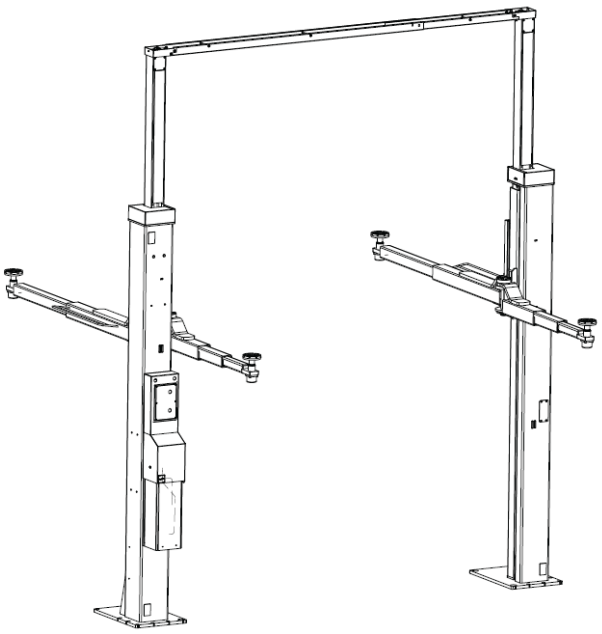
Nussbaum

TRANSLATION OF THE ORIGINAL OPERATING MANUAL

POWER LIFT

POWER LIFT HL 2.40 NT W UNI
POWER LIFT HL 2.40 NT W UNI RH

WASHING HALL



OPERATING MANUAL AND INSPECTION BOOK

Valid from: 04/2022

Serial No.:

Made in Germany

a member of the Stertil Group

Contents

Introduction

Nussbaum products are a result of many years of experience. A high quality standard and superior concept guarantees you reliability, long lifetimes and economical operation. To prevent unnecessary damage and hazards, read this operating manual carefully and always comply with its contents.
Any other use, or use beyond purpose is considered improper.

Nussbaum Automotive Lifts GmbH is not liable for any resulting damage. The operating company alone carries the risk.

Proper use also includes:

- adherence to all instructions in this operating manual and
- compliance with inspection and maintenance work and the inspections stipulated.
- the operating manual is to be followed by all personnel working on the lift. This is notably with regards to Section 4 "Safety conditions".
- in addition to safety information from the operating manual, comply with rules and regulations at the location of use.
- proper system handling.

Operating company obligations:

The operating company is obliged to only permit personnel to work on the system who

- understand the principle regulations about work safety and accident prevention and who have been trained in working with the lift.
- have read the safety section and warning information in this operating manual, have understood it and confirmed learning with a signature.

Hazards in working with the system:

Nussbaum products have been designed and built to state-of-the-art and to recognised safety standards. However, improper use may lead to hazards to life and limb of the user or result in property damage.
The system may only be operated:

- for proper intended use.
- if it is technically in perfect condition.

Organisational measures

- The operating manual is always to be kept ready at the location of use of the system.
- Supplemental to the operating manual, refer to and comply with generally valid legal and other binding regulations for accident prevention and for environmental protection.
- Check occasionally that personnel have an awareness of hazards and safe work in compliance with the operating manual!
- Use personal protective equipment as needed or required by regulations.
- All safety and hazard information on the system is to be kept in a legible condition!
- Replacement parts must meet technical specifications of the manufacturer. This is only guaranteed for original parts.
- Deadlines pre-set or given in the operating manual for repeating tests / inspections must be followed.

Maintenance work, error removal

- Comply with pre-determined setting, maintenance and inspection work and intervals in the operating manual, including details for exchanging parts / part fittings! These activities may only be done by specialists who have participated in a special factory training.

Guarantee and liability

- In principle, our "General sales and supply conditions" apply.

  Guarantee and liability claims for personal and property damage are excluded if due to one or more of the following causes:
- Improper use of the system.
- Improper assembly, commissioning, operation and maintenance of the system.
- Operating the system with defective safety devices or improperly attached or non-functional safety and protection devices.
- Non-compliance with information in the operating manual in terms of transport, storage, assembly, commissioning, operation, maintenance and fitting of the system.
- Independent construction changes to the system.
- Independent changes to the system (e.g. drive ratios: power, rotation speed, etc.)
- Improperly done repairs.
- Catastrophic cases due to foreign influences or force majeure.

After successful set up, complete this form fully, sign it, make a copy and send the original to the manufacturer within a week. The copy remains in the inspection book.

Nussbaum Automotive Lifts GmbH

Korker Str. 24

D-77694 Kehl

Assembly protocol

The lift

with serial number..... was set up on .....

at (company name)..... in.....

checked for function and safety and put into operation.

The set up was done by the operating company / specialist (score out the one that does not apply).

After successful inspection of function and safety by a trained assembler, the lift is transferred without electrical connection (e.g. plug) to on-site power supply An on-site electrical connection between the lift and the power supply is to be done by a qualified electrician. (see details in the electrical plan)

The operating company confirms proper lift set up, has read and will comply with all information contained in this operating manual and inspection book, and will keep this document accessible to trained operators at all times.

The specialist confirms proper lift set up, has read all information in this operating manual and inspection book, and has transferred the documents to the operating company.

Anchor used (*):_____(type/brand)

Minimum anchoring depth (*) complied with: _____mm ☐ ok

Tightening torque (*) complied with: _____NM ☐ ok

.....	.....	.....
Date	Name, operating company & company stamp	Operating company signature
.....	.....	.....
Date	Name, specialist	Signature of specialist

Service partner: .....(Stamp)

(*) see enclosed anchor manufacturer sheet

Transfer protocol

The lift

with serial number ..... was set up on .....

at (company name) ..... in .....

checked for function and safety and put into operation.

The following listed people (operators) were trained to handle and care the lift after it was set up by a trained assembler of the manufacturer or a contract partner (specialist).
(Date, name, signature, empty lines must have a scored out)

.....	.....	.....
Date	Name	Signature
.....	.....	.....
Date	Name	Signature
.....	.....	.....
Date	Name	Signature
.....	.....	.....
Date	Name	Signature
.....	.....	.....
Date	Name	Signature
.....	.....	.....
Date	Name, specialist	Signature of specialist

Service partner:.....

1. General information

Technical documentation contains important information for safe operation and for retaining functional safety of the lift.

- To verify lift set up, the assembly protocol form is to be completed, signed and sent to the manufacturer.
- Forms are available in this inspection book for use in verifying single, regular and extraordinary safety checks. Use the forms to document inspections and leave the completed forms in the inspection book.
- The lift master forms must record changes to the construction or changes to set up location.

1.1 Set up and test the lift

Safety relevant work on the lift and safety inspections may only be done by personnel specifically trained to carry it out. They are designated in general and in this documentation as technical experts and specialists (competent people).

- Technical experts are people (freelance expert engineers, TÜV specialists) that may inspect and assess due to their education and experience with lifts. They are knowledgeable in the appropriate work safety and accident prevention regulations.

- Specialists (competent people) are people who have sufficient knowledge and experience with lifts and have participated in a special factory training by the lifts manufacturer.

1.2 Hazard information

To become aware of the hazardous points and important information, the following three symbols are used with the descriptive meaning. Pay particular attention to text positions that are labelled by these symbols.

Danger! Identifies a danger to life and limb, if the highlighted process is not done properly there is a mortal danger!

Caution! Identifies a warning of possible lift damage or other operating company property damage if the highlighted process is not done properly!

Note! Labels information about a key function or points to an important remark!

2.Lift master forms

2.1 Manufacturer

Nussbaum Automotive Lifts GmbH
Korker Str. 24
D-77694 Kehl

2.2 Purpose

The lift is a lifting tool for raising vehicles with a total weight of max. 4000 kg in normal workshop operation, for a maximum lift distribution of 3: 2 or 2:3 in the drive-in or against the drive-in direction. A single load from only one or two lifting arms may not happen.

The set up of the standard lift is not permitted in explosion endangered work shops. The lift can be mounted in washing halls.

Lift operation is done directly on the operating column (see Data sheet).

After construction and maintenance changes on load carrying parts the lift must be inspected afterwards by a specialist who approves the changes. If the set up location is changed, the lift must be checked again by a specialist and changed approved.

2.3 Changes to the design / construction

Inspections by a technical expert are required before recommissioning
(Date, type of change, technical expert signature)

.....

.....

.....

Name, address of technical expert

....
Location, date Technical expert signature

2.4 Changing the assembly location

Inspections by a technical expert are required before recommissioning (date, type of change, specialist signature)

.....

.....

.....
Name, address of technical expert

....
Location, date Technical expert signature

2.5 Declaration of conformity

EG- Konformitätserklärung

Nussbaum

gemäß Maschinenrichtlinie Anhang II 1A

Declaration of Conformity according Machinery Directive 2006/42/EG ANNEX II 1A
Déclaration de conformité selon directive machines annexe II 1A
Declaración de conformidad según Directiva Maquinaria 2006/42/EG ANNEX II 1A
Dichiarazione di conformità in accordo alla direttiva 2006/42/EG ANNEX II 1A

Hiermit erklären wir, daß die Hebebühne, Modell: Hereby we declare that the lift model: Par la présente nous déclarons que le pont élévateur modèle Por la presente declara, que el elevador modelo: Con la presente si dichiara che il sollevatore:	**POWER LIFT HL 2.40 NT W** HL 2.40 NT W UNI HL 2.40 NT W UNI RH

allen einschlägigen Bestimmungen der folgenden Richtlinien entspricht:
fulfils all the relevant provisions of the following Directives:
correspond aux normes suivantes:
cumple todas las disposiciones pertinentes de las Directivas siguientes:
adempie a tutte le richieste delle seguenti direttive:

Maschinenrichtlinie / Machinery Directive	2006/42/EG
EMV Richtlinie / EMC Directive	2014/30/EU
Niederspannungsrchtlinie / Low Voltage Directive	2014/35/EU

in Übereinstimmung mit den folgenden harmonisierten Normen gefertigt wurde
was manufactured in conformity with the harmonized norms
fabriqué en conformité selon les normes harmonisées en vigueurs.
producido de acuerdo a las siguientes normas armonizadas.
è stato fabbricato in conformità con le norme armonizzate

Fahrzeug- Hebebühnen / Vehicle lifts	EN 1493: 2010
Beauftragter für die Technische Dokumentation Authorised to compile the technical file	Nussbaum Automotive Lifts GmbH
Baujahr Year of manufacture	20___
Seriennummer Serial number	_____ Seriennummer

Kehl- Bodersweier, 05.04.2022

Frank Scherer
CEO

DoC-NUS_POWER-LIFT_HL-240-NT-W_2022-04

Nussbaum Nussbaum Automotive Lifts GmbH | Korker Straße 24 | 77694 Kehl-Bodersweier CE

3. Technical information

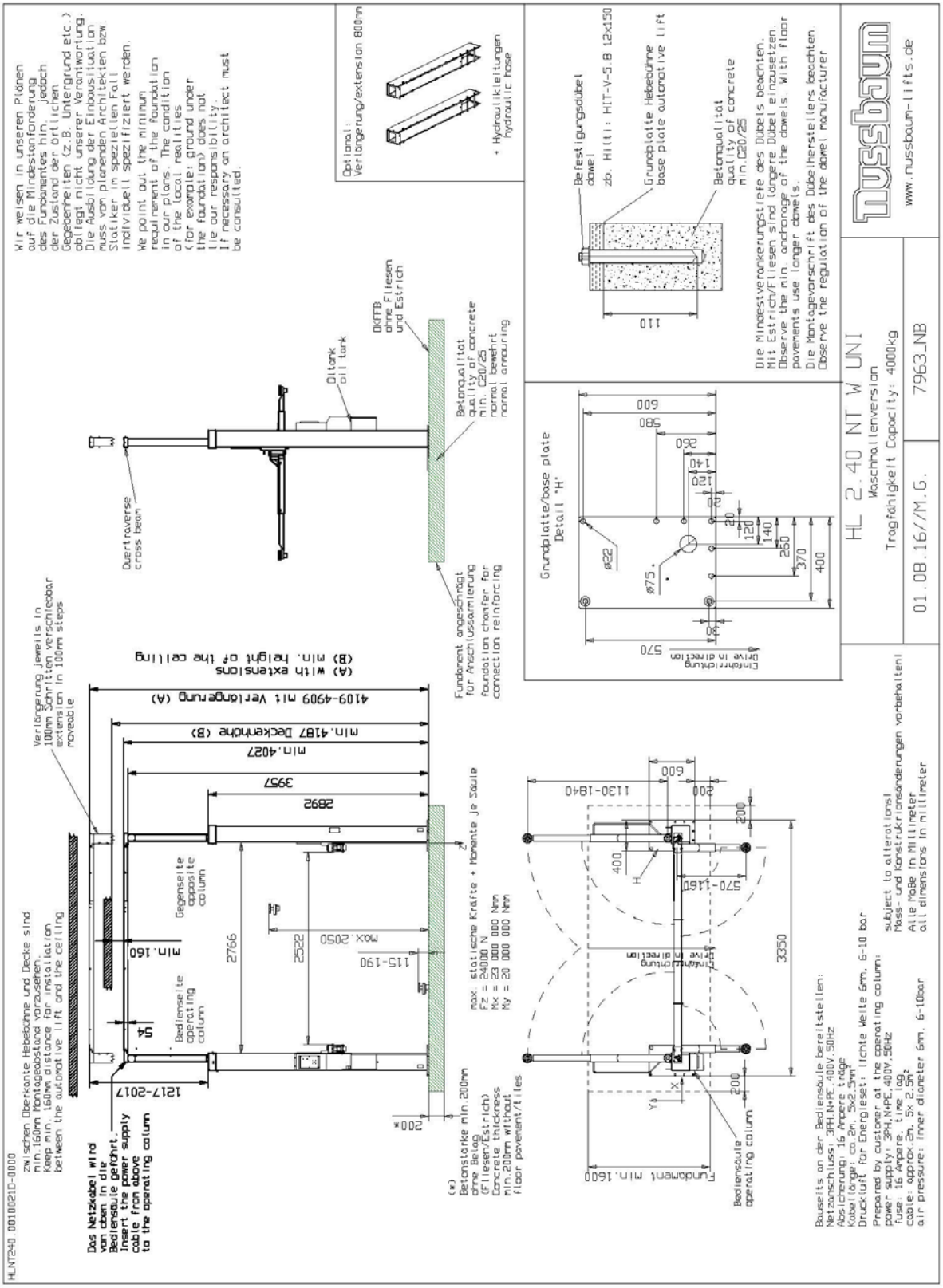
3.1 Technical data

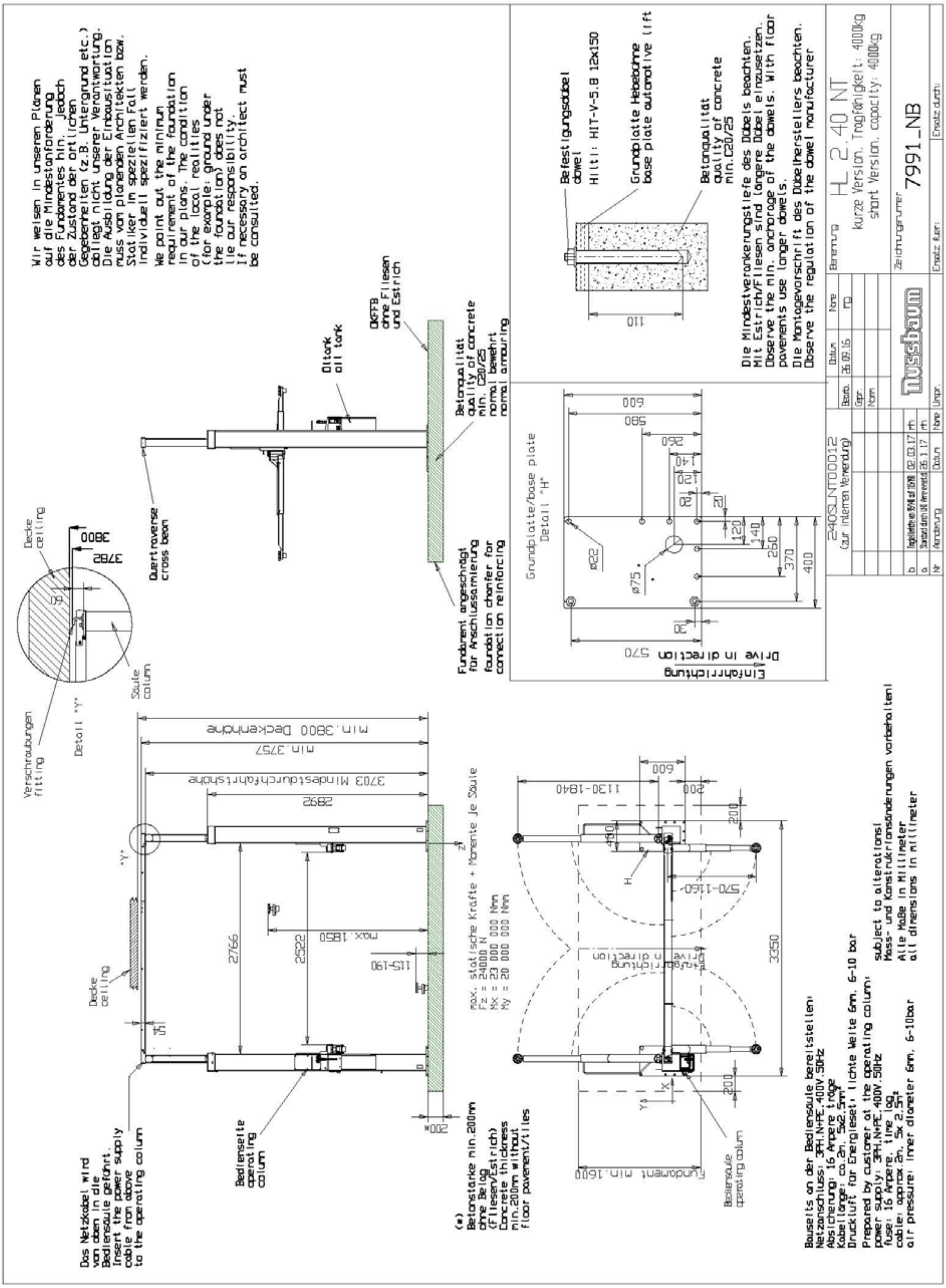
Total weight	700 kg
Load carrying capacity:	4000 kg
Loading a lifting arm:	A single load from only one lifting arm may not happen
Load distribution	max. 3:2 or 2:3 mm or against the drive- in direction
Lift / lowering time:	approx. 26 sec. / approx. 14 sec. with 4 t
RH:	approx. 24 sec. / approx. 13 sec. with 4 t
Standard operating voltage:	3 ~/N+PE,400 volt, 50 Hz
Motor capacity	3 kW
Motor speed:	2880 rpm
Hydraulic pump	2.7 cm^3
Lifting / lowering pressure	300/190 bar
Pressure relief valve	310 bar
Oil volume	approx.10 litres (HLP32)
Noise level LpA:	≤ 70 dB
on-site connection:	3~/N+PE, 400 V, 50 hz with 16 A fuses, slow, according to VDE regulations

