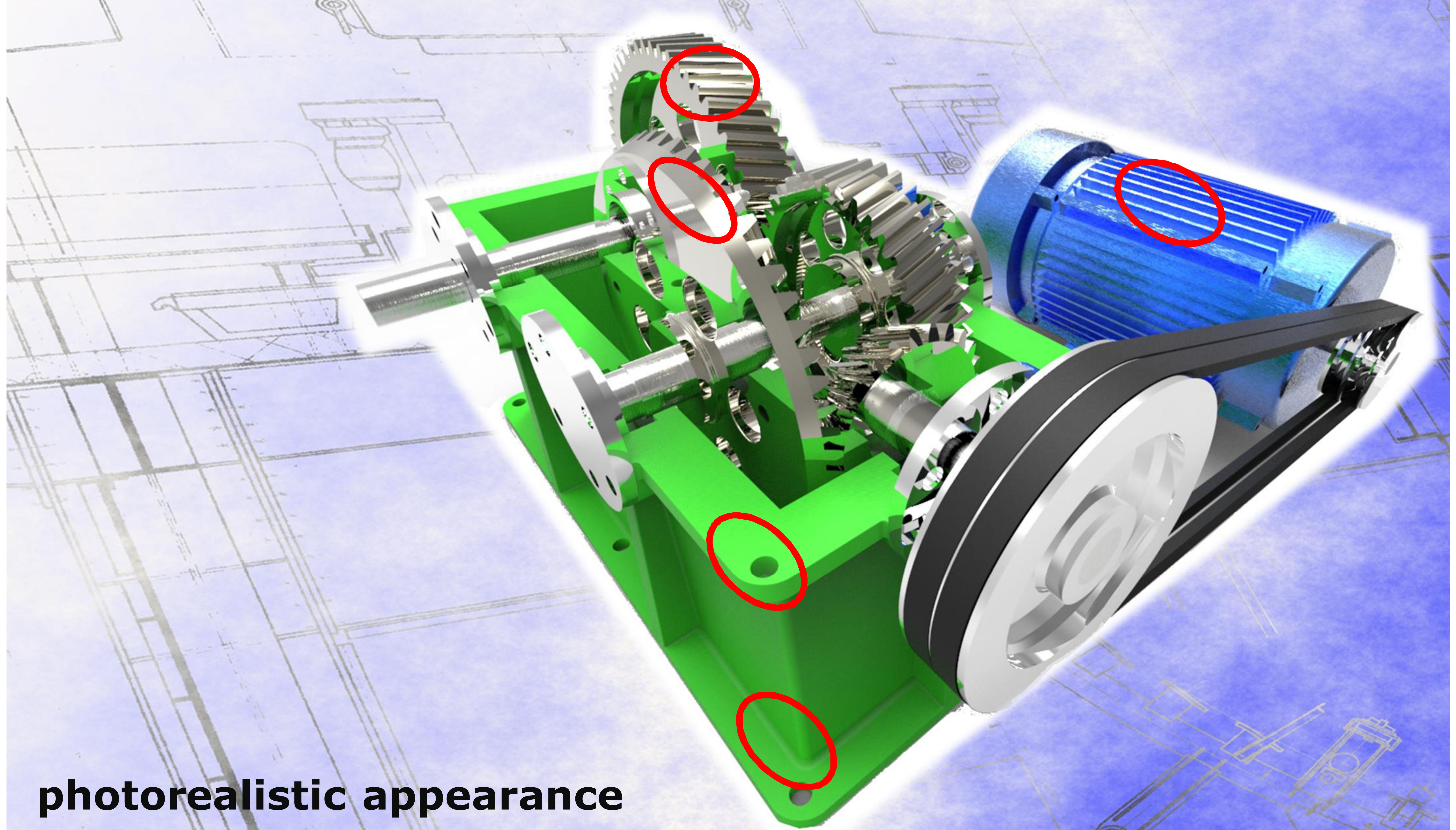
**Visual
appearance**

efficiency

detailed

≠

