

## Report examination

Report belonging to examination no. : NL 11-400-1002-131-09  
Date of issue of original report : March 7<sup>th</sup>, 2011  
No. and date of revision of report : -.-  
Concerns : component  
Revision -.- concerns : -.-  
Requirements : Standards: EN 81-1/2  
Project no. : P100095-06

## 1. General specifications

Name and address manufacturer : Bode Components GmbH  
Eichsfelder Strasse 29  
D 40595 Düsseldorf  
Germany  
Description component : Tension weight system for overspeed  
governors  
Type : SGD, SGI, SGV, SR/FO-V  
Laboratory : -  
Data of examination : January – February 2011  
Examination performed by : R.E. Kaspersma

## 2. Description component

Bode Components GmbH produces overspeed governors. For these overspeed governors four tension weight systems are available.

The following type designations are used:

- **SGD**
- **SGI 200/300**
- **SGV/SRV**
- **SR/FO-V**

The SGD system consists of a frame which is guided by guide rails. Inside the frame five weight blocks can be placed. The weight blocks mass is 15.4 kg. The mass of the 200 mm sheave frame is 6 kg and the mass of the 300 mm frame is 8.5 kg.

The SGI 200/300 system consist of a cast iron weight which is split onto two parts which encase the tension sheave. The total mass of this system depends on the sheave diameter. The 200 mm mass is 66 kg and the 300 mm mass is 68.5 kg

The SGV/SRV system is a system with a weight of 15 kg suspended on a arm. The arm can be fitted with a 200 mm or 300 mm sheave. The position of the sheave and weight can be adjusted on the arm.

The SR/FO-V system is a system with a weight of 30 kg suspended on a arm. The arm can be fitted with a 200 mm or 300 mm sheave. Additionally a brake cylinder is installed to add force for the upward direction. The brake cylinder is adjusted at 200 N. The position of the sheave and weight can be adjusted on the arm.

### 3. Examinations and tests

The examination covered a check whether compliance with the EN 81-1/2 clause 9.9 and 9.11.5 and Annex F.4 and F.8 is met.

The examination included:

- Examination of the technical file consisting of:
  - All relevant information on the model to be checked.
  - Performed calculations according to EN 81-1.
  - Instruction manuals ( Installation, Operation, Maintenance ).
  - Examination of the representative model in order to establish conformity with the technical file.

### 4. Results

After the final examination the installation and the technical file were found in accordance with the requirements. The functional tests passed without remarks. The load tests passed without remarks and did not lead to permanent deformations or loss of stability.

#### **4.1 Calculations**

Calculations are made according to EN 81-1. There has been given special attention to the fact that it should be possible to conduct final inspections without the need of calculations.

#### **4.2. Measurements**

During the EC-type examination of the overspeed governors type 7,8 and 9 of Bode all the weight combinations were verified to ensure sufficient force to operate the safety gear.

Empirical determined operating force of the systems:

Type	Operation force		Position of tension weight
	downwards	upwards	
SGD	2000 N	380 N	Centrally under the governor rope
SIG	1000 N	335 N	Centrally under the governor rope
SR/FO-V	2000 N	340 N	Pos. 1 on the drawing <sup>1)</sup>
SRV	600 N	X	Pos. 1 on the drawing <sup>1)</sup>

<sup>1)</sup> By shifting the tension sheave and the tension weight higher operating forces can be obtained.

Type	EC-type certificate number	Notified Body
7	NL-10-400-1002-131-01	Liftinstituut B.V.
8	NL-10-400-1002-131-02	Liftinstituut B.V.
9	NL-10-400-1002-131-03	Liftinstituut B.V.

## 5. Conditions

On the examination report the following conditions apply:

- The force in the rope shall be calculated according the EN 81-1 to ensure a minimum pulling force of 300 N when the overspeed governor is activated.
- The safety factor of 8 of the overspeed governor rope shall be calculated according the EN 81-1
- The correct function of the brake cylinder shall be checked during maintenance.

