



IBS safetyMASTER



Gerd Ressmann; July 2015

The Situation

Periodically, manual measurement of the felt profile is all-round standard and therefore requested by the customers

The Problem

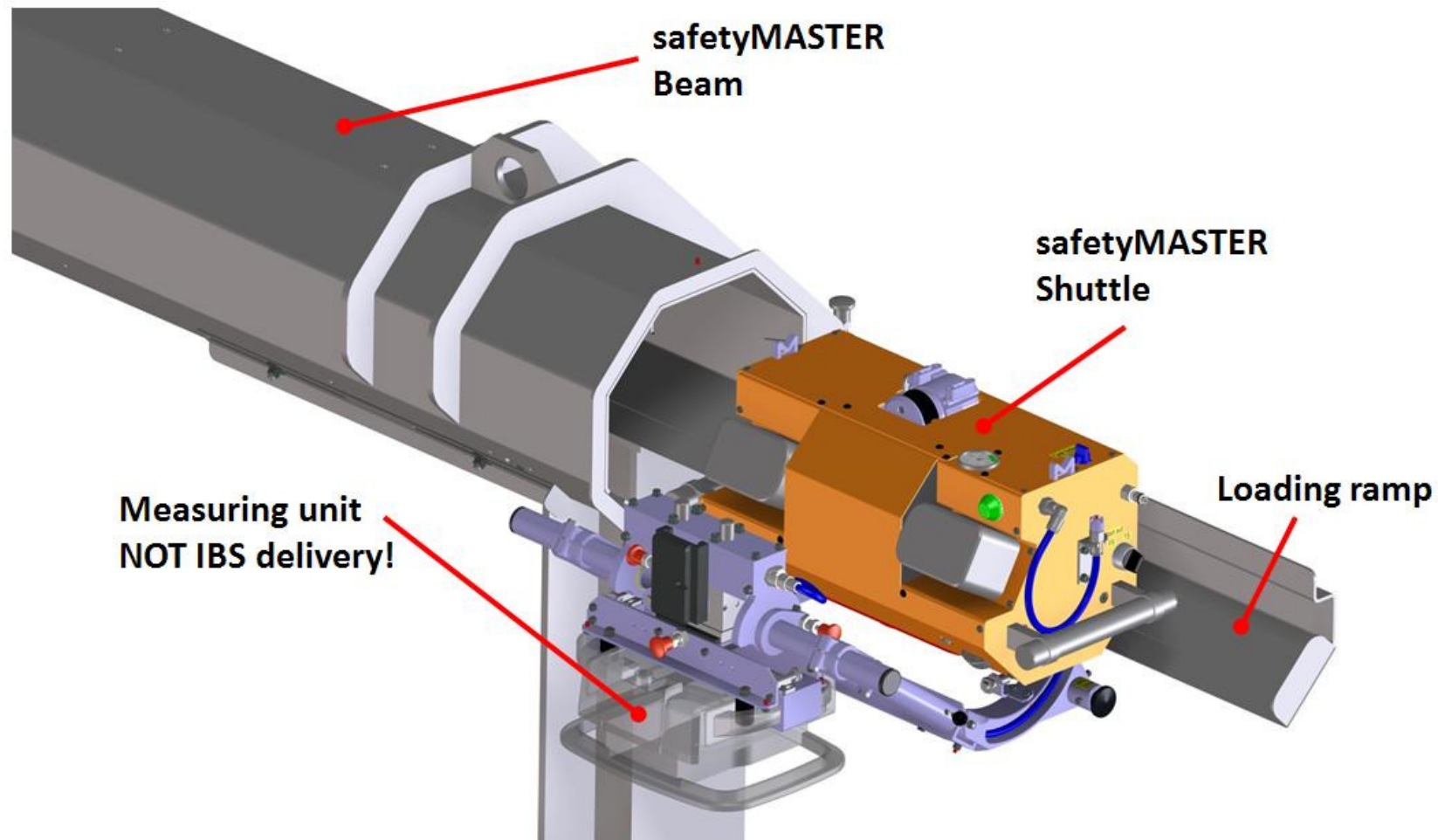
- ✚ Manual measuring (felt profile) at running PM is dangerous!
- ✚ Some mills do not allow to walk through the running PM
- ✚ In some position no access is possible (no space, no walkways)
- ✚ Result of manual measurement is influenced by the person doing the measurement

The Solution

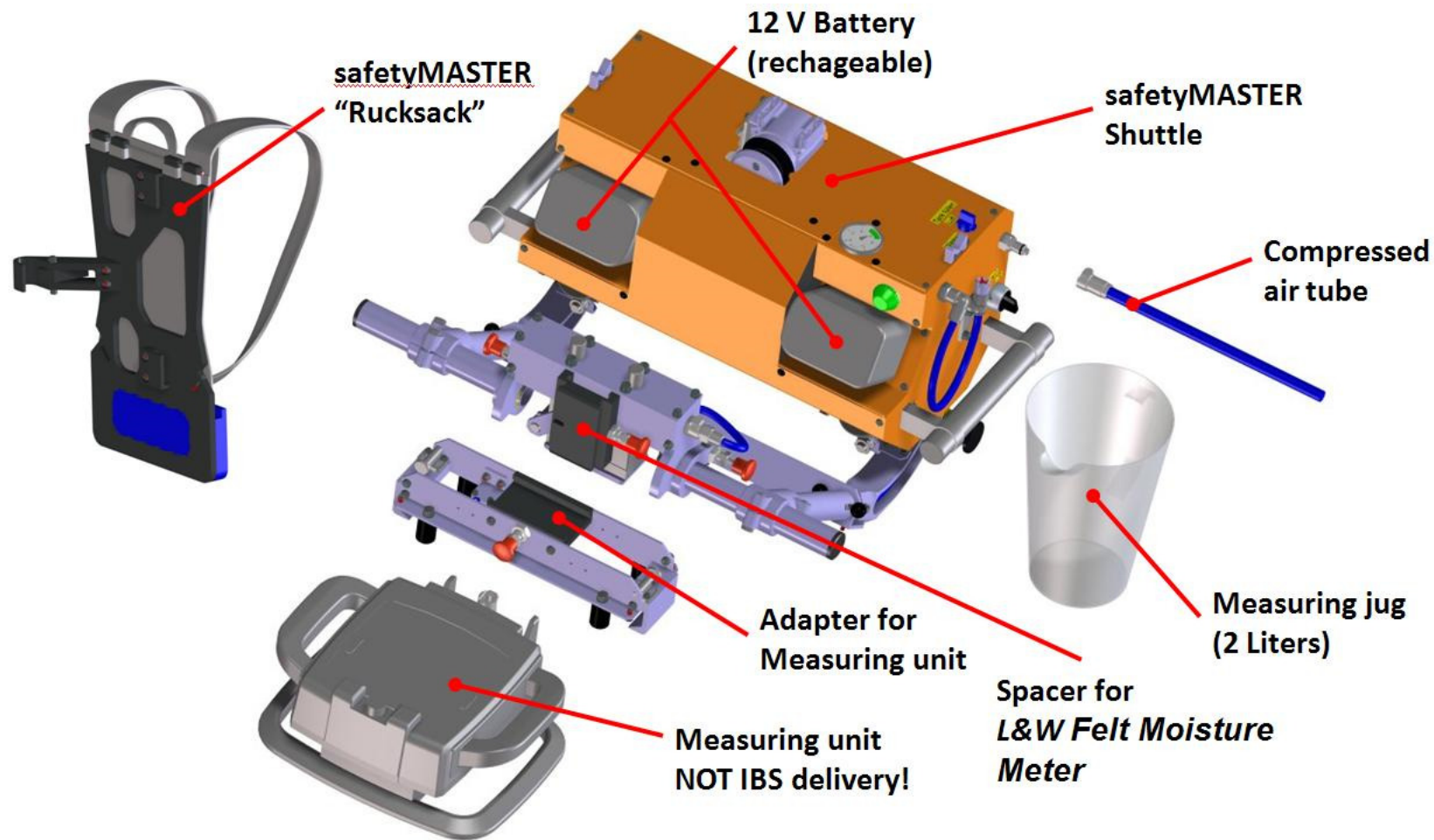
The IBS safetyMASTER Concept

- ▣ Absolute safe profile measurement at running PM – operator stays outside PM
- ▣ Profile measurement, even in position with very limited space
- ▣ No possibility to walk through PM (walkway) needed
- ▣ Reproducible measuring results – on operator influence

