Inspection Door

Operating Instructions

Version: 0
Language: ENG
M3127EUK-05/21

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1 General

NOTE

Before starting work these operating instructions must be read and understood completely

Martin® Inspection Doors allow inspection in chutes of belt conveyors for service requirements or to clean out material buildup.

The inspection doors contain a Barrier Guard. This serves for the safety of the operators and protects against access in hazardous areas. Therefore, the Barrier Guard must always be properly mounted in the frame of the inspection door.

A minimum distance of **120 mm** between the Barrier Guard and hazardous areas must be observed.

1.1 About these operating instructions

These operating instructions apply solely for inspection doors and are intended for those persons who install inspection doors, commission them, and monitor their usage.

The operating instructions must be kept for the lifetime of the inspection door and be made available in an orderly condition to all persons entrusted with work with and on the inspection door.

1.2 Intended usage

The inspection doors are used to observe processes within machines such as belt conveyors and their bulk material transfers. They can also be used to carry out inspection / cleaning / maintenance or repair activities on the components behind them.

They may only be used

- in industrial areas above ground
- at a sufficiently safe distance from danger points
- according to the technical data in the documentation
- in the installation position with hinges to the side on vertical walls.

The usage of the inspection doors is only considered to be as intended if the following conditions are also fulfilled:

- Before starting initial work, the personnel must have been instructed on the work on the system and on all relevant issues of occupational health and safety
- Any personal protective equipment required must be worn
- The provisions of the operating instructions must be observed in full.

The inspection doors are not suitable,

- to hold back ejected objects, especially machine parts, conveyor belts or bulk material,
- to hold back released energy from explosions or divert it in a safe direction, or
- to retain hazardous substances, noise or radiation.
- to absorb additional loads caused, for example, by deposited objects or people stepping on the inspection doors.
- to be used potentially explosive areas of ATEX Zones 0, 1, 2 and 20 as well as underground, as they are not designed for this purpose.

The inspection doors are not to be mounted

- horizontally in areas where they may be stepped on.
- facing downward
- in direct path of material
- where door can be used as a step
- where material can collect in cover.

Operation of the inspection doors under deviating conditions and unauthorised modification of the cleaners is considered as improper usage

Special product variants of the inspection doors can also be used in ATEX zones 22 and 21 under certain circumstances.

1.3 Personnel qualification

Only authorised and qualified personnel may be entrusted with work with and on the inspection door. Persons are considered qualified if they have the qualification of a skilled worker and meet all the following requirements:

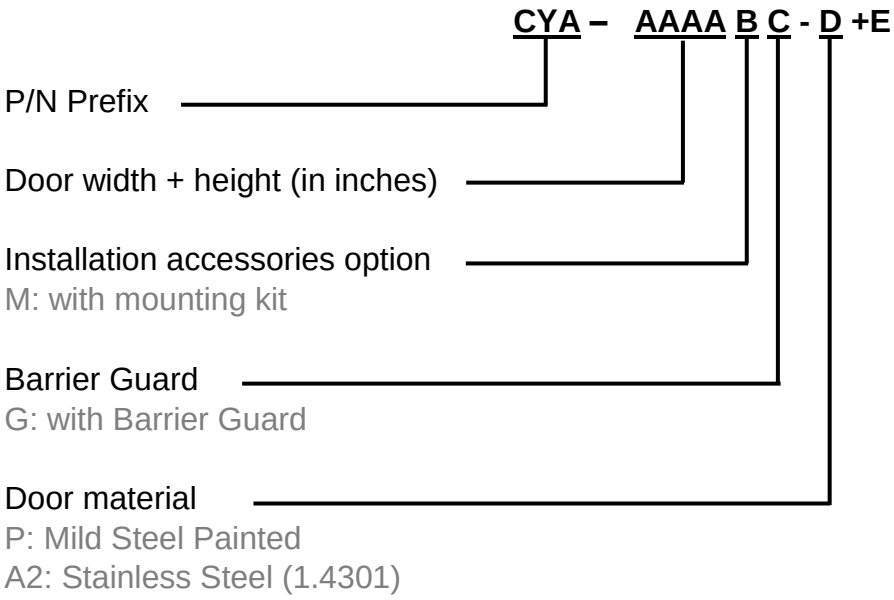
- completed professional training or at least 5 years of professional experience in the field,
- technical experience,
- knowledge of the relevant occupational health and safety regulations.