## 6. Conclusions

Based upon the results of the examination Liftinstituut B.V. issues a examination report taking into account the above mentioned conditions.

Prepared by:



Robert Kaspersma  
Senior Specialist  
Liftinstituut B.V.

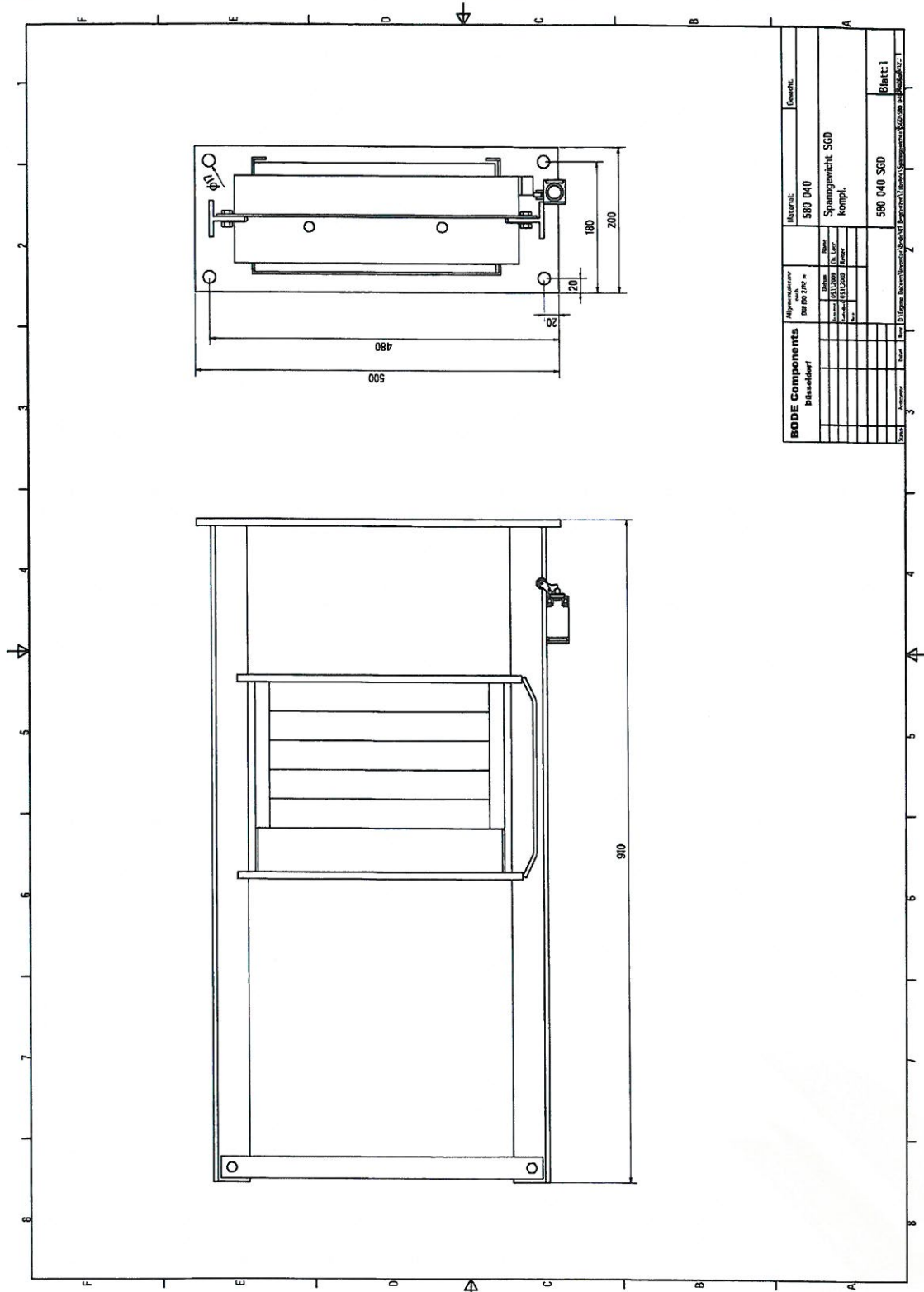
Reviewed by:

