

PRODUCT DATASHEET

Product group	IQM Scan® Monitoringsystem	
Product component	IQM Scan® Layer – Metal mesh (stainless steel mesh 1.4301)	
Rev. / Date	1.00	10.12.2025

PRODUCT DESCRIPTION

The IQM Scan® Layer metal mesh is a highly conductive stainless steel mesh made of 1.4301 (SS304) and serves as a robust, flat counter electrode in the IQM Scan® monitoring system. It is typically used under bituminous waterproofing, in roof and building waterproofing systems or in industrial applications where permanently stable electrical conductivity measurement is required for moisture monitoring and the production of the waterproofing layer requires high thermal processing (flaming). The fabric is mechanically resilient, corrosion-resistant and complies with fire protection class A1 according to EN 13501-1.

FEATURES & ADVANTAGES

- Stainless steel mesh made from 1.4301 (SS304) – corrosion-resistant & durable
- High open area ($\approx 76.75\%$) for optimum drainage and flexible integration
- Fine structure (22/20 mesh, wire \varnothing 0.15 mm) allows good adaptation to substrates
- **Non-combustible building material (fire protection class A1)**
- Roll width up to 1200 mm, rollable and easy to transport
- Closed edge (C-Edge) for secure installation without fraying
- Ideal for applications requiring high electrical conductivity and mechanical stability
- Manufactured and tested in accordance with ISO 9001 – complete identification & traceability



BASIC TECHNICAL DATA

Feature	Description
Product name	IQM Scan® Layer - metal mesh
Material	Stainless steel mesh aus 1.4301 (SS304)
Roll width	approx. 120 cm
Roll length (Standard role)	Max. 200 m (max. 25 kg/roll – labour law restriction)
Overlapping	According to installation instructions (typically 10–15 cm)
Installation position	Below (bituminous) waterproofing layer
Connection option	Via connection clamp with pre-assembled cable

AREAS OF APPLICATION

- Plastic and bitumen waterproofing systems
- Roof, building and container waterproofing
- Counter electrode for large-area moisture monitoring
- IQM Scan® applications under mechanically stressed conditions
- Industrial buildings, flat roofs, technical intermediate layers
- Applications with high requirements for temperature and fire behaviour

SCOPE OF DELIVERY

- Rolled stainless steel mesh in accordance with project-specific specifications
- Technical Specification / Data Sheet

INSTALLATION INSTRUCTIONS

The metal mesh is laid over the entire surface and tension-free under the waterproofing. The overlaps must be carried out in accordance with the installation instructions (typically 5–10 cm) and the mesh must not be kinked or mechanically damaged. C-Edge should preferably be laid at joints to prevent fraying.

Connection to the IQM Scan® system is made using suitable clamping or contact modules. Installation must only be carried out by trained specialists.

CONTACT & SUPPORT



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TECHNICAL SAFETY DATA SHEET

IQM Scan® Layer metal mesh	Detail specification
Maximum width	1200 mm
Edge	C / Closed Edge
Roll diameter	Max 500 mm (max. 25 kg/roll – labour law restriction)
Core diameter	50/76/150 mm
Roll length	Max. 200 m (max. 25 kg/roll – labour law restriction)
Total weight	Max 25kg (labour law restriction)

Material: 304	Detail specification	
Material code:	1.4301	
Chemical composition	C	≤ 0.08
	Mn	≤ 2.0
	P	≤ 0,045
	S	≤ 0,030
	Si	≤ 1.0
	Cr	17,5-19,5
	Ni	8.0-10.5
	Fe	Remaining share quantities
	Others	none
Tensile strength (T/S):	620–900 MPa	
Elongation:	> 20 %	
Mesh specification	Mesh type:	Stainless steel mesh 22/20
	Wire diameter:	0,15 mm
	Mesh count:	22 / 20
	Mesh size:	1,211 mm / 1,061 mm
	Open space:	76,75 %

Standards & Quality	Detail specification
Fire protection class:	A1 in accordance with EN 13501-1
Production according to:	ISO 9001
	P 08.5 – Production & service supply
	P 08.5.2 – Identification & traceability
Each batch is produced, tested and documented in accordance with project specifications.	



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