The persons must

- be able to assess the tasks and risks assigned to them,
- be able to recognise potential dangers in advance,
- be physically and cognitively able to operate the conveyors and cleaners safely,
- have been trained and instructed appropriately,
- have read and understood these operating instructions.

Work on earth connections (Protective Bonding Kits), cabling, switching, control, regulation, automation and all electrical components may be carried out only by trained electricians.

1.4 Part number



1.5 Technical Data

The inspection door is suitable for the following operating parameters:

	Operating parameter
Temperature range:	-30 - 80 °C

2 Safety

2.1 General safety instructions

DANGER

Entanglement in moving or rotating parts

Body parts may get caught and pulled in by moving or rotating parts of the machinery.

- *The distance between the danger point and the Barrier Guard of the inspection door must be* ***at least 120 mm***

DANGER

Entanglement in moving or rotating parts

Body parts and/or clothing may get caught and pulled in by moving or rotating parts of the machinery when Barrier Guards are not fitted in mainframe of the inspection doors.

- *Ensure that the Barrier Guards are properly mounted in the frame of the inspection doors. Only then switch on the machines or equipment.*
- *Ensure that the barrier guards and all components are always in good condition.*
- *Ensure that the Barrier Guards are not bent and can be easily installed.*

CAUTION

Risk of injury

When opening the inspection door, dusts, particles and other objects may be released. These can cause injuries to the face and other parts of the body.

- *Keep as much distance as possible when opening the inspection door.*
- *Always open the inspection door slowly.*
- *Wear personal protective equipment.*

WARNING

Flying objects

Objects left on or in the conveyor can fly around uncontrollably when the conveyor is switched on and can hit and injure persons.

– *Before switching on the conveyor, remove all foreign objects such as tools, devices, etc. from the belt!*

WARNING

Danger of injury due to unapproved component parts

Unapproved parts can directly or indirectly cause personal injury or damage to property.

– *Only use accessories and spare parts that are distributed by the manufacturer or are explicitly approved (in writing)!*

2.2 Personal protective equipment

Persons carrying out work on cleaners must wear suitable personal protective equipment.
Minimum requirements:

Symbol	Meaning
	Wear head and eye protection
	Wear at least ankle-high foot protection
	Use gloves
	Use fall protection, if required

2.3 Safety markings on the system

The safety markings on the inspection doors must be kept in good condition and clearly visible at all times.

If parts of the system are replaced, ensure that the spare parts are or will be provided with appropriate safety markings.

3 Installation

DANGER

Entanglement in moving or rotating parts

Body parts and/or clothing may get caught and pulled in by moving or rotating parts of the machinery.

- *Before any installation or maintenance work is carried out, ensure that all power sources to the conveyor belt system and its accessories are switched off and secured against inadvertent switching on.*
- *Apply Log-Out / Tag-Out / Try-Out (LOTOTO) Procedures*
- *Apply warning signs*

DANGER

Automatic start-up of the conveyor

Serious or fatal injuries due to unintentional start-up of the conveyor.

- *Switch off the conveyor before starting work and secure it against being switched on again.*
- *Follow safe procedures to prevent unintentional restart.*

WARNING

Risk of falling down

Inspection doors are often mounted and operated in heights. There may be a risk of falling down.

