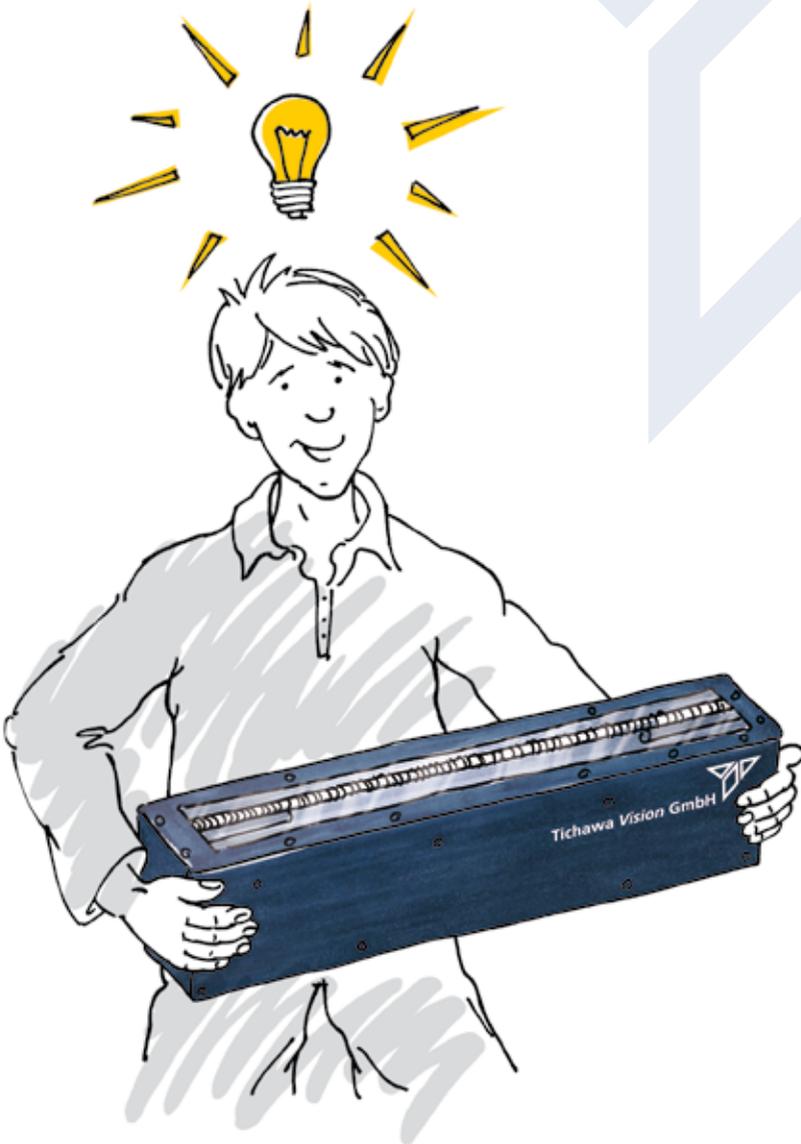


# CIS User's Guide



Tichawa *Vision* GmbH



|  | <i>Page</i> |
|--|-------------|
| Preparation                              | 3           |
| Unpacking & Handling                     | 9           |
| Mechanical Installation                  | 14          |
| Electrical Installation                  | 17          |
| CIS / Frame Grabber Connection and Setup | 22          |
| Operation                                | 25          |
| Maintenance                              | 28          |
| Illumination Safety                      | 30          |
| Returns                                  | 31          |

Impressum:



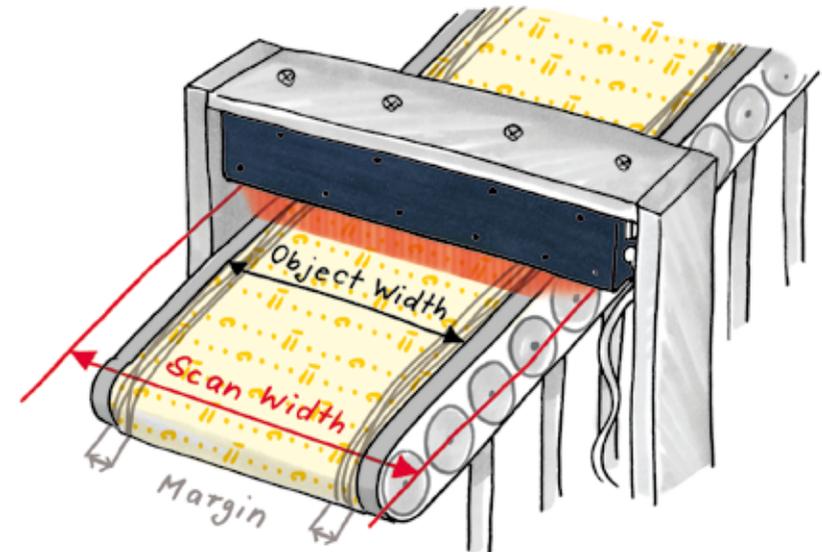
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©Illustrations: www.karin-bauer.com  
 Layout: www.morawetz-grafik.de

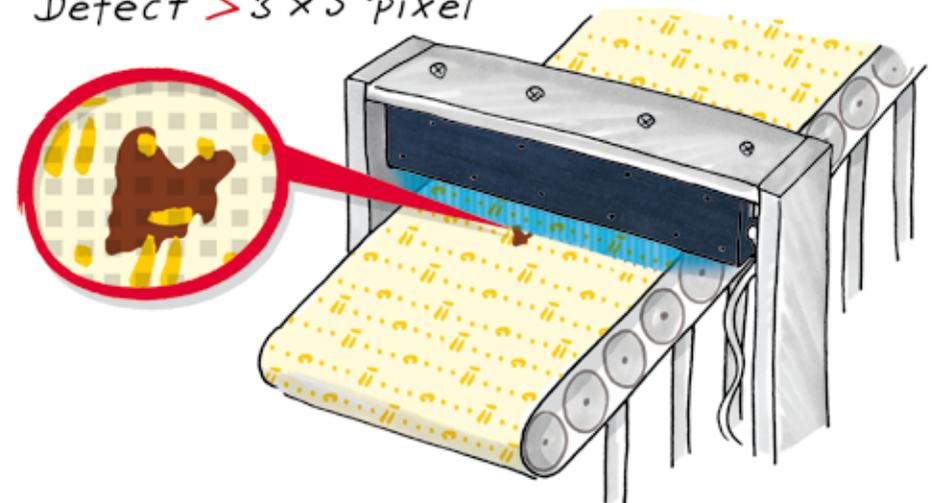
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### Scan Width > Object Width + Margin