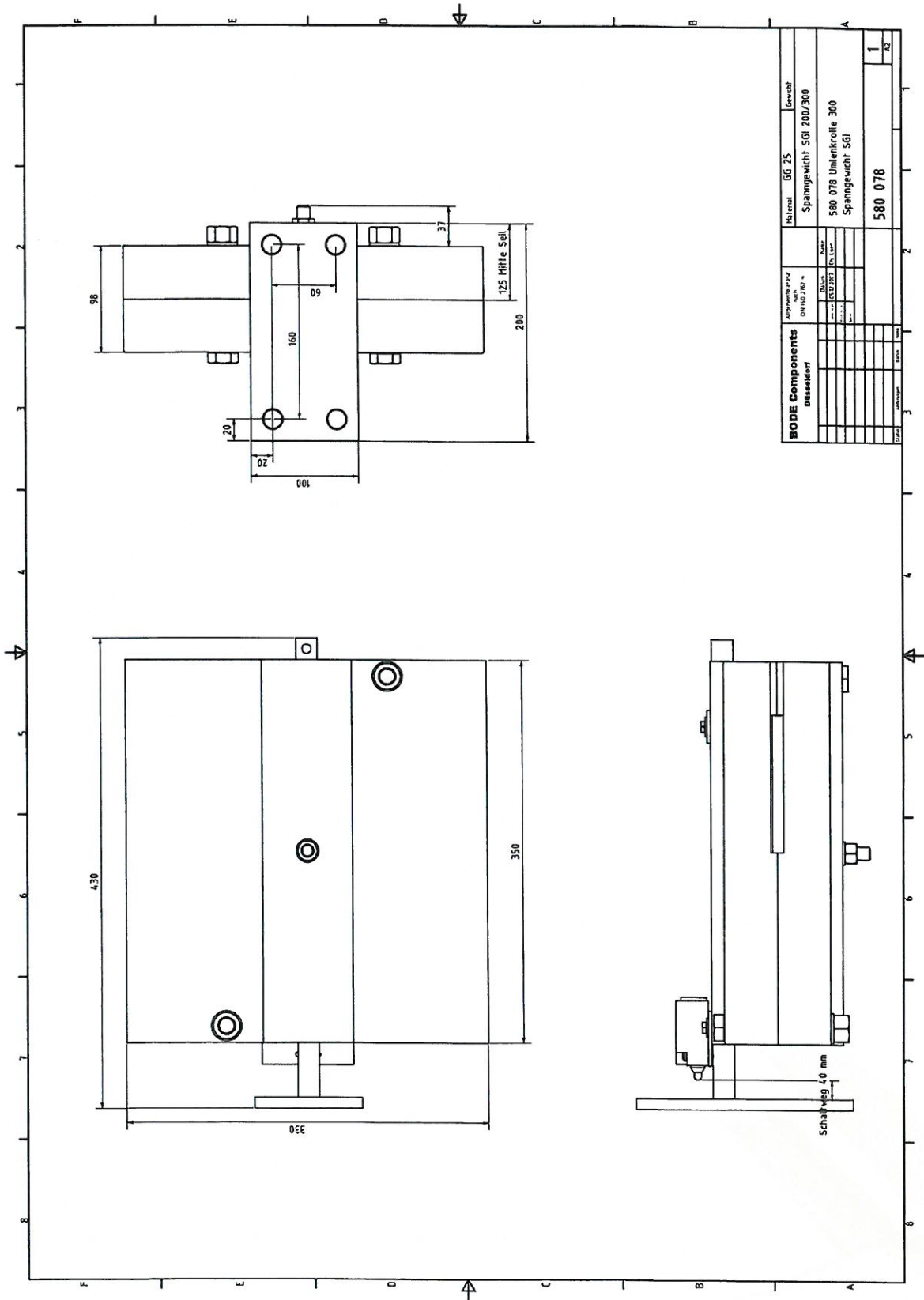


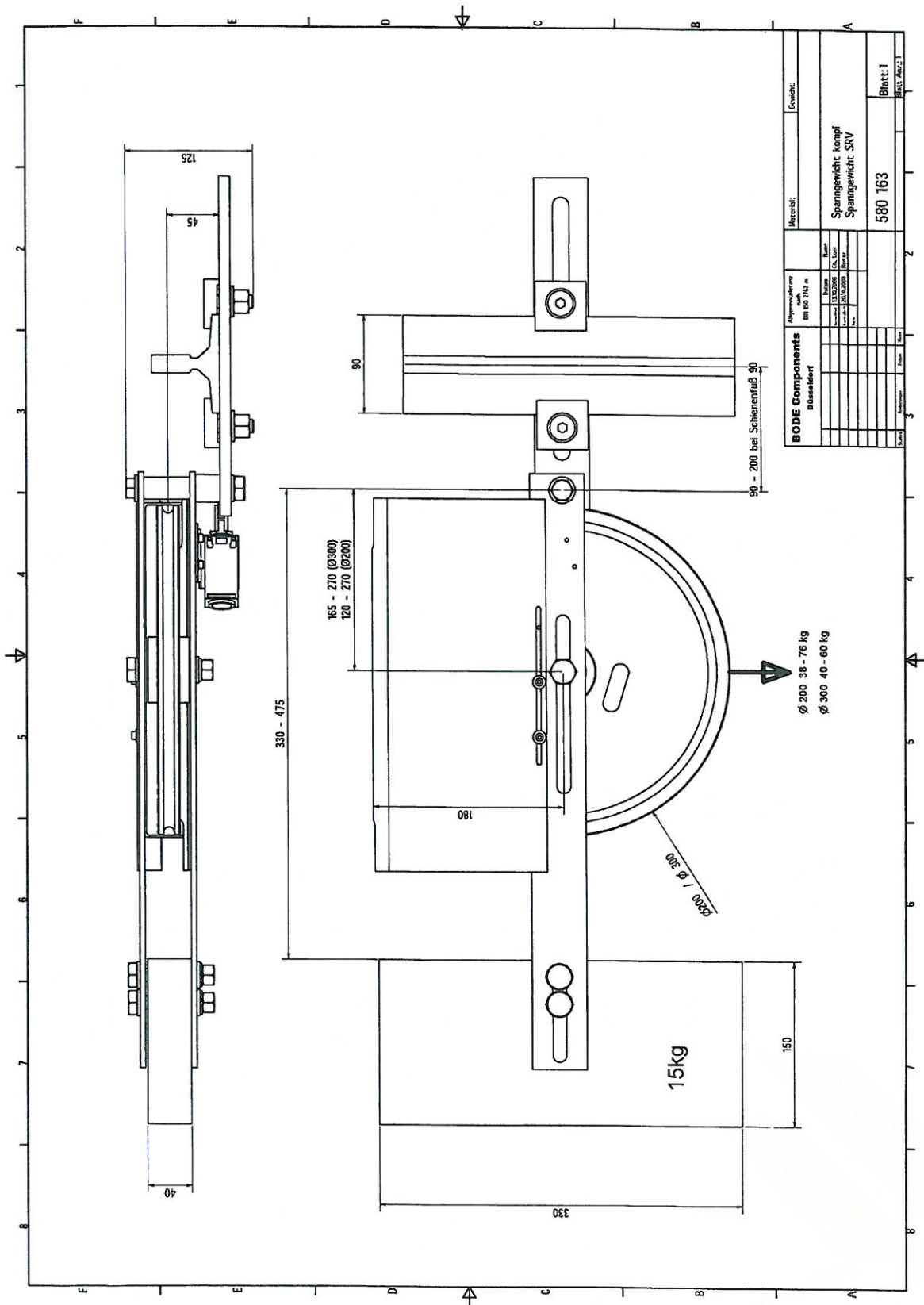
W.G. Kasteleijn  
Product Manager Lifts Directive  
Liftinstituut B.V.