- *Therefore, use a fall protection device when installing in higher working areas!*

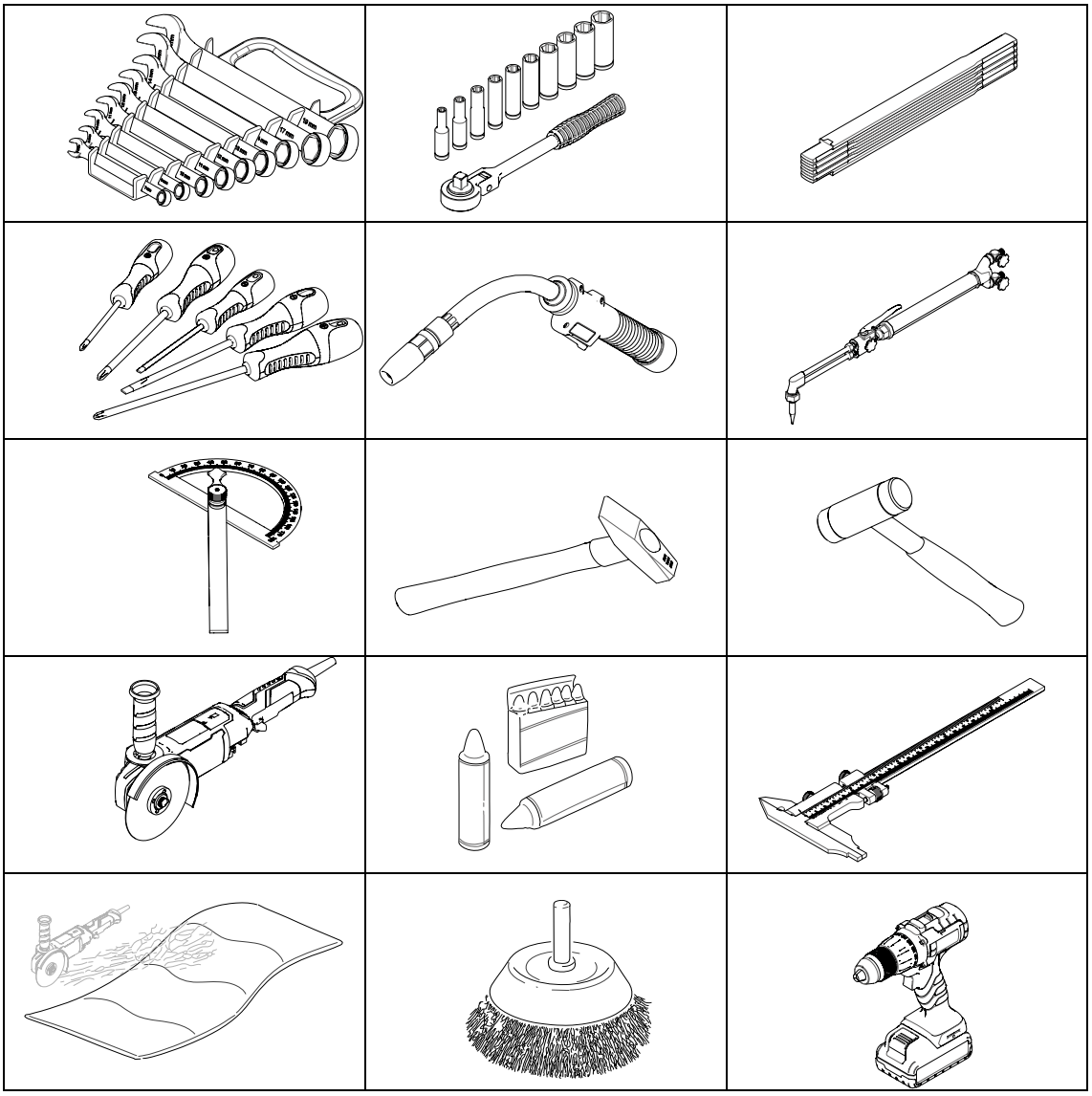
WARNING

Working in confined spaces

Areas in which inspection doors are installed are often difficult to access and include confined spaces. It is often necessary to work in difficult positions.