safetyMASTER Components




safetyMASTER Components





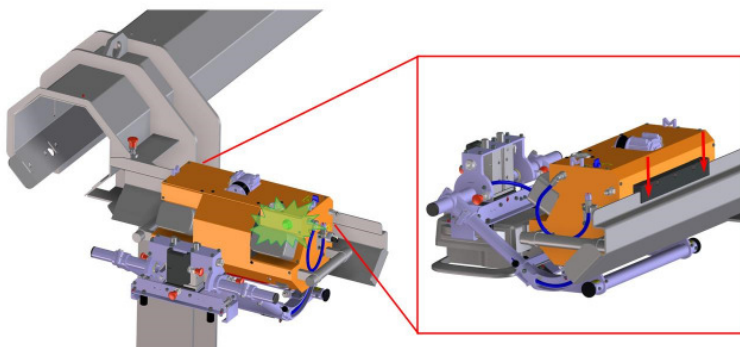
Play Video



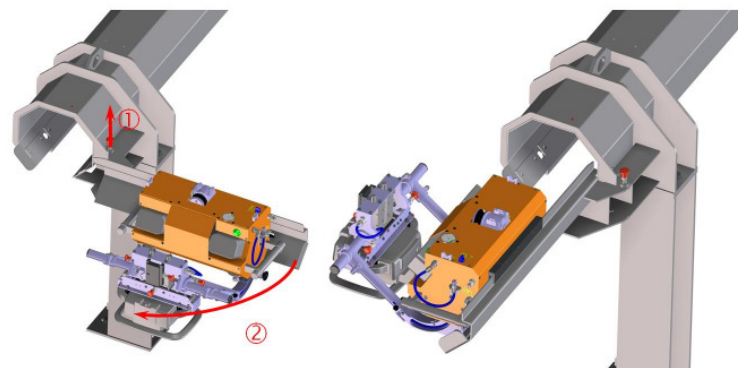
Go to
measuring results

safetyMASTER Operation

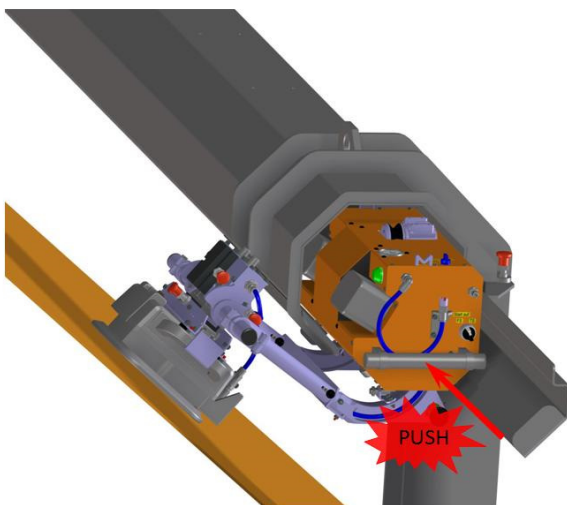
- 1.) Place self-driving shuttle on loading ramp at the cross-beam end



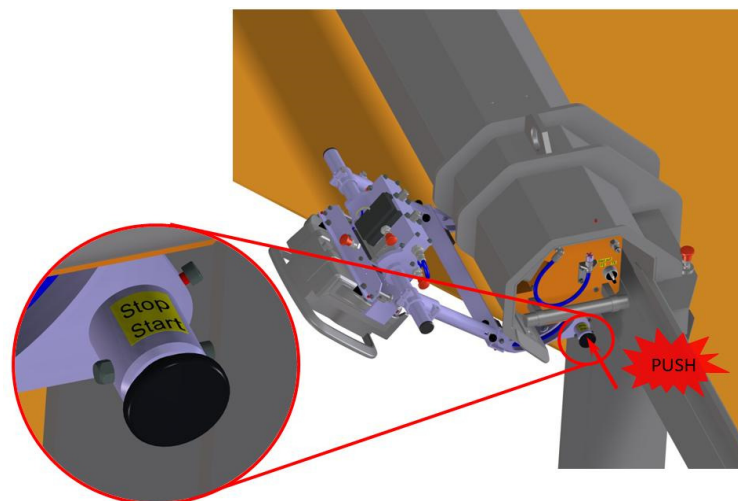
- 2.) Close loading ramp



- 3.) Push the shuttle into the cross beam

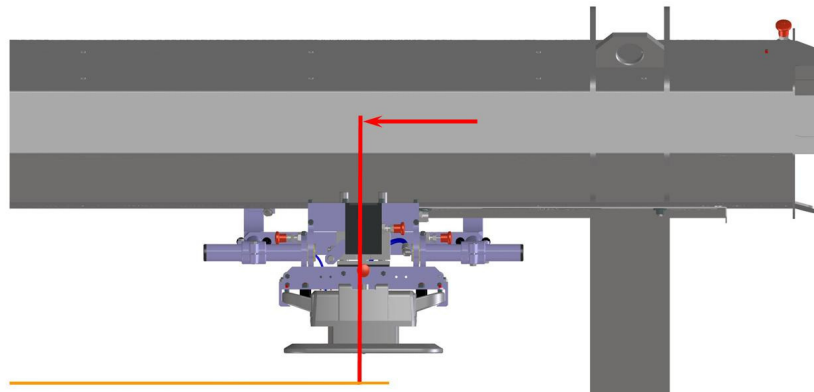


- 4.) Press the Start button

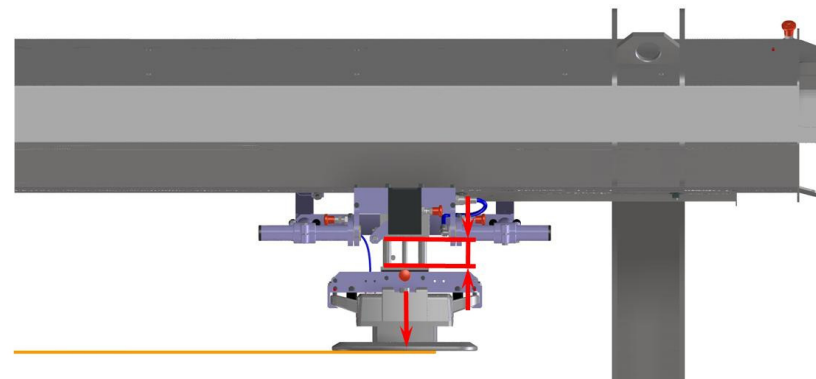


safetyMASTER Operation

- 5.) The shuttle moves to the felt edge position and stops there

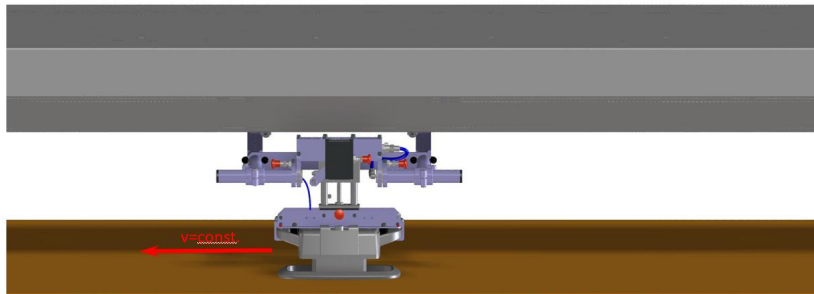


- 6.) The measuring device is pressed against the felt and the measurement starts

