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## 2.1 Product Name and Manufacturer

Product: knithawk  
Manufacturer: Mayer & Cie. GmbH & Co. KG

## 2.2 Product images



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### 3 Description and Features

"knithawk" is a device for optical textile monitoring during the manufacturing process. It monitors the knitted fabric for knitting errors and divides them into horizontal, vertical and point defects. "knithawk" is positioned centrally on the machine (center bar), monitors the knitted fabric immediately after stitch formation and can thus detect defects in a timely manner. All defects are recorded in a protocol and made available for evaluation. "knithawk" consists of a compact camera unit, whereby the knitted fabric is monitored by means of infrared technology.

### 4. Limitations

#### 4.1 Limitation of structures (knitted fabric) Machine type/fineness/diameter

*Structures/knitted fabrics:*

Single jersey llain and single jersey plated with elastomer

*Machine types:*

Single Jersey machines (Relanit 3.2/ Relanit 3.2 II/ Relanit 3.2 S/ Relanit 3.2 HS/ Relanit 3.2 HS II/ Relanit 4.0/ S4-3.2/ S4-3.2 II/ MV 4-3.2 II)

*Machine diameters:*

26 to 34 inches

*Gauges:*

E20 to E28

*Limitation of error analysis, evaluation of the knitted fabric:*

Oil stains in the knitted fabric are not recognized as defects

#### 4.2 Limitation of yarns

Dark (dyed) yarns are excluded

#### 4.3 Limitation of Duration/Software of the Premium Version

The premium version (software) of the device is available free of charge for 3 years after shipping (invoice creation date). After the 3-year premium version expires, the device runs in the "standard version". The premium version can continue to be used after 3 years for a monthly fee according to our current price list (see [www.mayercie.com](http://www.mayercie.com) #smarteloesungen #knithawk). The premium version offers regular software updates as well as online support and use of the dashboard.

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## 5. Warranty (hardware)

Mayer & Cie. GmbH Co. KG gives a warranty of 1 year on the product (when used properly).

## 6. Specifications/Areas of application

For installation on a Mayer & Cie. circular knitting machine for optical textile monitoring.

## 7. Functional Scope (Limitations) Knitting Machine Control Type:

*Required control type on the circular knitting machine:*

The prerequisite for the operation of the device is a machine control system of the type ME40 or MC5

Prior testing by MCT is required.

## 8. Technical Data

Operating voltage:	24 V DC
Power consumption:	2.1 A
Operating temperature:	+15°C to + 50°C
Production speed:	up to 2.5 m/s possible

## 9. Interfaces

Connection of a barcode scanner is possible (not included in the scope of delivery and no guarantee of full function).

Report as a PDF file can be sent by e-mail.

Knitroom/Dashboard

## 10. Dimensions and Weight

50 x 40 x 25 cm / Net weight: 3 KG (plus width ring weight)

Responsible:
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## 11. Scope of Delivery

1 pc. knithawk Scanner  
1 pc. Set of cables  
1 I/O Box  
1 pc. Adapter cable (scanner side)  
1 pc. Adapter cable (machine side)  
1 pc. Bracket  
1 pc. Deflection bars  
1 pc. Tablet  
1 Adjuster  
1 pc. Tablet holder  
1 USB cable  
1 pc. Width ring

## 12. Other usage information

Only for use and installation on a Mayer & Cie. circular knitting machine. Do not use on other machines or equipment.

## 13. Operating Conditions/Requirements

*Temperature:*

+15°C to +50°C

*Moisture tolerance:*

0-80% non-condensing

*Cleaning intervals/requirements:*

A cleaning cycle ranging from 1 day to 5 days is necessary depending on the environment and material is recommendable.

The light strip and the camera must be cleaned.

Please do not use harsh cleaning agents, only use a soft cloth to clean the camera window and the illumination window (dust and clean oil)

It is recommended to clean the camera every time you change rolls.

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#### *Minimum Network/Wi-Fi/Data Speed Requirement:*

A connection with 100Mbit is sufficient (minimum requirement)

#### *Intus/Encoders:*

The machine must have an Intus/rotary encoder. If not available, this can be purchased from Mayer & Cie. The intus is mandatory for the function of the device.

### **14. Intended and proper installation**

See Section 3 (Installation Instructions) in the Owner's Manual

### **15. Security Guidelines**

The knithawk device consists of a compact camera unit, which monitors the knitted fabric by means of an infrared laser. Safety measures must be taken due to the use of infrared lasers.

#### *Indication of optical radiation:*

Direct visual contact with optical radiation can lead to serious eye injuries.

Wearing safety goggles to protect yourself against optical radiation is mandatory.

Direct visual contact with the optical beam must be avoided.

In the event of active optical radiation, a warning light is switched on.



Warning of optical radiation



Wear safety goggles

Further safety instructions can be found on page 6+7 (1.1.3) Warnings, Commandments and Safety Instructions in the Operating Instructions.

Responsible:
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## 16. Support Information

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Responsible:
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