- *Determine whether occupational safety measures are necessary that go beyond the usual measures!*

3.1 Required maximum of tools and materials



3.2 Unpacking/transportation

WARNING

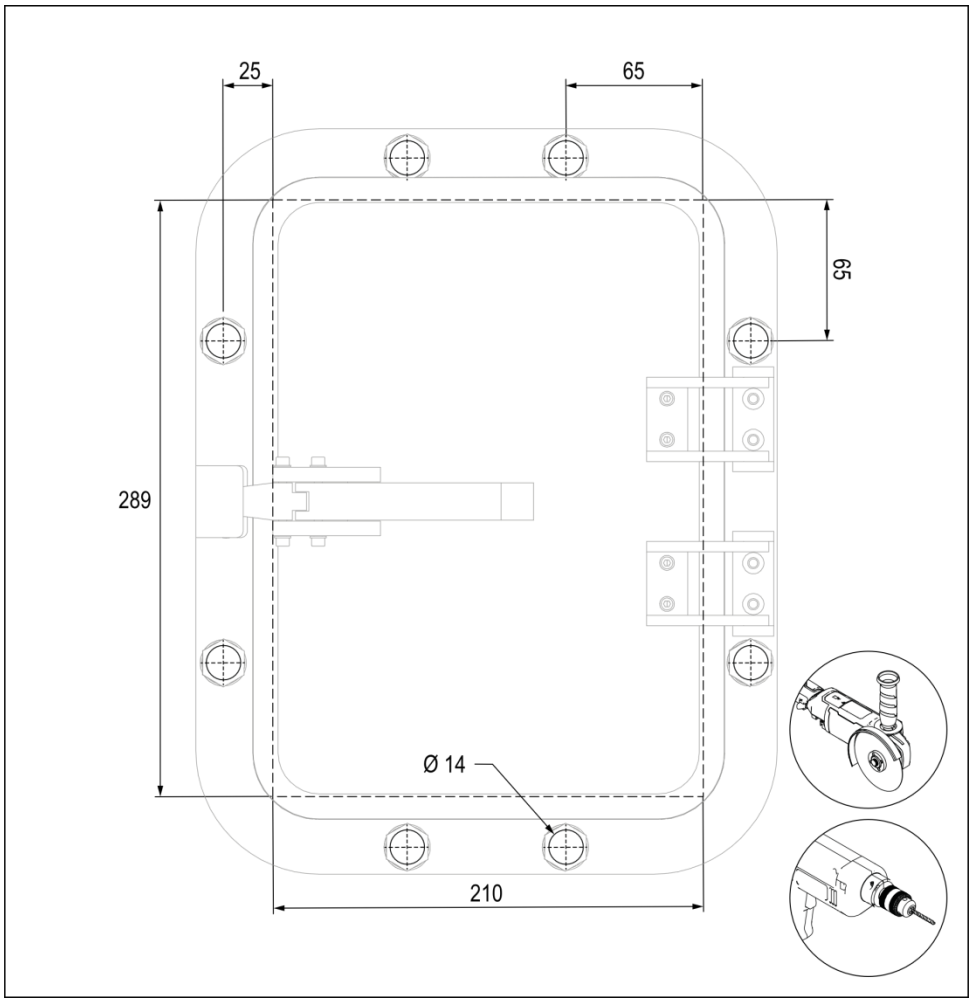
Heavy weight

The inspection doors may have weights that require handling by lifting devices. Handling inspections doors by hand can cause serious skeletal injuries.

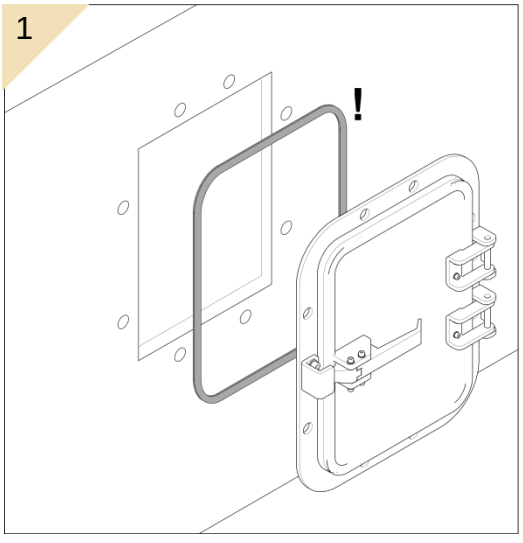
- *Use suitable aids if the load is > 25 kg per person!*
- *Identify the centre of gravity! Ensure that the inspections door cannot tilt during the lifting process!*