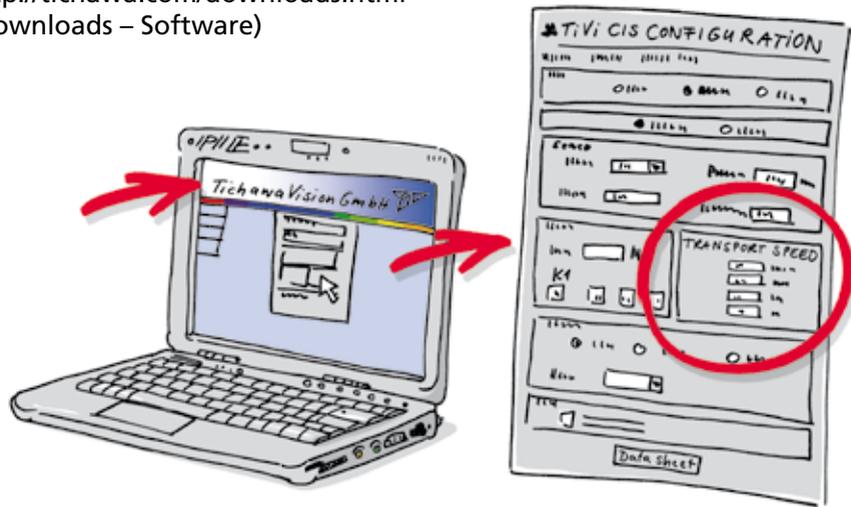
### Resolution

*Defect > 3 x 3 pixel*

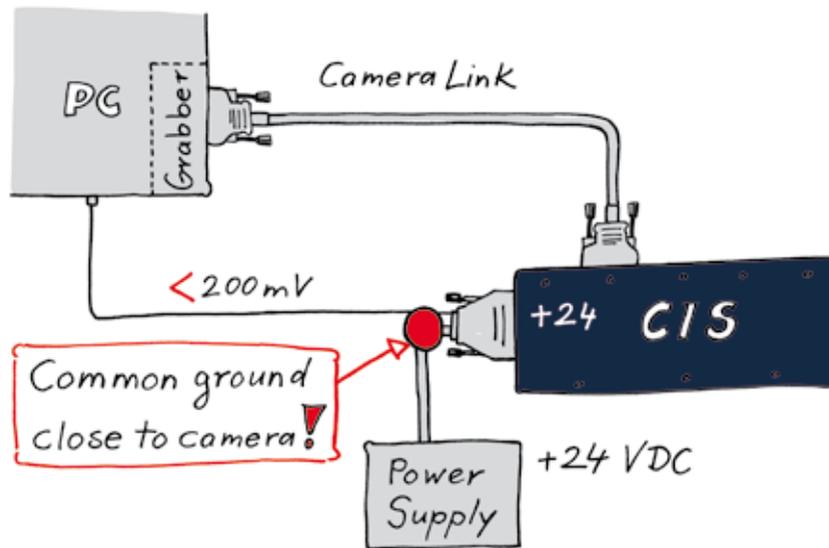


### Transport Speed

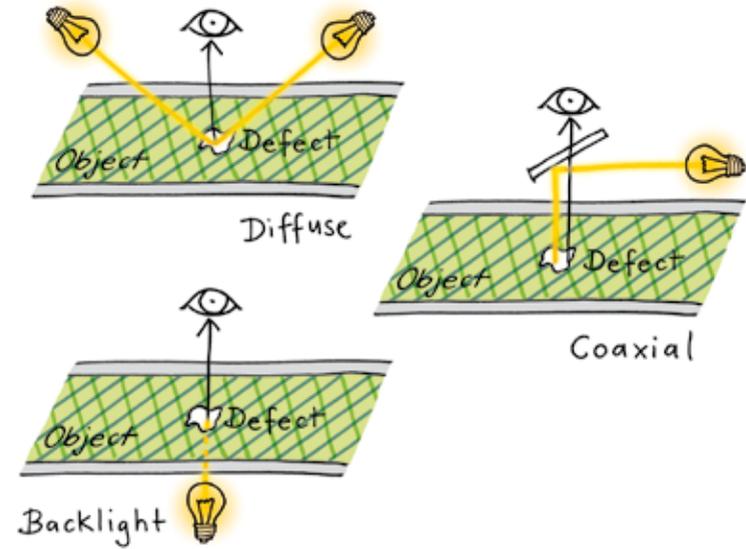
<http://tichawa.com/downloads.html>  
(Downloads – Software)