3.2 Safety devices

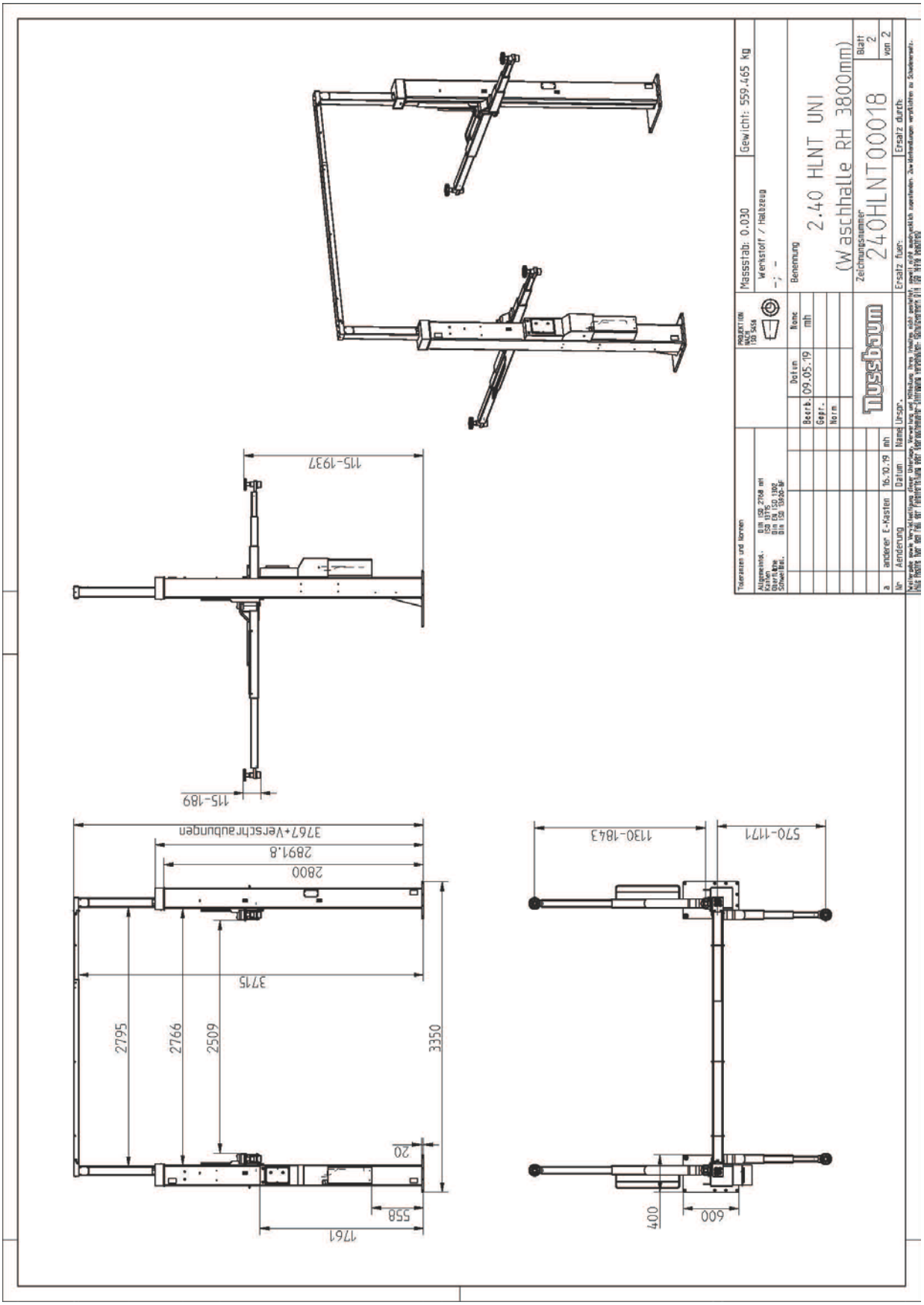
1. Over-pressure valve
   Hydraulic system fuse against over-pressure
2. Check valve
   Secure the vehicle against unauthorised lowering
3. Main switch with curtain lock device
   Fuse to prevent unauthorised use
4. Two independent cylinder systems (each with a command, follow system)
   Secure against unauthorised lowering of the lift
5. Deadman controls
   Lift movement stops when the push button is released
6. Lifting arm block
   Secures the lifting arm against horizontal movement in a lifted condition

3.3 Datasheet

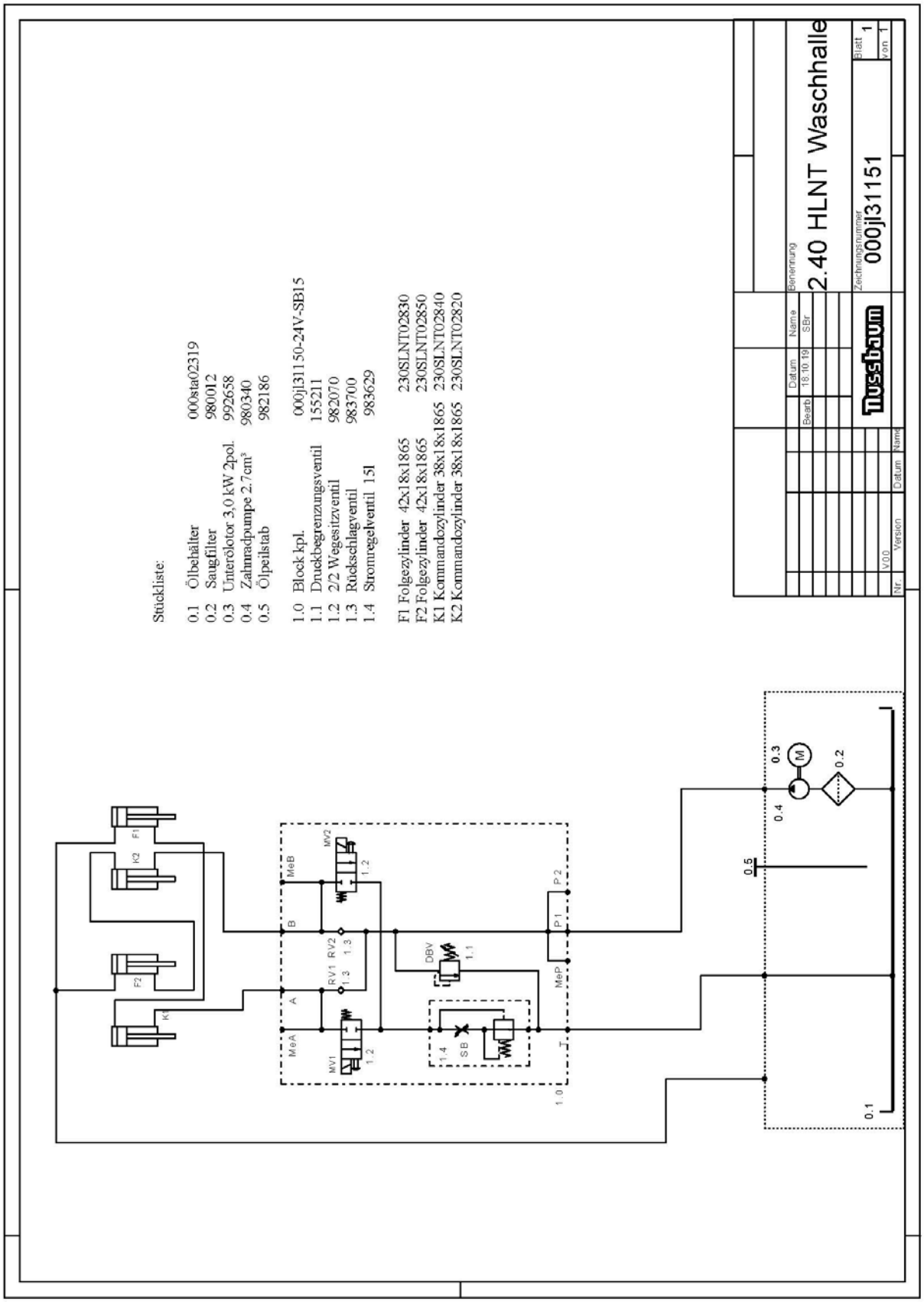



Wir weisen in unseren Plänen auf die Mindestanforderung des Fundamentes hin. Jedoch der Zustand der örtlichen Gegebenheiten (z.B. Untergrund etc.) obliegt nicht unserer Verantwortung. Die Ausbildung der Einbausituation muss von planenden Architekten bzw. Statiker im speziellen Fall individuell spezifiziert werden.
We point out the minimum requirement of the foundation in our plans. The condition of the local realities (for example: ground under the foundation) does not lie our responsibility. If necessary an architect must be consulted.
Befestigungsdübel dowel
Hilti: HIT-V-5.8 12x150
Grundplatte Hebebühne base plate automotive lift
Betonqualität quality of concrete min. C20/25
Die Mindestverankerungstiefe des Dübels beachten. Mit Estrich/Fliesen sind längere Dübel einzusetzen.
Observe the min. anchorage of the dowels. With floor pavements use longer dowels.
Die Montagevorschrift des Dübelherstellers beachten.
Observe the regulation of the dowel manufacturer
Ölfank oil tank
OKFFB ohne Fliesen und Estrich
Betonqualität quality of concrete min. C20/25 normal bewehrt normal armouring
Decke ceiling
Quertraverse cross beam
Fundament angeschrägt für Anschlussarmierung
foundation chamfer for connection reinforcing
Grundplatte/base plate Detail "H"
Einfahrrichtung
Drive in direction
Säule column
Verschraubungen fitting
Detail "Y"
min. 3800 Deckenhöhe
min. 3757
3703 Mindestdurchfahrtshöhe
2892
2766
2522
max. 1850
115-190
1130-1840
570-1160
3350
max. statische Kräfte + Momente je Säule
Fz = 24000 N
Mx = 23 000 000 Nmm
My = 20 000 000 Nmm
Das Netzkabel wird von oben in die Bediensäule geführt.
Insert the power supply cable from above to the operating column
Bedienseite operating column
(*) Betonstärke min. 200mm ohne Belag (Fliesen/Estrich)
Concrete thickness min. 200mm without floor pavement/tiles
Fundament min. 1600
Bediensäule operating column
Bauseits an der Bediensäule bereitstellen:
Netzanschluss: 3PH,N+PE,400V,50Hz
Absicherung: 16 Ampere träge
Kabellänge: ca. 2m, 5x2,5mm²
Druckluft für Energieset: lichte Weite 6mm, 6-10 bar
Prepared by customer at the operating column:
power supply: 3PH,N+PE,400V,50Hz
fuse: 16 Ampere, time lag
cable: approx. 2m, 5x 2.5mm²
air pressure: inner diameter 6mm, 6-10bar
subject to alterations!
Mass- und Konstruktionsänderungen vorbehalten!
Alle Maße in Millimeter
all dimensions in millimeter
HL 2.40 NT
kurze Version, Tragfähigkeit: 4000kg
short Version, capacity: 4000kg
7991_NB
nussbaum

Power Lift HL 2.40 NT W UNI RH

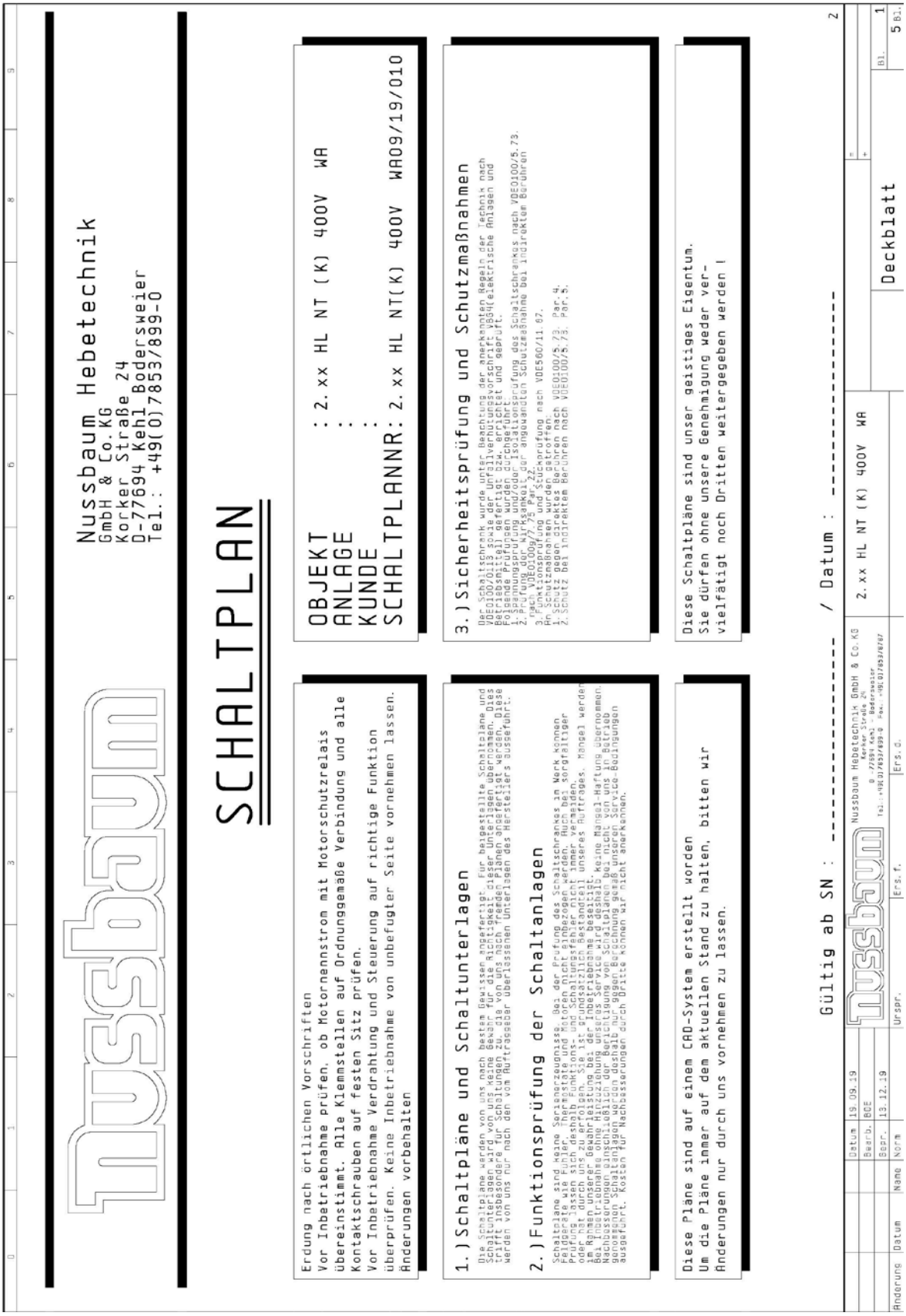


3.4 Hydraulic plan



Original hose set	230HLNT01090
Hose set extensions for refitting	230HLNT01091
Hose set extensions from the factory	230HLNT01092

3.5 Electrical circuit diagram



0 1 2 3 4 5 6 7 8 9

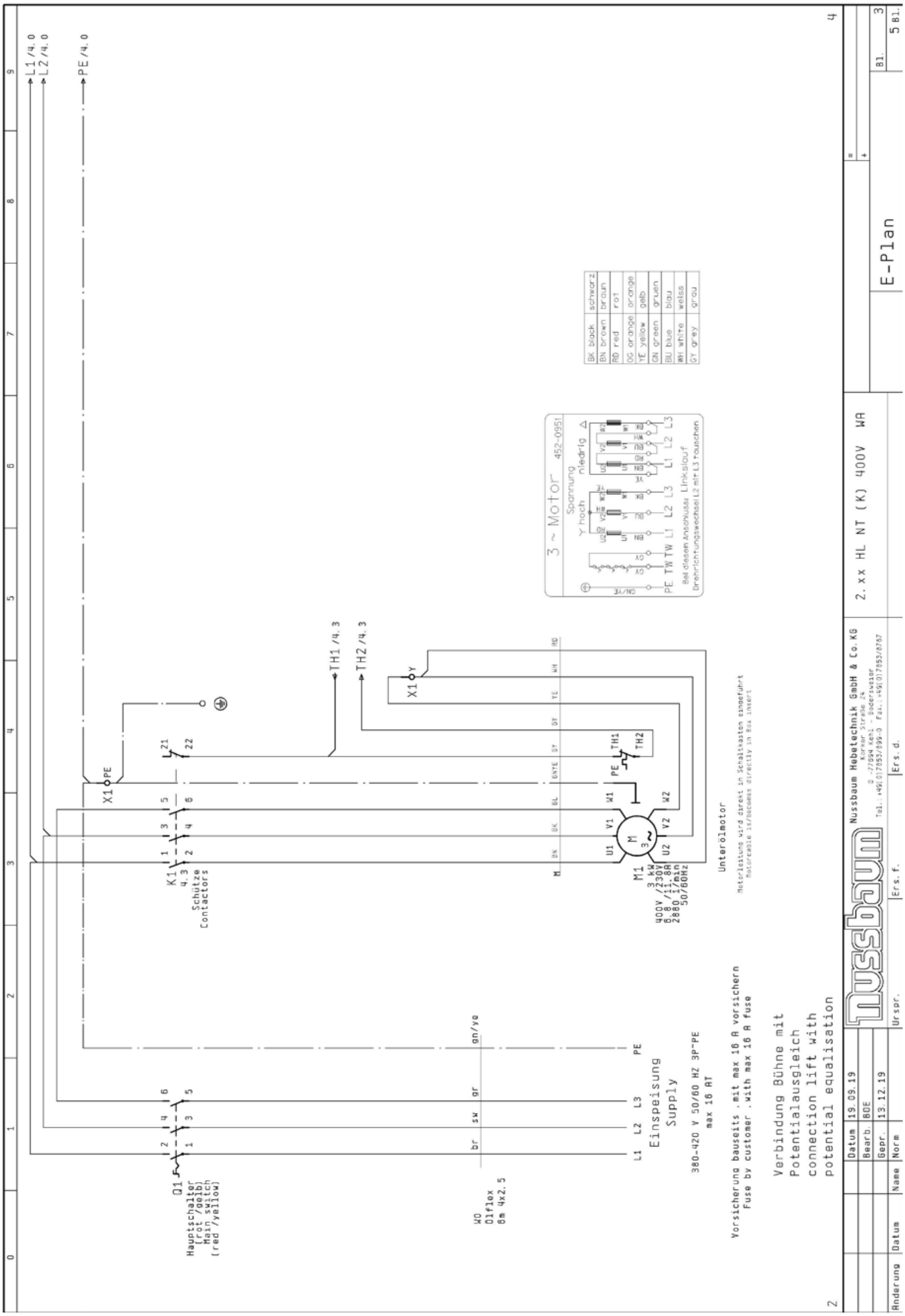
Inhaltsverzeichnis

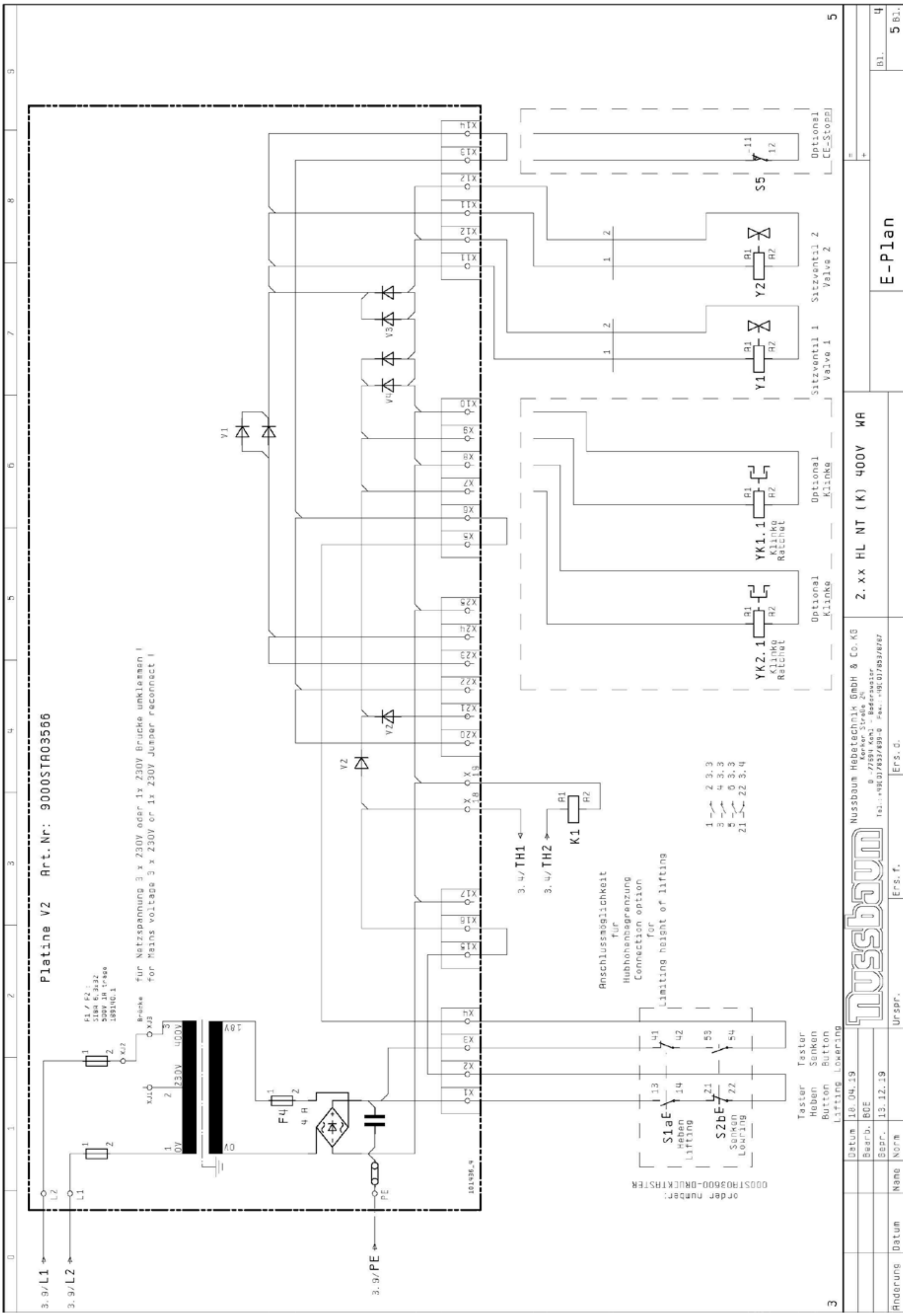
Spalte X: eine automatisch erzeugte Seite wurde manuell nachbearbeitet

WUPJ0050 24.02.1994

1 3

			Datum	19.09.19	Nussbaum Hebetechnik GmbH & Co.KG Kerker Straße 24 D-77694 Kehl - Bodersweier Tel.: +49(0)7853/899-0 Fax.: +49(0)7853/8787	2.xx HL NT (K) 400V WA	= / +
			Bearb.	BOE			
			Gepr.	13.12.19			Inhaltsverzeichnis — Bl. 2 / 5 Bl.
Änderung	Datum	Name	Norm		Urspr. / Ers. f. / Ers. d.		