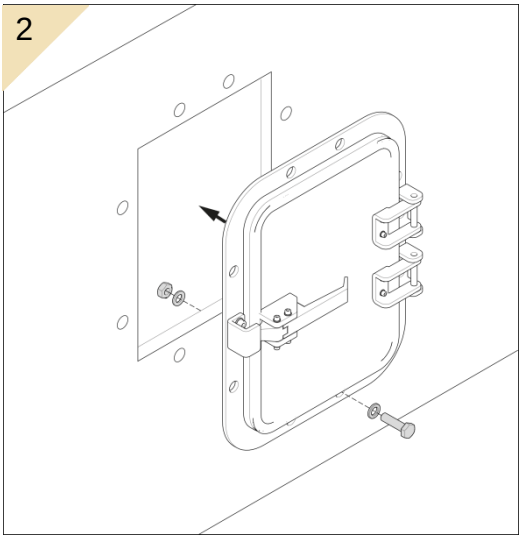
When unpacking, all components must be checked for completeness and intactness.

3.3 Determining the installation position



3.4 Mounting the inspection door





3.5 Placing labels

3.5.1 Safety label

The safety label (safety marking) below must be attached to the Inspection door or to the conveyor system in the immediate vicinity of the inspection door:

3.5.2 Other labels

The labels below are attached to the product:

1. Sticker showing the address of the Martin Engineering branch and the designation of the product

4 Maintenance / Repair

DANGER

Entanglement in moving or rotating parts

Body parts and/or clothing may get caught and pulled in by moving or rotating parts of the machinery.

- *Before any installation or maintenance work is carried out, ensure that all power sources to the conveyor belt system and its accessories are switched off and secured against inadvertent switching on.*
- *Apply Log-Out / Tag-Out / Try-Out (LOTOTO) Procedures*
- *Apply warning signs*

DANGER

Automatic start-up of the conveyor

Serious or fatal injuries due to unintentional start-up of the conveyor.

- *Switch off the conveyor before starting work and secure it against being switched on again.*
- *Follow safe procedures to prevent unintentional restart.*

CAUTION

Risk of injury

When opening the inspection door, dusts, particles and other objects may be released. These can cause injuries to the face and other parts of the body.

- *Keep as much distance as possible when opening the inspection door.*
- *Always open the inspection door slowly.*
- *Wear personal protective equipment.*

WARNING

Danger of injury due to unapproved component parts

Unapproved parts can directly or indirectly cause personal injury or damage to property.

- *Only use accessories and spare parts that are distributed by the manufacturer or are explicitly approved (in writing)!*

Interval	Component part	Activity
Daily	Barrier Guards	• Visual inspection. Ensure proper condition of the equipment • Ensure they are properly installed in the frame of the inspection doors
Weekly	All components of the inspection door	• Check that all securing parts are tightened. Tighten any loose connections as required. • Clean all warning labels. Replace any warning labels which are illegible • Check the seal of the door frame for damages. Replace if required.

