Příloha č. 1

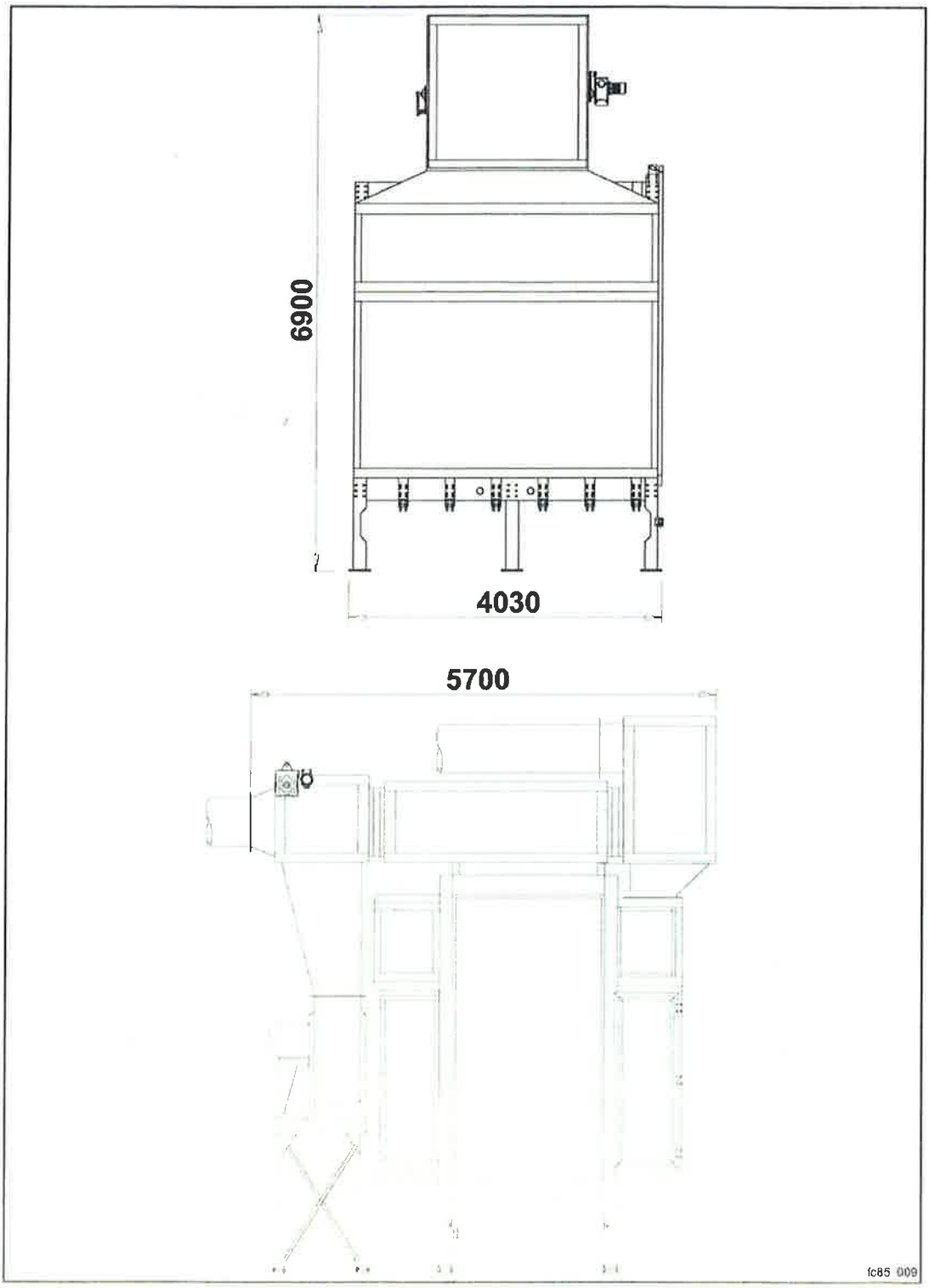
INSTALACE NOVÉHO CHLADICÍHO ZAŘÍZENÍ PRO LISOVACÍ LINKU č. 2 v TECHNISTONE, a.s., HRADEC KRÁLOVÉ