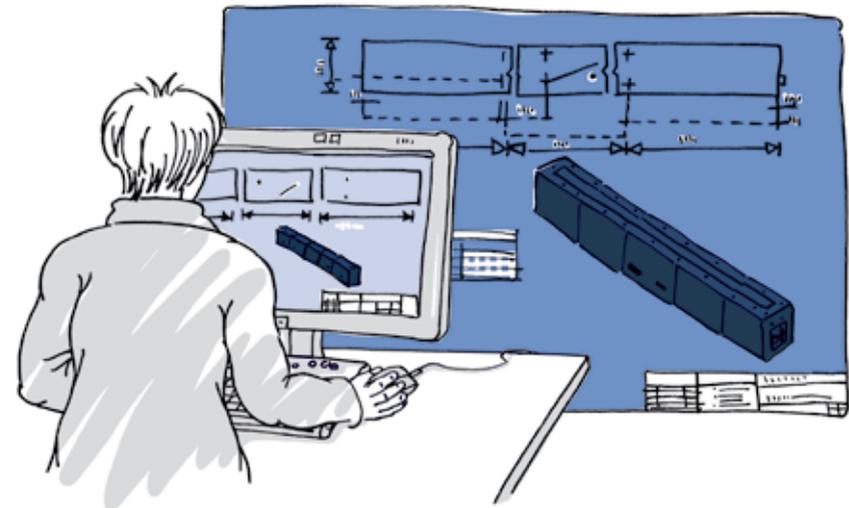
### Proper Wiring



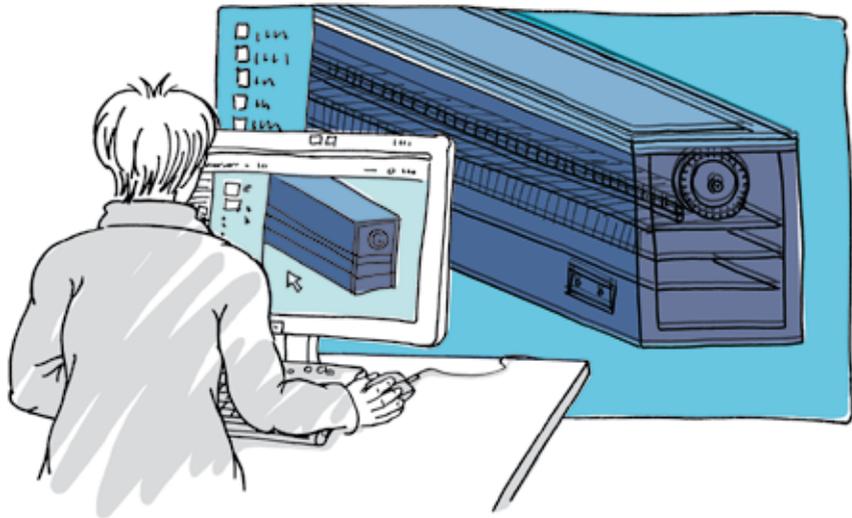
### Illumination



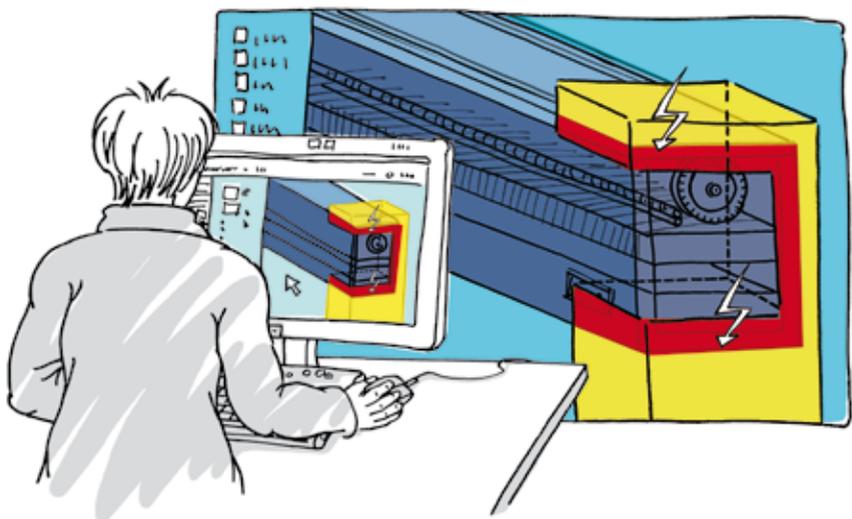
### View Parametric Drawing



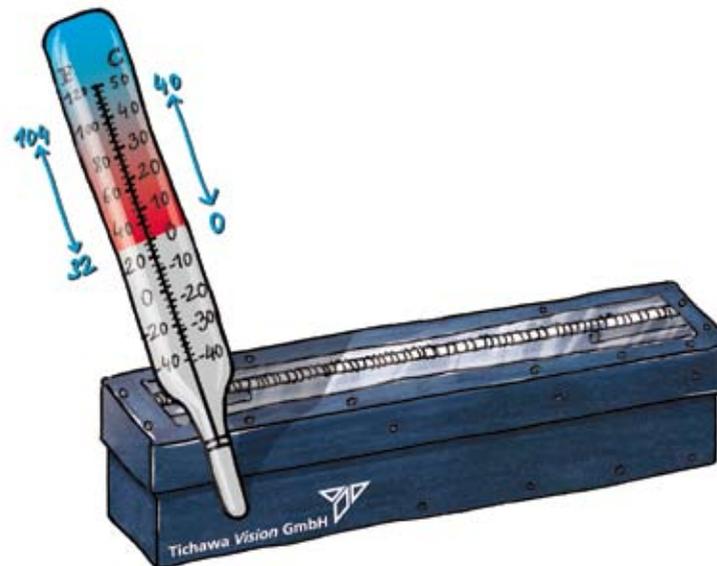
### View STEP File



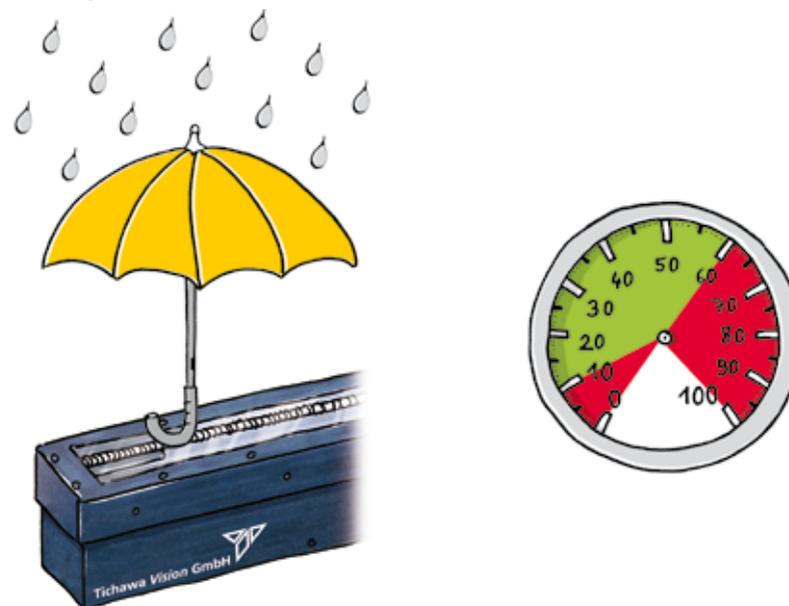
### Integrate STEP File into your model



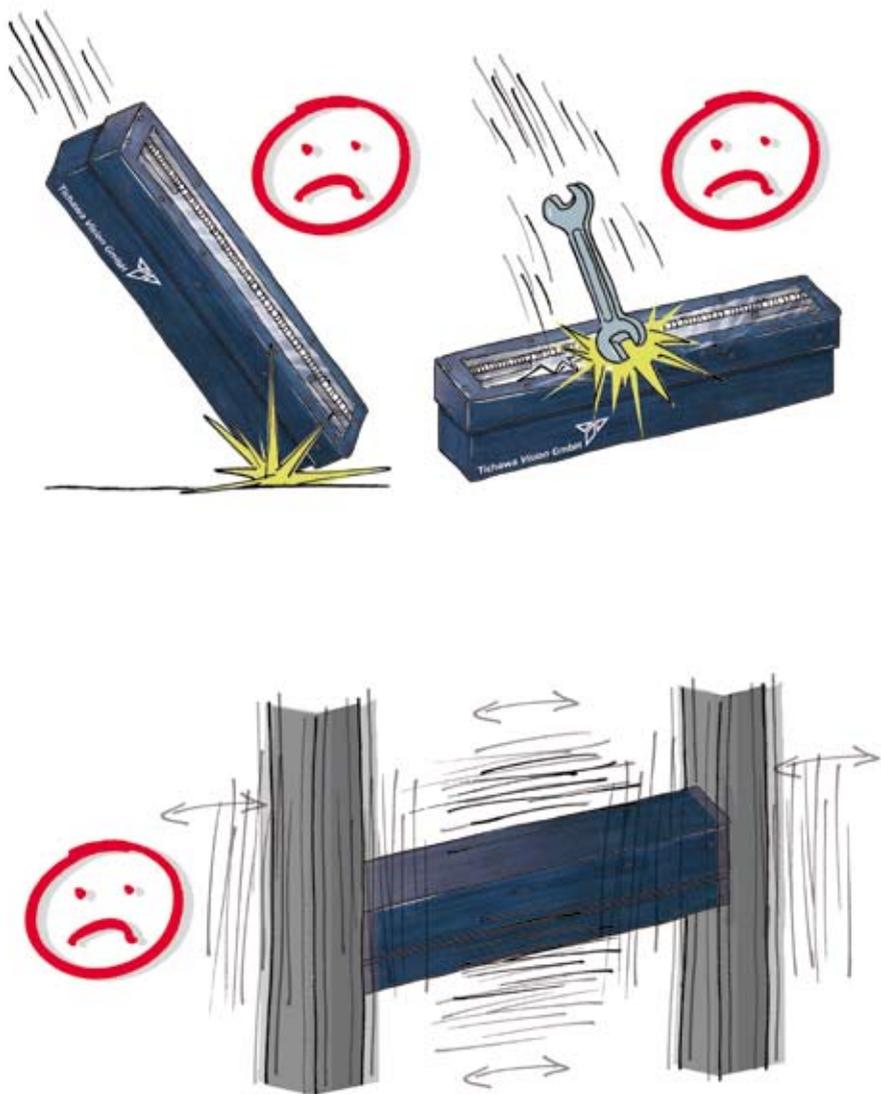
### Case Temperature



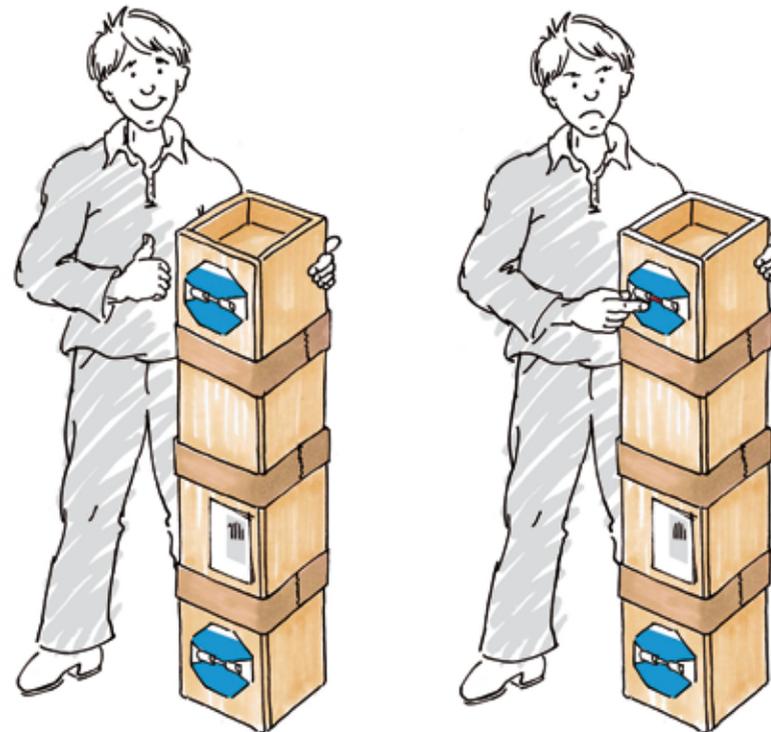
### Humidity



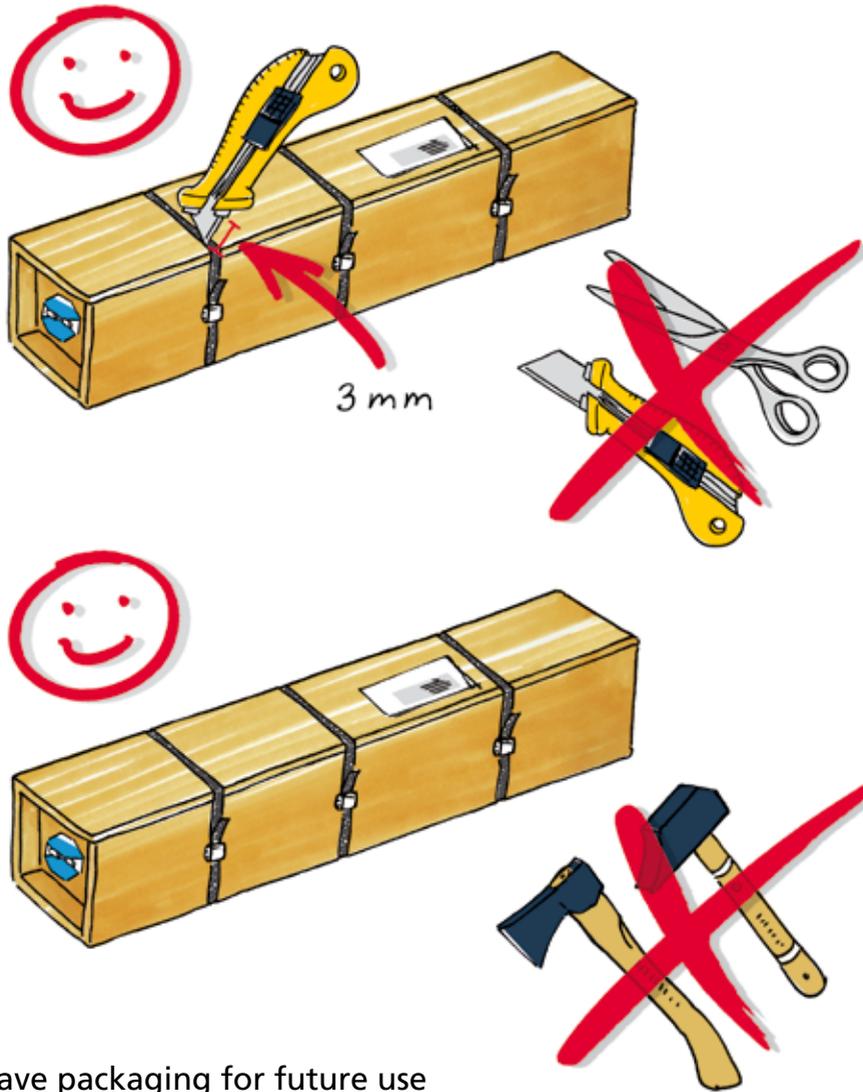