Q1
Hauptschalter
(rot/gelb)
Main switch
(red/yellow)
K1
Schütze
Contactors
X1
PE
TH1
TH2
M1
3 kW
400V/230V
6.8/11.8A
2880 1/min
50/60Hz
Unterölmotor
Einspeisung
Supply
380-420 V 50/60 HZ 3P~PE
max 16 AT
Ölflex
6m 4x2,5
Vorsicherung bauseits, mit max 16 A vorsichern
Fuse by customer, with max 16 A fuse
Verbindung Bühne mit
Potentialausgleich
connection lift with
potential equalisation
3 ~ Motor
BK black schwarz
BN brown braun
RD red rot
OG orange orange
YE yellow gelb
GN green gruen
BU blue blau
WH white weiss
GY grey grau
Nussbaum Hebetechnik GmbH & Co.KG
2.xx HL NT (K) 400V WA
E-Plan
Datum 19.09.19
Bearb. BOE
Gepr. 13.12.19


Platine V2 Art.Nr: 9000STA03566
E-Plan
2.xx HL NT (K) 400V WA
Nussbaum Hebetechnik GmbH & Co.KG
Sitzventil 1 Valve 1
Sitzventil 2 Valve 2
Optional Klinke
Optional CE-Stopp
Taster Heben Button Lifting
Taster Senken Button Lowering

Stückliste Bill of materials

NUSTÜCKZ 16.11.2004

Bauteilbenennung Component design.	Menge Amount	Bezeichnung Designation	Typen nummer Model number	Lieferant Supplier	Artikelnummer Article number
	1	GEH.KPL.CT-862 ABS	SCHALTKASTEN ABS CT 862	Bernstein	240HLNT03030
	2	Perfect Kabelverschraubung M20x1.5	KABELVERSCHRAUBUNG M20X1.5	Jacob GmbH	9951937
	2	Perfect Kabelverschraubung M16x1.5	KABELVERSCHRAUBUNG M16X1.5	Jacob GmbH	99519371
	1	Montageplatte in Schaltkasten CT 862	MONTAGEPLATTE IM SCHALTKASTEN	Nussbaum	235TS03011
D1	1	Hauptsch. Not-Aus 3p 16A 5,5kW IP65	A 105/3.0260-EV/S0	Merz GmbH	994810
M1	1	Unterolmotor 3kW/ 6,8/11,8A 50Hz	U07K2-371	Hanning GmbH	992658
X1	1	Schutzleiterkl DR 4/8.P.ADO schn-schraub	DR 4/8.P.ADO	Entrelec	990592
X1	0.02	Blanko Schild	RC610 6X10	Entrelec	990713
X1	1	Reihenklemme D 1,5/6.ADO grau schn-schn	D 1.5/6.ADO	Entrelec	990183
	1	Universalsteuerplatine V2	PLATINE FÜR UNIVERSALSTEUERUNG	Hauss Elektronik GmbH	9000STA03566
S1a	1	Doppeldrucktaste (D22mm) mit Pfeilen	LPCB7191	Lovato electric	996880
S1a	1	Befestigungsbasis (D22mm)	LPXAU120n	Lovato electric	996884
S1a	2	Kontaktelement 1O (22mm)	LPXC01	Lovato electric	996881
S1a	2	Kontaktelement 1S (22mm)	LPXC10	Lovato electric	996885
K1	1	Leistungschütz 5,7 kW 24 V DC	11BG12.01 D 24V DC	Lovato electric	990842
Y1	1	Ventilstecker C182 9 N21 schwarz	GERÄTESTECKER	Seehausen	118620
Y2	1	Ventilstecker C182 9 N21 schwarz	GERÄTESTECKER	Seehausen	118620
W0	6	Steuerleitung mit num. Adern 4G2,5	PVC-STEUERLEITUNG FLEX	Kabel Wächter GmbH & Co.KG	990087
WY1	1	Steuerleitung mit num. Adern (2 x1,0mm²)	PVC-STEUERLEITUNG FLEX	Kabel Wächter GmbH & Co.KG	995577
WY2	1	Steuerleitung mit num. Adern (2 x1,0mm²)	PVC-STEUERLEITUNG FLEX	Kabel Wächter GmbH & Co.KG	995577

4

Datum 17.10.19
Bearb. BOE
Gepr. 13.12.19
Änderung Datum Name Norm
Urspr. Ers.f. Ers.d.

Nussbaum Hebetechnik GmbH & Co.KG
Korker Straße 24
D-77694 Kehl - Bodersweier
Tel.: +49(0)7853/899-0 Fax.: +49(0)7853/8787

2.xx HL NT (K) 400V WA

Stückliste

Bl. 5
5 Bl.

POS	Menge	Bezeichnung 1	Bezeichnung 2	Typennummer	Bestellnummer	Hersteller	Artikel-Nummer
1	2	Ventilstecker C182 9 N21 schwarz	max 240 V	GERÄTESTECKER	KA132000B9 PG 9	Seehausen	118620
2	1	Montageplatte in Schaltkasten CT 862	für für Universalplatine TS /TSK	MONTAGEPLATTE IM SCHALTKASTEN	235TS03011	Nussbaum	235TS03011
3	1	GEH.KPL.CT-862 ABS	240x160x120 modifiziert für HLNT WA	SCHALTKASTEN ABS CT 862	CT 862	Bernstein	240HLNT03030
4	1	Universalsteuerplatine V2	400 / 230 V 3P 50/60 Hz	PLATINE FÜR UNIVERSALSTEUERUNG	101436_4	NB_Universalpatine	9000STA03566
5	6 m	Steuerleitung mit num. Adern 4G2,5	Einsatz in industrieller Umgebung (Maschinen,	PVC-STEUERLEITUNG FLEX	ÖPVC-JZ	Kabel Wächter GmbH & Co.KG	990087
6	1	Reihenklemme D 1,5/6.ADO grau schn-schn	6 mm breit für 35 mm Hutschiene	D 1,5/6.ADO	0199051.26	Entrelec	990183
7	1	Schutzleiterkl DR 4/8.P.ADO schn-schraub	8 mm breit für 15 mm Hutschiene	DR 4/8.P.ADO	0299632.05	Entrelec	990592
8	0.020	Blanko Schild	Klemmenzubehör	RC610 6X10	0233000.01	Entrelec	990713
9	1	Leistungschütz 5,7 kW 24 V DC		11BG12.01 D 24V DC		Lovato electric	990842
10	1	Unterölmotor 3kW/ 6,8/11,8A 50Hz	2800min-1 400/230V	U07K2-371	U07K2-371	Hanning GmbH	992658
11	1	Hauptsch. Not-Aus 3p 16A 5,5kW IP65	Als Not-Aus-Schalter verwendbar	A 105/3.0260-EV/SO	521022024	Merz GmbH	994810
12	2	Perfect Kabelverschraubung M20x1,5	mit Zugentlastung	KABELVERSCHRAUBUNG M20X1,5	50620PA7035	Jacob GmbH	9951937
13	2	Perfect Kabelverschraubung M16x1,5	mit Zugentlastung !!!ersetzt durch 9951969!!!	KABELVERSCHRAUBUNG M16X1,5	50616PA7035	Jacob GmbH	99519371
14	2 m	Steuerleitung mit num. Adern (2 x1,0mm²)	Einsatz in industrieller Umgebung (Maschinen,	PVC-STEUERLEITUNG FLEX	ÖPVC-OZ	Kabel Wächter GmbH & Co.KG	995577
15	1	Doppeldrucktaste (D22mm) mit Pfeilen	Heben - Senken	LPCB7191	LPCB7191	Lovato electric	996880
16	2	Kontaktelement 1Ö (22mm)		LPXC01	LPXC01	Lovato electric	996881
17	1	Befestigungsbasis (D22mm)	für die Installation der Kontaktelemente	LPXAU120´	LPXAU120´	Lovato electric	996884
18	2	Kontaktelement 1S (22mm)		LPXC10	LPXC10	Lovato electric	996885

4. Safety regulations

When working with lifts comply with legal accident prevention regulations according to BGG945: Comply with inspection of lifts; BGR500, operation of lifts; (previously VBG14).

Particular attention is drawn to compliance with the following regulations:

- The max. load bearing capacity of 4000 kg may not be exceeded. For this, see details on the model plate.
- Always follow the operating manual when using the lift.
- The lift must be completely lowered before the vehicle is driven on, and it may only be done in intended direction.
- Vehicles with low floor clearance or fitted with custom devices are to be checked to see whether damage could occur before positioning the lifting arm and raising the vehicle.
- Only personnel aged 18 or over may operate the lift independently, they must be trained in lift operation and have their work verified by the company. They must be explicitly tasked with operating the lift (excerpt from BGR500) (see transfer protocol).
- The proper positioning of the carrier plate below the vehicle is to be checked again after the vehicle has been raised slightly.
- After each set down of the vehicle, check the lifting arm positions below the fixture points again and adjust as required.
- When disassembling heavy, consider any possible centre of mass shifts. The vehicle is to be appropriately secured against falling using suitable materials (e.g. tensioning belts, beams, etc.).
- During lifting or lowering, the work area of the lift should be clear or people.
- It is prohibited from moving people with the lift.
- Climbing onto the lift and onto a lifted vehicle is prohibited.
- Climbing onto the lifting arm is prohibited.
- After design and maintenance on load bearing parts the lift must be inspected by a technical expert.
- Vehicles may only be attached at fixture points approved by the vehicle manufacturer.
- The entire lifting and lowering process is to be continuously observed.
- The set up of the standard lift is not permitted in explosion endangered work shops.
- Initial access into the lift may only be done after the main switch is off and locked.

5. Operating manual

When handling the lift, it must absolutely comply with safety regulations. Carefully read the safety regulations in Section 4 before first operation!

5.1 Positioning the vehicle

- Drive the vehicle onto the lift according to the following images, until the lifting arm receives it (figure A and B).

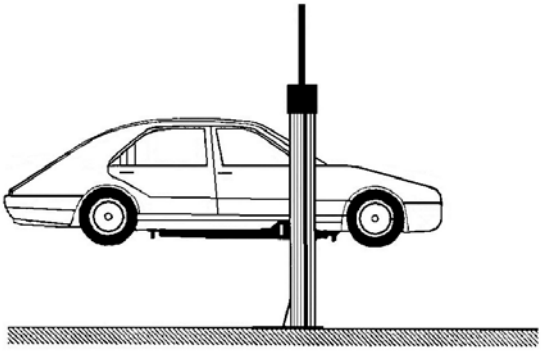


Figure. A) The lift column must be located between the steering wheel and the car doorlift.

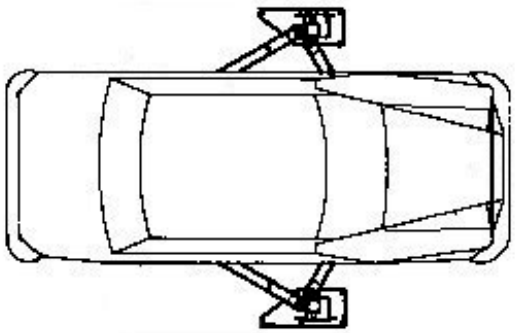


Figure. B) Drive into the centre of the hinges

- Swivel in the lifting arms and extend out to the desired position The adjustable receiving plates are to be placed at the pointed prescribed by the vehicle manufacturer.
- The lifting arm block must be ratcheted in after the fixture point has been reached.
- After each vehicle is set down, position the lifting arm below the fixture points again to check and if required, to realign.
- Check that there are no people or objects in the hazardous area of the lift.

5.2 Lifting the vehicle

- Lift the vehicle until the wheels are off the ground. Push the "Lift" button (see figure 4).
- If the wheels are not blocked, interrupt the lifting process and check for proper seating of the carrier plate. Similarly check whether the lifting arm blocks are ratcheted in. Otherwise, lower the lift and reposition the vehicle.
- Check that there are no people or objects in the hazardous area of the lift.
- Afterwards, lift the vehicle to the desired working height.

Ensure secure vehicle placement on the carrier plate, otherwise there is a danger of the vehicle dropping.

See to it that the lifting arm blocks are ratcheted in after the vehicle has been accepted.

Figure: Hydraulic unit with operating element

Lift/lower button and main switch

5.3 Lift synchronisation

- Asynchronous running is excluded in proper operation due to two independently constructed hydraulic systems.
- For this, raise the lift to its uppermost end position. Push the button for a further 2 seconds. During this procedure the lift rails are equalised to each other as hydraulic oil flows to the tank as an overflow from the command cylinder via the downstream cylinder to the tank.
- Release the button. The lift rails then lower some millimetres and thereby block the overflow opening of the cylinder.
- Both lift rails are now at the same height.

5.4 Lowering the vehicle

- Check that there are no people or objects in the hazardous area of the lift.
- Lower the vehicle to the desired working height or to its lowest position; push the "Lower" button.
- For heavier vehicles, lift it slightly before lowering to prevent an "sticking" and any corresponding jolt during lowering.
- Once the lift is in the lowest position, push the lifting arms to the start position.

6. Behaviour in cases of error

Defective operational readiness of the lift may be due to a simple error. Check the system for the listed sources of error.
If the error cannot be removed after an inspection to the named causes, then inform customer service or your dealer

Independent repairs to the lift, especially on the safety devices, as well as inspections and repairs to electrical systems are prohibited.
Work on electrical systems may only be done by electricians.

Problem: The lift cannot be raised!	
Possible causes:	**Repair:**
No power supply present	*Check power supply*
The main switch is not switched on, or is defective	*Check main switch*
Push button defective	*Check function*
Defective fuse	*Check fuses*
Power line interrupted	*Check power lines*
Motor has overheated	*Let motor cool (cooling time dependent on ambient temperature)*
Motor defective	*Do an emergency discharge (see Section 6.1)*
only 2 phases active	*Do an on-site check with a qualified electrician*
insufficient hydraulic oil available	*Refill new hydraulic oil*

Problem: The lift cannot be lowered!	
Possible causes:	**Repair:**
The lifting arm has moved onto an obstacle	*Raise the lift and remove the obstacle.*
Push button is defective	*Inform customer service* *If needed, do an emergency discharge.*
Valve is defective	*Inform customer service*

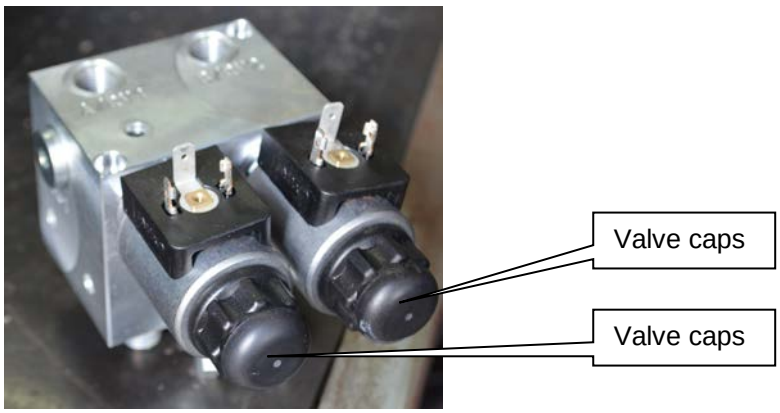
6.1 Emergency discharge

There is the option of placing the lift into the lowest position with a simple operation.

An emergency discharge can only be done by personnel who are trained to operate the lift. Follow the conditions to "Lower".

Emergency discharge procedure

- People may not stand in the hazardous area around the lift.
- Loosen the unit cover and pull it forwards.
- At the same time, give a forceful push on the black caps of both valves. The lowering procedure begins immediately.



- Always observe the lowering process.
- Release the valve caps in case of danger.
- Lower the lift to the lowest position.
- If required, firstly inform customer service.
- The lift may only operated again after it has been returned to a seamless condition seen from a safety point of view.

6.2 Moving onto an obstacle

If the lifting rails or lifting arms move onto an obstacle due to operator inattention, the lift stops in place. To remove the object, raise the lift to a height where the object can be removed.

7. Maintenance and care

Before maintenance, do all preparation work so there is no danger to life or limb or object damage during maintenance and repair work.

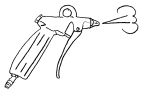
Legal principles: BSV (operating equipment regulation) + BGR500 (Operation of work equipment)

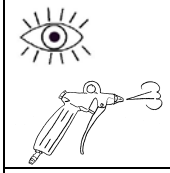
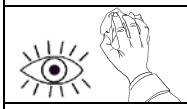
Value is placed on long lifetimes and safety in the development and production of Nussbaum products. To guarantee the safety of the operator, product reliability, low running costs, keep the warranty and also the long-lifetime of the product, proper set up and operation is just as important as regular maintenance and sufficient care.
Our platforms fulfil or exceed all safety standards of the countries we supply to. For example, European regulations require a service by qualified experts every 12 months of work of the platform. To guarantee the largest possible availability and functional capacity of the lift system, ensure the list of any cleaning, care and maintenance work is done.

After first commissioning the lift is to be serviced at regular intervals of a maximum of one year by an authorised person according to the following plan. For intensive operation and higher degree of contamination shorten the service interval.
The complete function of the lift is to be observed during daily use. Customer service must be informed of any malfunctions.

7.1 Maintenance plan

Before starting maintenance disconnect from power. The work area around the lift is to be secured against unauthorised use.

						
Visual inspection	Spray	Oil	Lubricate	Clean with compressed air	Clean	Inspect

Type of maintenance	Maintenance plan	Time frame
	Model and information signs, labels, brief operating instructions, safety stickers and warning information are to be cleaned and exchanged if damaged.	Daily
	Check the lifting arm block and gear for wear. Exchange if there is visible damage.	At least 1 x per year
	Lifting arm booms, lifting arm bolts, carrier plate threaded bolts are to be checked for ease of running. If required, lightly grease with multi-purpose grease. Do not over-lubricate.	At least 1 x per year
	Check the foot bumper for condition and function. Exchange if damaged	Daily
	The rubber acceptance plate is to be checked for wear and replaced if necessary.	Daily
	Check the tracks and the lift rail equalisation parts for wear. After cleaning, grease with multi-purpose grease. We exclusively recommend that MO-2 high performance lubricating grease is used. (available for purchase directly from Oest)	Every 3 months
	The lift cylinder can sweat and small oil droplets can form on the base plate, this is however, not a leak.	Clean as required
	Check all fastening screws and anchors with a torque wrench. *Fastening class 8.8* *0.08* 0.12** 0.14**** *M8 17.9 23.1 25.3* *M10 36 46 51* *M12 61 80 87* *M16 147 194 214* *M20 297 391 430* *M24 512 675 743* *Fastening class 10.9* *0.08* 0.12** 0.14**** *M8 26.2 34 37.2* *M10 53 68 75* *M12 90 117 128* *M16 216 285 314* *M20 423 557 615* *M24 730 960 1060* ** Lubricated slide friction number 0.8 MoS2* *** Lightly oiled slide friction number 0.12* **** Ensured slide friction number 0.14 screw with micro-encapsulated plastic*	At least 1 x per year

	All weld seams must have a visual inspection. Stop the system and contact the manufacturer if there are cracks or breaks in weld seams of the lift.	At least 1 x per year
	Check electrical components for function and condition. - Plug - Press button. Defective or damaged push buttons or main switch can leak. They must be replaced immediately. - During assembly and maintenance always check the condition of electrical lines. All cables and lines must be secured so they cannot be crushed, kinked or contact any moving assembly.	At least 1 x per year Daily
	Check the condition of the unit cover and at the same time check the cover seal.	At least 1 x per year
 	Hydraulic hose lines Storage and duration of use Excerpt from DIN20066:2002-10 - For permitted loading, hoses undergo a natural change. This limits the duration of use. - Improper storage, mechanical damage and unpermitted loads are the most frequent cause of breakdowns. - The duration of use of a hose line including any storage time should not exceed six years. Hose lines are to be replaced if/when, - Damage to the outer coating up to the insert (chafe marks, cuts, cracks) - The outer coating becomes brittle (crack formation) - Deformation from the natural shape in the depressurised and pressurised conditions. - Leakage - Damage or deformation of the mounting fixture - Meandering of the mounting fixture - The lifetime has been exceeded Repair of the hose line using the implemented hose / mounting fixture is not permitted. Extending the replacement intervals given in the guideline is possible if the inspection for safe-work condition is done in adjusted, shortened time frames, if required and by competent personnel. If there is an extension of the replacement interval, no situation may occur which could result in injury of employees or other personnel.	