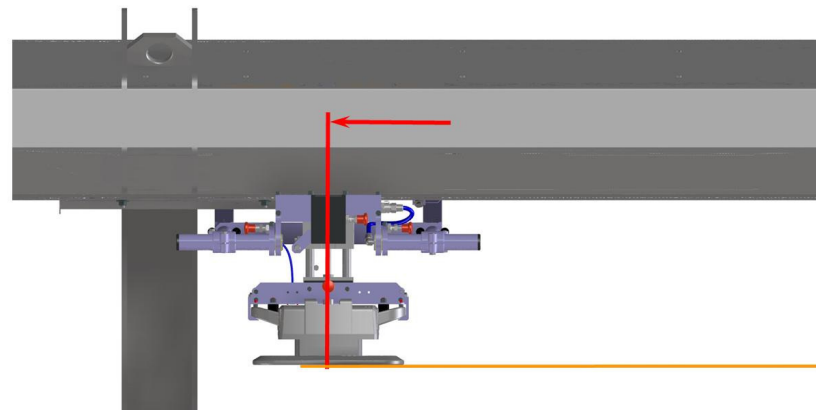


safetyMASTER Operation

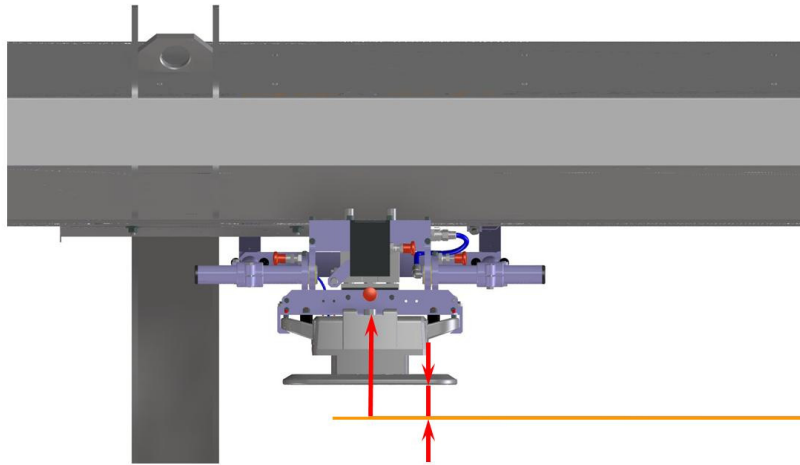
- 7.) The shuttle moves with constant speed across the felt



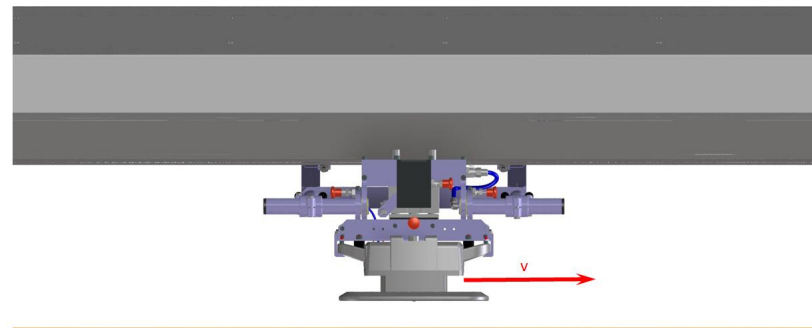
- 8.) The shuttle stops at the other felt edge and the measurement is stopped too



9.) The measuring device is lifted off the felt



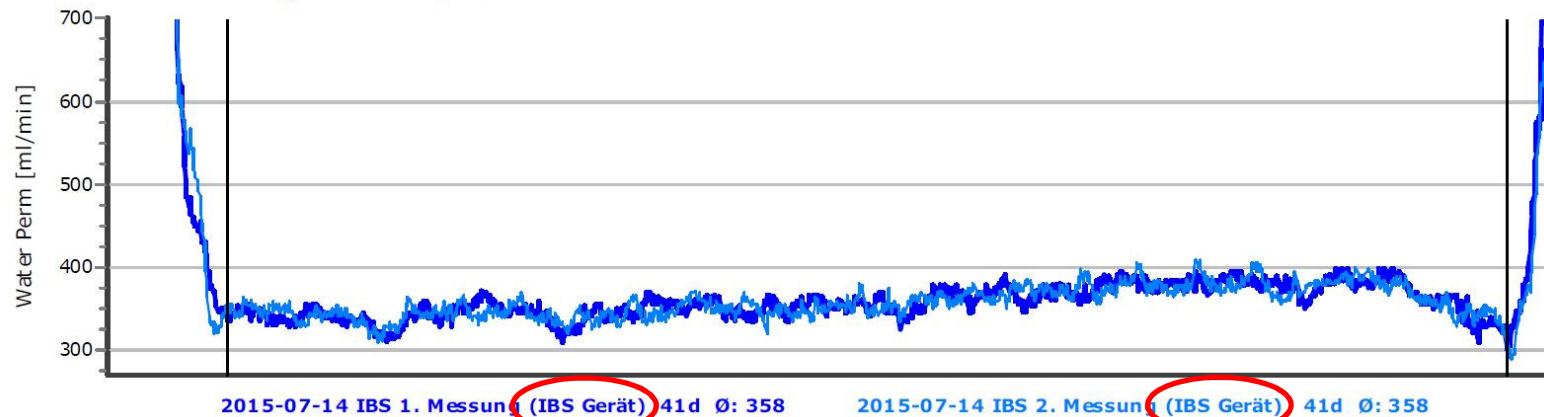
10.) The shuttle moves back to the starting position



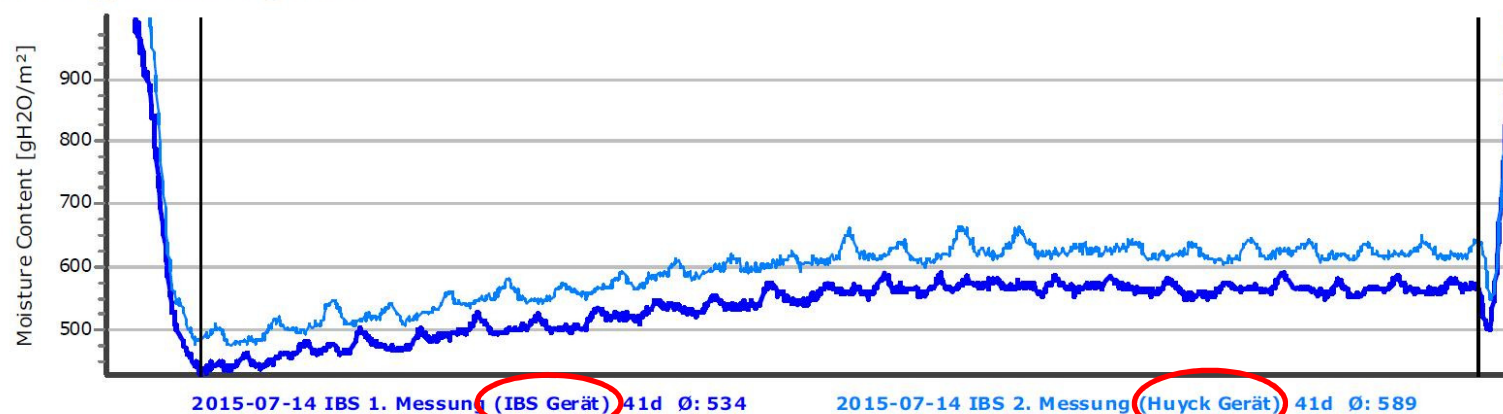
safetyMASTER Measuring Results

± Absolute reproducible measuring results

Wasseraufnahmefähigkeit - Messprofile:

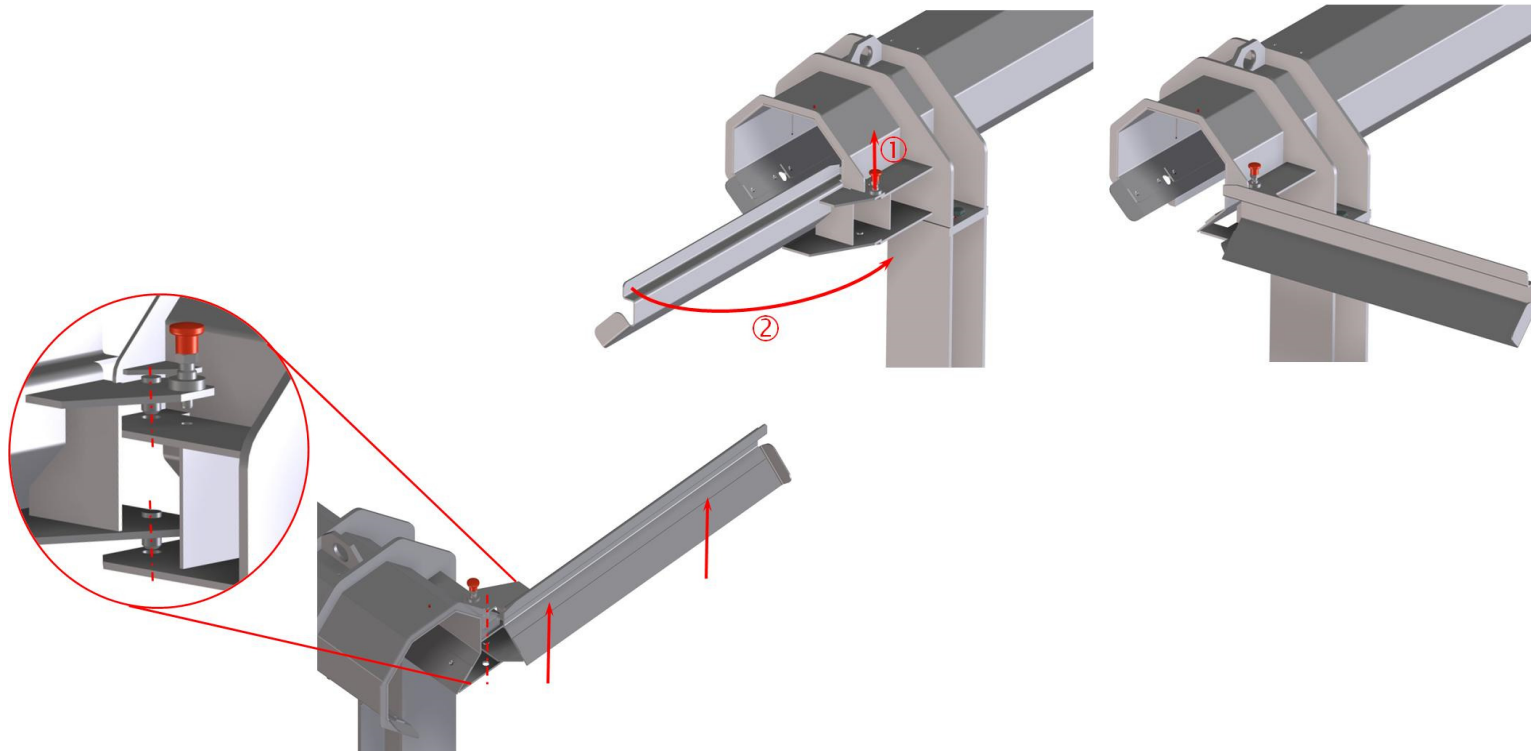


Wassergehalt - Messprofile:



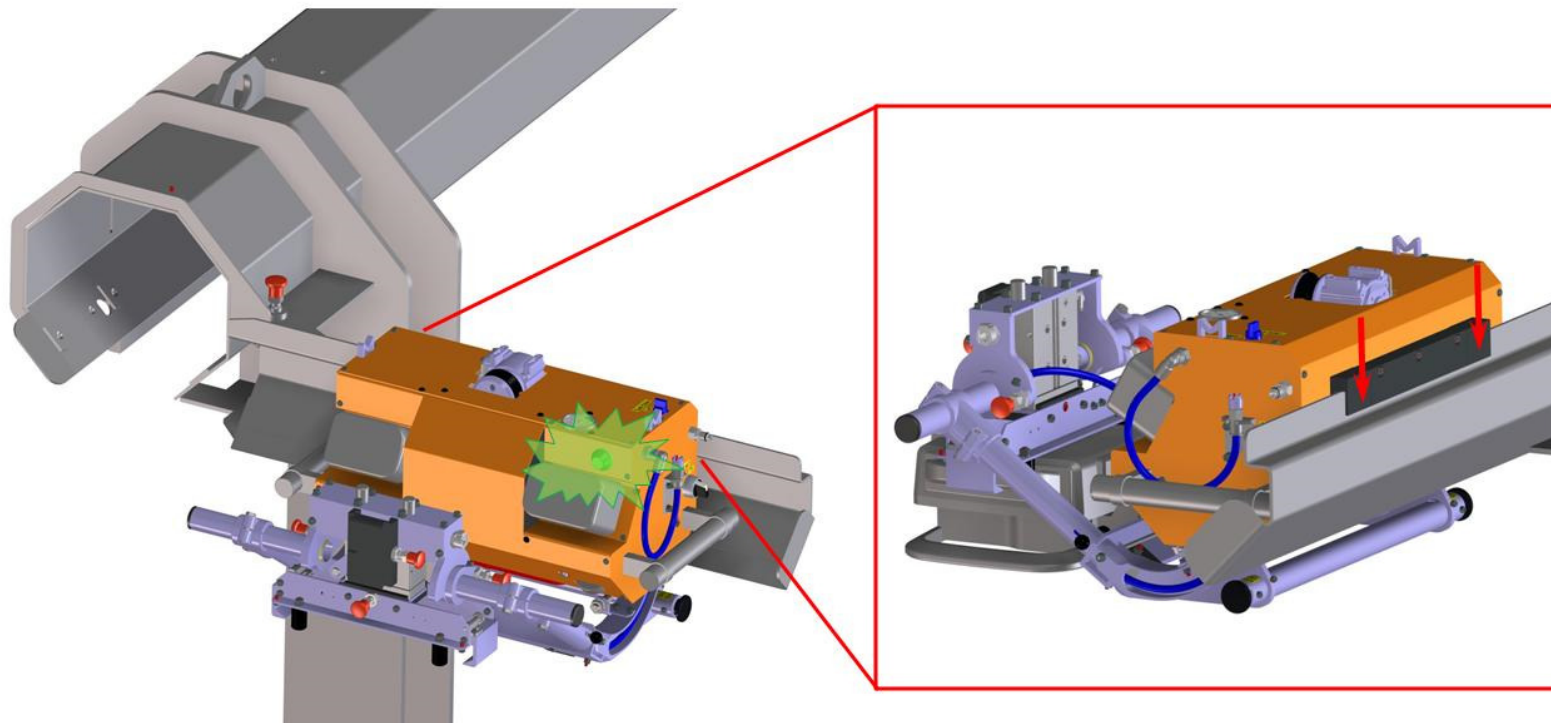
safetyMASTER Special Features

- The loading ramp can be on tending side or on drive side (depending to the space available)
- The loading ramp is storable - and removable



safetyMASTER special features

- A green shining LED shows that the shuttle is placed correctly on the loading ramp