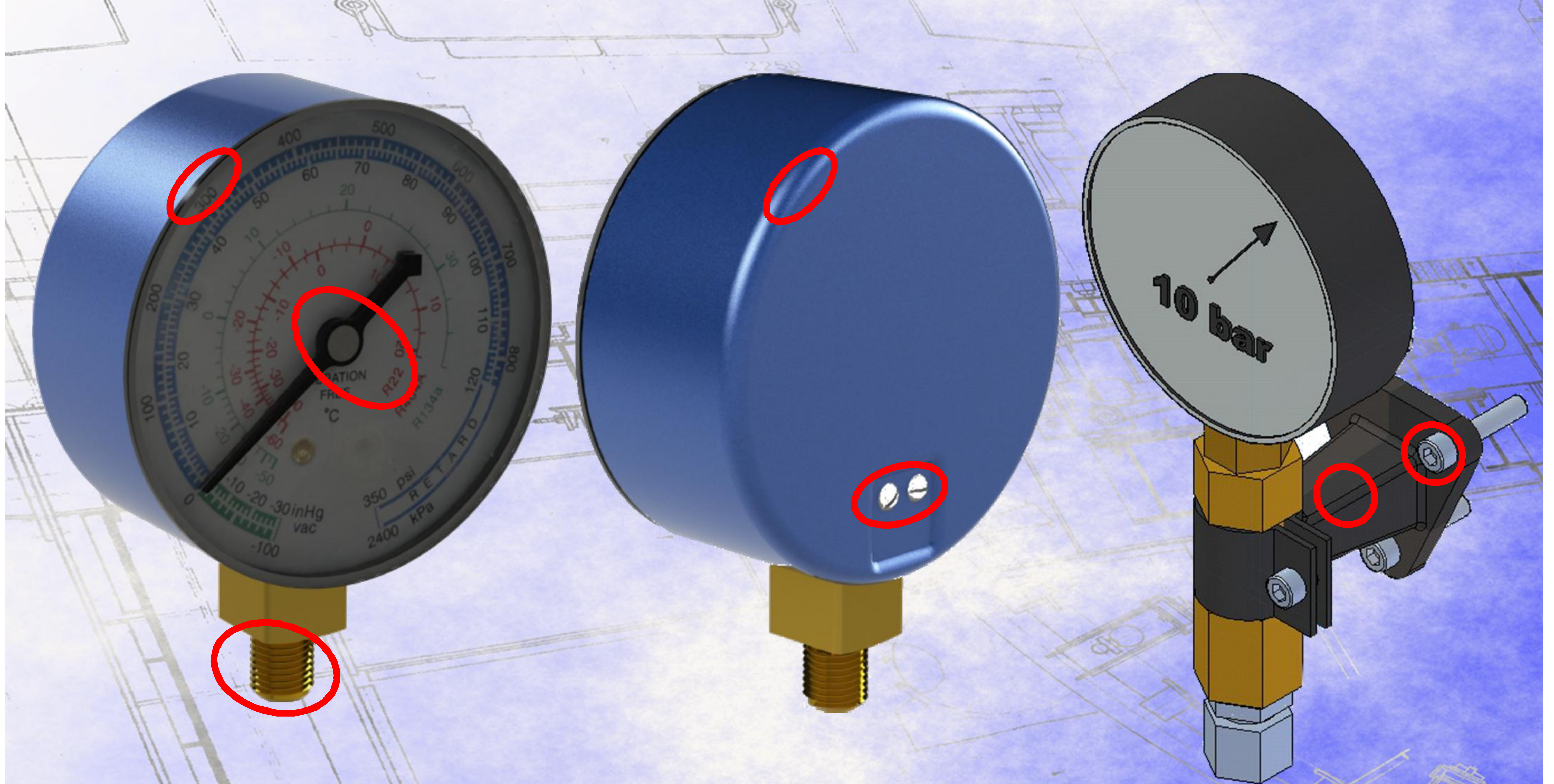
simplified



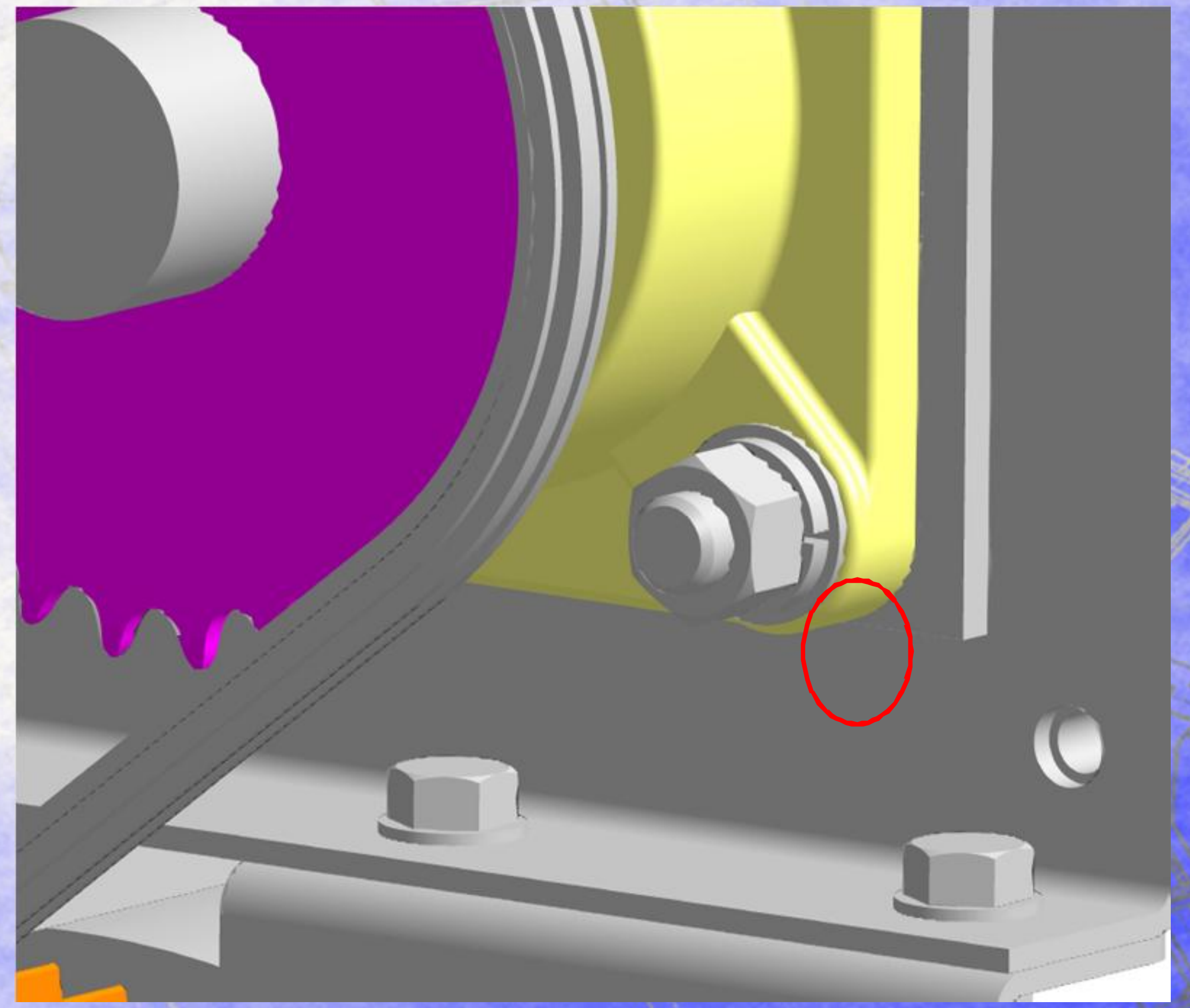