	Excerpt from BGR237 Specifications for the hydraulic hose lines Normal specification: Increased demands e.g. by - Increased usage times e.g. multi-shift, short cycle times and pressure impulses. - Extreme external and internal (from the medium) influences, that severely reduce the lifetime of the hoses.	Recommended exchange intervals 6 years (operation duration including max. 2 years storage time 2 year operation duration
	Check the door stopper rubber for wear. Exchange if damaged.	Daily
	According to manufacturer instructions, the hydraulic oil should be changed every two years in normal operations. Various environmental influences (e.g. location, temperature swings, intensive operation etc, can have an influence on the quality of the hydraulic oil. For this reason, the oil must be checked during annual safety inspections and maintenance. The oil is used if it has a milky colour or if the hydraulic oil smells unpleasantly. To change oil, lower the lift is to its lowest position then suction the oil out of the oil container and replace the contents. The manufacturer recommends high-quality clean hydraulic oil. The required oil volume and type is to be taken from the section 3. After filling, the hydraulic oil must be between the upper and lower marking on the oil dipstick or approx. 2 cm below the filling opening. Dispose of the old oil according to regulations to the intended location (district offices, environmental protection office or commercial regulatory office has the obligation to disclose about disposal points).	Min. every two years

7.2 Cleaning the lift

The platform is suitable for use in a washing hall. Regular and expert care is important and helps retain the value of the lift.
Additionally, it can also be a pre-requisite for retention of guarantee claims for any damages resulting from improper handling.
The best protection for the lift is regular removal of contaminants of any kind.
- This includes above all:

- de-icing salt
- sand, pebbles, earth
- industrial dust of all types
- aggressive liquids, also in connection with other environmental influences
- aggressive deposits of all types
- permanent humidity due to insufficient ventilation

The frequency of lift cleaning depends, among other things on the frequency of use, of lift handling, of workshop cleanliness, and the location of the lift. Furthermore, the degree of contamination depends on the time of year, the weather conditions and workshop ventilation. Under adverse circumstances, weekly lift cleaning might be required, however a monthly cleaning may be sufficient.

Do not use and aggressive and abrasive materials for cleaning, rather use mild cleaners, e.g. a commercially available detergent and luke warm water.
- It can be used for cleaning with a high pressure cleaners (e.g. steam cleaners). However Keep the jet approx. 20 m away from the surface to be cleaned.

The hydraulic unit and electrical box may never be exposed to a direct jet from the high pressure cleaner.

- Carefully remove all contamination with a sponge, or if required with a brush.
- Make sure that there is no residue of the cleaner on the lift.
- Dry the lift with a cloth and spray it with a spray wax or oil.
- Moving parts (bolts, bearing zones) are to be lubricated or oiled according to instructions.
- When cleaning the workshop floor ensure that no aggressive cleaning materials come into contact with lift surfaces. Permanent contact with any aggressive liquid is prohibited.

7.3 Checking the stability of the lift

- Retighten nuts of the approved fastening anchors to the torques specified by the manufacturer using a pre-set torque wrench. (Torque details are found on the data sheet of the corresponding anchor manufacturer)

8. Assembly and commissioning

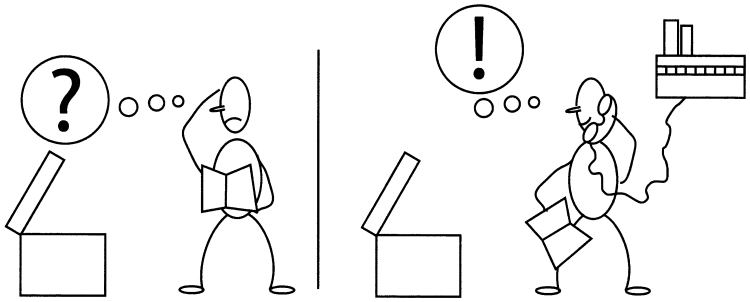


Figure 20:

8.1 Set up guidelines

- Lift set up is done by trained manufacturer personnel or a contract partner. Set up is to be done according to the assembly instructions.
- A standard lift may not be set up in explosion endangered spaces or wash halls.
- Before setting up, ensure or make a sufficient foundation.
- A level set up space is to be done in all cases, where open air and enclosed foundations where frost is expected, must have a frost-depth thickness.
- An on-site standard electrical connection of 3 ~/N + PE, 400 V, 50 Hz is to be provided. The supply is to be secured according to VDE0100 with 16 ampere fuses. The minimum line cross-section is 2.5 mm².
- The lines can be fed through the cross-beams. In all cases, prevent kinks or tensional loads on the lines.
- After successful lift installation and before first commissioning, the operating company must have the lift grounding conductors inspected on-site according to IEC regulation (60364-6-61). An insulation resistance test is also recommended.

8.1.1 Set up and anchoring the lift

☞ ***On-site provision of suitable auxiliary materials (e.g. forklifts, crane, etc) are to be made available for unloading the lift and for assembly.***

Before setting up the lift, the operating company must ensure or make a sufficient foundation. For this, a normal reinforced concrete floor with a value of a min. C20/25 is required. The minimum foundation thickness (without screed and tiles) is to be taken from the foundation plan in this document.

In our plans, we inform of the minimum specifications for the foundation, however local conditions (e.g. underground, floor quality, etc.) are outside of our responsibility. In special cases, the design of the installation location must be individually specified by planning architects and statics experts. Open air foundations must be made to frost depth.
The operating company of the lift is solely responsible for the set up location.

If the lift is to be assembled on an existing concrete floor, cement quality and strength are to be checked beforehand. In case of doubt, make a test bore and insert an anchor. Then, tighten the anchor to the manufacturer recommended torque. After inspection within the anchor zone of influence (200 mm diameter), if there is visible damage (hairline cracks, cracks or similar), or if the required torque cannot be applied then the set up location is unsuitable.

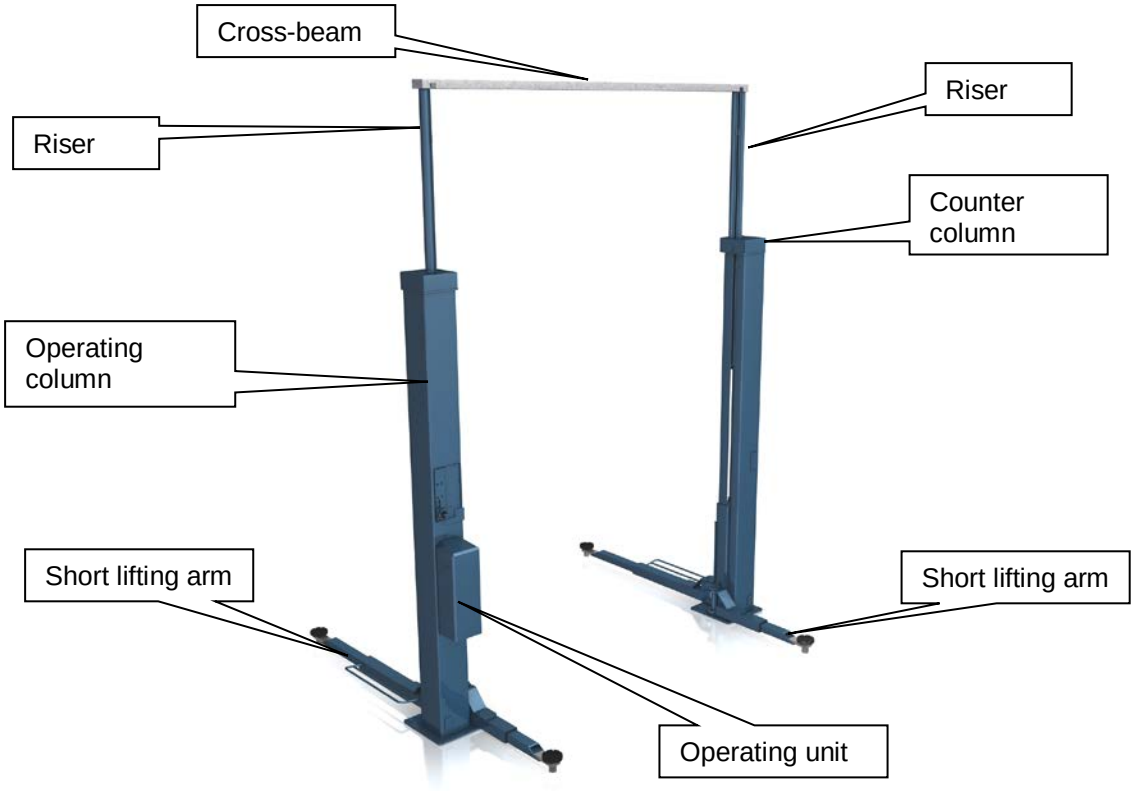


Figure 21: Complete assembly view without riser extension (similar to figure)

A foundation must be made according to the "Foundation plan" sheet regulations. Also a level, set up surface must be ensured for the lift so there is continuous contact between the lift and the concrete floor.

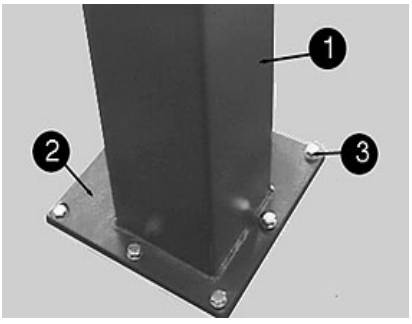


Figure 22: Anchoring

1: Column

2: Base plate

3: Safety anchor

- To reach a higher level of protection against humidity from the workshop floor, a thin PE foil should be put between the workshop floor and column base plate before anchors are placed. Also, the gap between the base plate and workshop floor should be silicone sprayed after anchoring.
- Lift the cross-beam that is fastened to a column and fasten to the opposite side. Hydraulic lines are marked in colours thereby making them easy to connect.
- Holes for floor anchoring are to be placed through the holes in the base plates.
  Clean the bore holes by blowing them out with air. Insert safety anchors into the holes.
  The manufacturer recommends e.g. Hilti injection anchors or similar anchors from other manufacturers, with approval and in compliance with their specifications.

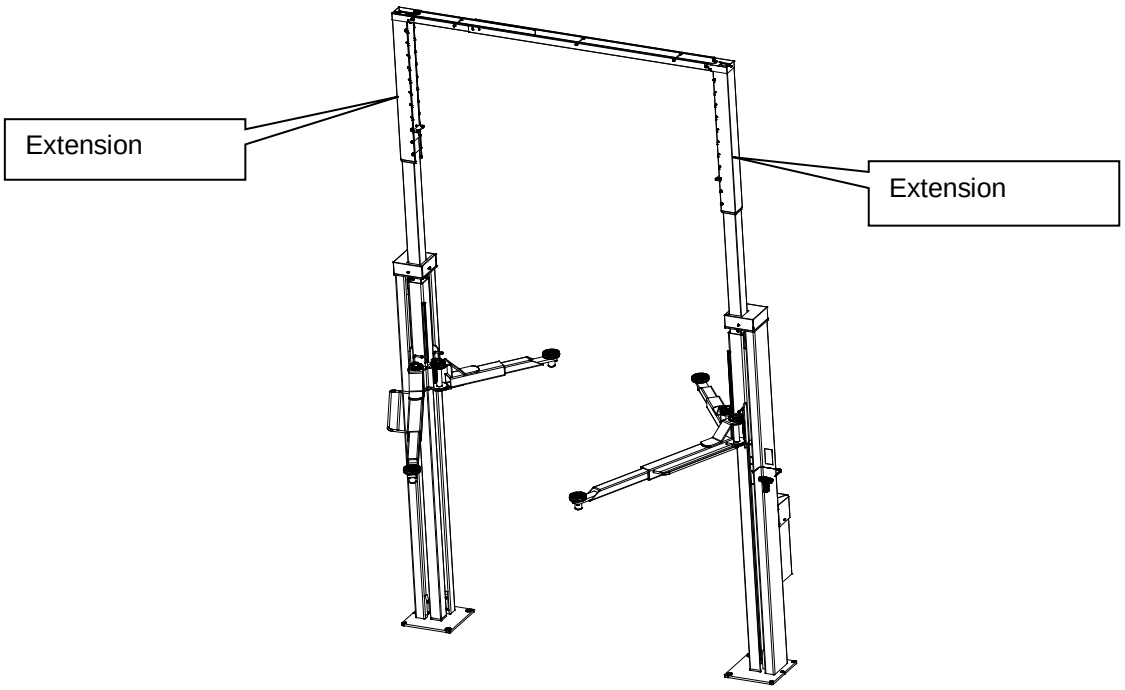
Before anchoring the lift, check whether the concrete is of quality C20/25 up to the finishing level of the completed floor. In this case, determine the anchor length from the "Selection of anchor length without floor covering (in appendix) data sheet. If there is a floor covering (tiles, screed) on the weight bearing concrete, the thickness of this covering must be determined. Afterwards, then determine the anchor length from the "Selection of anchor length without floor covering (in appendix) data sheet.

- Position and align the lift and lift columns using a bubble level.
- The base plates are also to be supported with suitable underlays (thin metal strips) to ensure precise vertical set up and contact between the base plate and the floor.
- Tighten the anchors using a torque wrench.

Each anchor must be able to be tightened to the torque specified by the manufacturer. Safe operation of the lift is not guaranteed with a lower torque.

- If an anchor is tightened to the specified torque, then the domed washer lays flat on the base plate. Secure anchor connection is then guaranteed.

8.1.2 Lift assembly with riser extension



Steigrohrverlängerung auf das vorhandene Steigrohr aufsetzen. Offene Seite zeigt nach innen

Place the riser Pipes on the top of the column. The opening shows to the inner side.

Placer la rehausse sur le pont, partie ouverte vers l'intérieur.

Auf die gewünschte Höhe einstellen (von 100 mm bis 900 mm in 100 mm schritten) je nach Deckenhöhe

Adjust to the wished height, (from 100mm up to 900 mm) depends to the ceiling height.

Régler en hauteur (de 100mm à 900mm)
Selon le cran utilisé.

Guide the 4 hydraulic lines (fastened to the operating column) upwards out of the riser.

Deckel befestigen

Fix the cover plate.

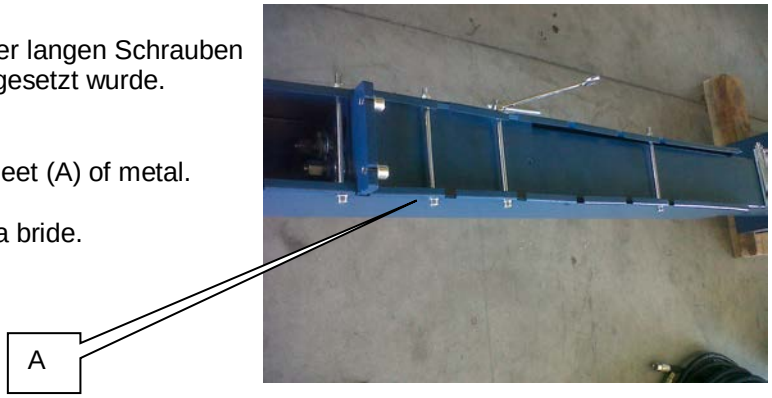
Fixer la plaque du haut.

- After setting up the lifting columns, lift the cross-connection fastened to the operating column upwards and fasten to the opposite side. The hydraulic lines are placed in the cross-connection.
- Guide the lines from above into the riser of the opposite side and connect to the colour marked positions.

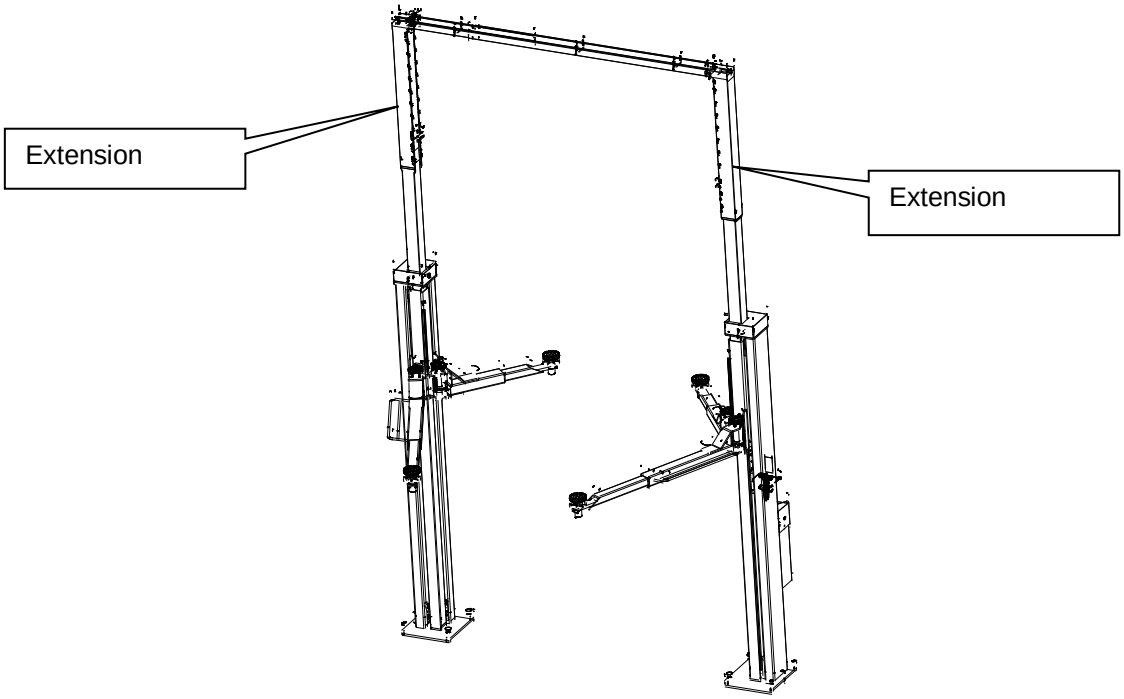
Verlängerung befestigen mittels der langen Schrauben nachdem das Spannblech (A) eingesetzt wurde.

Close the screw after insert the sheet (A) of metal.

Fixer les vis (A) en ayant intégré la bride.



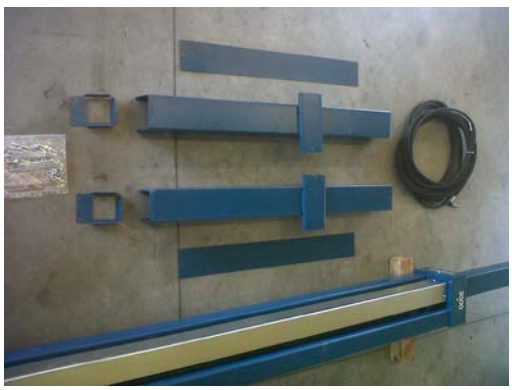
8.1.3 Retrofitting the riser extension



Die optionalen Steigrohrverlängerungen werden in einem Karton angeliefert.
The Riser pipes where delivered in a box.
Les rehausses sont livrées en carton.

Mitgelieferte Teile bereitlegen
Prepair the different pieces.
Repérer les differentes Pièce.

Schläuche, Deckel, Platten
Hoses, covers, plates, extensions, press panels, screws.
Tuyaux, caches, plaque haut, rehausse, bride Visserie.



Steigrohrverlängerung auf das vorhandene Steigrohr aufsetzen. Offene Seite zeigt nach innen

Place the riser Pipes on the top of the column. The opening shows to the inner side.

Placer la rehausse sur le pont, partie ouverte vers l'intérieur.

Auf die gewünschte Höhe einstellen (von 100 mm bis 900 mm in 100 mm schritten) je nach Deckenhöhe

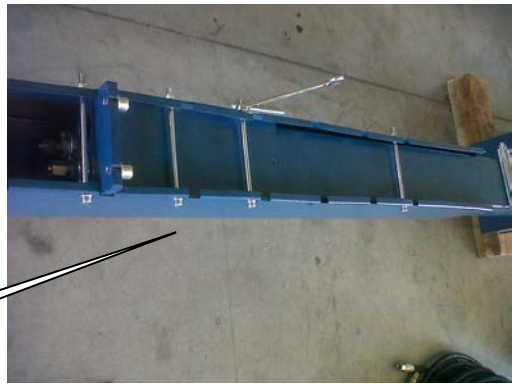
Adjust to the wished height, (from 100mm up to 900 mm) depends to the ceiling height.

Régler en hauteur (de 100mm à 900mm) Selon le cran utilisé.

Verlängerung befestigen mittels der langen Schrauben nachdem das Spannblech (A) eingesetzt wurde.

Close the screw after insert the sheet (A) of metal.

Fixer les vis (A) en ayant intégré la bride.



Deckel befestigen

Fix the cover plate.