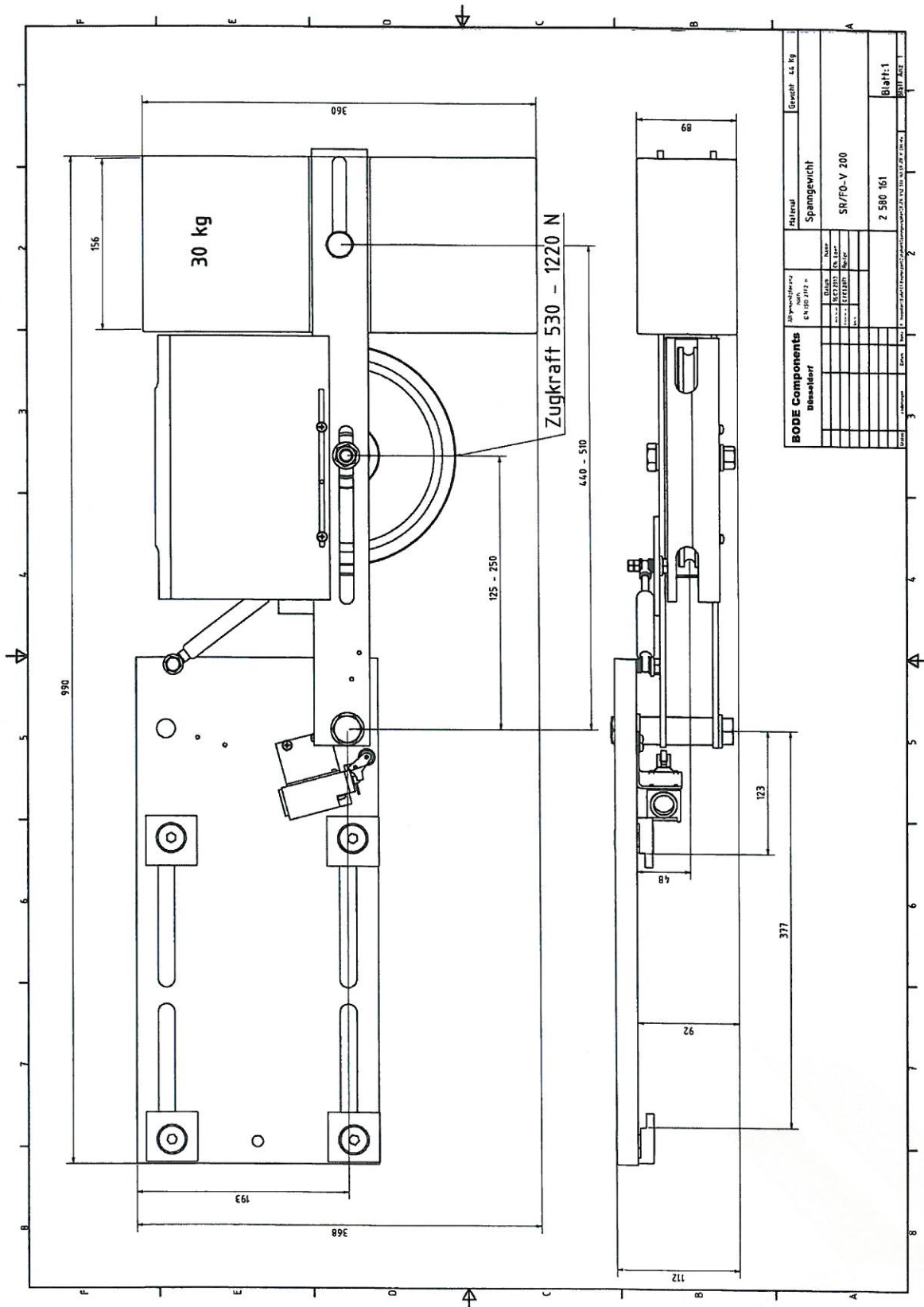
## Annexes

## Annex 1 : Basic lay-out of the different systems

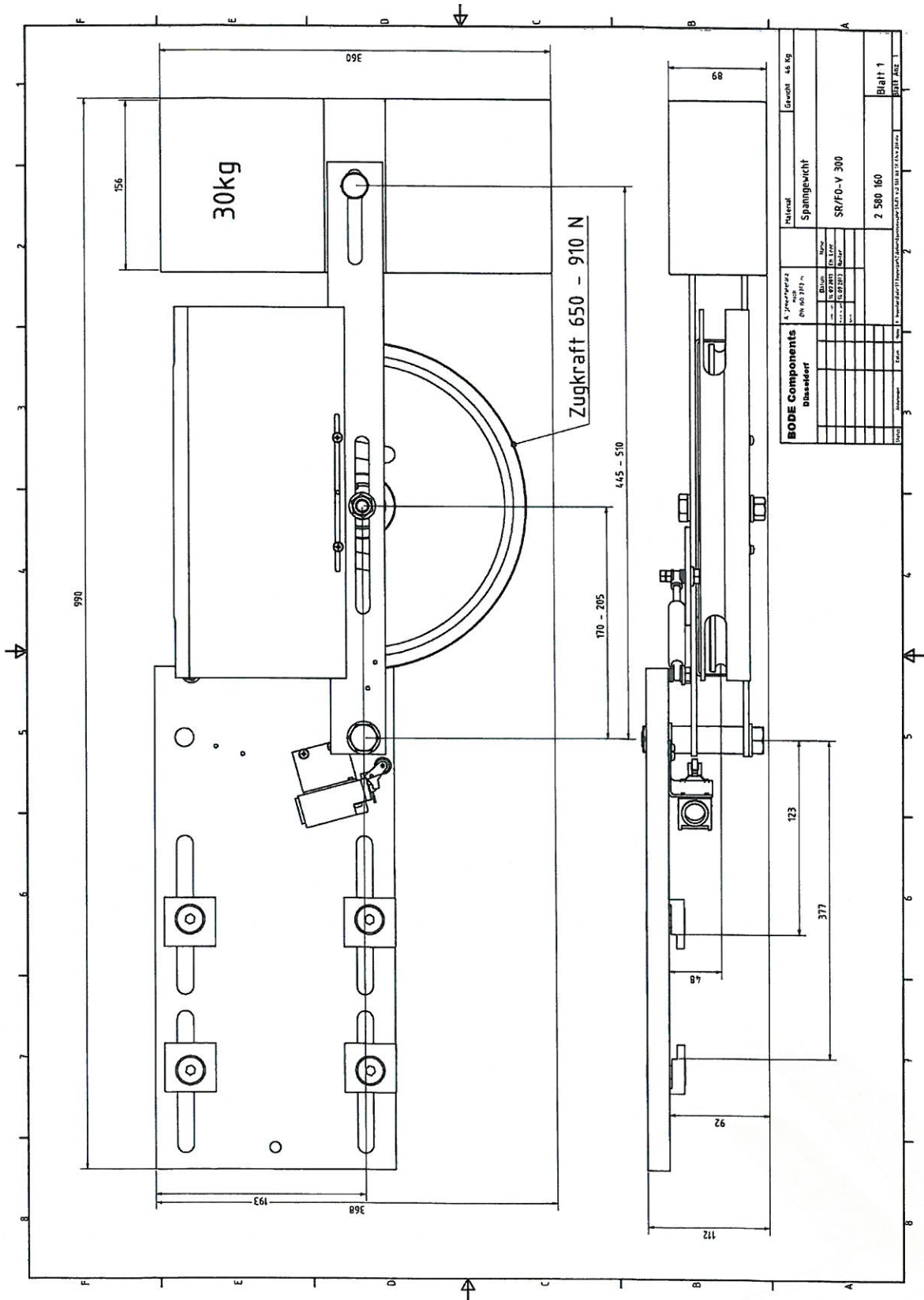












Annex 2 : Overview of previous revisions of report(s)

## REVISIONS OF REPORT

Rev.:	Date	Summary of revision