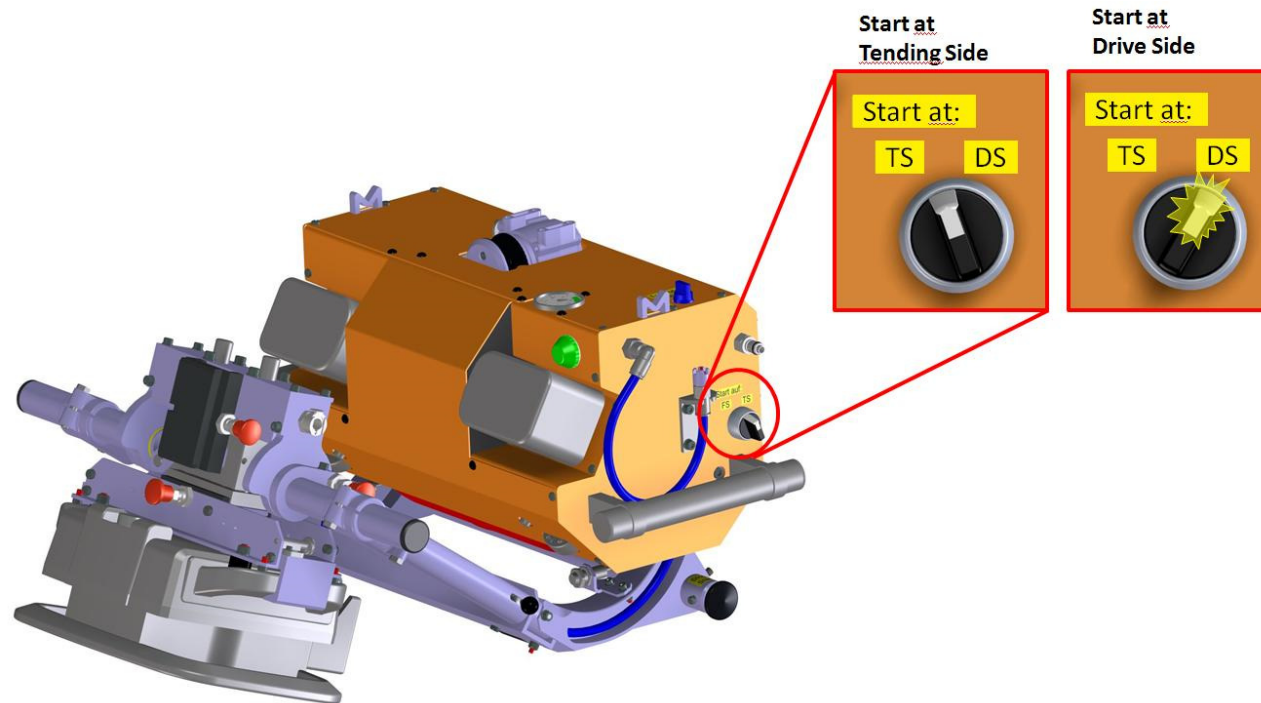


safetyMASTER special features

- Select where you start the shuttle

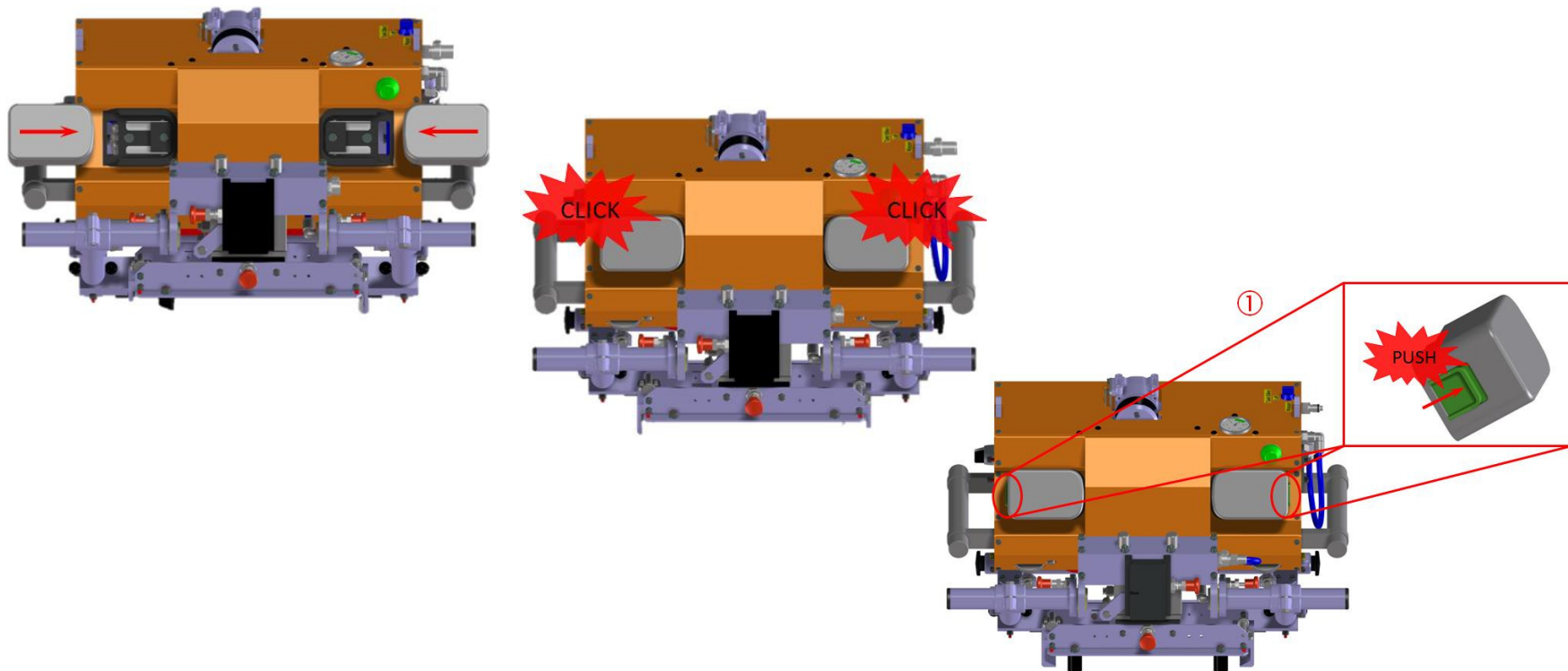
(Where the loading ramp is positioned - Tending Side or Drive Side)