Fixer la plaque du haut.

Vorhandene Hydraulikleitungen entfernen.

Change the position of the Hydraulic pieces.
Do not remove the colour marking.

Modifier la position des raccords hydrauliques.
Ne retirez pas la marque d'encre.

T-Stück und Winkel wie auf Bild sichtbar lösen und driven.

Loosen and turn the T-piece and angle piece (see pic)

T piece et de l'angle et rotation.

Mitgelieferte Hydraulikschläuche austauschen
Change the delivered hydraulic pipes.
Changer les tuyaux hydrauliques.

Gelb und weiß oben an der Bediensäule anbringen.

Yellow and white on the master column.

Blanc et jaune coté commande.

Rot direkt am Aggregat anbringen

Install the red directly at the hydraulic aggregate.

Rouge directement au groupe hydraulique.

Blau an K1 an der Bediensäule anschließen

Install the blue on K1 at the master column.

Bleu vérin K1cote commande.

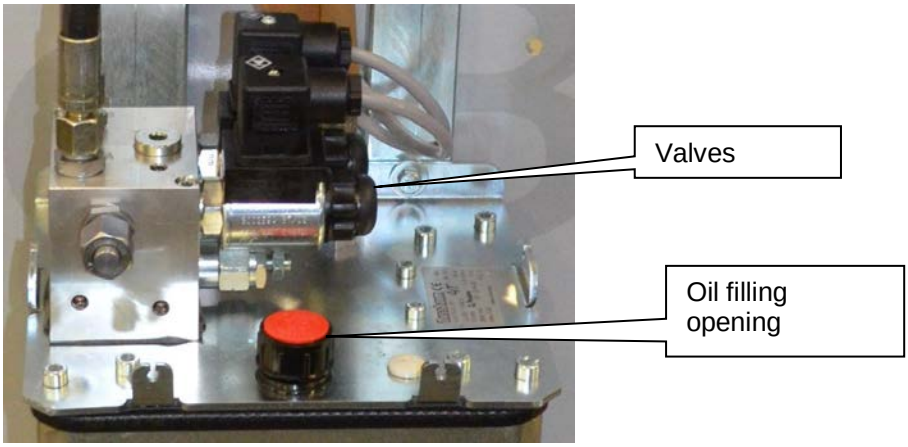
Abdeckblech auf Länge zuschneiden und montieren.

Cut the cover plate and fix it.

Couper le cache à la longueur et le fixer.

8.1.4 First filling

- After the lift has been assembled and has an electrical connection, fill the hydraulic oil as follows:
- Loosen and remove the unit cover.
- Loosen and remove the oil filling opening.



- Fill with 10 litres of hydraulic oil.
- Raise the lift approx. 1000 mm.
- Hang in the lift arms and secure.
- Then push the “Lift” button and raise the lift up to its uppermost end position.
- Push the button for a further 2-3 seconds until the oil flows into the tank again in the overflow procedure.
- Lower the lift to the lowest position. Push and hold the “Lower” button until the lifting arms are lowered.
- Then top up the oil tank again. Oil level to approx. 25 mm below the filling opening.

- Do not fill the oil tank to the upper edge as otherwise during lowering, the oil return flow from the tank can pull resulting in an extremely slow lift speed in the upper area.

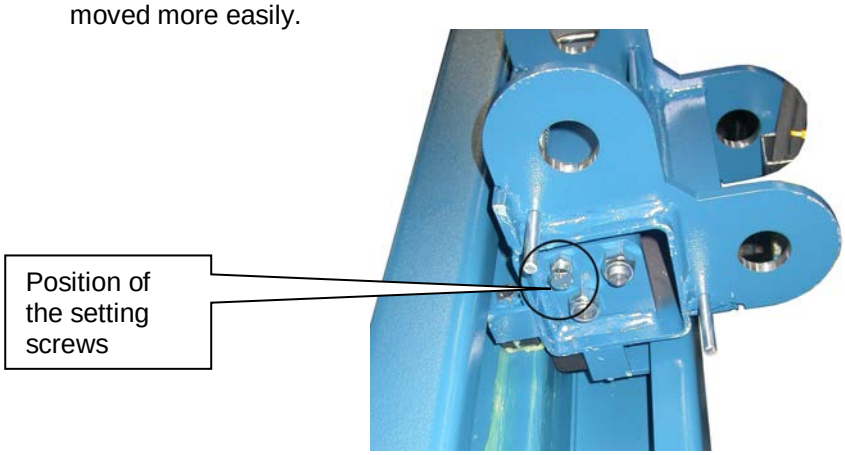
8.2 Lifting arm assembly

- Hang in the standard lifting arm and then place an acid-free multi-purpose grease into the joint bolts in each case from above into the hole and then insert the enclosed locking ring.

The lifting arm bolts must be secured on both sides as otherwise a reliable connection is not given between the lift rails and lifting arm.

8.3 Lifting arm alignment

- After assembly of the lift, the lifting arm may be placed at the lowest position and become difficult to move. There is the option of setting the set screw so that the lifting arms can be moved more easily.



8.4 Commissioning

Before commissioning, a single safety inspection must be done (use the Single Safety Inspection form)

If the lift set up is done by a specialist (factory trained assembler) then he can also do the safety inspection. If the set up is done by the operating company, then a specialist must be tasked with the safety inspection.
The specialist confirms seamless operation of the lift on the set up protocol for single safety inspection and releases the lift for use.

After commissioning, please complete the assembly protocol and send to the manufacturer immediately.

8.5 Changing the assembly location

To change the assembly location the pre-conditions must be met according to the assembly guidelines. The location change is to be done according to the following sequence:

- Move the lift rails to about half height.
- Remove the lifting arm (remove locking rings on the lifting arm bolts.
  Pull out the lifting arm bolts and remove the lifting arm).
- Disconnect electrical supply lines to the lift from mains power.
- Remove hydraulic lines above on the opposite side and seal them off with blind stoppers.
- Only loosen cross beams on one side and fold them under along with the hydraulic lines.
- Securely fix the beam to the columns.
- Suction off hydraulic oil.
- Loosen the anchor fastenings.
- Carefully transport the lift column using appropriate auxiliary means (e.g. crane, forklift, etc) to the new assembly location.
- Assemble the lift according to the procedure during assembly and anchoring before first commissioning.

Use new anchors. The old anchors are no longer fit for purpose.

9. Safety Inspection

The safety inspection is required to guarantee operational safety of the lift. It is to be done:

1. Before first commissioning after setting up the lift.
   Use the "single safety inspection" form.

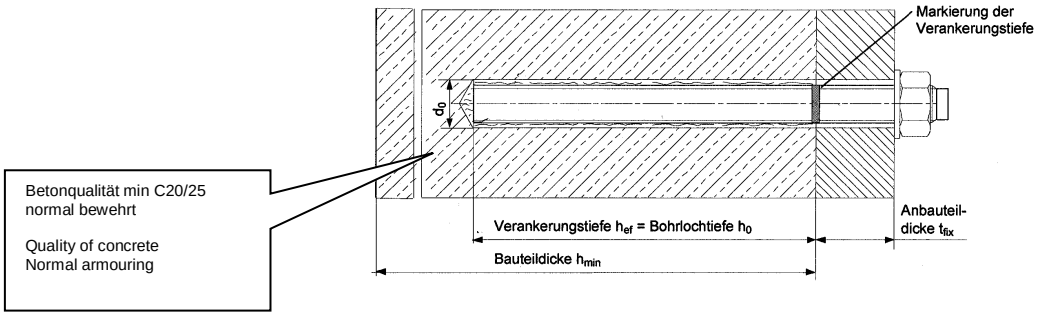
2. After first commissioning, at regular intervals of a maximum of one year.
   Use the "regular safety inspection" form.

3. After changes to the lift construction.
   Use the "extraordinary safety inspection" form.

Single and regular safety inspections must be done by a specialist. It is recommended to do maintenance at the same time.

After a change in construction (for example changing the load carrying capacity or changing the lifting height) and after significant maintenance on load carrying parts (e.g. welding work), inspection by a technical expert is required (extraordinary safety inspection).

This inspection book contains forms with a printed inspection plan for safety inspections. Please use the appropriate form, record the condition of the inspected lift and leave the completed form in this inspection book.



Änderungen vorbehalten!
subject to alterations!
sous réserve des modifications!

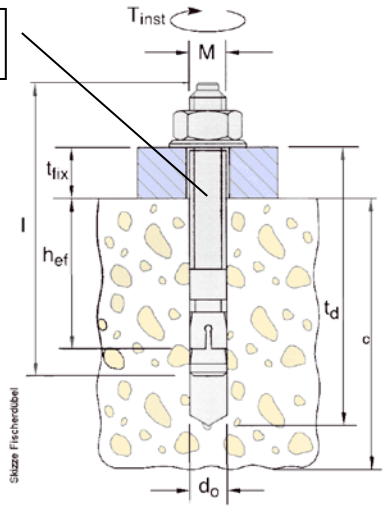
Hilti injection anchor			**HL 2.40 NT^f,**	
Betonboden / concrete floor		ohne Bodenbelag / without floor pavement (tiles)		
Dübel type of dowel type de cheville		HIT-V-5.8 M10x130	HIT-V-5.8 M12x150 Item No.:387061	HIT-V-5.8 M16x200 Item No. 956437
Bohrteife (mm) drilling depth Profondeur de l'alésage	h_o	90	108	144
Mindestverankerungstiefe (mm) min.anchorage depth Profondeur minimale dáncrage	h_{ef}	90	108	144
Betonstärke (mm) thickness of concrete Epaisseur du béton	H_{min}	Min. 120	min.138	min.180
Bohrerdurchmesser (mm) diameter of bore Diamètre de l'alésage	d_o	12	14	18
Bauteildicke (mm) thickness of the lift-piece Epaisseur de la pièce	t_{fix}	max.17	Max. 19	23
Anzugsdrehmoment (Nm) turníng moment moment d´une force	T_{inst}	20	40	80
Gesamtlänge (mm) total length Longueur totale	**l**	130	150	200
Gewinde thread fil	**M**	10	12	16
Stückzahl piece number nombre des pièces	a	4		
	b	8		
	c	10		
	d	12		
	e	14		
	f	16		
	g	28		

Die Montageanweisung des Dübelherstellers ist Folge zu leisten.
Bei Bodenbelag (Estrich/Fliesen) sind längere Dübel zu verwenden.

Observe necessarily the installation description of the dowel manufacturer.
Use longer dowels with version with floor pavement and tiles

Es können auch gleichwertige Injektionsdübel anderer Hersteller (mit Zulassung) unter Beachtung deren Bestimmungen verwendet werden.
It is possible to use equivalent injections dowels (with license) of other manufacturer but observe their regulations.
Des chevilles des autres marques (autorisées) peuvent aussi être choisies en respetant les directives du fabricant.

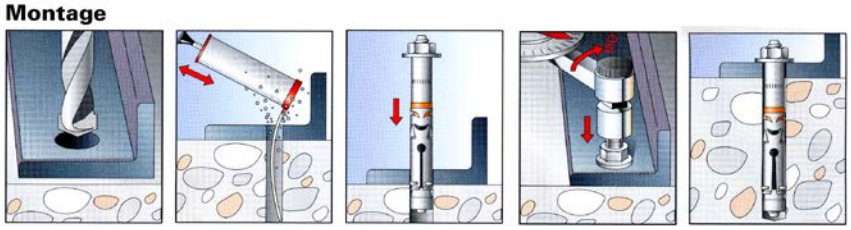
Marking the anchoring depth



Änderungen vorbehalten!
subject to alterations!
sous réserve des modifications!

fischer anchor			**HL 2.40 NTr,**	
Dübel typ of dowel type de cheville		FH 15/50 B **Order No. 970265**	FH 18 x 100/100 B **Order No.: 972230**	FH 24/100 B **Order No. 970267**
Bohrteife drilling depth Profondeur de l'alésage	t_d	145	230	255
Mindestverankerungstiefe min.anchorage depth Profondeur minimale dáncrage	h_{ef}	70	100	125
Betonstärke thickness of concrete Epaisseur du béton	c	siehe den aktuellen Fundamentplan see current foundation-diagram drawing vois le plan de fondation actuel		
Bohrerdurchmesser diameter of bore Diamètre de l'alésage	d_o	15	18	24
Bauteildicke thickness of the lift-piece Epaisseur de la pièce	t_{fix}	0-50	0-100	0-100
Anzugsdrehmoment Nm turníng moment moment d´une force	M_D	40	80	120
Gesamtlänge total length Longueur totale	l	155	230	272
Gewinde thread fil	M	M10	M12	M16
Stückzahl piece number nombre des pièces	a	4		
	b	8		
	c	10		
	d	12		
	e	14		
	f	16		
	g	20		

Montage



Es können auch gleichwertige Sicherheitsdübel anderer Hersteller (mit Zulassung) unter Beachtung deren Bestimmungen verwendet werden.
It is possible to use equivalent safety-dowels (with license) of other manufacturer but observe their regulations.
Des chevilles des autres marques (autorisées) peuvent aussi être choisies en respetant les directives du fabricant.

Single safety inspection before commissioning

☞ Complete and leave in the inspection book

Serial number: _____

Test step	OK	Defect missing	Reinspect	Remarks
Model plate	☐	☐	☐	.....
Brief operating instructions on the column	☐	☐	☐	.....
Load capacity details on the lift	☐	☐	☐	.....
Detailed operating manual	☐	☐	☐	.....
Condition, operating button function.	☐	☐	☐	.....
Label "Lift, Lower	☐	☐	☐	.....
Condition, lockable main switch	☐	☐	☐	.....
Securing the lifting arm bolts	☐	☐	☐	.....
Condition, function rubber plate	☐	☐	☐	.....
Condition, function foot bumper (optional	☐	☐	☐	.....
Condition sliding part lift rails	☐	☐	☐	.....
Paint condition	☐	☐	☐	.....
Load bearing construction (deformations, cracks)	☐	☐	☐	.....
Fastening screw torque	☐	☐	☐	.....
Fastening anchor torque	☐	☐	☐	.....
Condition, function lifting arm block	☐	☐	☐	.....
Condition, function lifting arm movement	☐	☐	☐	.....
Condition, cross-beam	☐	☐	☐	.....
Cylinder condition	☐	☐	☐	.....
Condition wiper cylinder	☐	☐	☐	.....
Condition of covers	☐	☐	☐	.....
Unit cover leak-tightness	☐	☐	☐	.....
Operating box leak-tightness	☐	☐	☐	.....
Condition, function riser extension	☐	☐	☐	.....
Condition of concrete floor (cracks	☐	☐	☐	.....
Condition electrical lines	☐	☐	☐	.....
Condition, hydraulic lines + screw fittings	☐	☐	☐	.....
Condition, hydraulic unit	☐	☐	☐	.....
Functional test lift with vehicle	☐	☐	☐	.....
Functional test "overflows	☐	☐	☐	.....
Stability of lift	☐	☐	☐	.....
General condition of lift	☐	☐	☐	.....

(place a checkmark in the relevant, if a retest is required then check it again!

Safety inspection done on:.....

Performed by company:.....

Name, address of specialist:.....

Result of inspection:
- ☐ Continued operation questionable, reinspection required
- ☐ Continued operation possible, remove defects
- ☐ No deficiencies, continue to operate

....
Signature of specialist Operating company signature

If requested to take care of deficiencies

Deficiency removed on: ....
Operating company signature

(use a new form for reinspection!)

Regular safety inspection and maintenance

Complete and leave in the inspection book

Serial number: _____

Test step	OK	Defect missing	Reinspect	Remarks
Model plate	☐	☐	☐	.....
Brief operating instructions on the column	☐	☐	☐	.....
Load capacity details on the lift	☐	☐	☐	.....
Detailed operating manual	☐	☐	☐	.....
Condition, operating button function.	☐	☐	☐	.....
Label "Lift, Lower	☐	☐	☐	.....
Condition, lockable main switch	☐	☐	☐	.....
Securing the lifting arm bolts	☐	☐	☐	.....
Condition, function rubber plate	☐	☐	☐	.....
Condition, function foot bumper (optional	☐	☐	☐	.....
Condition sliding part lift rails	☐	☐	☐	.....
Paint condition	☐	☐	☐	.....
Load bearing construction (deformations, cracks).	☐	☐	☐	.....
Fastening screw torque	☐	☐	☐	.....
Fastening anchor torque	☐	☐	☐	.....
Condition, function lifting arm block	☐	☐	☐	.....
Condition, function lifting arm movement	☐	☐	☐	.....
Condition, cross-beam	☐	☐	☐	.....
Cylinder condition	☐	☐	☐	.....
Condition wiper cylinder	☐	☐	☐	.....
Condition of covers	☐	☐	☐	.....
Unit cover leak-tightness	☐	☐	☐	.....
Operating box leak-tightness	☐	☐	☐	.....
Condition, function riser extension	☐	☐	☐	.....
Condition of concrete floor (cracks	☐	☐	☐	.....
Condition electrical lines	☐	☐	☐	.....
Condition, hydraulic lines + screw fittings	☐	☐	☐	.....
Condition, hydraulic unit	☐	☐	☐	.....
Functional test lift with vehicle	☐	☐	☐	.....
Functional test "overflows	☐	☐	☐	.....
Stability of lift	☐	☐	☐	.....
General condition of lift	☐	☐	☐	.....

(place a checkmark in the relevant, if a retest is required then check it again!

Safety inspection done on:.....

Performed by company:.....

Name, address of specialist:.....

Result of inspection:
- ☐ Continued operation questionable, reinspection required
- ☐ Continued operation possible, remove defects
- ☐ No deficiencies, continue to operate

....
Signature of specialist Operating company signature

If requested to take care of deficiencies

Deficiency removed on: ....
Operating company signature

(use a new form for reinspection!)

Regular safety inspection and maintenance

Complete and leave in the inspection book

Serial number: _____

Test step	OK	Defect missing	Reinspect	Remarks
Model plate	☐	☐	☐	.....
Brief operating instructions on the column	☐	☐	☐	.....
Load capacity details on the lift	☐	☐	☐	.....
Detailed operating manual	☐	☐	☐	.....
Condition, operating button function.	☐	☐	☐	.....
Label "Lift, Lower	☐	☐	☐	.....
Condition, lockable main switch	☐	☐	☐	.....
Securing the lifting arm bolts	☐	☐	☐	.....
Condition, function rubber plate	☐	☐	☐	.....
Condition, function foot bumper (optional	☐	☐	☐	.....
Condition sliding part lift rails	☐	☐	☐	.....
Paint condition	☐	☐	☐	.....
Load bearing construction (deformations, cracks)	☐	☐	☐	.....
Fastening screw torque	☐	☐	☐	.....
Fastening anchor torque	☐	☐	☐	.....
Condition, function lifting arm block	☐	☐	☐	.....
Condition, function lifting arm movement	☐	☐	☐	.....
Condition, cross-beam	☐	☐	☐	.....
Cylinder condition	☐	☐	☐	.....
Condition wiper cylinder	☐	☐	☐	.....
Condition of covers	☐	☐	☐	.....
Unit cover leak-tightness	☐	☐	☐	.....
Operating box leak-tightness	☐	☐	☐	.....
Condition, function riser extension	☐	☐	☐	.....
Condition of concrete floor (cracks	☐	☐	☐	.....
Condition electrical lines	☐	☐	☐	.....
Condition, hydraulic lines + screw fittings	☐	☐	☐	.....
Condition, hydraulic unit	☐	☐	☐	.....
Functional test lift with vehicle	☐	☐	☐	.....
Functional test "overflows	☐	☐	☐	.....
Stability of lift	☐	☐	☐	.....
General condition of lift	☐	☐	☐	.....

(place a checkmark in the relevant, if a retest is required then check it again!

Safety inspection done on:.....

Performed by company:.....

Name, address of specialist:.....

Result of inspection:
- ☐ Continued operation questionable, reinspection required
- ☐ Continued operation possible, remove defects
- ☐ No deficiencies, continue to operate

....
Signature of specialist Operating company signature

If requested to take care of deficiencies

Deficiency removed on: ....
Operating company signature

(use a new form for reinspection!)