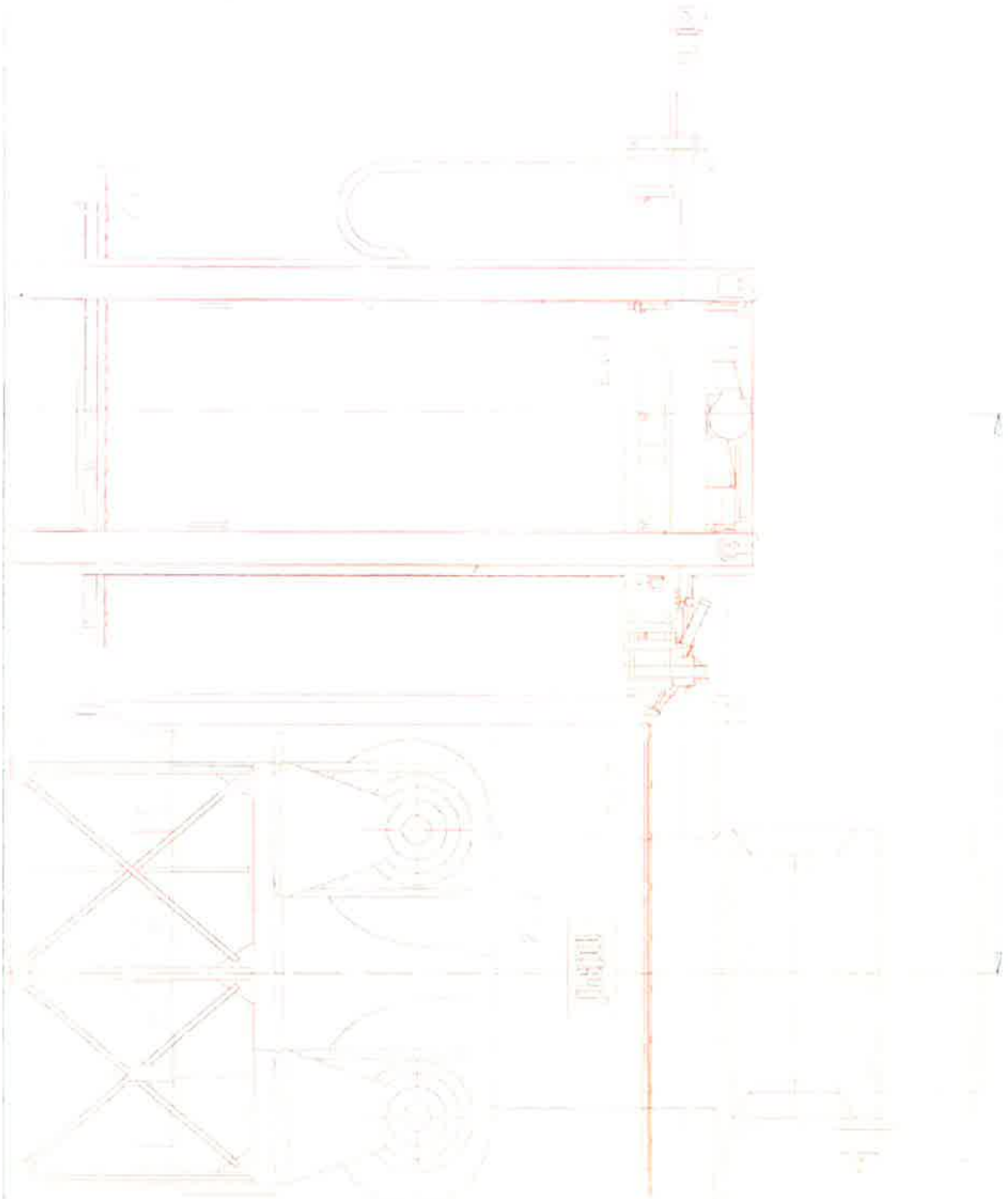
STROJNÍ KNIHA

Poziční označení - Item No	Název a specifikace SaZ / jednotek - Name of unit	Popis SaZ / montážní práce	Kusů - Pieces	Dodavatel - Supplier	Typ - Model	Hmotnost - Weight	Hlavní rozměry v mm - Main dimensions length x width x height	Poznámky - Notes
1	2	3	4	5	6	7	8	9
01	**Nové zařízení dodané fy Breton**							
CT1	Válečkový dopravník / *Friction-driven motorized roller conveyor*	Přesun a umístění válečkového dopravníku na novou pozici dle layout Breton BL851202880A rev. 7	1	Breton	1RMF/16/L/10/1/G	200 kg	1000 x 1600 x 720	
CT2	Válečkový dopravník / *Friction-driven motorized roller conveyor*	Přesun a umístění válečkového dopravníku na novou pozici dle layout Breton BL851202880A rev. 7	1	Breton	RRM16LL301CSP	600 kg	3000 x 1600 x 720	
CT3	Zařízení pro zakládání desek do chladicí věže / *Unit for loading/unloading the levels on/from the cooling tower*	Montáž zařízení na lince dle layout Breton BL851202880A rev. 7; Zařízení je popsáno a specifikováno v přiložené dokumentaci ke strojní knize, taktéž způsob montáže.	1	Breton	CSP/17/33/24	4000 kg	4930 x 2740 x 5260	
CT4	Chladicí věž pro 24 pater vč. příslušenství / *Slab cooling tower*	Montáž zařízení na lince dle layout Breton BL851202880A rev. 7; Zařízení a způsob montáže je popsán a specifikován v přiložené dokumentaci ke strojní knize.	1	Breton	MSLC/17/33/24	6200 kg	4030 x 5700 x 6900	
CT5	Patra pece / *Levels*	Přesun pater pace do zařízení pro zakládání desek na pozici CT3.	18	Breton	PSL1733SA01	450 kg/ks	3420 x 1830 x 70	
CT6	Válečkový dopravník / *Friction-driven motorized roller conveyor*	Přesun a umístění válečkového dopravníku na novou pozici dle layout Breton BL851202880A rev. 7	1	Breton	1RMF/16/L/40/1/G	800 kg	4000 x 1600 x 720	
CT7	Elektrický rozvaděč / *Electric cabinet*	Přesun a umístění rozvaděče na novou pozici dle layout Breton BL851202880A rev. 7	1	Breton	-	500 kg	2000 x 800 x 2250	