### Shock & Vibration



### Check Shockwatches

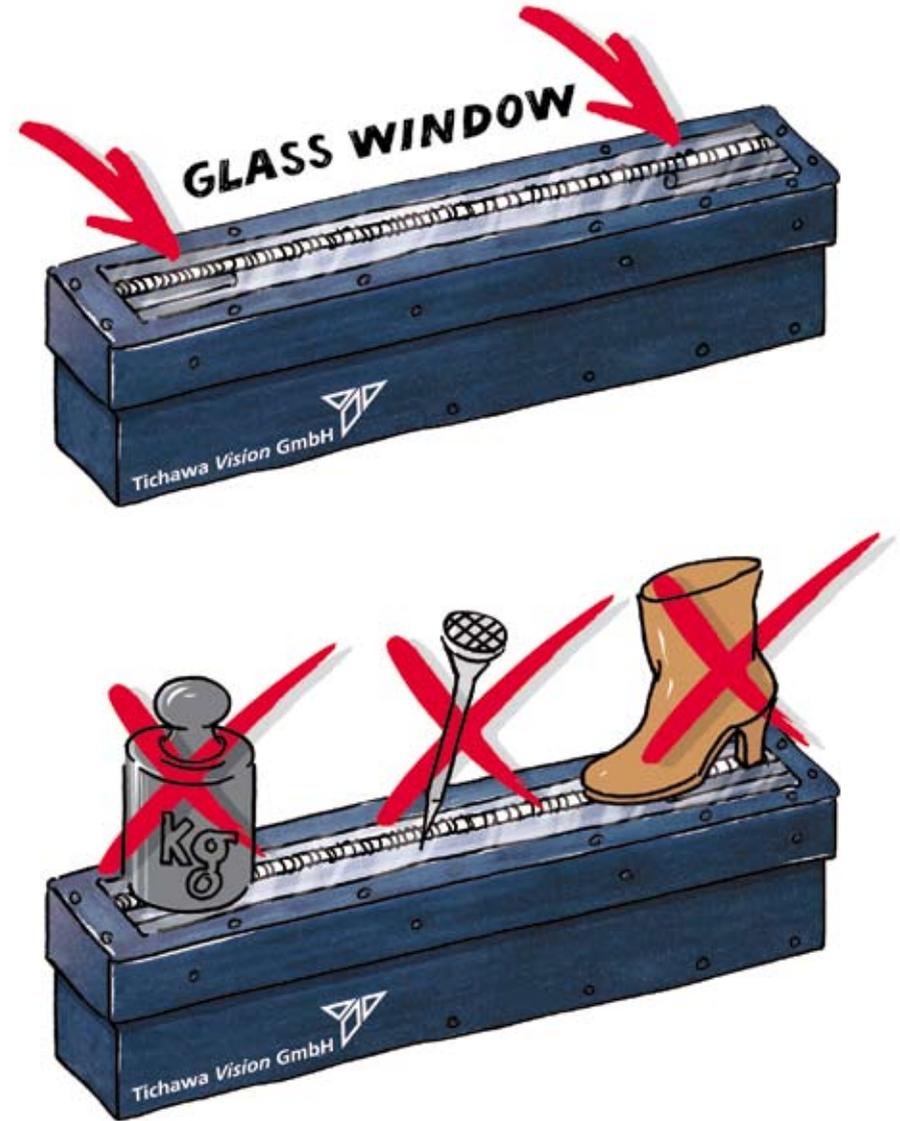


No long knives, scissors, axes or hammers



Save packaging for future use if repairs are necessary

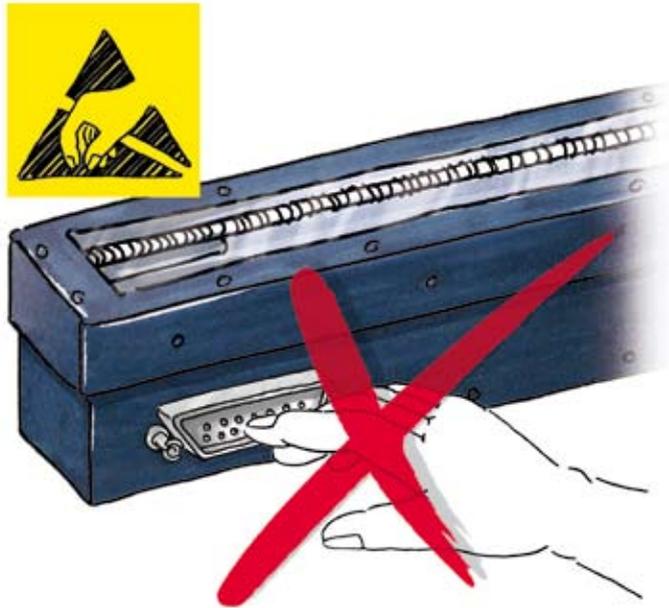
Protect Glass Surface



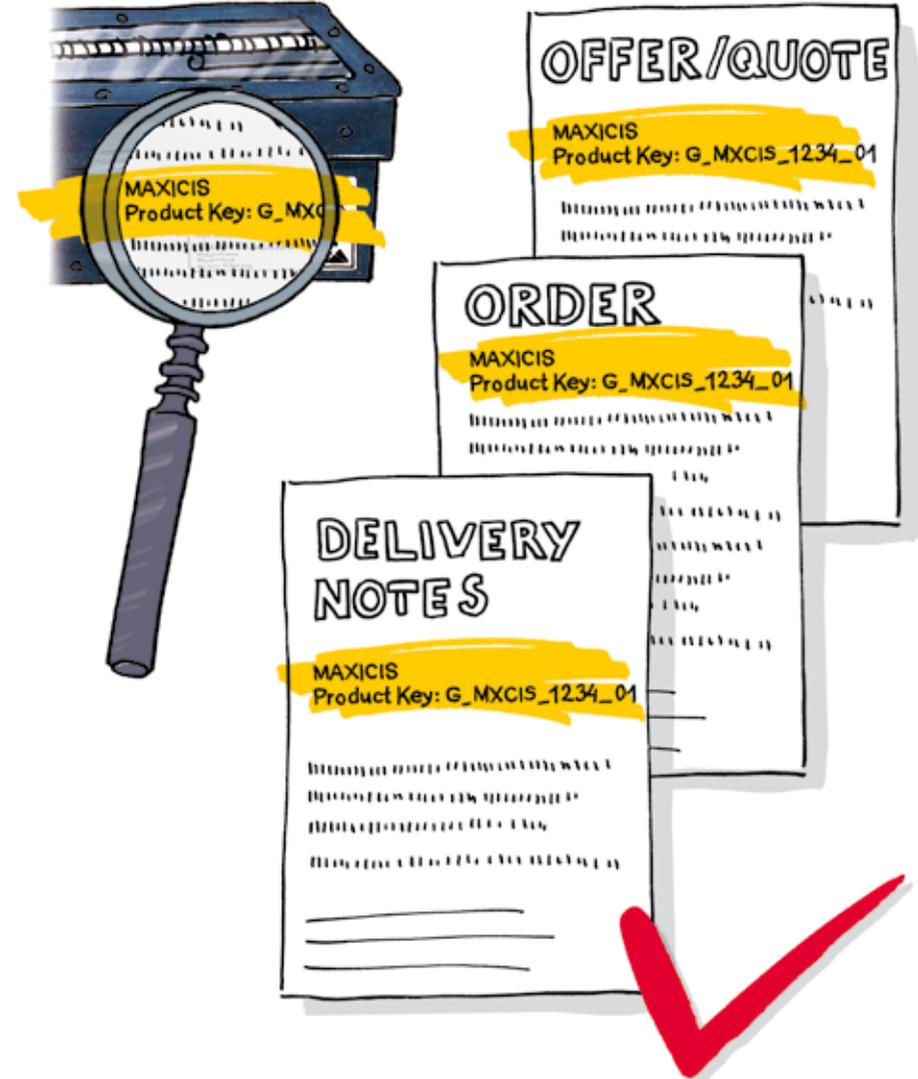
### Check Camera Type Label



### ESD Protection



### Compare Product Label with shipping documents



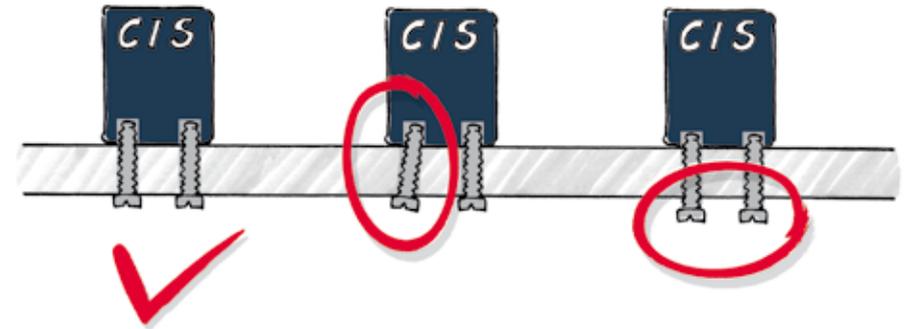
Use parametric drawing



View STEP File