5 Disassembly / Recycling / Disposal

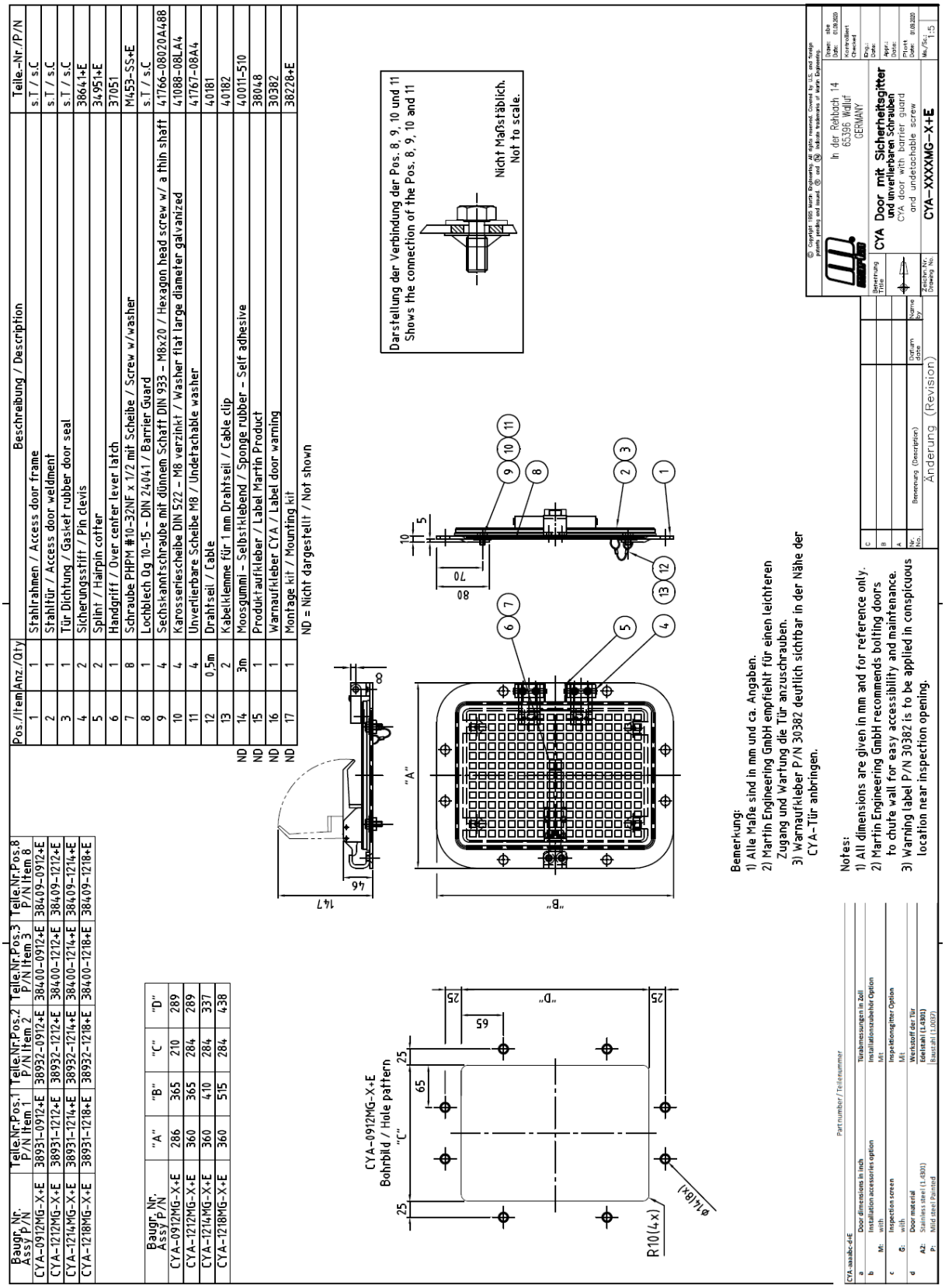
1. Disassemble inspection doors by material groups as far as possible.
2. Contact official bodies (disposal centres, authorities) and request information about proper disposal or recycling possibilities.
3. Recycle the different materials.

Only materials that cannot be reasonably recycled may be disposed of. Disposal must be carried out professionally.