Regular safety inspection and maintenance

Complete and leave in the inspection book

Serial number: _____

Test step	OK	Defect missing	Reinspect	Remarks
Model plate	☐	☐	☐	.....
Brief operating instructions on the column	☐	☐	☐	.....
Load capacity details on the lift	☐	☐	☐	.....
Detailed operating manual	☐	☐	☐	.....
Condition, operating button function.	☐	☐	☐	.....
Label "Lift, Lower	☐	☐	☐	.....
Condition, lockable main switch	☐	☐	☐	.....
Securing the lifting arm bolts	☐	☐	☐	.....
Condition, function rubber plate	☐	☐	☐	.....
Condition, function foot bumper (optional	☐	☐	☐	.....
Condition sliding part lift rails	☐	☐	☐	.....
Paint condition	☐	☐	☐	.....
Load bearing construction (deformations, cracks)	☐	☐	☐	.....
Fastening screw torque	☐	☐	☐	.....
Fastening anchor torque	☐	☐	☐	.....
Condition, function lifting arm block	☐	☐	☐	.....
Condition, function lifting arm movement	☐	☐	☐	.....
Condition, cross-beam	☐	☐	☐	.....
Cylinder condition	☐	☐	☐	.....
Condition wiper cylinder	☐	☐	☐	.....
Condition of covers	☐	☐	☐	.....
Unit cover leak-tightness	☐	☐	☐	.....
Operating box leak-tightness	☐	☐	☐	.....
Condition, function riser extension	☐	☐	☐	.....
Condition of concrete floor (cracks	☐	☐	☐	.....
Condition electrical lines	☐	☐	☐	.....
Condition, hydraulic lines + screw fittings	☐	☐	☐	.....
Condition, hydraulic unit	☐	☐	☐	.....
Functional test lift with vehicle	☐	☐	☐	.....
Functional test "overflows	☐	☐	☐	.....
Stability of lift	☐	☐	☐	.....
General condition of lift	☐	☐	☐	.....

(place a checkmark in the relevant, if a retest is required then check it again!

Safety inspection done on:.....

Performed by company:.....

Name, address of specialist:.....

Result of inspection:
- ☐ Continued operation questionable, reinspection required
- ☐ Continued operation possible, remove defects
- ☐ No deficiencies, continue to operate

....
Signature of specialist Operating company signature

If requested to take care of deficiencies

Deficiency removed on: ....
Operating company signature

(use a new form for reinspection!)

Regular safety inspection and maintenance

Complete and leave in the inspection book

Serial number: _____

Test step	OK	Defect missing	Reinspect	Remarks
Model plate	☐	☐	☐	.....
Brief operating instructions on the column	☐	☐	☐	.....
Load capacity details on the lift	☐	☐	☐	.....
Detailed operating manual	☐	☐	☐	.....
Condition, operating button function.	☐	☐	☐	.....
Label "Lift, Lower	☐	☐	☐	.....
Condition, lockable main switch	☐	☐	☐	.....
Securing the lifting arm bolts	☐	☐	☐	.....
Condition, function rubber plate	☐	☐	☐	.....
Condition, function foot bumper (optional	☐	☐	☐	.....
Condition sliding part lift rails	☐	☐	☐	.....
Paint condition	☐	☐	☐	.....
Load bearing construction (deformations, cracks)	☐	☐	☐	.....
Fastening screw torque	☐	☐	☐	.....
Fastening anchor torque	☐	☐	☐	.....
Condition, function lifting arm block	☐	☐	☐	.....
Condition, function lifting arm movement	☐	☐	☐	.....
Condition, cross-beam	☐	☐	☐	.....
Cylinder condition	☐	☐	☐	.....
Condition wiper cylinder	☐	☐	☐	.....
Condition of covers	☐	☐	☐	.....
Unit cover leak-tightness	☐	☐	☐	.....
Operating box leak-tightness	☐	☐	☐	.....
Condition, function riser extension	☐	☐	☐	.....
Condition of concrete floor (cracks	☐	☐	☐	.....
Condition electrical lines	☐	☐	☐	.....
Condition, hydraulic lines + screw fittings	☐	☐	☐	.....
Condition, hydraulic unit	☐	☐	☐	.....
Functional test lift with vehicle	☐	☐	☐	.....
Functional test "overflows	☐	☐	☐	.....
Stability of lift	☐	☐	☐	.....
General condition of lift	☐	☐	☐	.....

(place a checkmark in the relevant, if a retest is required then check it again!

Safety inspection done on:.....

Performed by company:.....

Name, address of specialist:.....

Result of inspection:
- ☐ Continued operation questionable, reinspection required
- ☐ Continued operation possible, remove defects
- ☐ No deficiencies, continue to operate

....
Signature of specialist Operating company signature

If requested to take care of deficiencies

Deficiency removed on: ....
Operating company signature

(use a new form for reinspection!)

Regular safety inspection and maintenance

Complete and leave in the inspection book

Serial number: _____

Test step	OK	Defect missing	Reinspect	Remarks
Model plate	☐	☐	☐	.....
Brief operating instructions on the column	☐	☐	☐	.....
Load capacity details on the lift	☐	☐	☐	.....
Detailed operating manual	☐	☐	☐	.....
Condition, operating button function.	☐	☐	☐	.....
Label "Lift, Lower	☐	☐	☐	.....
Condition, lockable main switch	☐	☐	☐	.....
Securing the lifting arm bolts	☐	☐	☐	.....
Condition, function rubber plate	☐	☐	☐	.....
Condition, function foot bumper (optional	☐	☐	☐	.....
Condition sliding part lift rails	☐	☐	☐	.....
Paint condition	☐	☐	☐	.....
Load bearing construction (deformations, cracks)	☐	☐	☐	.....
Fastening screw torque	☐	☐	☐	.....
Fastening anchor torque	☐	☐	☐	.....
Condition, function lifting arm block	☐	☐	☐	.....
Condition, function lifting arm movement	☐	☐	☐	.....
Condition, cross-beam	☐	☐	☐	.....
Cylinder condition	☐	☐	☐	.....
Condition wiper cylinder	☐	☐	☐	.....
Condition of covers	☐	☐	☐	.....
Unit cover leak-tightness	☐	☐	☐	.....
Operating box leak-tightness	☐	☐	☐	.....
Condition, function riser extension	☐	☐	☐	.....
Condition of concrete floor (cracks	☐	☐	☐	.....
Condition electrical lines	☐	☐	☐	.....
Condition, hydraulic lines + screw fittings	☐	☐	☐	.....
Condition, hydraulic unit	☐	☐	☐	.....
Functional test lift with vehicle	☐	☐	☐	.....
Functional test "overflows	☐	☐	☐	.....
Stability of lift	☐	☐	☐	.....
General condition of lift	☐	☐	☐	.....

(place a checkmark in the relevant, if a retest is required then check it again!

Safety inspection done on:.....

Performed by company:.....

Name, address of specialist:.....

Result of inspection:
- ☐ Continued operation questionable, reinspection required
- ☐ Continued operation possible, remove defects
- ☐ No deficiencies, continue to operate

....
Signature of specialist Operating company signature

If requested to take care of deficiencies

Deficiency removed on: ....
Operating company signature

(use a new form for reinspection!)

Regular safety inspection and maintenance

Complete and leave in the inspection book

Serial number: _____

Test step	OK	Defect missing	Reinspect	Remarks
Model plate	☐	☐	☐	.....
Brief operating instructions on the column	☐	☐	☐	.....
Load capacity details on the lift	☐	☐	☐	.....
Detailed operating manual	☐	☐	☐	.....
Condition, operating button function.	☐	☐	☐	.....
Label "Lift, Lower	☐	☐	☐	.....
Condition, lockable main switch	☐	☐	☐	.....
Securing the lifting arm bolts	☐	☐	☐	.....
Condition, function rubber plate	☐	☐	☐	.....
Condition, function foot bumper (optional	☐	☐	☐	.....
Condition sliding part lift rails	☐	☐	☐	.....
Paint condition	☐	☐	☐	.....
Load bearing construction (deformations, cracks)	☐	☐	☐	.....
Fastening screw torque	☐	☐	☐	.....
Fastening anchor torque	☐	☐	☐	.....
Condition, function lifting arm block	☐	☐	☐	.....
Condition, function lifting arm movement	☐	☐	☐	.....
Condition, cross-beam	☐	☐	☐	.....
Cylinder condition	☐	☐	☐	.....
Condition wiper cylinder	☐	☐	☐	.....
Condition of covers	☐	☐	☐	.....
Unit cover leak-tightness	☐	☐	☐	.....
Operating box leak-tightness	☐	☐	☐	.....
Condition, function riser extension	☐	☐	☐	.....
Condition of concrete floor (cracks	☐	☐	☐	.....
Condition electrical lines	☐	☐	☐	.....
Condition, hydraulic lines + screw fittings	☐	☐	☐	.....
Condition, hydraulic unit	☐	☐	☐	.....
Functional test lift with vehicle	☐	☐	☐	.....
Functional test "overflows	☐	☐	☐	.....
Stability of lift	☐	☐	☐	.....
General condition of lift	☐	☐	☐	.....

(place a checkmark in the relevant, if a retest is required then check it again!

Safety inspection done on:.....

Performed by company:.....

Name, address of specialist:.....

Result of inspection:
- ☐ Continued operation questionable, reinspection required
- ☐ Continued operation possible, remove defects
- ☐ No deficiencies, continue to operate

....
Signature of specialist Operating company signature

If requested to take care of deficiencies

Deficiency removed on: ....
Operating company signature

(use a new form for reinspection!)

Exceptional safety inspection

Complete and leave in the inspection book

Serial number: _____

Test step	OK	Defect missing	Reinspect	Remarks
Model plate	☐	☐	☐	.....
Brief operating instructions on the column	☐	☐	☐	.....
Load capacity details on the lift	☐	☐	☐	.....
Detailed operating manual	☐	☐	☐	.....
Condition, operating button function.	☐	☐	☐	.....
Label "Lift, Lower	☐	☐	☐	.....
Condition, lockable main switch	☐	☐	☐	.....
Securing the lifting arm bolts	☐	☐	☐	.....
Condition, function rubber plate	☐	☐	☐	.....
Condition, function foot bumper (optional	☐	☐	☐	.....
Condition sliding part lift rails	☐	☐	☐	.....
Paint condition	☐	☐	☐	.....
Load bearing construction (deformations, cracks)	☐	☐	☐	.....
Fastening screw torque	☐	☐	☐	.....
Fastening anchor torque	☐	☐	☐	.....
Condition, function lifting arm block	☐	☐	☐	.....
Condition, function lifting arm movement	☐	☐	☐	.....
Condition, cross-beam	☐	☐	☐	.....
Cylinder condition	☐	☐	☐	.....
Condition wiper cylinder	☐	☐	☐	.....
Condition of covers	☐	☐	☐	.....
Unit cover leak-tightness	☐	☐	☐	.....
Operating box leak-tightness	☐	☐	☐	.....
Condition, function riser extension	☐	☐	☐	.....
Condition of concrete floor (cracks	☐	☐	☐	.....
Condition electrical lines	☐	☐	☐	.....
Condition, hydraulic lines + screw fittings	☐	☐	☐	.....
Condition, hydraulic unit	☐	☐	☐	.....
Functional test lift with vehicle	☐	☐	☐	.....
Functional test "overflows	☐	☐	☐	.....
Stability of lift	☐	☐	☐	.....
General condition of lift	☐	☐	☐	.....

(place a checkmark in the relevant, if a retest is required then check it again!

Safety inspection done on:.....

Performed by company:.....

Name, address of specialist:.....

Result of inspection:
- ☐ Continued operation questionable, reinspection required
- ☐ Continued operation possible, remove defects
- ☐ No deficiencies, continue to operate

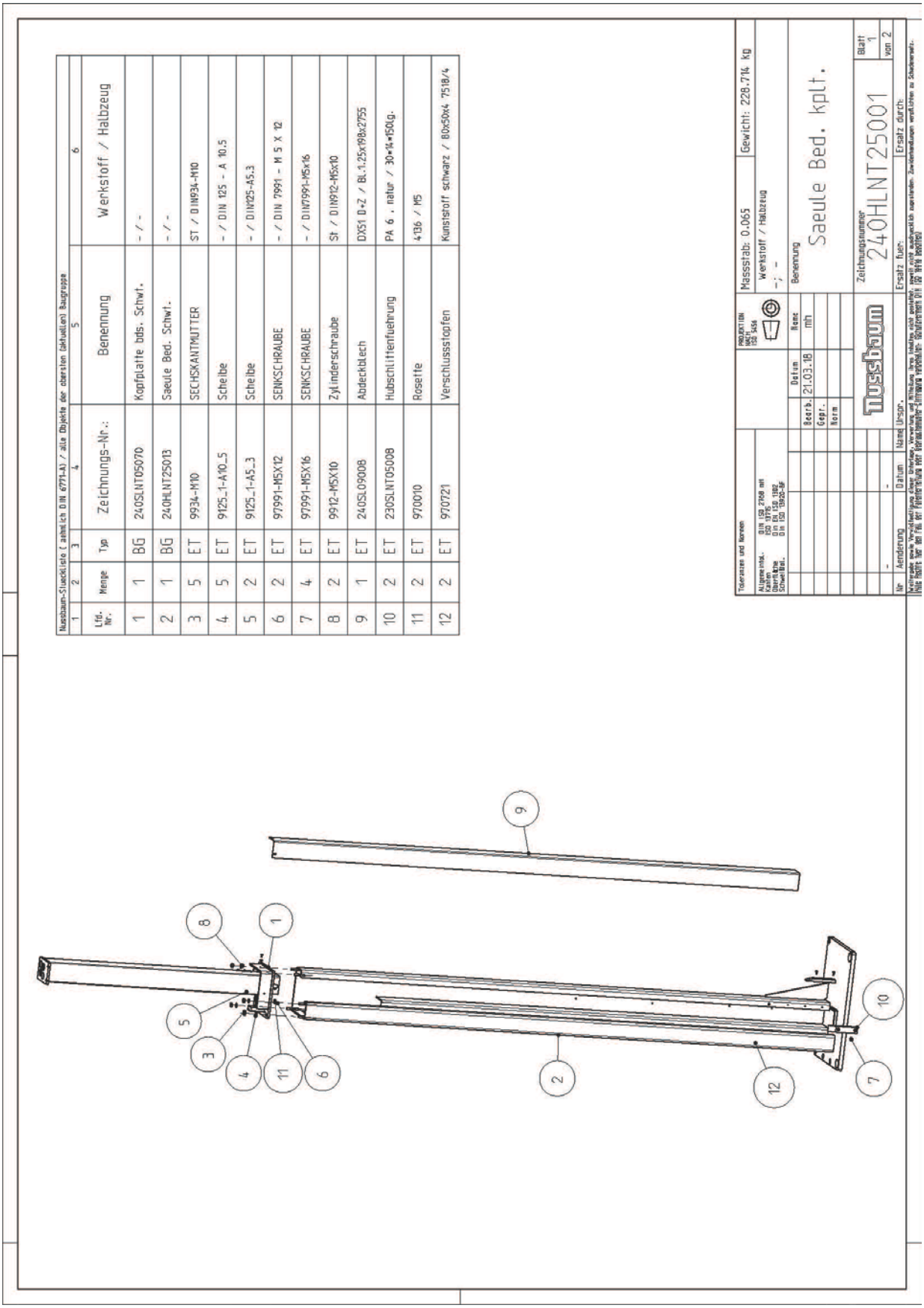
....
Signature of specialist Operating company signature

If requested to take care of deficiencies

Deficiency removed on: ....
Operating company signature

(use a new form for reinspection!)

10. Replacement parts list



Nussbaum-Stueckliste (aehnlich DIN 6771-A1) / alle Objekte der obersten (aktuellen) Baugruppe					
1	2	3	4	5	6
Lfd. Nr.	Menge	Typ	Zeichnungs-Nr.:	Benennung	Werkstoff / Halbzeug
1	1	BG	240SLNT05070	Kopfplatte bds. Schwt.	- / -
2	1	BG	240HLNT25013	Saeule Bed. Schwt.	- / -
3	5	ET	9934-M10	SECHSKANTMUTTER	ST / DIN934-M10
4	5	ET	9125_1-A10_5	Scheibe	- / DIN 125 - A 10.5
5	2	ET	9125_1-A5_3	Scheibe	- / DIN125-A5.3
6	2	ET	97991-M5X12	SENKSCHRAUBE	- / DIN 7991 - M 5 X 12
7	4	ET	97991-M5X16	SENKSCHRAUBE	- / DIN7991-M5x16
8	2	ET	9912-M5X10	Zylinderschraube	St / DIN912-M5x10
9	1	ET	240SL09008	Abdeckblech	DX51 D+Z / BL.1.25x998x2755
10	2	ET	230SLNT05008	Hubschlittenfuehrung	PA 6 , natur / 30+%+150g.
11	2	ET	970010	Rosette	4136 / M5
12	2	ET	970721	Verschlussstopfen	Kunststoff schwarz / 80x50x4 7518/4

Toleranzen und Normen
Allgemeintol.: DIN ISO 2768 mH
Kanten: ISO 13715
Oberflächen: DIN ISO 1302
Schweißes.: DIN ISO 13920-B

PRODUKTION nach ISO 9454

Massstab: 0.065 | Gewicht: 228.714 kg

Werkstoff / Halbzeug
-; -

Benennung
Saeule Bed. kplt.

Zeichnungsnummer
240HLNT25001

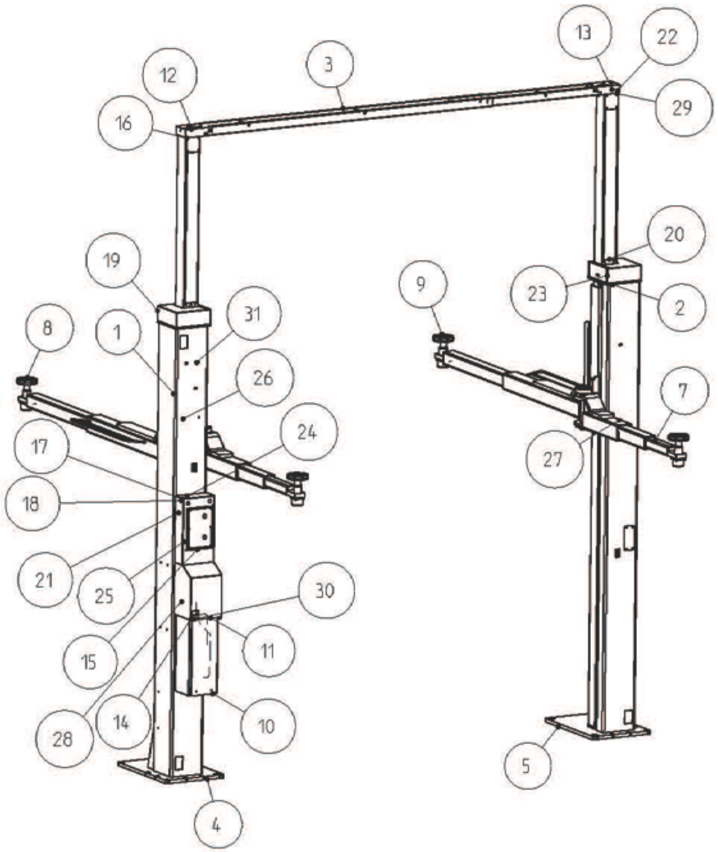
Blatt 1 von 2

	Datum	Name
Bearb.	21.03.18	mh
Gepr.		
Norm		

Nussbaum

Nr	Aenderung	Datum	Name	Ursprung
-	-	-	-	-

Ersatz fuer:
Ersatz durch:



Nussbaum-Stueckliste (aehnlich DIN 6771-A) / alle Objekte der obersten (aktuellen) Baugruppe

1	2	3	4	5	6
Lfd. Nr.	Menge	Typ	Zeichnungs-Nr.:	Benennung	Werkstoff / Halbzeug
1	1	BG	240HLNT26001	Hubschl. Bed. kpl.	- / -
2	1	BG	240HLNT26051	Hubschl.Gegens.kompl.	- / -
3	1	BG	230HLNT05710	Quertraverse Kplt.	- / -
4	1	BG	240HLNT25001	Saeule Bed. kplt.	- / -
5	1	BG	240HLNT25002	Saeule Geg. kplt.	- / -
6	1	BG	240HLNT03030	Schaltkasten Waschhalle	CT 862 / ABS-Gehaeuse.120x160x240
7	2	BG	232NSTL28038	T4-Arm kurz kpl.	570mm-1160mm / Teleskoptragteller
8	1	BG	240SPL08001	Tragarm lang Bed. kpl.	Universal / 4t; 1130mm-1840mm
9	1	BG	240SPL08002	Tragarm lang Geg. kpl.	Universal / 4t; 1130mm-1840mm
10	1	BG	000STA01560	Universalaggregat Kplt (HLNT Waschhalle)	- / -
11	1	BG	240HLNT09023	Waschhalle Abdeckung Schwt.	- / -
12	1	BG	230SLNT02802	Zylinder Bediens.kpl.	- / -
13	1	BG	230SLNT02801	Zylinder Gegens kpl.	- / -
14	4	ET	97337-A2_4X4-AL-ST	BLINDNIET	- / DIN 7337-D7337-2,4X4-AL-ST
15	4	ET	9125_1-A5_3	Scheibe	- / DIN125-A5.3
16	8	ET	97991-M4X10	SENKSCHRAUBE	- / DIN 7991 - M 4 X 10
17	4	ET	9912-M5X10	Zylinderschraube	St / DIN912-M5x10
18	2	ET	9912-M5X25	Zylinderschraube	St / DIN912-M5x25
19	1	ET	230SLH09045	Abdeckhaube	ELO / BL.1x415x334
20	1	ET	230SLH09047	Abdeckhaube	ELO / BL.1x415x334
21	1	ET	240HLNT09031	Befestigunsplatte	S235 / BL. 5x175x334
22	2	ET	230SLNT05580	Deckel	DD11 / BL. 2x110x90
23	2	ET	230SLH09048	Deckel Haube	Elo / BL.1x110x230
24	1	ET	240HLNT09021	Kantenschutzdichtprofil	EPDM / GN2180 Form D / 1637 lang
25	1	ET	240HLNT03018	Kantenschutzprofil	971027 mit Stahlklemmband / 890mm 1-2mm schwarz
26	6	ET	978984	Kegelstopfen GPN500	PE-LD / M6
27	6	ET	9VL50X10X0_8-2	Lamellenstopfen fuer Rechteckrohre	PE / Walter Bethke GmbH & Co. KG / VL/R 50x10x0.8-2
28	2	ET	9SEM05X010ZN	Linsenflanschschraube	DIN NB 602 / M5x12
29	8	ET	972210	Rosette	4136 / M4
30	1	ET	155RGK05989	Typenschild	- / -
31	2	ET	978983	Verschlussstopfen GPN300	PE-LD / D12