Use screws of proper length and thread

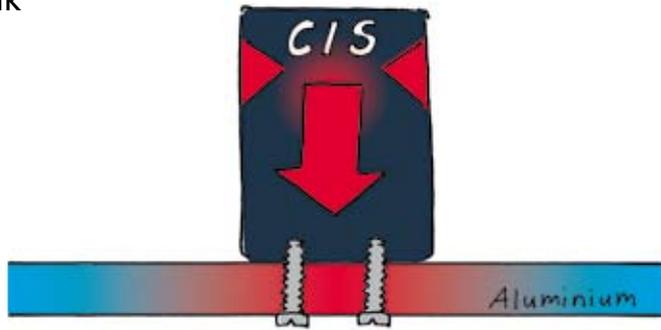


Mount on flat and even carrier only

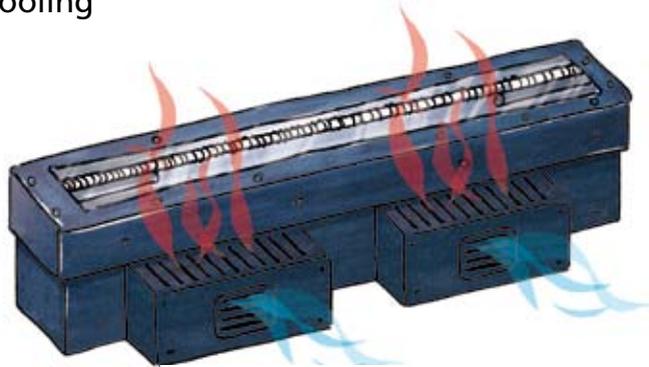


### Provide proper heatsinking

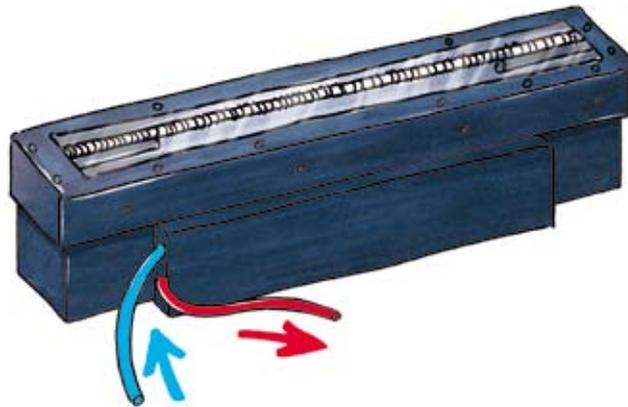
Chassis heat sink



Air cooling



Liquid cooling



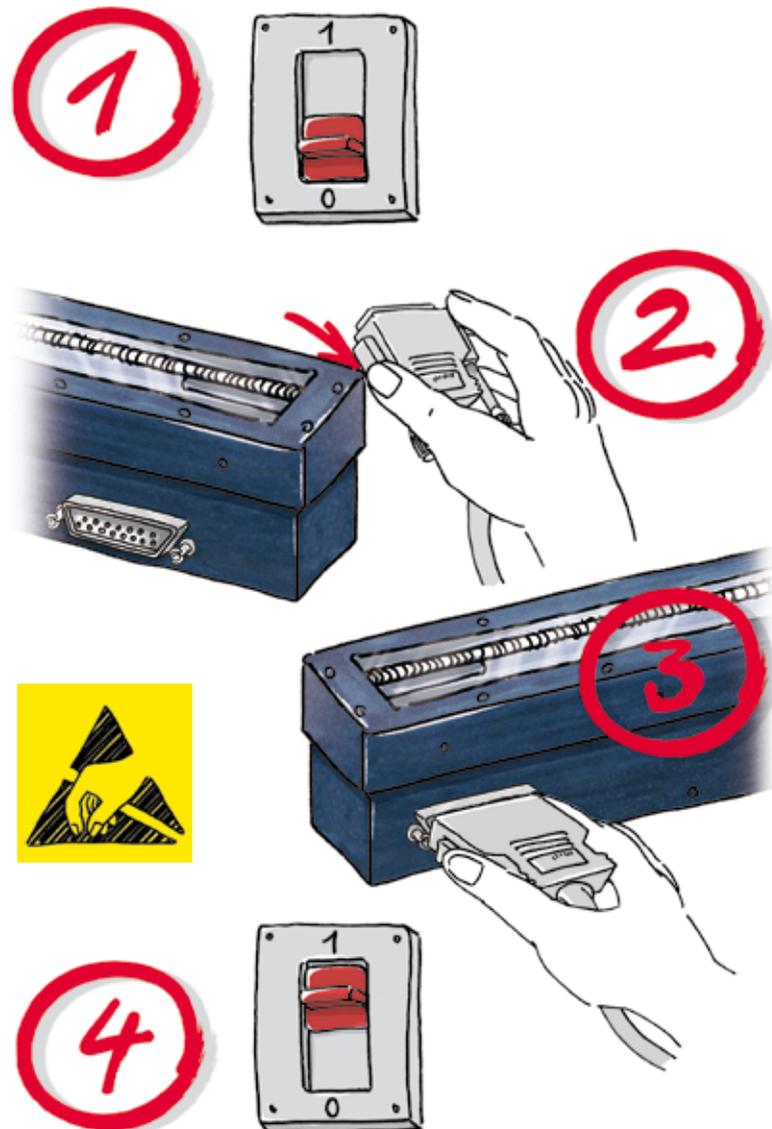
### Check Camera Type Label



ESD Protection

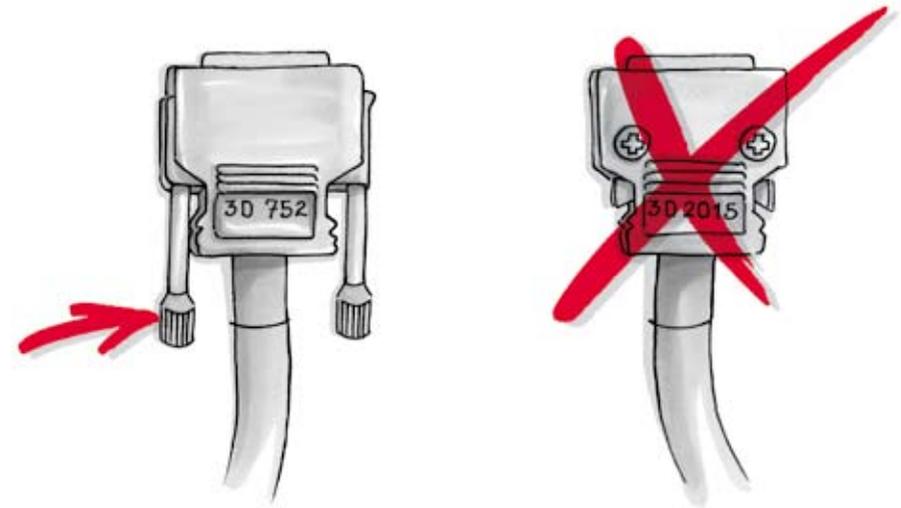


ESD Protection

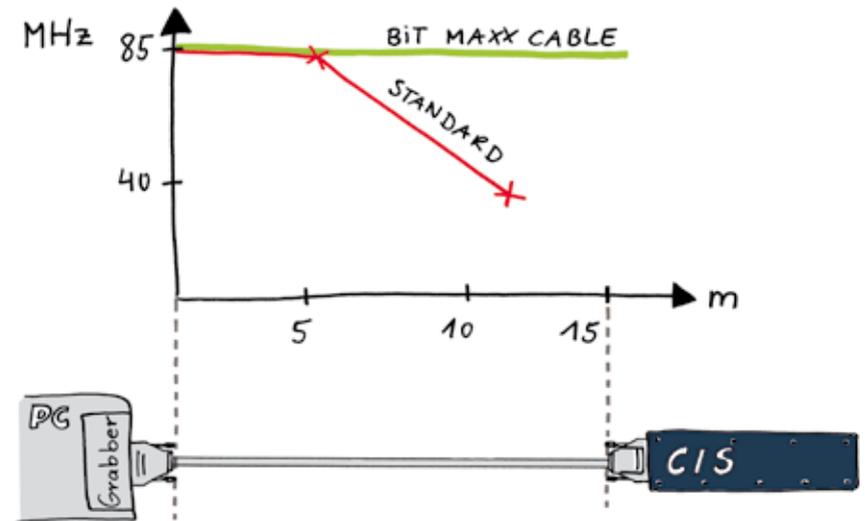


Camera Link Cable

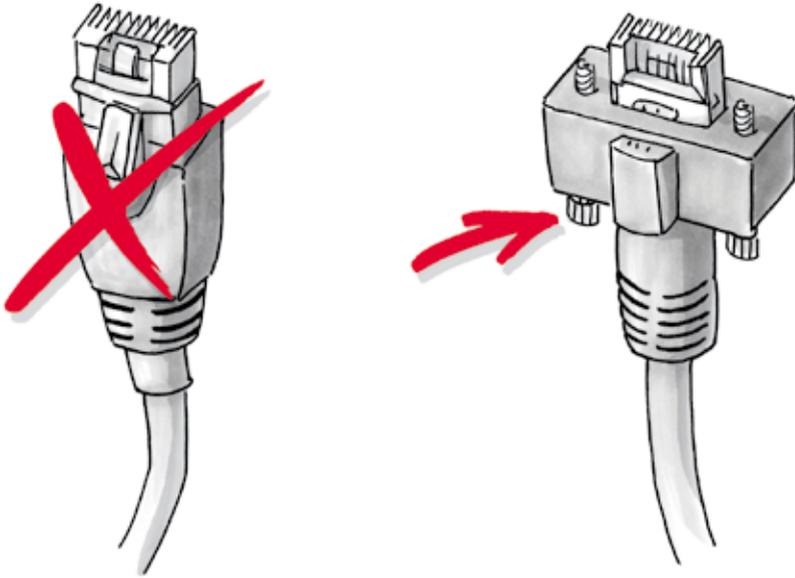