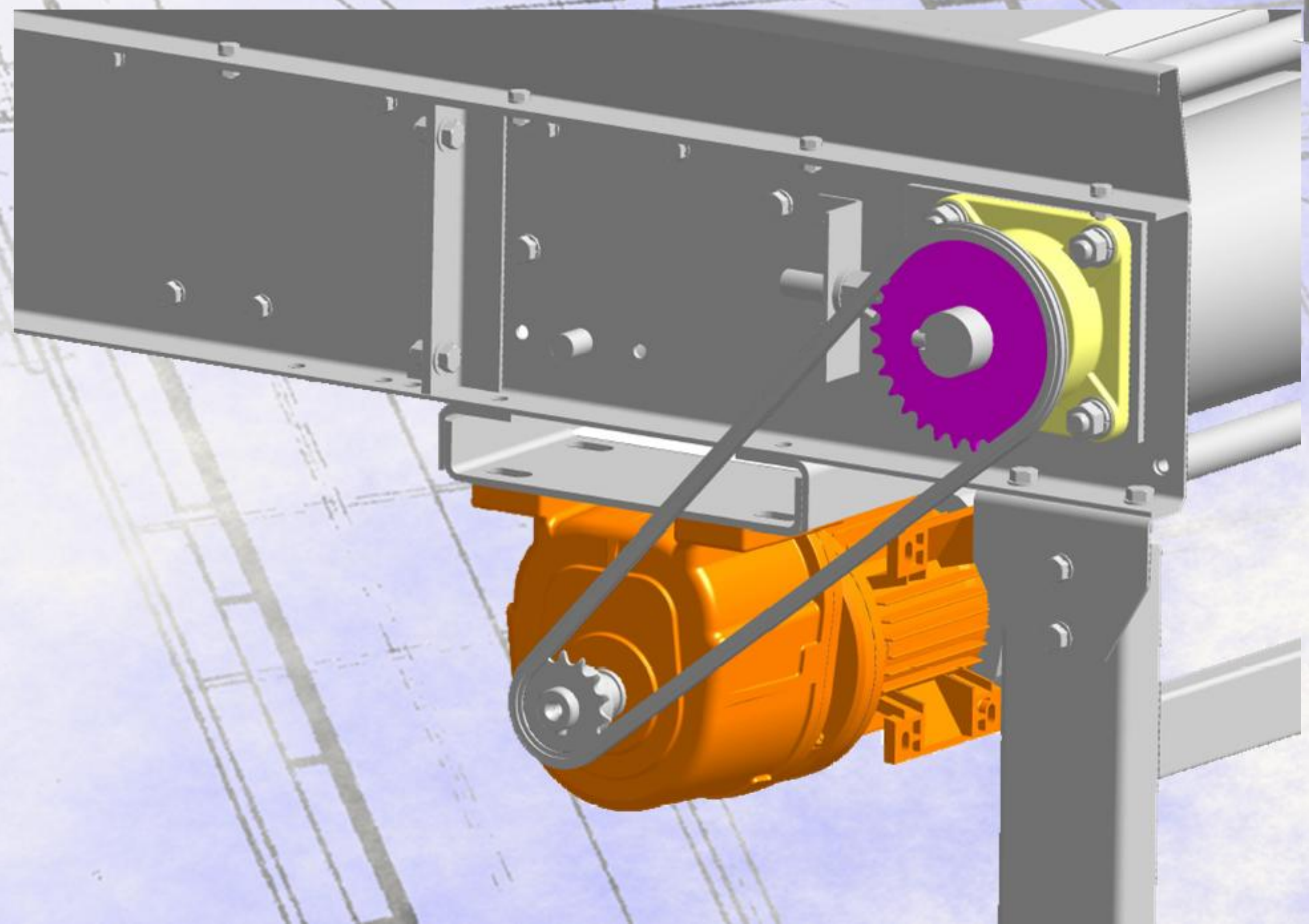
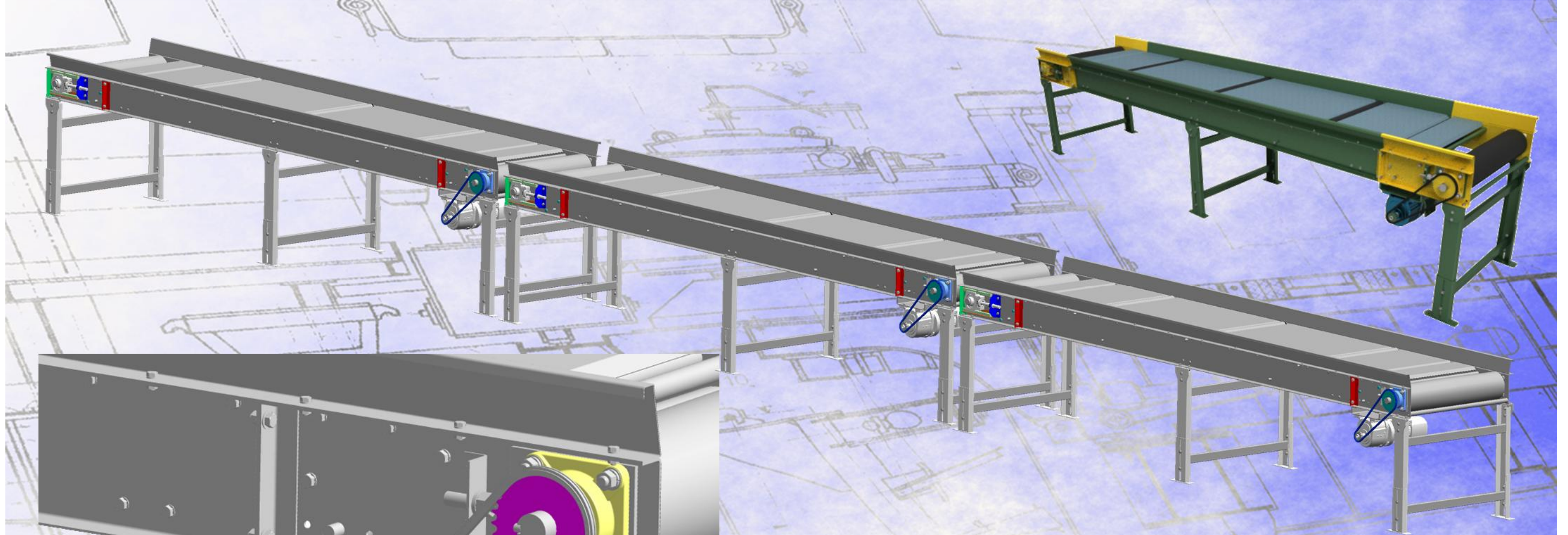
photorealistic appearance