CT8	Vozík - automatický nakladač desek / *Slab automatic loader*	Demontáž starého vozíku a jeho nahrazení za nový vozík na pozici CT8 dle layout Breton BL851202880A rev. 7. Montáž sloupků pro kabelové vedení - prodloužení trasy.	1	Breton	CAL/SS/2000	2000 kg	3000 x 2450 x 700	
CC005472	Válečkový dopravník - nemotorizovaný / *roller conveyor*	Montáž nemotorizovaných válečkových dopravníků před stávající chladicí tunely D16 a dopravník D14 dle layout Breton BL851202880A rev. 7	3	Breton	Code CC005472	50 kg/ks	300 x 1600 x 720	
02	**Montážní práce / přesuny stávajícího strojního zařízení linky**							
DX1	Válečkový dopravník / *Friction-driven motorized roller conveyor*	Demontáž, přesun, montáž stávajícího válečkového dopravníku na novou pozici dle layout Breton BL851202880A rev. 7	1	Stavající zařízení na lince	-	600 kg	3000 x 1600 x 720	
DX3	Pračka / *Washing machine*	Demontáž, přesun, montáž stávajícího pračky na novou pozici dle layout Breton BL851202880A rev. 7 vč. ventilátorů.	1	Stavající zařízení na lince	-	1750 kg	4300 x 2460 x 1400	
součást DX3	Regenerační jednotka pro filtraci a koncentraci / *Separation unit*	Demontáž, přesun, montáž jednotky na novou pozici dle layout Breton BL851202880A rev. 7	1	Stavající zařízení na lince	-	2200 kg	2800 x 1800 x 2500	
D14	Válečkový dopravník / *Friction-driven motorized roller conveyor*	Záměna (přesun) dopravníku se stolem na proklady forem dle layout Breton BL851202880A rev. 7	1	Stavající zařízení na lince	-	600 kg	3000 x 1600 x 720	
záměna za D14	Stůl pro proklady forem / *Rubber form table*	Záměna (přesun) stolu s dopravníkem D14 dle layout Breton BL851202880A rev. 7	1	Stavající zařízení na lince	-	800 kg	4000 x 1800 x 720	
D15	Prodloužení kabelové vedení vozíku	Montáž sloupků kabelového vedení	1	Stavající zařízení na lince	-	-	-	
D18 / CC00429	Výstupní točna / *Turntable*	Demontáž, přesun a zpětná montáž na novou pozici dle layout Breton BL851202880A rev. 7	1	Stavající zařízení na lince	-	2500 kg	ø 3260 x 2500	