Use connectors with screws, not with clamps



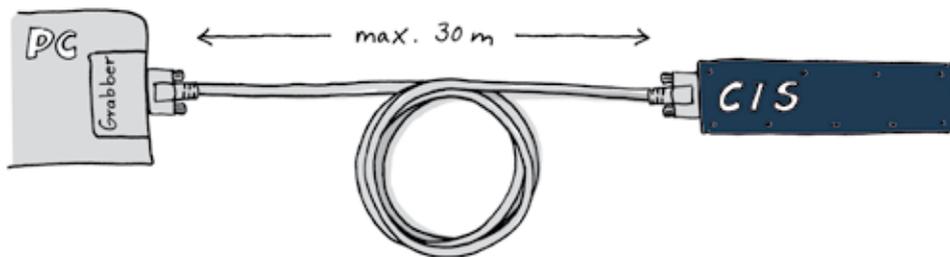
Camera Link Cables for Extended Length



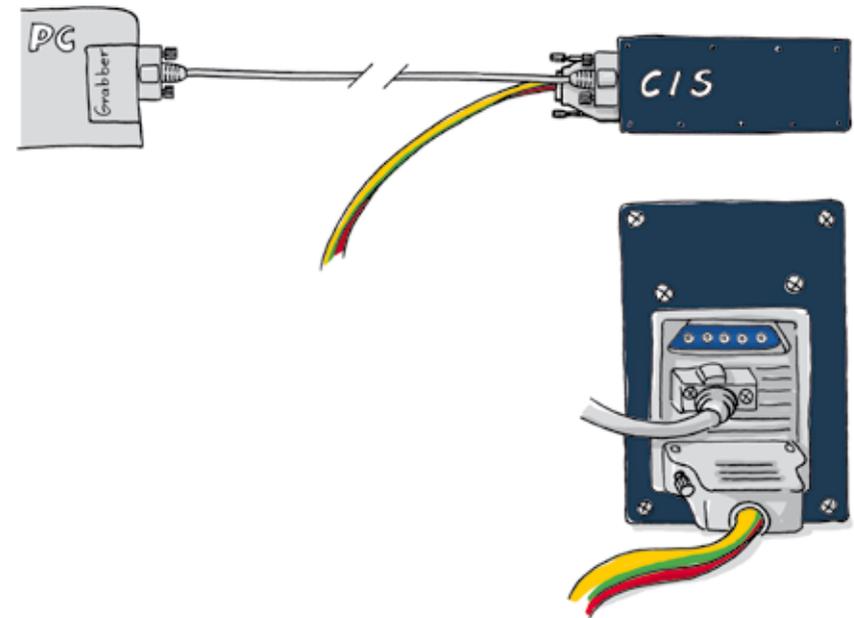
GigE Cable –  
use connectors with screws



GigE Cable Length



Triggering GigE Cameras



Be sure you are familiar with the CIS Operating Manual

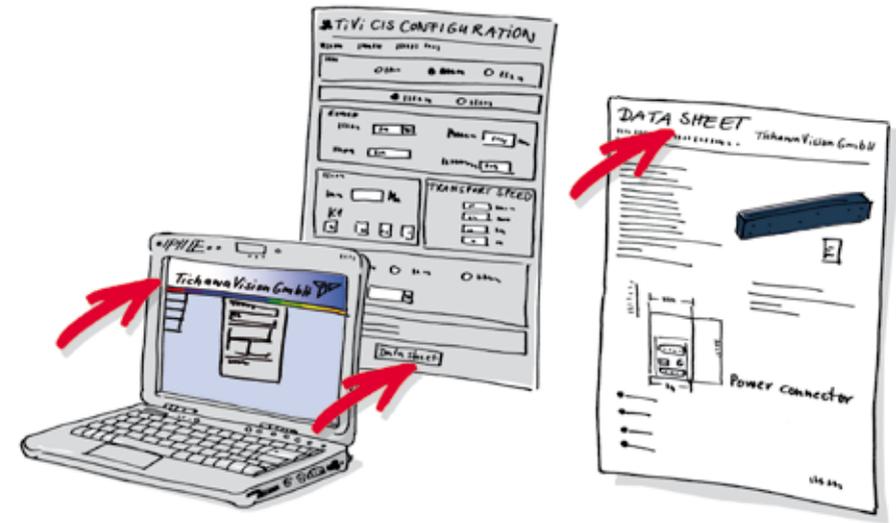


Check Camera Link Standard

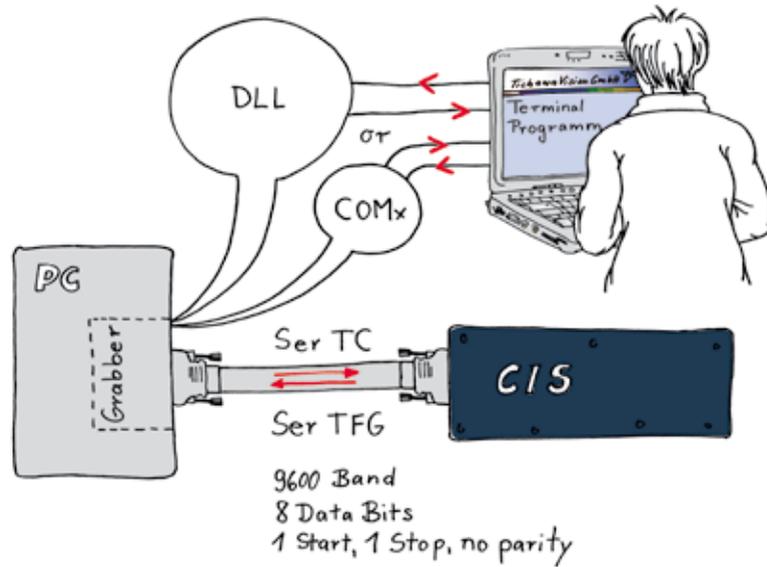
<http://tichawa.com/downloads.html>  
(Downloads – Software)