➔ The felt- measurement is always done from tending side to drive side



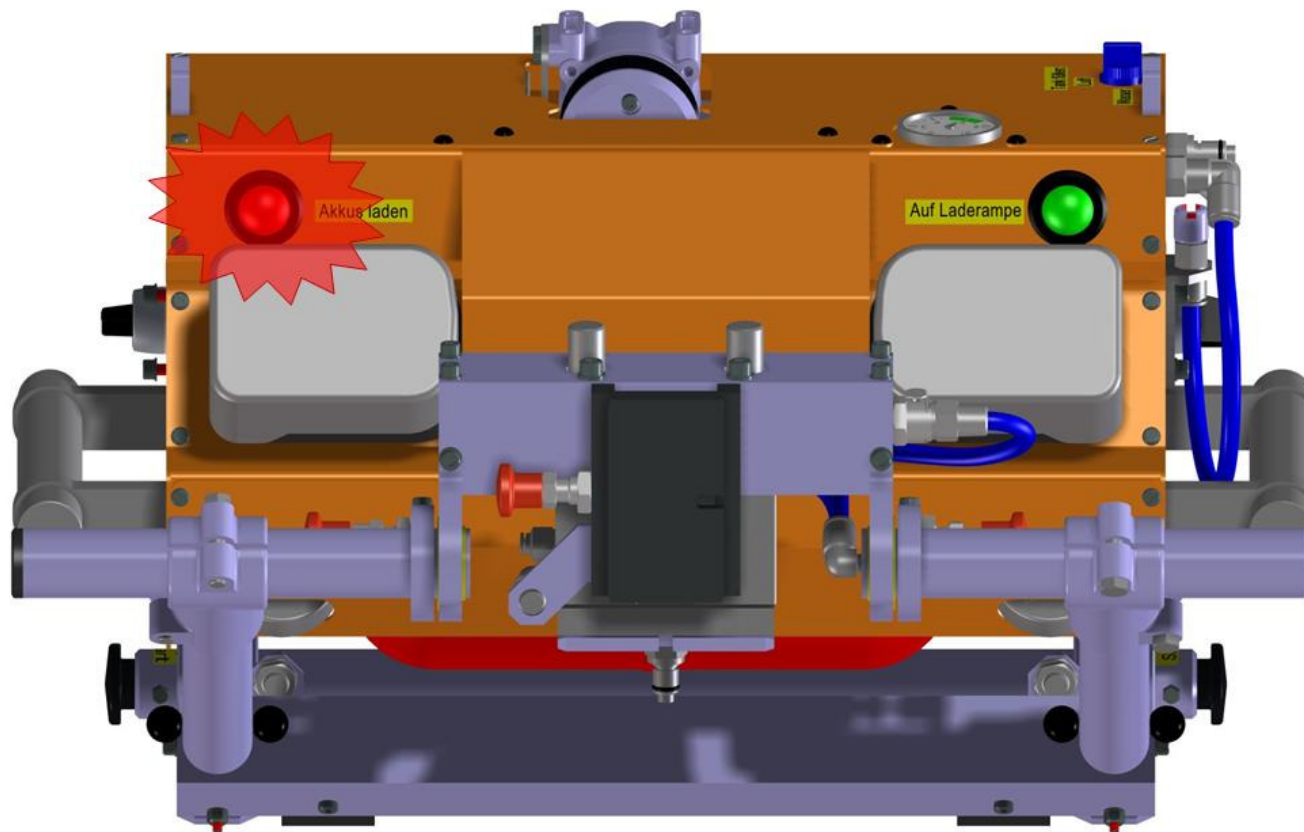
safetyMASTER Special Features

- High capacity battery back – up to 50 measurements possible without charging
- Quick change system for rechargeable battery backs (second battery backs available)