Material groups that can be fed into a recycling process include:

- Sheet steel
- Steel profiles
- Plastics
- Rubber
- Non-ferrous metals
- Electrical cables
- Electrical components (with copper content)
- Lubricants

6 Scope of delivery and spare parts



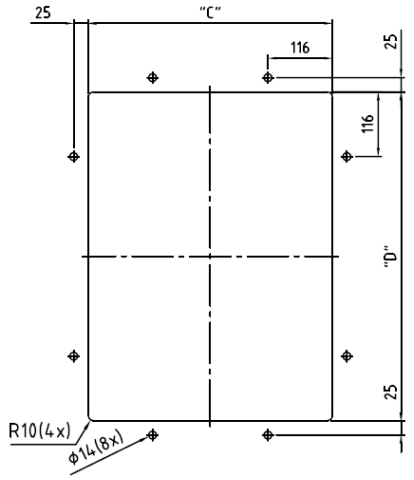
Baugr. Nr. Assy P/N	Teile.Nr.Pos.1 P/N Item 1	Teile.Nr.Pos.2 P/N Item 2	Teile.Nr.Pos.3 P/N Item 3	Teile.Nr.Pos.8 P/N Item 8
CYA-1818MG-X+E	38931-1818+E	38932-1818+E	38400-1818+E	38409-1818+E
CYA-1824MG-X+E	38931-1824+E	38932-1824+E	38400-1824+E	38409-1824+E
CYA-2424MG-X+E	38931-2424+E	38932-2424+E	38400-2424+E	38409-2424+E
CYA-3030MG-X+E	38931-3030+E	38932-3030+E	38400-3030+E	38409-3030+E

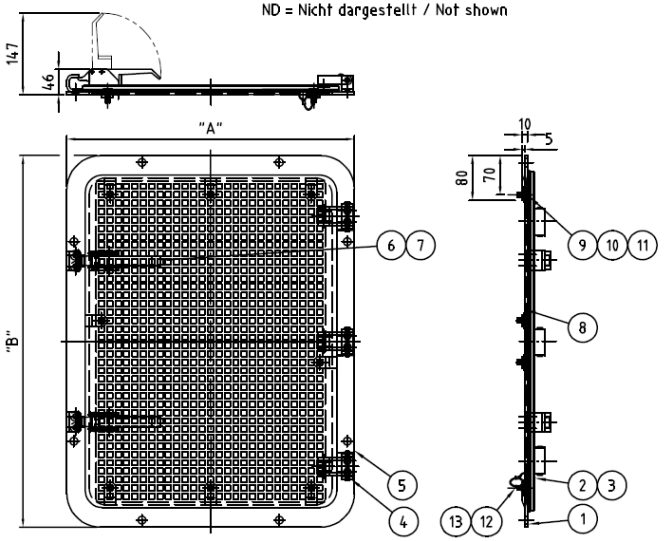
Baugr. Nr. Assy P/N	"A"	"B"	"C"	"D"
CYA-1818MG-X+E	515	515	438	438
CYA-1824MG-X+E	515	665	438	589
CYA-2424MG-X+E	665	665	583	583
CYA-3030MG-X+E	850	850	768	768

	Pos./Item	Anz./Qty	Beschreibung / Description	Teile.-Nr./P/N
	1	1	Stahlrahmen / Access door frame	s.T / s.C
	2	1	Stahltür / Access door weldment	s.T / s.C
	3	1	Tür Dichtung / Gasket rubber door seal	s.T / s.C
	4	3	Sicherungsstift / Pin clevis	38641+E
	5	3	Splint / Hairpin cotter	34951+E
	6	2	Handgriff / Over center lever latch	37051
	7	14	Schraube PHPM #10-32NF x 1/2 mit Scheibe / Screw w/washer	M453-SS+E
	8	1	Lochblech Qg 10-15 - DIN 24041 / Barrier Guard	s.T / s.C
	9	8	Sechskanntschraube mit dünnem Schaft DIN 933 - M8x20 / Hexagon head screw w/ a thin shaft	41766-08020A488
	10	8	Karosseriescheibe DIN 522 - M8 verzinkt / Washer flat large diameter galvanized	41088-08LA4
	11	8	Unverlierbare Scheibe M8 / Undetachable washer	41767-08A4
	12	0,5m	Drahtseil / Cable	40181
	13	2	Kabelklemme für 1 mm Drahtseil / Cable clip	40182
ND	14	3m	Moosgummi - Selbstklebend / Sponge rubber - Self adhesive	40011-510
ND	15	1	Produktaufkleber / Label Martin Product	38048
ND	16	1	Warnaufkleber CYA / Label door warning	30382
ND	17	1	Montage kit / Mounting kit	38228+E