Check Data Rate

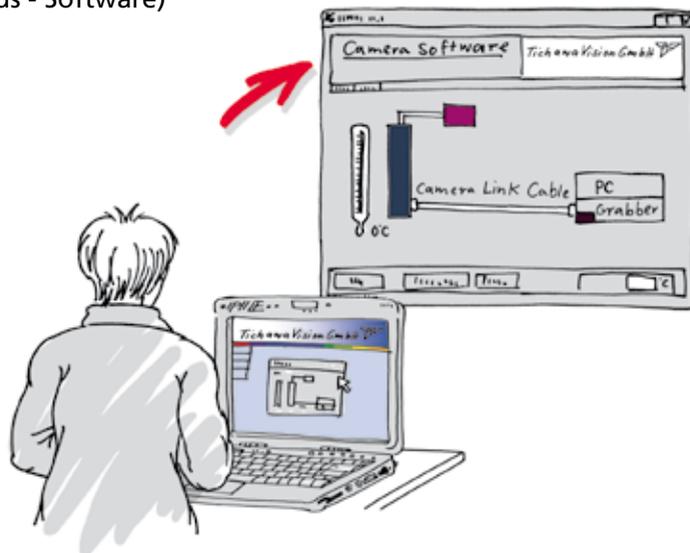


Check Serial Communication



Use TiVi Terminal Program

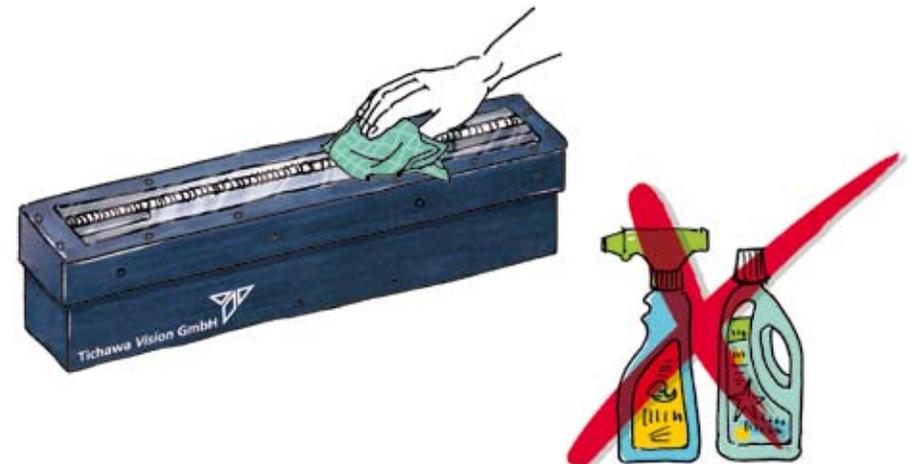
<http://tichawa.com/downloads.html>  
(Downloads - Software)



Keep free from dust and dirt



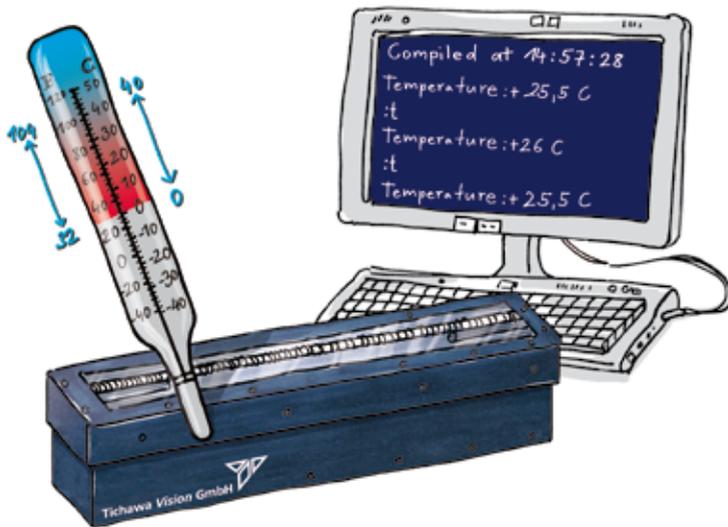
Clean window regularly with soft cloth



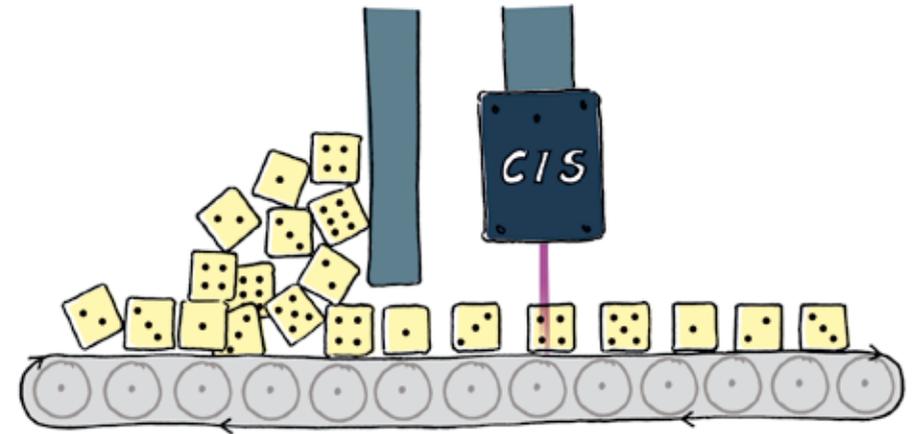
Prevent Cable Wear



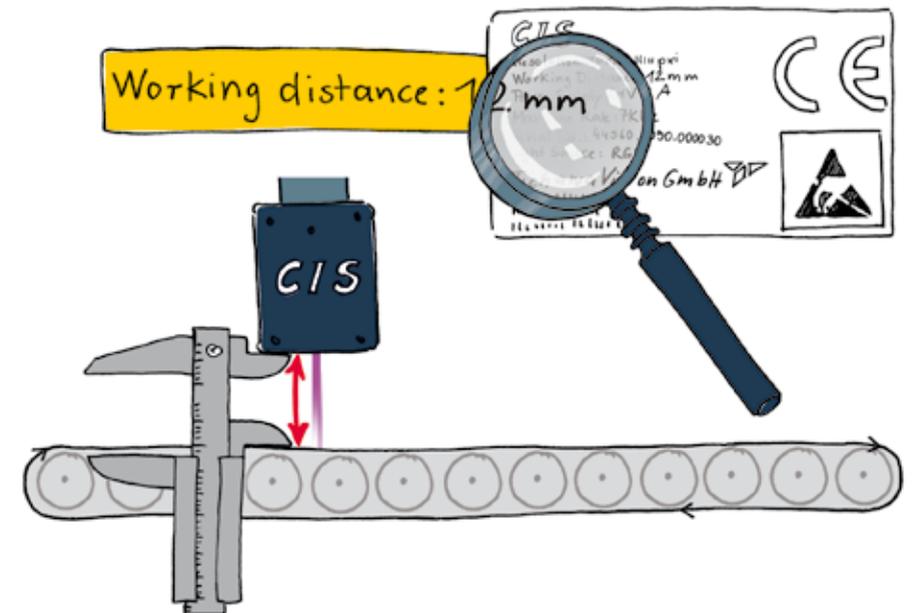
Keep case temperature low to increase lifetime