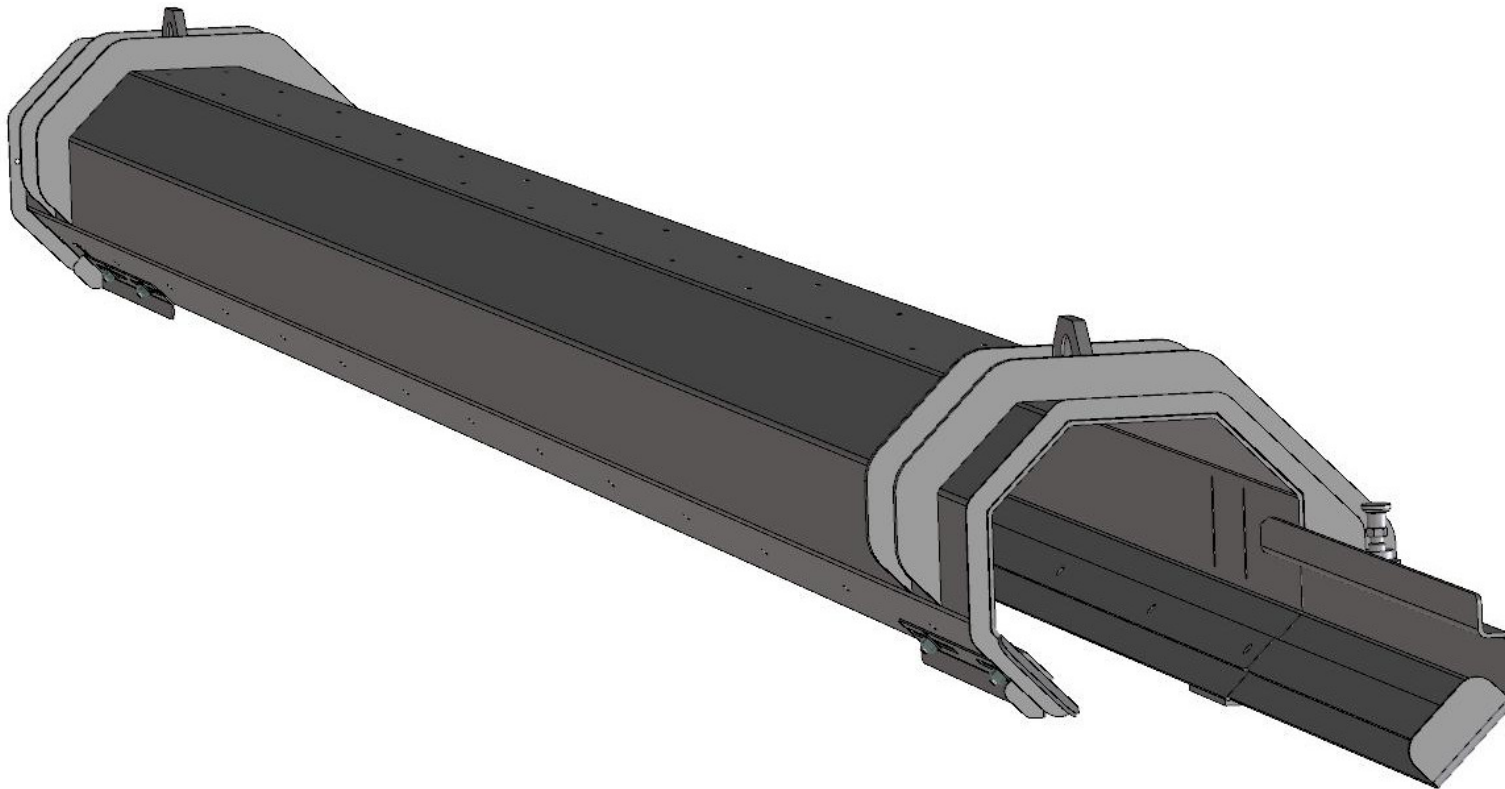
safetyMASTER Special Features

- Red indication lamp shows that battery has to be loaded / changed



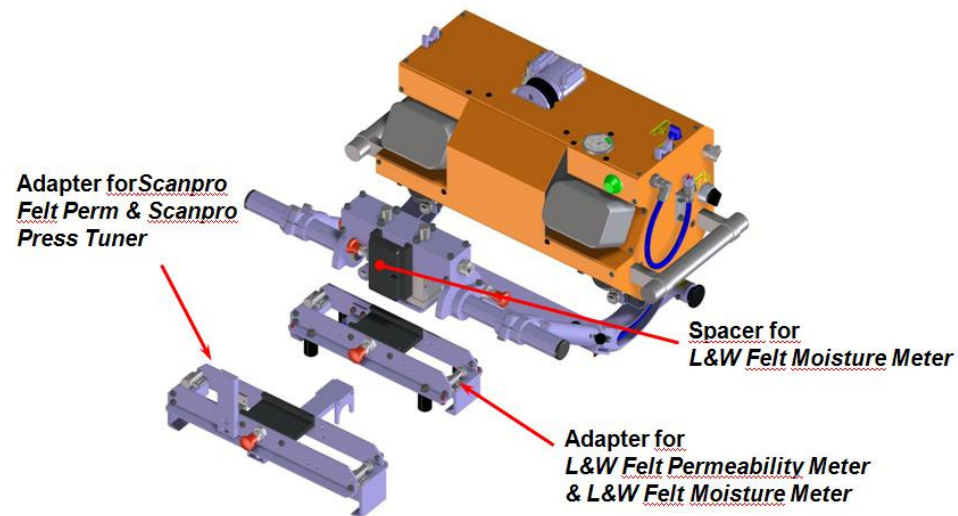
safetyMASTER Special Features

- Special cross beam design - low risk of contamination



safetyMASTER Special Features

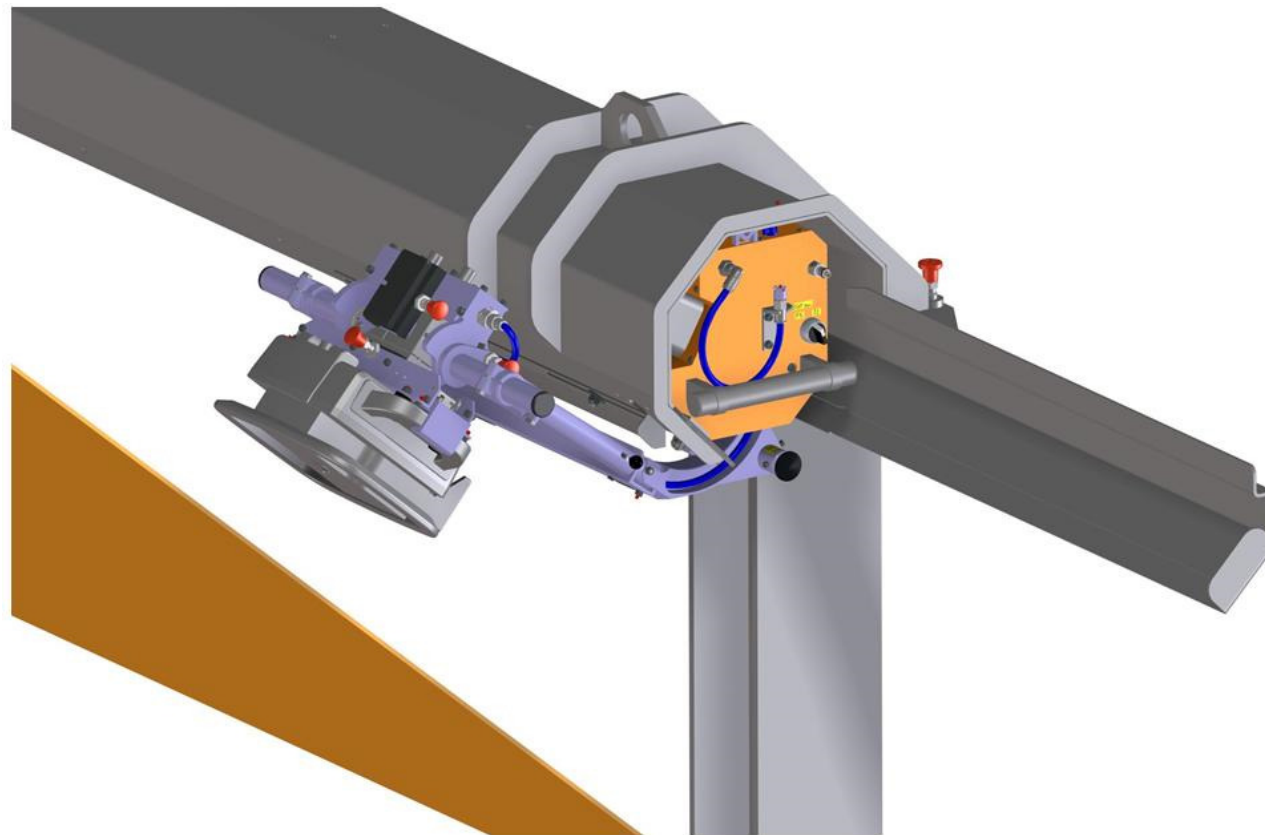
- Quick change system with adapters for different felt-measurement devices



Adapter	Measuring-Unit
	L&W-Felt-Permeability-Meter
	L&W-Felt-Moisture-Meter
	Scanpro-Felt-Perm
	Scanpro-Press-Tuner

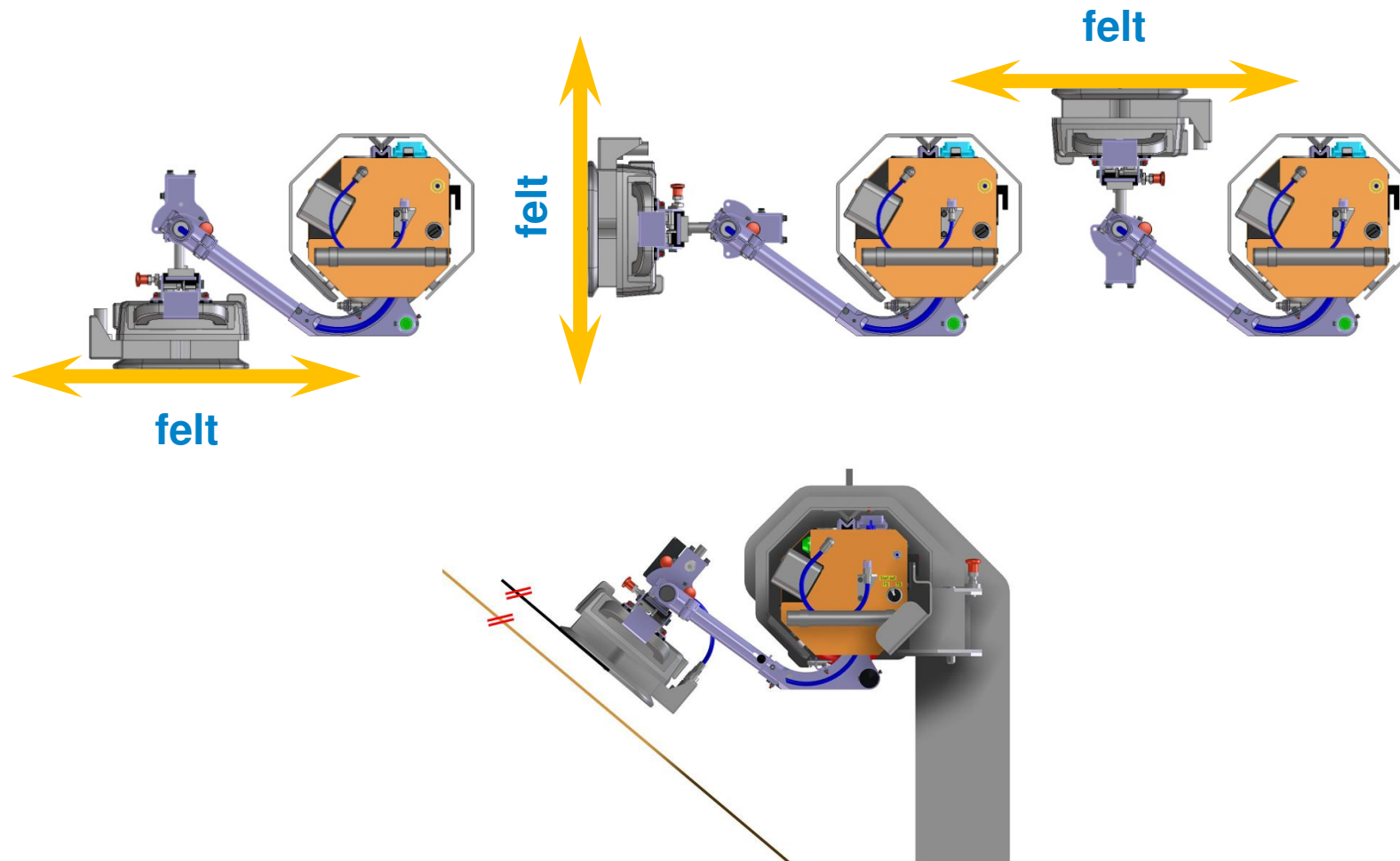
safetyMASTER Special Features

- Autonomous, self driving shuttle, no connections at cross beam position needed (electric, pneumatic, water)