blends and chamfer

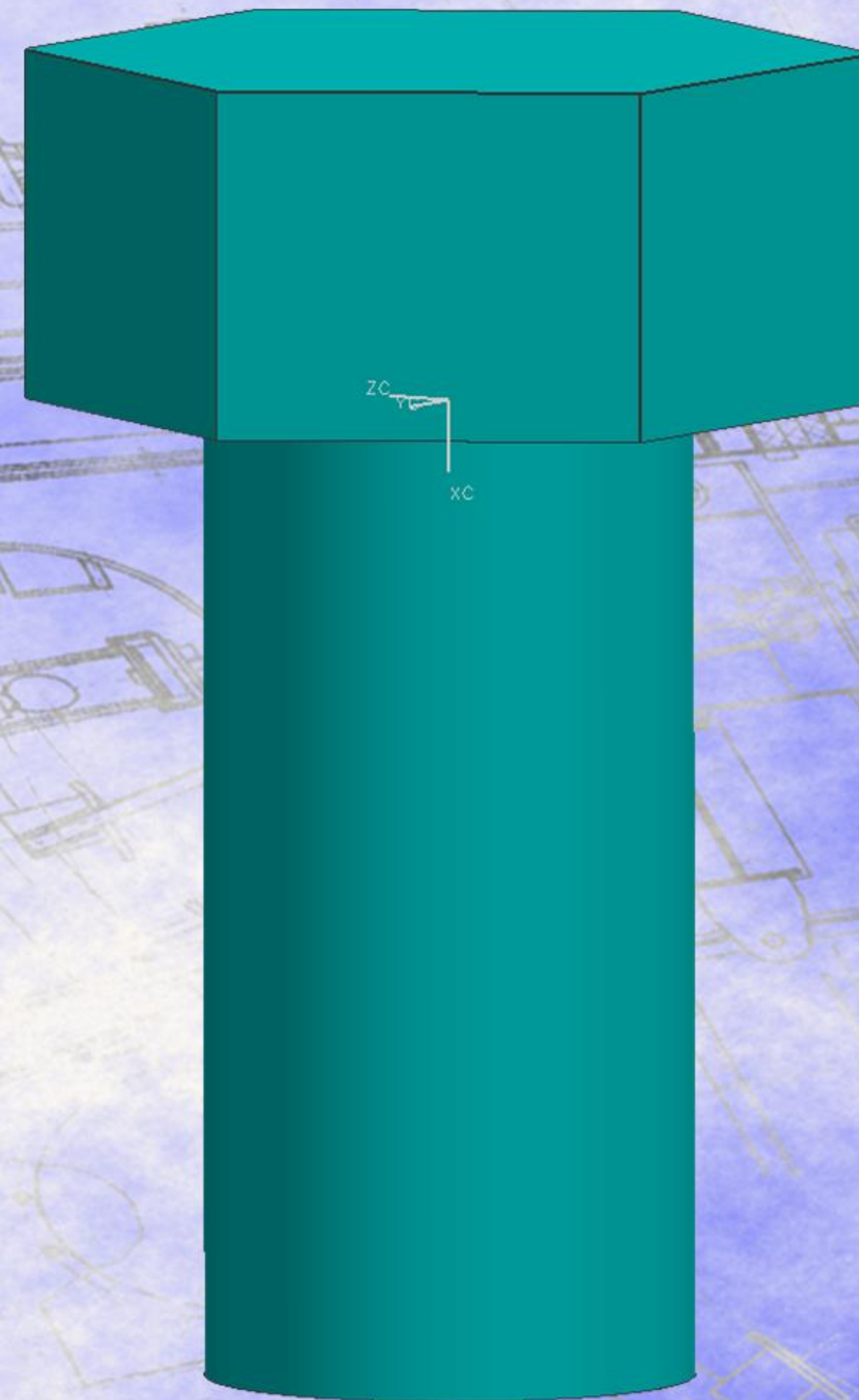
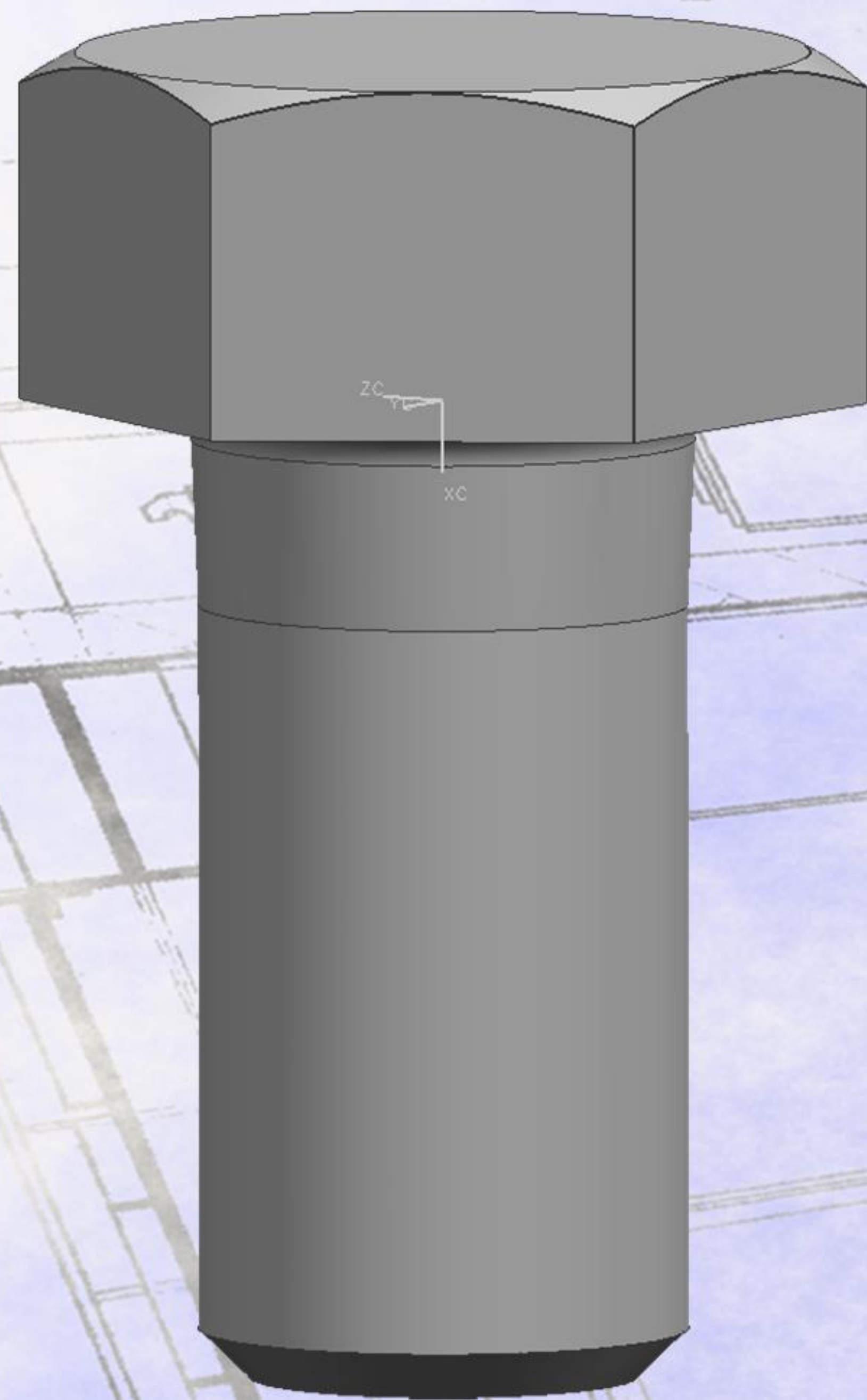
details (cooling rib, tooth, drilled holes)



photorealistic appearance
tapped bolt
details (small screws, blends)



