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Sparklike Online™
Specification Data and Description

Description, Sparklike Online™

The equipment consists of set of components, movement system and software installed into a typical insulating glass production line. After gas press the glass will stop to a pre-defined location and linear movement takes the measuring head to the preset height and the measurement takes place. After been measured, the glass can move further. The results are stored to a hard drive and can be transferred to an external system. The operation of the Sparklike Online™ will be linked to the insulating glass line cycle and operation.

Sparklike Online™
Sparklike Online™ is a device to measure non-invasively gas inside the insulating glass unit by means of a semi-conductor laser with 763nm wavelength (TDLAS technology). A laser beam is transmitted through the insulating glass unit and the reflection is measured and converted to the oxygen content. From oxygen content the integrated computer automatically calculates the insulating gas (argon, krypton, xenon, etc.) amount in percentage. The measurement can be done through coatings and laminated glasses (*). The system can measure double-glazed unit and triple-glazed units (*). The Sparklike Online™ can also measure and report the glass and cavity thicknesses.

Scope of supply (Sparklike):
- Sparklike Online™ measuring head
- Sparklike Online™ main control unit with all needed computing operations
- Y-Z-movement system for the measuring head
- Installation platform, brackets, cable raceways and supports needed
- User interface, alarms, communication interface to the IG-line
- Software and their applicable licenses

Scope of supply (Buyer):
- Supplies: electricity, argon for flushing (0.2 liters/min, 99.99%)
- Availability of the IG-line for set-up and testing
- Technical support for installation

- **To be agreed separately**
- Protective covers as per local EHS requirements
- IG-line mechanical modifications
- IG-line software modifications

Specifications, Sparklike Online™

Approximate dimensions:

Size	900 x 1300 (Length x Depth mm; Height based on the IG-line)
Weight	Abt. 350 kg

Operating Conditions

Temperature	5-40°C
Humidity	20-80%

Supplies

Main Power Supply	100/120/220/230/240 VAC Selectable, 50/60 Hz, PE
Connected Power	1600W
Connectors	Ethernet, USB 2.0, VAC Power, Argon supply with 6mm tube

Software	Custom made Sparklike Online™ SW running on Windows platform

Measurement Specifications

IGU size information received from IG-line

Measurement Time	9s DGU / 16s TGU (minimum)
Glass thickness range	2 - 23 mm
Cavity range	6 - 40 mm

IGU size information measured by Sparklike Online™

Measurement Time	20s DGU / 30s TGU (minimum)
Glass thickness range	2 - 13 (23*) mm
Cavity range	6 - 24 (40*) mm
IG-thickness	Max 51mm from surface 1 to 3 or 1 to 5

(* with manual presets)

Accuracy and range with any insulating gas:

2% Std.Dev. with gas concentration of 0-95%

The measurement accuracy and realization are subject to min. 30% transmission with 763nm and optically non-scattering materials in the IGU. Calibration interval for the specified accuracy is max. 12 months.