Toleranzen und Normen
Allgemeintol. DIN ISO 2768 mH
Kanten ISO 13715
Oberfläche Din EN ISO 1302
Schweißtol. Din ISO 13920-BF

Projektion nach ISO 5456

Massstab: 0.040 | Gewicht: 564.934 kg
Werkstoff / Halbzeug: -; -

	Datum	Name
Bearb.	09.05.19	mh
Gepr.		
Norm		

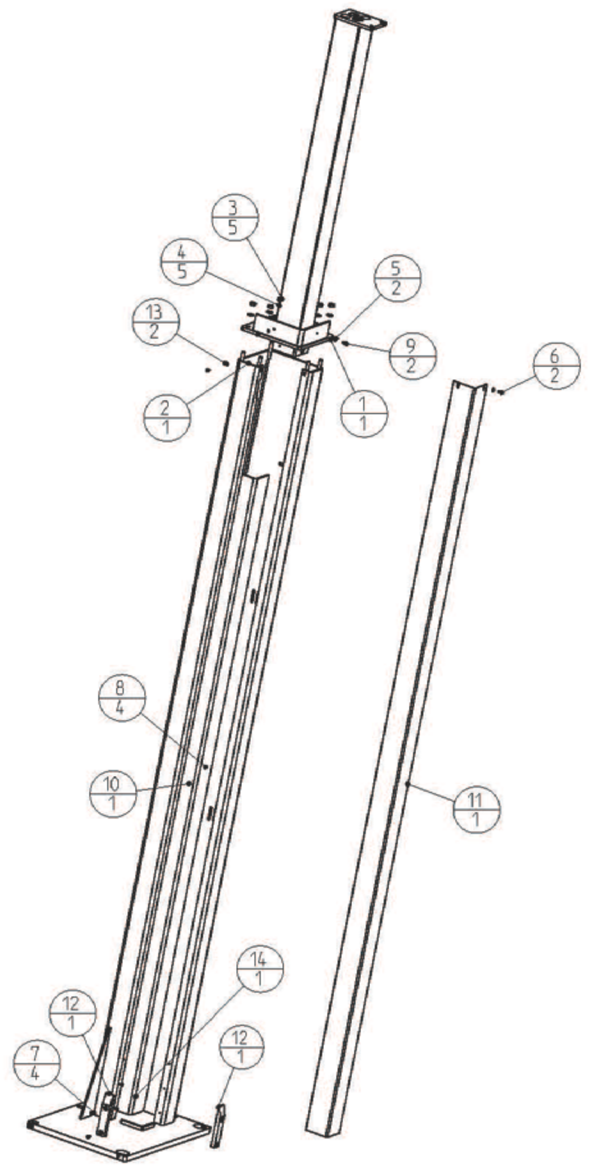
Benennung: 2.40 HLNT UNI (Waschhalle)

Nr	Aenderung	Datum	Name
b	anderer E-Kasten	16.10.19	mh
a	Stueckl. aktual.	29.07.19	mh

Nussbaum

Urspr.

Zeichnungsnummer: 240HLNT00016
Blatt 1 von 2
Ersatz fuer: | Ersatz durch:



Nussbaum-Stueckliste (aehnlich DIN 6771-A) / alle Objekte der obersten (aktuellen) Baugruppe

1	2	3	4	5	6
Lfd. Nr.	Menge	Typ	Zeichnungs-Nr.:	Benennung	Werkstoff / Halbzeug
1	1	BG	240SLNT05040	Kopfplatte ggs Schwt.	- / -
2	1	BG	240HLNT25023	Saeule Geg. Schwt.	- / -
3	5	ET	9934-M10	SECHSKANTMUTTER	ST / DIN934-M10
4	5	ET	9125_1-A10_5	Scheibe	- / DIN 125 - A 10.5
5	2	ET	9125_1-A5_3	Scheibe	- / DIN125-A5.3
6	2	ET	97991-M5X12	SENKSCHRAUBE	- / DIN 7991 - M 5 X 12
7	4	ET	97991-M5X16	SENKSCHRAUBE	- / DIN7991-M5x16
8	4	ET	97991-M5X8	SENKSCHRAUBE	- / DIN7991-M5x8
9	2	ET	9912-M5X10	Zylinderschraube	St / DIN912-M5x10
10	1	ET	225SL09021	Abdeckbl.f.E-Set	StW22 / BL.1.5*70*150
11	1	ET	240SL09008	Abdeckblech	DX51 D+Z / BL.1.25x198x2755
12	2	ET	230SLNT05008	Hubschlittenfuehrung	PA 6 , natur / 30*14*150lg.
13	2	ET	970010	Rosette	4136 / M5
14	1	ET	970721	Verschlussstopfen	Kunststoff schwarz / 80x50x4 7518/4

Toleranzen und Normen
Allgemeintol. DIN ISO 2768 mH
Kanten ISO 13715
Oberfläche Din EN ISO 1302
Schweißtol. Din ISO 13920-BF

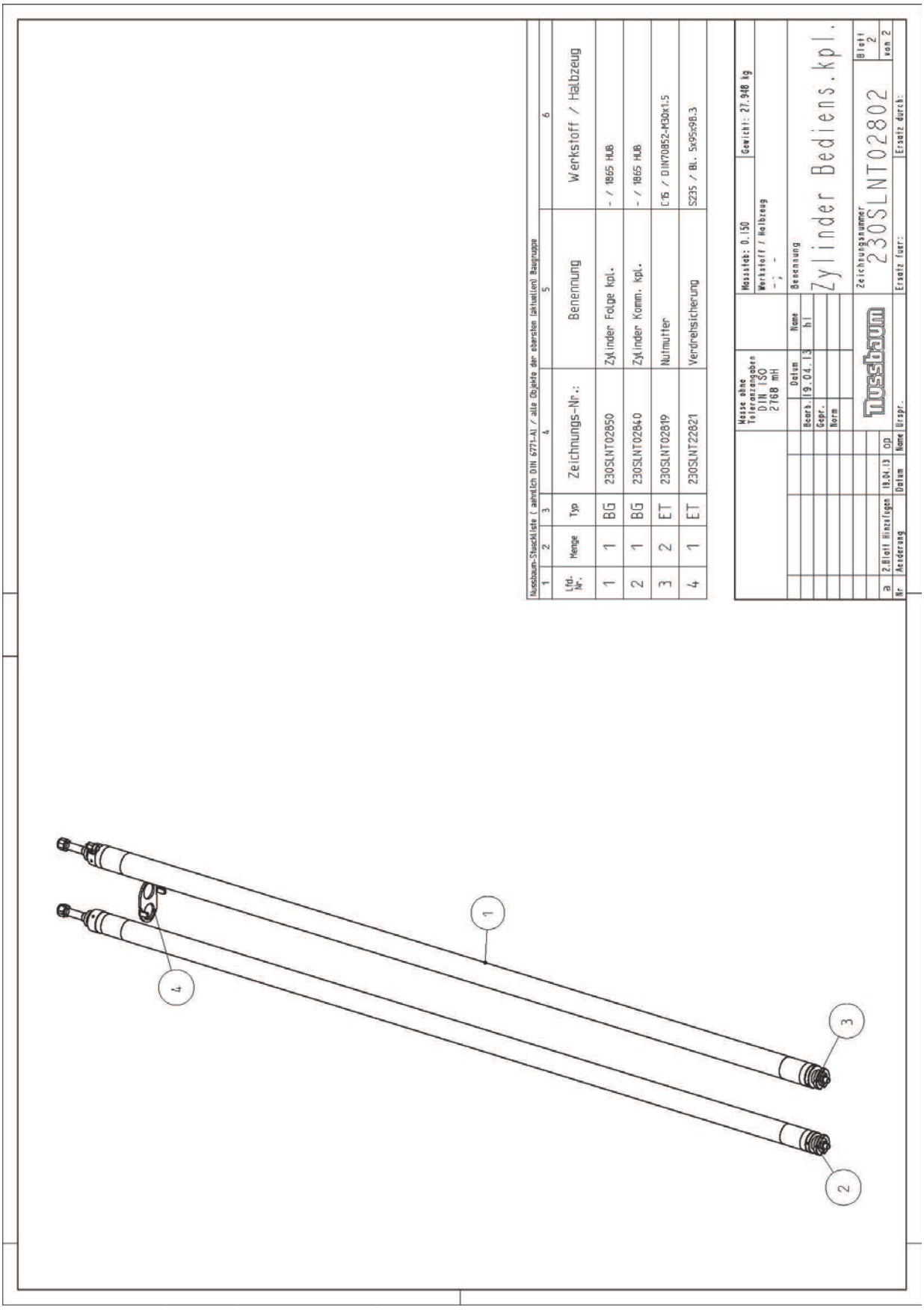
PROJEKTION NACH ISO 5456

	Datum	Name
Bearb.	21.03.18	mh
Gepr.		
Norm		

Massstab: 0.070 — Gewicht: 104.302 kg
Werkstoff / Halbzeug: -; -
Benennung: Saeule Geg. kplt.
Nussbaum
Zeichnungsnummer: 240HLNT25002
Blatt 1 von 2

Nr | Aenderung | Datum | Name | Urspr. | Ersatz fuer: | Ersatz durch:

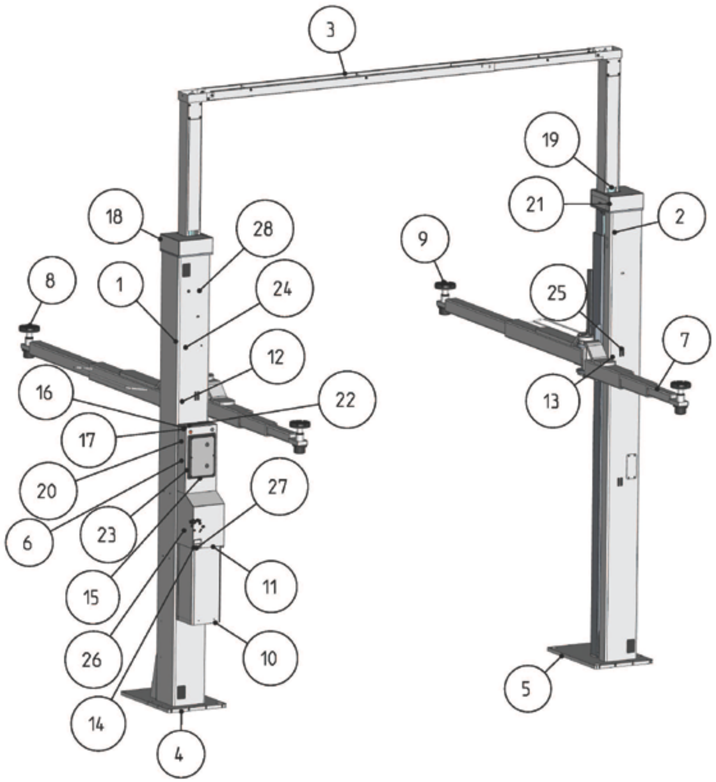
Weitergabe sowie Vervielfältigung dieser Unterlage, Verwertung und Mitteilung ihres Inhaltes nicht gestattet, soweit nicht ausdrücklich zugestanden. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte für den Fall der Patenterteilung oder Gebrauchsmuster-Eintragung vorbehalten. (Schutzvermerk DIN ISO 16016 beachten)


Ausbaum-Stueckliste (aehnlich DIN 6771-A) / alle Objekte der obersten (aktuellen) Baugruppe
Lfd. Nr.
Menge
Typ
Zeichnungs-Nr.:
Benennung
Werkstoff / Halbzeug
1 1 BG 230SLNT02850 Zylinder Folge kpl. - / 1865 HUB
2 1 BG 230SLNT02840 Zylinder Komm. kpl. - / 1865 HUB
3 2 ET 230SLNT02819 Nutmutter C45 / DIN70852-M30x1.5
4 1 ET 230SLNT22821 Verdrehsicherung S235 / BL. 5x95x98.3
Masse ohne Toleranzangaben DIN 130 2768 mH
Massstab: 0.150
Gewicht: 27.940 kg
Werkstoff / Halbzeug
-; -
Benennung
Zylinder Bediens.kpl.
Zeichnungsnummer
230SLNT02802
Blatt 2 von 2
Datum
Name
Bearb. 19.04.13 hl
Gepr.
Norm
Nusbaum
2.Blatt hinzugefuegt 18.04.13 op
Aenderung Datum Name Urspr.
Ersatz fuer:
Ersatz durch:
1
2
3
4

Version RH:

Nussbaum-Stueckliste (aehnlich DIN 6771-A) / alle Objekte der obersten (aktuellen) Baugruppe

1	2	3	4	5	6
Lfd. Nr.	Menge	Typ	Zeichnungs-Nr.:	Benennung	Werkstoff / Halbzeug
1	1	BG	240HLNT26001	Hubschl. Bed. kpl.	- / -
2	1	BG	240HLNT26051	Hubschl.Gegens.kompl.	- / -
3	1	BG	230HLNT05710	Quertraverse Kplt.	- / -
4	1	BG	240HLNT25301	Saeule Bed. kpl.	- / -
5	1	BG	240HLNT25302	Saeule Geg. kplt.	- / -
6	1	BG	240HLNT03030	Schaltkasten Waschhalle	CT 862 / ABS-Gehaeuse.120x160x240
7	2	BG	232NSTL28038	T4-Arm kurz kpl.	570mm-1160mm / Teleskoptragteller
8	1	BG	240SPL08001	Tragarm lang Bed. kpl.	Universal / 41; 1130mm-1840mm
9	1	BG	240SPL08002	Tragarm lang Geg. kpl.	Universal / 41; 1130mm-1840mm
10	1	BG	000STA01560	Universalaggregat Kplt (HLNT Waschhalle)	- / -
11	1	BG	240HLNT09023	Waschhalle Abdeckung Schwt.	- / -
12	1	BG	230HLNT02081	Zylinder Bed. kpl.	- / (1745 HUB)
13	1	BG	230HLNT02082	Zylinder Geg. kpl.	- / -
14	4	ET	97337-A2_4X4-AL-ST	BLINDNIET	- / DIN 7337-D7337-2.4X4-AL-ST
15	4	ET	9125_1-A5_3	Scheibe	- / DIN125-A5.3
16	4	ET	9912-M5X10	Zylinderschraube	St / DIN912-M5x10
17	2	ET	9912-M5X25	Zylinderschraube	St / DIN912-M5x25
18	1	ET	230SLH09045	Abdeckhaube	ELO / Bl.1x415x334
19	1	ET	230SLH09047	Abdeckhaube	ELO / Bl.1x415x334
20	1	ET	240HLNT09031	Befestigunsplatte	S235 / Bl. 5x175x334
21	2	ET	230SLH09048	Deckel Haube	Elo / Bl.1x110x230
22	1	ET	240HLNT09021	Kantenschutzdichtprofil	EPDM / GN2180 Form D / 1637 lang
23	1	ET	240HLNT03018	Kantenschutzprofil	971027 mit Stahlklemmband / 890mm 1-2mm schwarz
24	6	ET	978984	Kegelstopfen GPN500	PE-LD / M6
25	6	ET	9VL50X10X0_8-2	Lamellenstopfen fuer Rechteckrohre	PE / Walter Bethke GmbH & Co. KG / VL/R 50x10x0.8-2
26	2	ET	9SEM05X010ZN	Linsenflanschschraube	DIN NB 602 / M5x12
27	1	ET	155RGK05989	Typenschild	- / -
28	2	ET	978983	Verschlussstopfen GPN300	PE-LD / D12



Toleranzen und Normen
Allgemeintol. DIN ISO 2768 mH
Kanten ISO 13715
Oberfläche Din EN ISO 1302
Schweißtol. Din ISO 13920-BF

Projektion nach ISO 5456

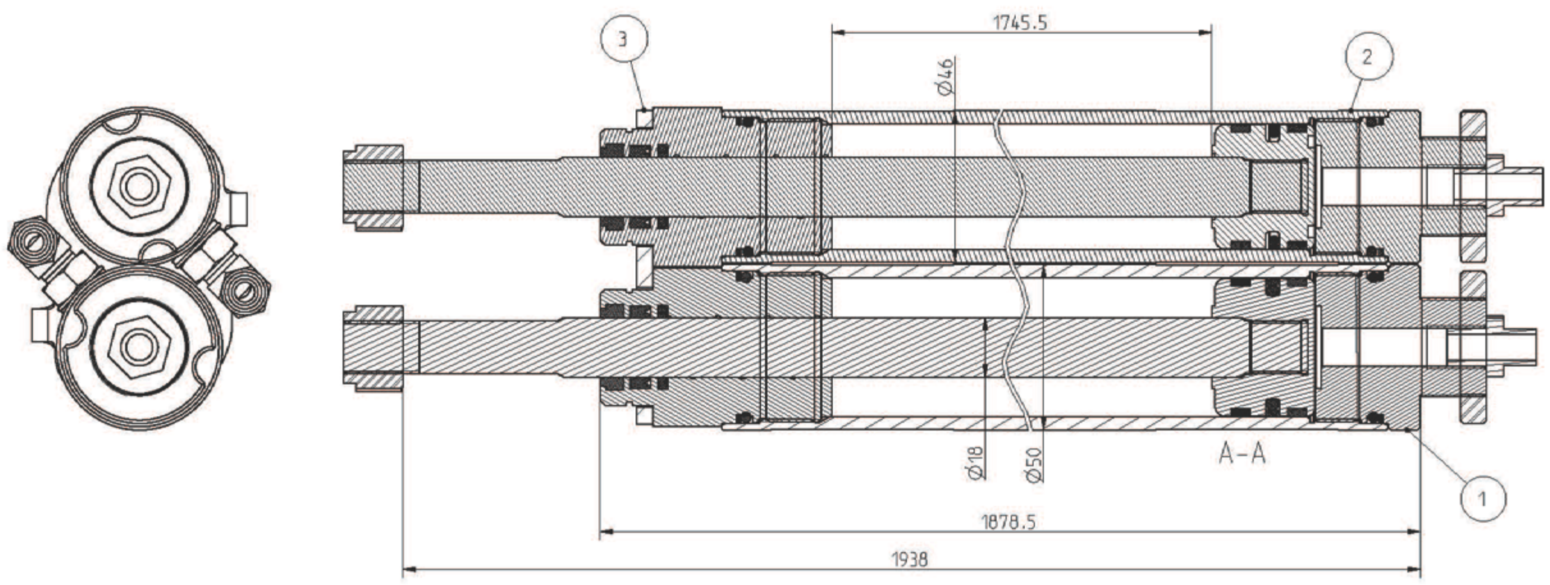
	Datum	Name
Beerb.	09.05.19	mh
Gepr.		
Norm		

Nr	Aenderung	Datum	Name
a	anderer E-Kasten	16.10.19	mh

Urspr.