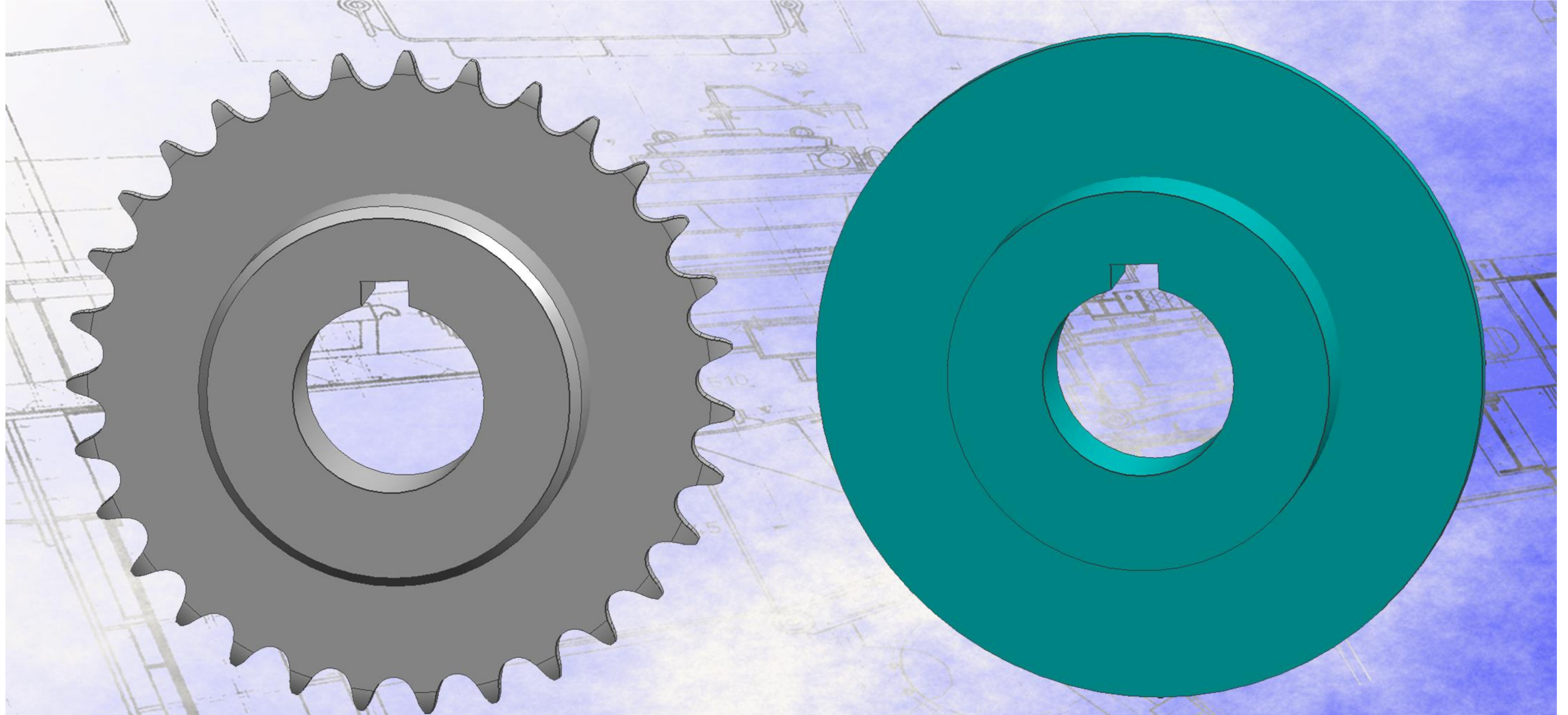
re-use
multiple use



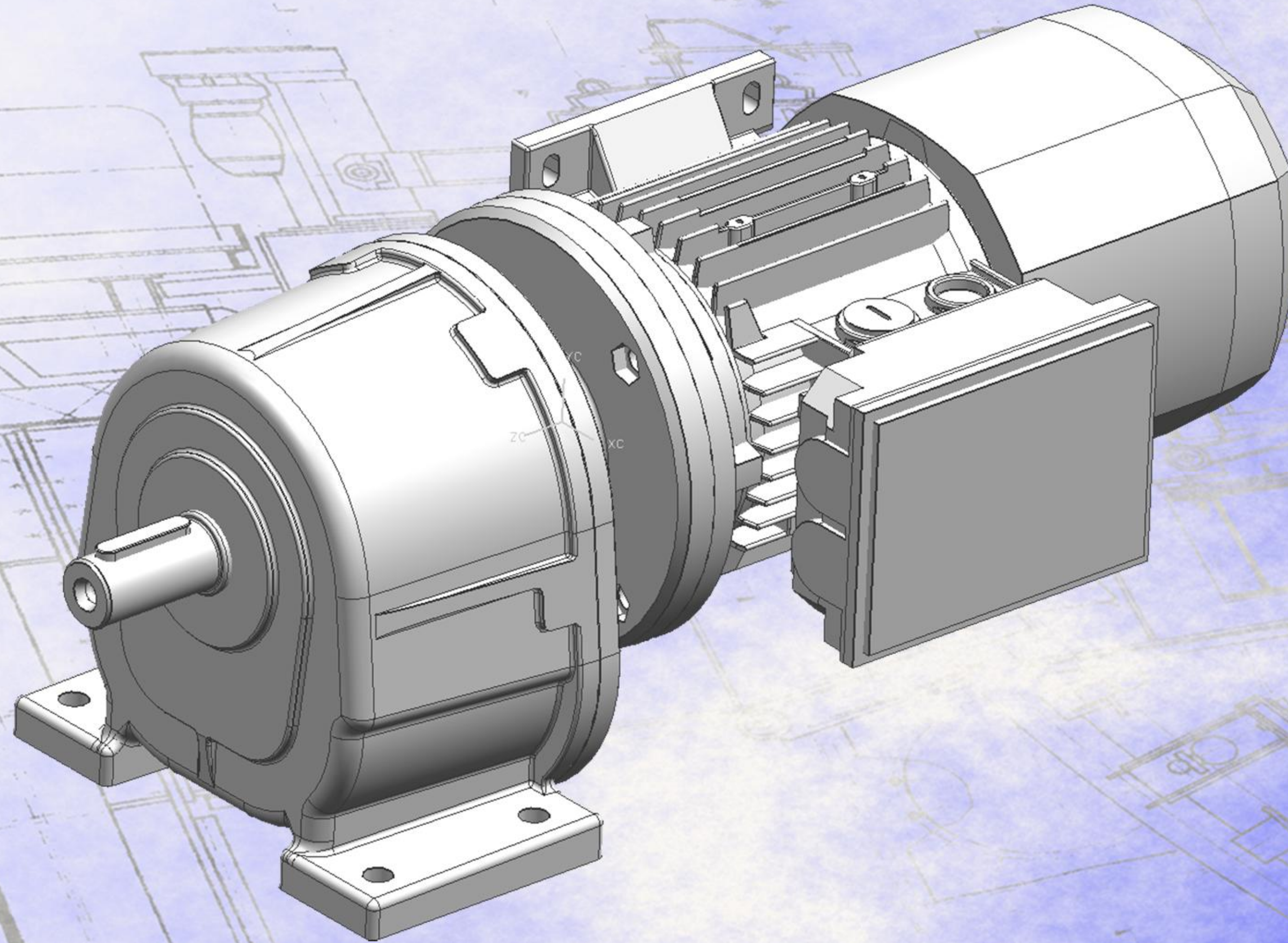
Visualization of hexagon bolt screw

detailed - 26 faces

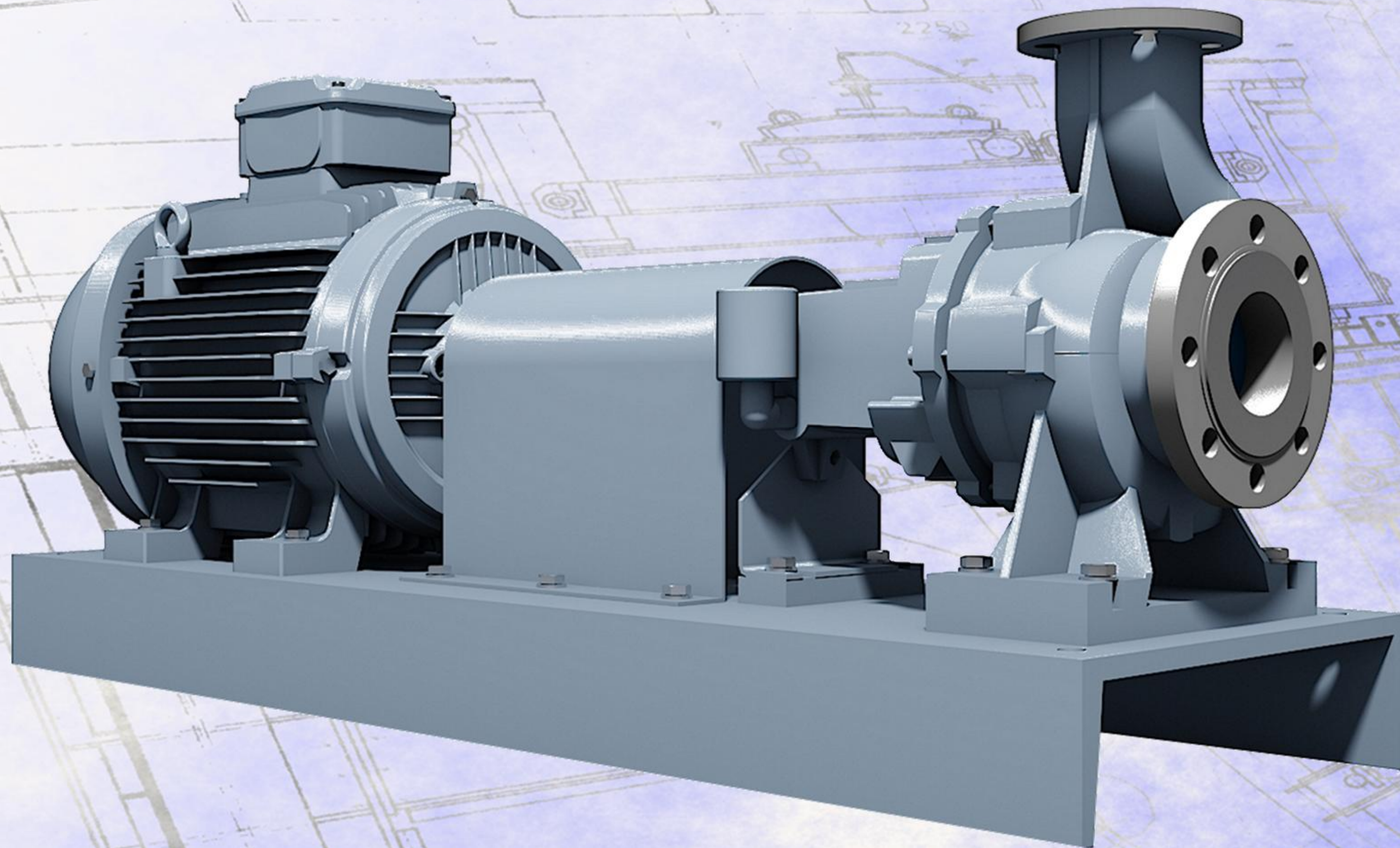
Simplified - 10 faces



Visualization of chain wheel
detailed - 319 faces