safetyMASTER Felt Directions

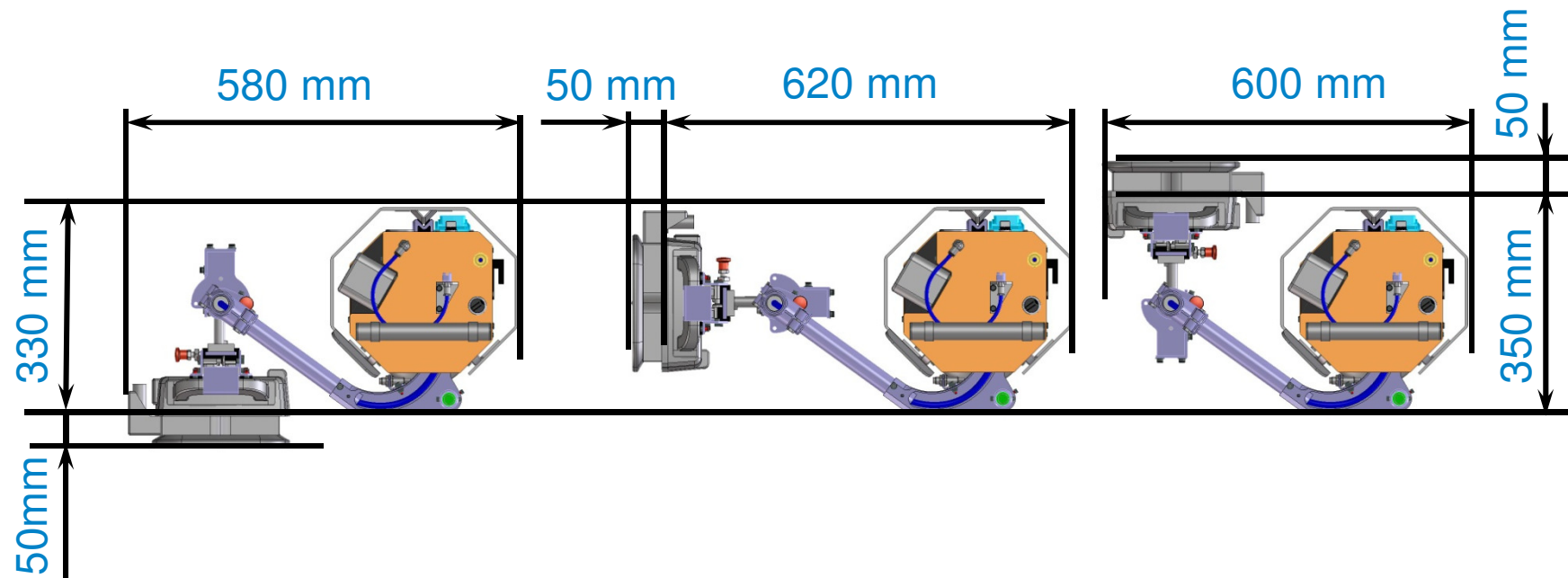
- Measurement head position is individual adjustable within 180°



safetyMASTER Dimensions

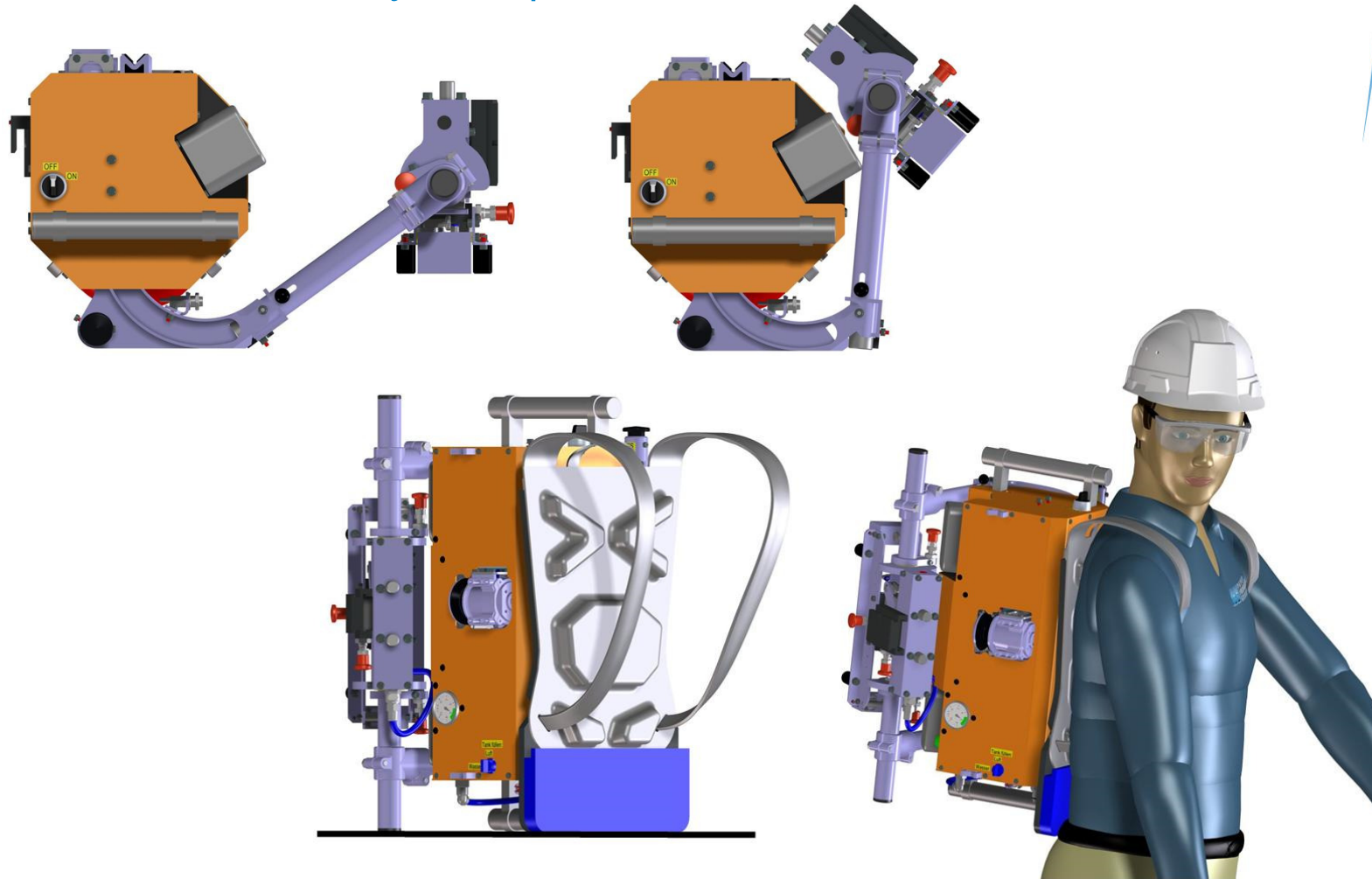
- weight of the shuttle: ca. 20 kg

Dimensions with L&W Felt Permeability Meter



safetyMASTER Transportation

- ✚ Foldable arm – easy transportation



safetyMASTER Advantages

- ✚ Cross profile measurement without entering the area inside the machine frame
- ✚ Individual number of cross-beams can be installed at any interesting machine position
- ✚ One, self-driving shuttle, can be used in different position and on different machines
- ✚ The self-driving shuttle can be adapted with different measuring devices

safetyMASTER



 **SAFETY FIRST** 