Protection



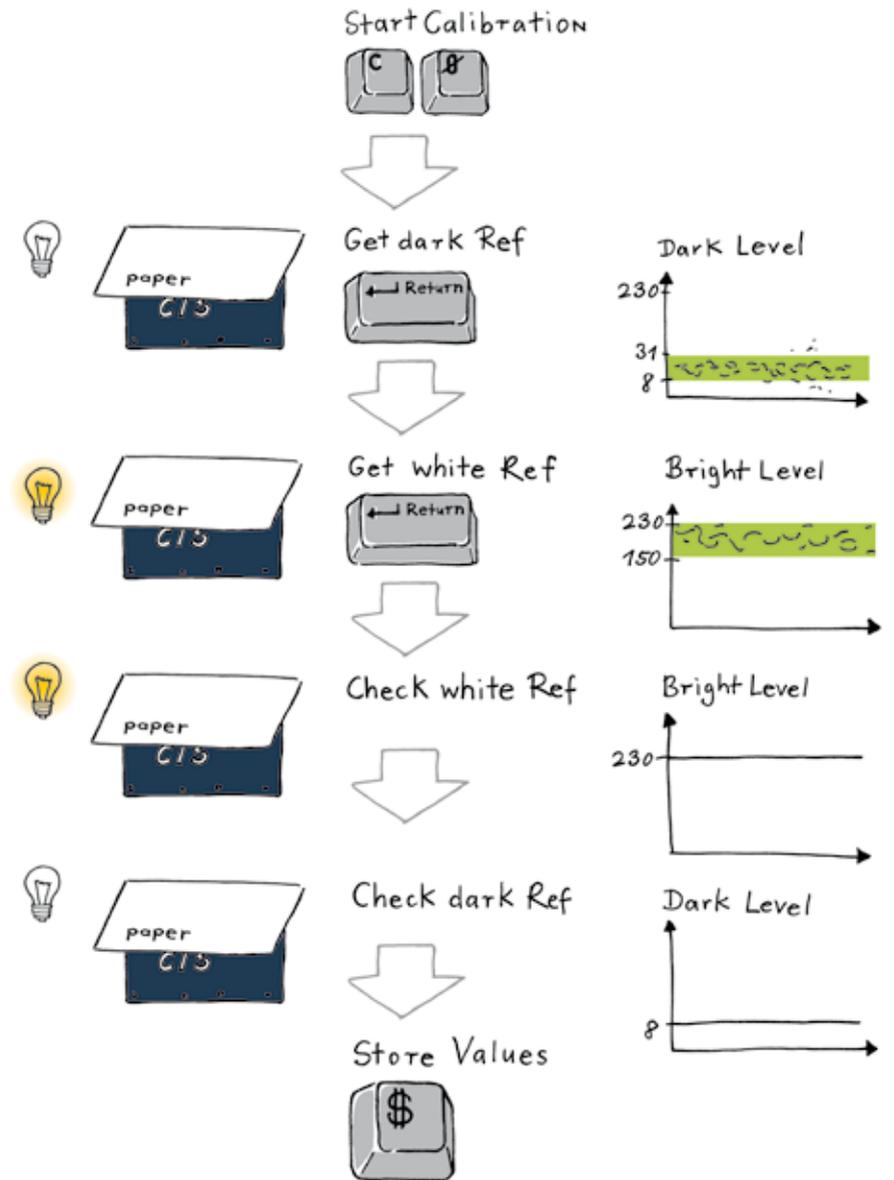
Alignment



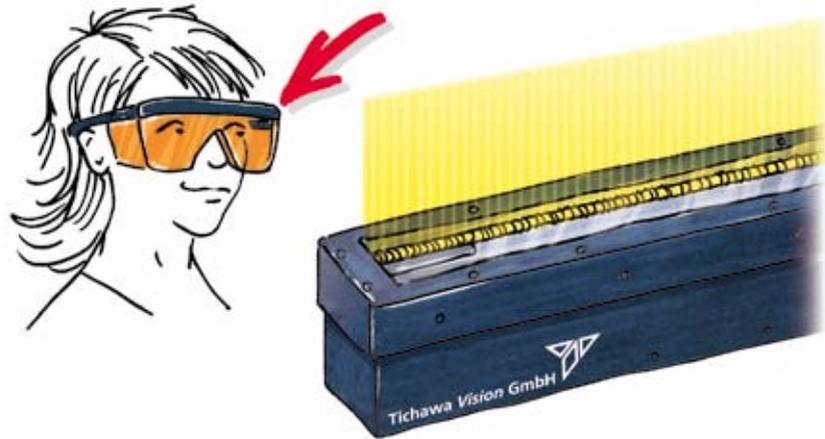
Be sure you are familiar with the CIS Operating Manual



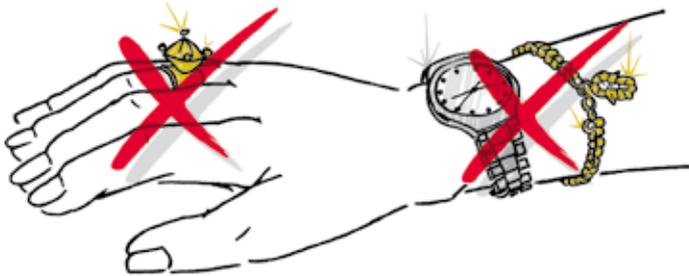
Be sure you understand the shading calibration procedure



Do not look into the light source  
Wear protective goggles

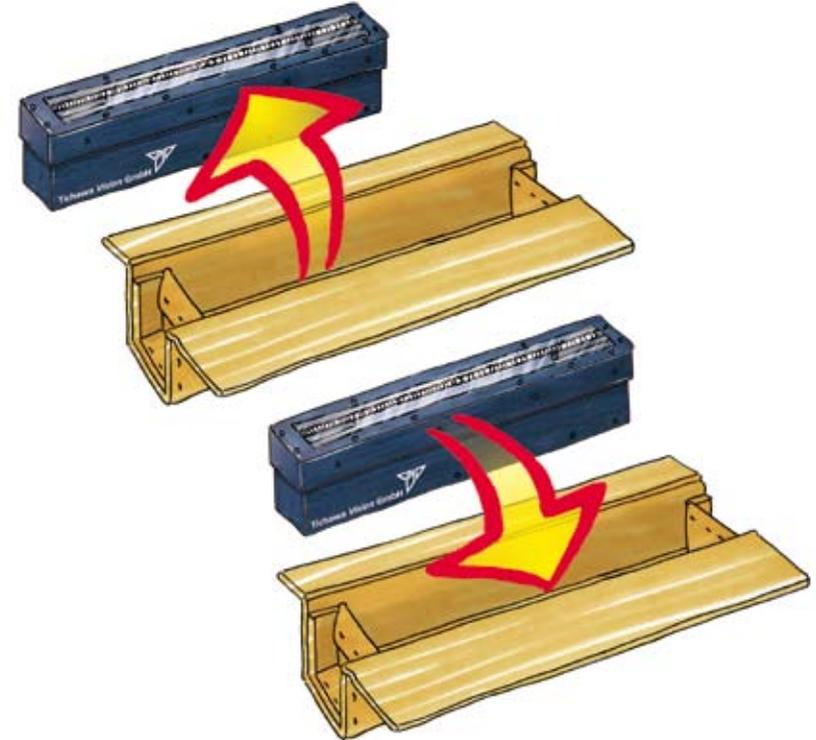


When working with the sensor,  
do not wear rings, bracelets or wristwatches

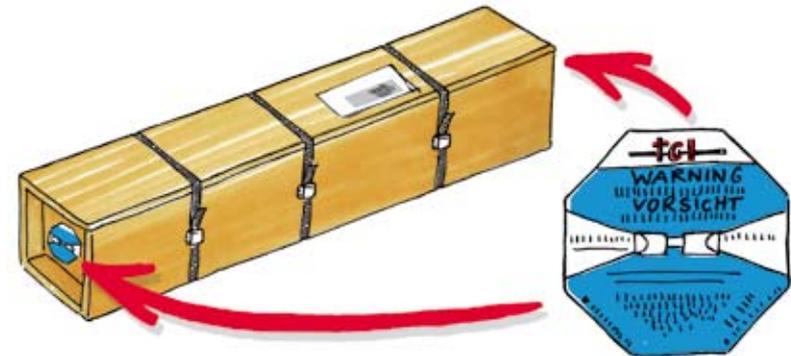


Keep to your national illumination  
safety standards might apply

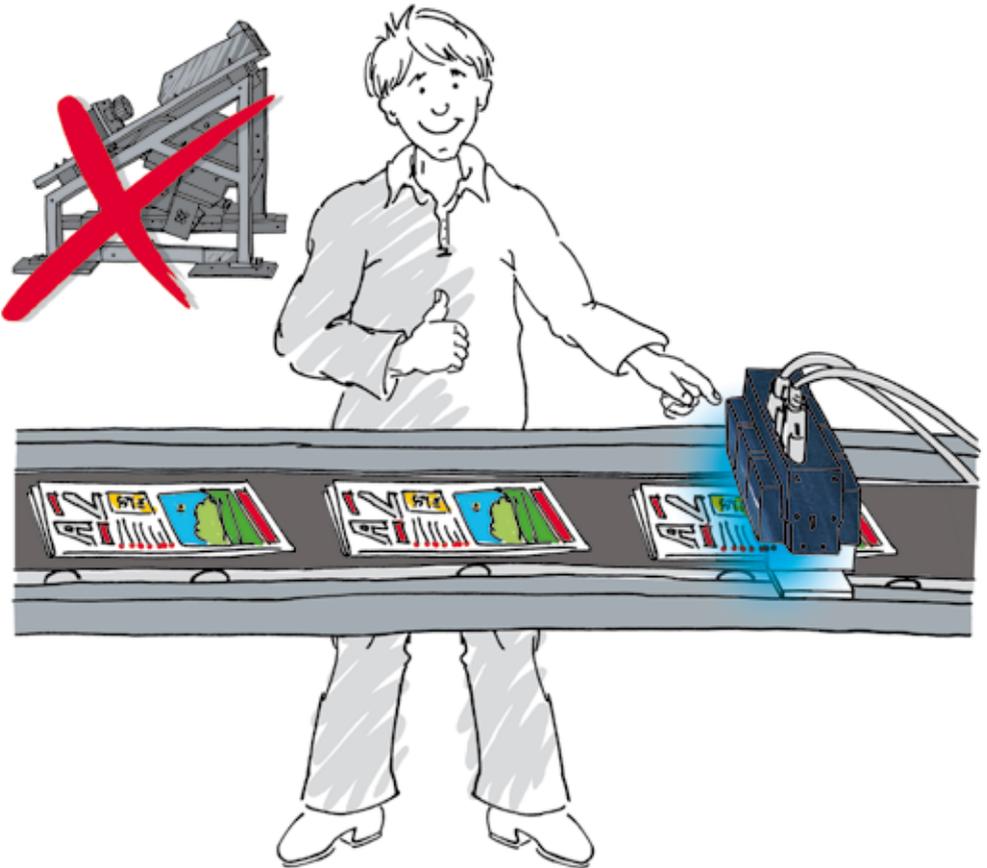
Use original package for shipping



Mount Shockwatches, request new ones if already red



# Contact Image Sensor – the much easier way!



Tichawa *Vision* GmbH



*Imaging technology for the future*