simplified - 9 faces

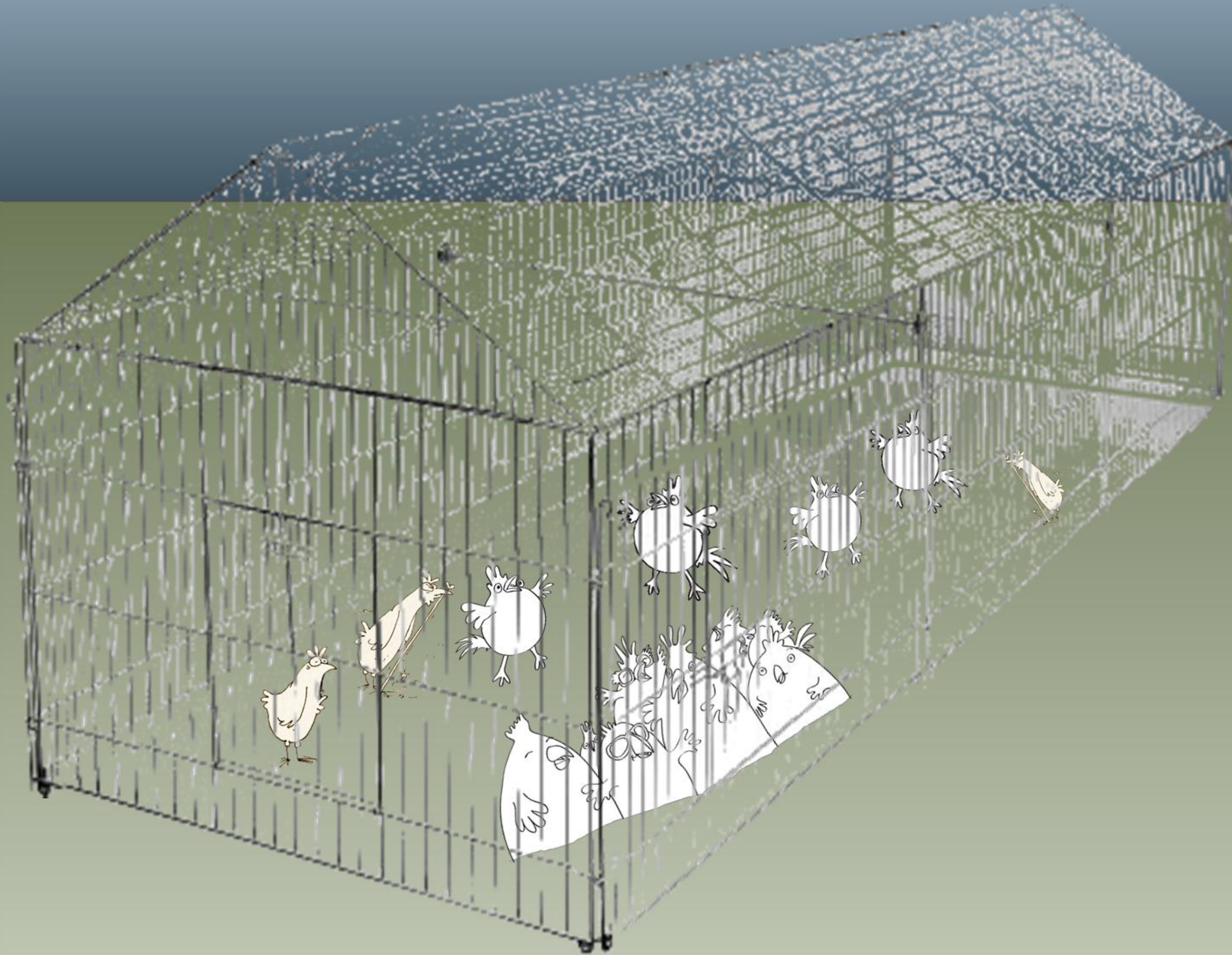


Visualization of gear box motor
detailed - 2348 faces
simplified - ??? faces



Detailed representations are needed for photorealistic appearance .

Simplified representations are needed for reuse and multiple use in large assemblies.



Thank you!



Klaus Pesendorfer
Voglhüb 11
A - 4671 Aichkirchen



klaus.pesendorfer@pedo.co.at

<https://twitter.com/klauspesend>



www.pedo.co.at
www.klauspesendorfer.com
www.konstruktionsrichtlinie.com



www.klauspesendorfer.com/forum