Nussbaum

Massstab: 0.040 Gewicht: 559.465 kg
Werkstoff / Halbzeug
-; -
Benennung
2.40 HLNT UNI
(Waschhalle RH 3800mm)
Zeichnungsnummer
240HLNT00018
Blatt 1 von 2
Ersatz fuer: Ersatz durch:



Nussbaum-Stueckliste (aehnlich DIN 6771-A) / alle Objekte der obersten (aktuellen) Baugruppe

1	2	3	4	5	6
Lfd. Nr.	Menge	Typ	Zeichnungs-Nr.:	Benennung	Werkstoff / Halbzeug
1	1	BG	230HLNT02050	Folgezylinder kpl.	- / (1745 HUB)
2	1	BG	230HLNT02030	Kommandozylinder kpl.	- / (1745 HUB)
3	1	ET	230SLNT22821	Verdrehsicherung	S235 / Bl. 5x95x98.3

Toleranzen und Normen
Allgemeintol. DIN ISO 2768 mH
Kanten ISO 13715
Oberfläche DIN EN ISO 1302
Schweißtol. DIN ISO 13920-BF

PROJEKTION NACH ISO 5456

Massstab: 0.800 | Gewicht: 26.420 kg
Werkstoff / Halbzeug: -; (1745 HUB)

	Datum	Name
Bearb.	15.01.19	mh
Gepr.		
Norm		

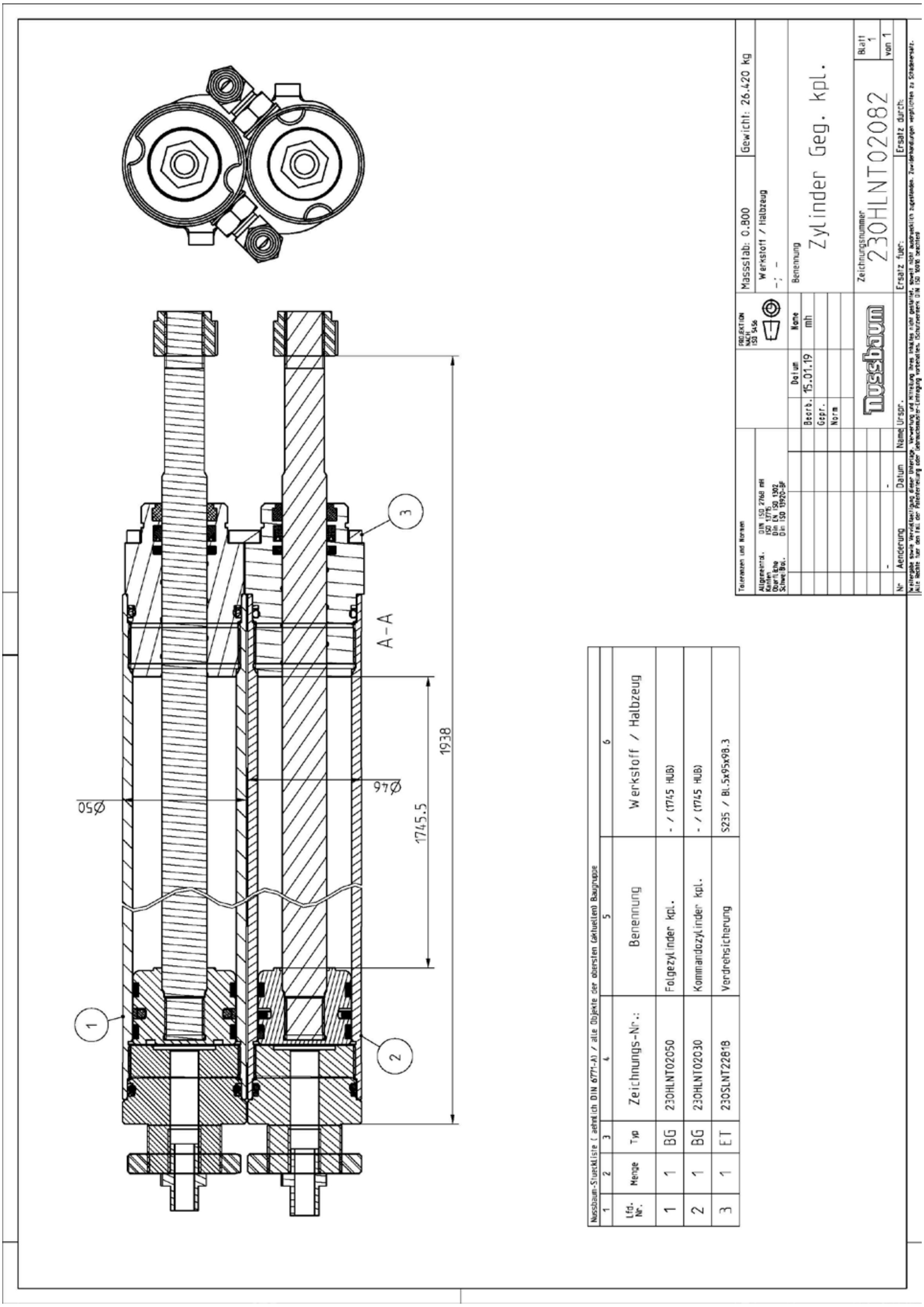
Benennung: Zylinder Bed. kpl.

Nussbaum

Zeichnungsnummer: 230HLNT02081 | Blatt 1 von 1

Nr	Aenderung	Datum	Name	Urspr.
	-	-		

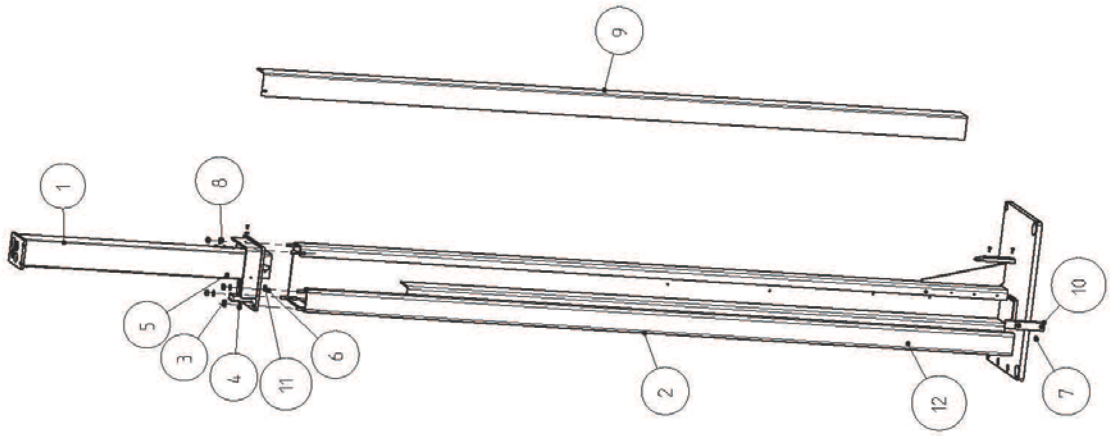
Ersatz fuer: | Ersatz durch:



Nussbaum-Stueckliste (aehnlich DIN 6771-A) / alle Objekte der obersten (aktuellen) Baugruppe

Lfd. Nr.	Menge	Typ	Zeichnungs-Nr.:	Benennung	Werkstoff / Halbzeug
1	1	BG	230HLNT02050	Folgezylinder kpl.	- / (1745 HUB)
2	1	BG	230HLNT02030	Kommandozylinder kpl.	- / (1745 HUB)
3	1	ET	230SLNT22818	Verdrehsicherung	S235 / Bl.5x95x98.3

Nussbaum-Stueckliste (aehnlich DIN 6771-A1) / alle Objekte der obersten (aktuellen) Baugruppe					
1	2	3	4	5	6
Lfd-Nr.	Menge	Typ	Zeichnungs-Nr.:	Benennung	Werkstoff / Halbzeug
1	1	BG	240SLNT05260	Kopfplatte BDS Kpl.(3800 mm)	- / 3800 mm
2	1	BG	240HLNT25013	Saeule Bed. Schwt.	- / -
3	5	ET	9934-M10	SECHSKANTMUTTER	ST / DIN934-M10
4	5	ET	9125_1-A10_5	Scheibe	- / DIN 125 - A 10.5
5	2	ET	9125_1-A5_3	Scheibe	- / DIN125-A5.3
6	2	ET	97991-M5X12	SENKSCHRAUBE	- / DIN 7991 - M 5 X 12
7	4	ET	97991-M5X16	SENKSCHRAUBE	- / DIN7991-M5x16
8	2	ET	9912-M5X10	Zylinderschraube	St / DIN912-M5x10
9	1	ET	240SL09008	Abdeckblech	DX51 D+Z / BL.1.25x998x2755
10	2	ET	230SLNT05008	Hubschlittenfuehrung	PA 6 , natur / 30*%*150lg.
11	2	ET	970010	Rosette	4136 / M5
12	2	ET	970721	Verschlussstopfen	Kunststoff schwarz / 80x50x4 7518/4



Toleranzen und Normen
Allgemeintol.: DIN ISO 2768 mH
Kanten: ISO 13715
Oberflaeche: DIN EN ISO 1302
Schweissnaht: DIN ISO 13920-B

PRODUKTION nach ISO 9454

Massstab: 0.065 | Gewicht: 228.714 kg
Werkstoff / Halbzeug
-; -

	Datum	Name
Bearb.	15.01.19	mh
Gepr.		
Norm		

Benennung: Saeule Bed. kpl.

Nussbaum

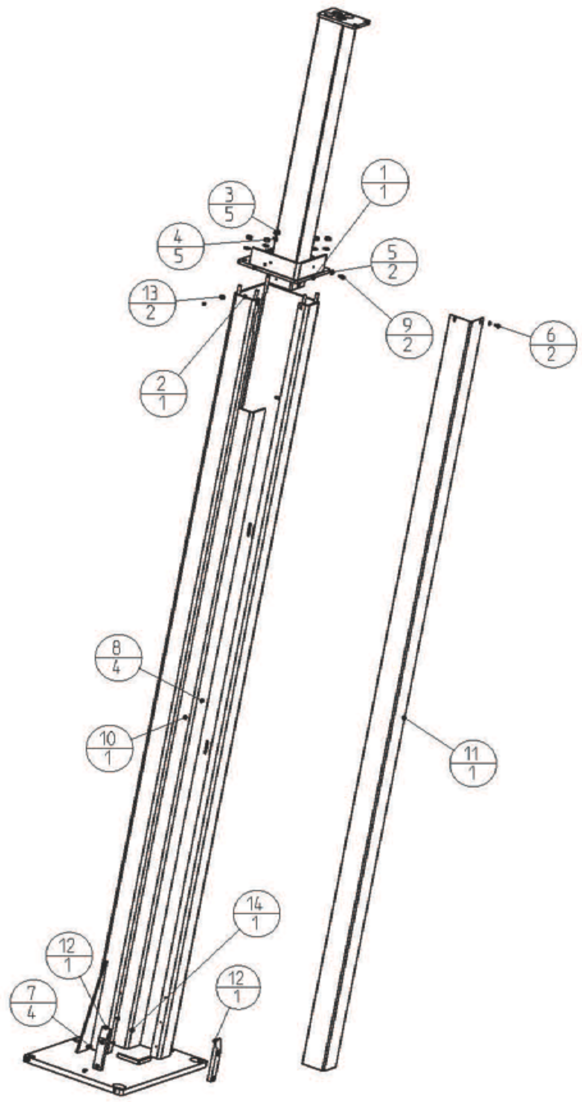
Zeichnungsnummer: 240HLNT25301

Blatt 1 von 2

Nr.	Aenderung	Datum	Name	Urspr.
-	-	-	-	-

Ersatz fuer:

Ersatz durch:



Nussbaum-Stueckliste (aehnlich DIN 6771-A) / alle Objekte der obersten (aktuellen) Baugruppe

1	2	3	4	5	6
Lfd. Nr.	Menge	Typ	Zeichnungs-Nr.:	Benennung	Werkstoff / Halbzeug
1	1	BG	240SLNT05230	Kopfplatte GGS Kpl.(3800 mm)	- / 3800 mm
2	1	BG	240HLNT25023	Saeule Geg. Schwt.	- / -
3	5	ET	9934-M10	SECHSKANTMUTTER	ST / DIN934-M10
4	5	ET	9125_1-A10_5	Scheibe	- / DIN 125 - A 10.5
5	2	ET	9125_1-A5_3	Scheibe	- / DIN125-A5.3
6	2	ET	97991-M5X12	SENKSCHRAUBE	- / DIN 7991 - M 5 X 12
7	4	ET	97991-M5X16	SENKSCHRAUBE	- / DIN7991-M5x16
8	4	ET	97991-M5X8	SENKSCHRAUBE	- / DIN7991-M5x8
9	2	ET	9912-M5X10	Zylinderschraube	St / DIN912-M5x10
10	1	ET	225SL09021	Abdeckbl.f.E-Set	StW22 / BL.1.5*70*150
11	1	ET	240SL09008	Abdeckblech	DX51 D+Z / BL.1.25x198x2755
12	2	ET	230SLNT05008	Hubschlittenfuehrung	PA 6 , natur / 30*14*150lg.
13	2	ET	970010	Rosette	4136 / M5
14	1	ET	970721	Verschlussstopfen	Kunststoff schwarz / 80x50x4 7518/4

Toleranzen und Normen
Allgemeintol.: DIN ISO 2768 mH
Kanten: ISO 13715
Oberfläche: Din EN ISO 1302
Schweißtol.: Din ISO 13920-BF

Projektion nach ISO 5456

	Datum	Name
Bearb.	21.03.18	mh
Gepr.		
Norm		

Massstab: 0.070 | Gewicht: 102.915 kg

Werkstoff / Halbzeug: -; -

Benennung: Saeule Geg. kplt.

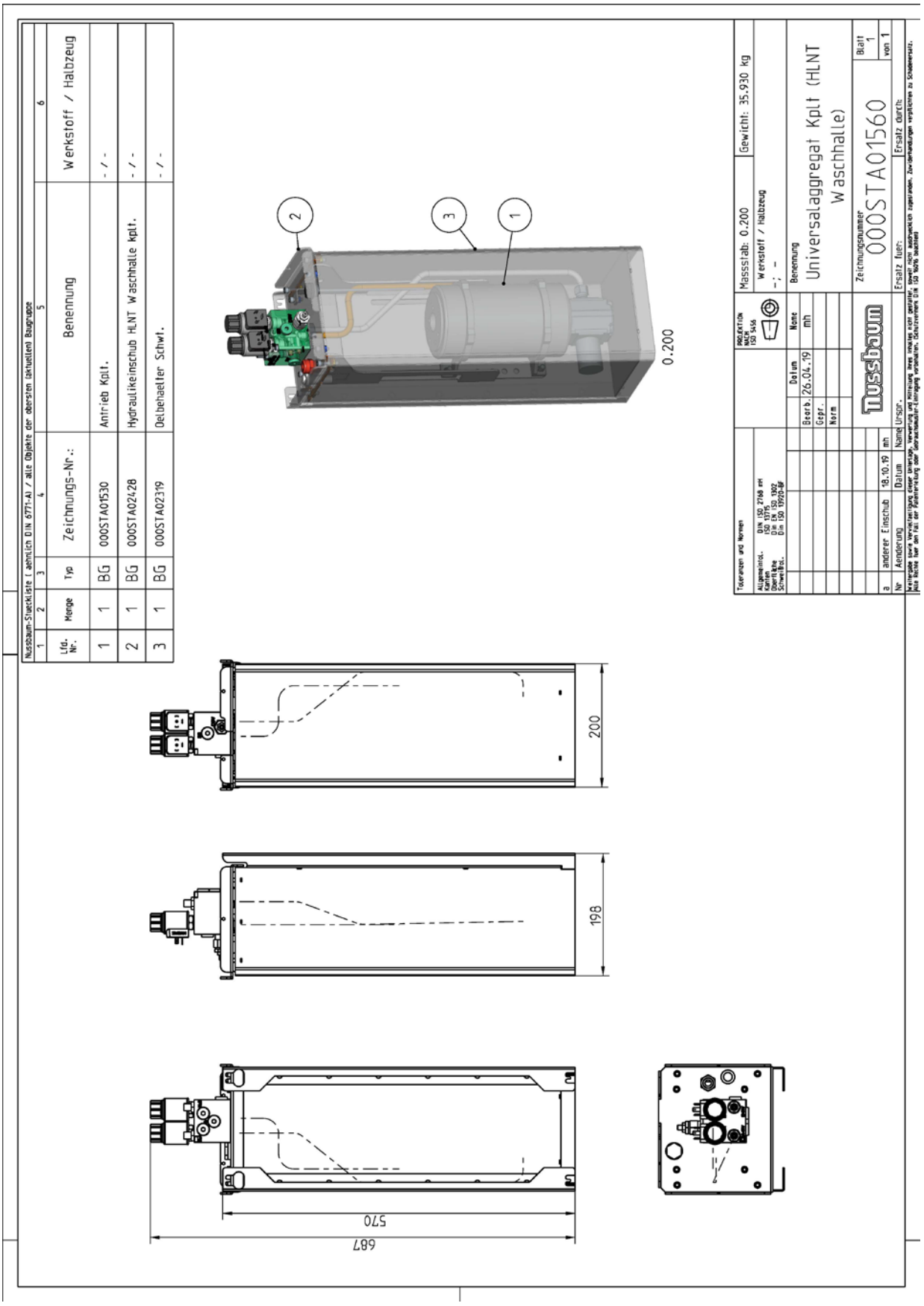
Zeichnungsnummer: 240HLNT25302

Blatt 1 von 2

Nussbaum

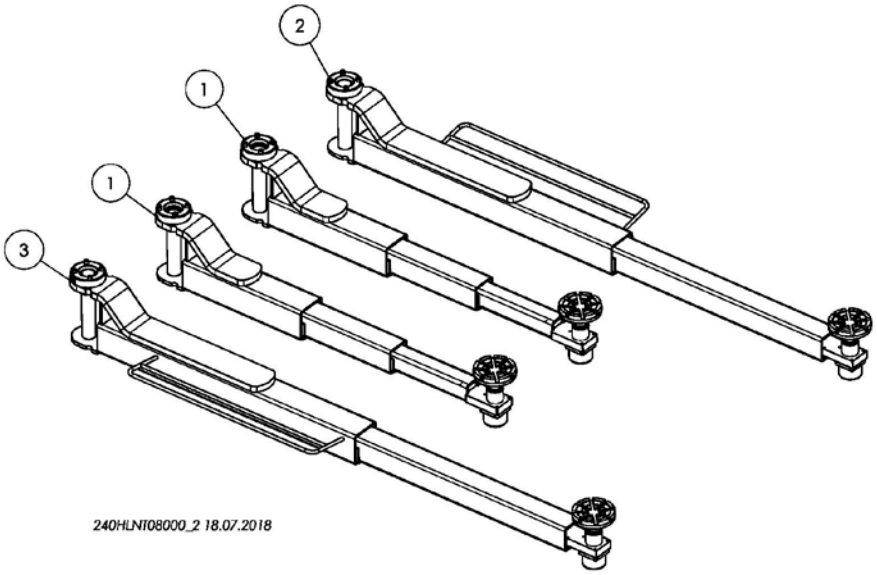
Nr	Aenderung	Datum	Name	Urspr.	Ersatz fuer:	Ersatz durch:
	-	-				

Weitergabe sowie Vervielfaeltigung dieser Unterlage, Verwertung und Mitteilung ihres Inhaltes nicht gestattet, soweit nicht ausdruecklich zugestanden. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte fuer den Fall der Patenterteilung oder Gebrauchsmuster-Eintragung vorbehalten. Schutzvermerk DIN ISO 16016 beachten


Nussbaum-Stückliste (gemäß DIN 6771-A1 / alle Objekte der obersten (aktuellen) Baugruppe
Lfd. Nr.
Menge
Typ
Zeichnungs-Nr.:
Benennung
Werkstoff / Halbzeug
1 1 BG 000STA01530 Antrieb Kplt. - / -
2 1 BG 000STA02428 Hydraulikeinschub HLNT Waschhalle kplt. - / -
3 1 BG 000STA02319 Oelbehaelter Schwl. - / -
2
3
1
0.200
200
198
570
687
Toleranzen und Normen
Allgemeintol.
Kanten
Oberfläche
Schweißbes.
DIN ISO 2768 mH
ISO 13715
DIN EN ISO 1302
DIN EN ISO 9692-1
Datum
Name
Bearb. 26.04.19 mh
Gepr.
Norm
Nussbaum
Maßstab: 0.200
Gewicht: 35.930 kg
Werkstoff / Halbzeug
-; -
Benennung
Universalaggregat Kplt (HLNT Waschhalle)
Zeichnungsnummer
000STA01560
Blatt 1
von 1
a anderer Einschub 18.10.19 mh
Nr Aenderung Datum Name Urspr.
Ersatz für:
Ersatz durch:

Lifting arm:

Tragarmsatz kpl.



1	232NSTL28038	T4-ARM KURZ KPL.	3	240SPL08002	TRAGARM LANG GEG. KPL.
2	240SPL08001	TRAGARM LANG BED. KPL.			

1	232NSTL28038	T4-ARM SHORT COMPLETE	3	240SPL08002	LIFTING ARM LONG SLAVE SIDE COMPLETE
2	240SPL08001	LIFTING ARM LONG MASTER SIDE COMPLETE			

Nussbaum Automotive Lifts GmbH • Customer service • Korker Str. 24 • D 77694 Kehl-Bodersweier
www.nussbaumlifts.com • e-mail: service@nussbaumlifts.com

Service hotline Germany: 0800 5 288 911
Service hotline international: +49 180 15 288 911