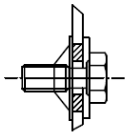
ND = Nicht dargestellt / Not shown

CYA-1824MG-X+E
Bohrbild / Hole pattern





Darstellung der Verbindung der Pos. 8, 9, 10 und 11
Shows the connection of the Pos. 8, 9, 10 and 11



Nicht Maßstäblich.
Not to scale.

Bemerkung:
1) Alle Maße sind in mm und ca. Angaben.
2) Martin Engineering GmbH empfiehlt für einen leichteren Zugang und Wartung die Tür anzuschrauben.
3) Warnaufkleber P/N 30382 deutlich sichtbar in der Nähe der CYA-Tür anbringen.

Notes:
1) All dimensions are given in mm and for reference only.
2) Martin Engineering GmbH recommends bolting doors to chute wall for easy accessibility and maintenance.
3) Warning label P/N 30382 is to be applied in conspicuous location near inspection opening.

Part number/ Teilenummer

CYA-aaaabc-d+E

			Türabmessungen in Zoll
a		Door dimensions in Inch	
b		Installation accessories option	Installationszubehör Option
	M:	with	Mit
c		Inspection screen	Inspektionsgitter Option
	G:	with	Mit
d		Door material	Werkstoff der Tür
	A2:	Stainless steel (1.4301)	Edelstahl (1.4301)
	P:	Mild steel Painted	Baustahl (1.0037)

C				
B				
A				
Nr. No.	Benennung (Description)	Datum date	Name by	
Änderung (Revision)				

In der Rehbach 14
65396 Walluf
GERMANY

Benennung Title: CYA Door mit Sicherheitsgitter und unverlierbaren Schrauben
CYA door with barrier guard and undetachable screw

Zeichn.Nr. Drawing No.: CYA-XXXXMG-X+E_2

Drawn: sbe Date: 01.09.2020
Kontrolliert Checked:
Eng.:
Appr.: Date:
Pl.art Date: 01.09.2020
Ms./Sc.: 1:7.5

Germany
Martin Engineering GmbH
In der Rehbach 14, 65396 Walluf, Germany
Tel. +49 (0)6123 97820; Fax +49 (0)6123 75533
info@martin-eng.de; www.martin-eng.de

Spain
Martin Engineering Spain
c/Balmes 297 1er 2a, 08006 Barcelona, Spain
Tel. +34 (0)876 245114; Fax +34 (0)966 719371
info@martin-eng.es; www.martin-eng.es

Great Britain
Martin Engineering Ltd.
8, Experian Way, NG2 Business Park,
Nottingham NG2 1EP, Nottinghamshire, Great Britain
Tel +44 115 946 4746
info@martin-eng.co.uk; www.martin-eng.co.uk

Turkey
Martin Engineering Türkiye
Yukarı Dudullu İmes Sanayi Sitesi, B Blok 205 Sokak No.6
34775 Ümraniye Istanbul, Turkey
Tel +90 216 499 34 91; Fax +90 216 499 34 90
info@martin-eng.com.tr; www.martin-eng.com.tr

France
Martin Engineering SARL
50 Avenue d'Alsace, 68025 Colmar Cedex, France
Tel +33 389 20 63204; Fax +33 389 20 4379
info@martin-eng.fr; www.martin-eng.fr

Italy
Martin Engineering Italy Srl
Via Buonarroti, 43/A, 20064 Gorgonzola (MI), Italy
Tel +39 295 3838 51; Fax +39 295 3838 15
info@martin-eng.it; www.martin-eng.it

Russia
OOO Martin Engineering
Ul. Bolshaya Dmitrovka, 23/1
125009 Moscow, Russia
Tel +7 495 181 33 43; Fax +7 499 720 62 12
info@martin-eng.ru; www.martin-eng.ru