-	Spojovací materiál	Chemické kotvy, závitové tyče a jiný spojovací materiál	1	Vítězný uchazeč VŘ				
03	**Zámečnické konstrukce a potrubí**							
-	Dodávka a montáž VZT potrubí chladicí věže vč. napojení na rám okna (úprava okenního rámu + zaskleni)	Dodávka, montáž a napojení VZT potrubí vč. spojovacího materiálu - sání a výduch do/z chladicí věže. Vyvedení potrubí VZT z haly přes stávající okno. Úprava okenního rámu a tabule vč. případného nového zasklení. Zaizolování otvorů kolem venkovního prostoru. Opatření výdechu a nádechu mříži proti ptactvu. Půdory a pohled na tvar potrubí je zakreslan na výkrese layout Breton BL851202880A rev. 7	1	Vítězný uchazeč VŘ	-	-	rozměry 1500 x 600; délka potrubí 11 m, napojovací příruby na chaldicí věži viz zadávací dokumentace	čtyřhrané potrubí, mat. pozink
-	Montáž bezpečnostního oplocení linky	Montáž sloupků a polí oplocení vč. spojovacího amteriálu (chemické kotvy, závitové tyče)	1	Breton			délka plotu 34 m	1 sloupek = 4 závitové tyče

Chladicí věž – instalace

2.2 OVERALL DIMENSIONS





2.3 TECHNICAL DATA TABLES

2.3.1 Machine technical data

DIMENSIONS / WEIGHT	Weight	daN (kg)	6200
	Slab + slab support max. weight	daN (kg)	850
	Width	mm	5700
	Length	mm	4030
	Height	mm	6900
	Shelf pitch	mm	140
	Number of shelves	No.	24
POWER / CONSUMPTION	Electric fan motor	kW	18.5x2
	Motor of air flow regulation system	kW	0.37
	Electric fan capacity	m³/h	30000x2
SPEED / TIME	Slab stay time in the store	min	50÷70
NOTES	Sound pressure level	dB (A)	83
	Slab outlet temperature	°C	~ 55
	Environmental specifications:		
	- Min. / max. temperature	°C	5÷40
	- Relative Humidity at 15 °C		80%

2.3.2 Material technical data

DIMENSIONS	Slab supports		
	Length	mm	3420
	Width	mm	1830
	Thickness	mm	70
	Slabs		
	Min./max. length	mm	3050÷3340
	Min./max. width	mm	1240÷1650
	Min./max. thickness	mm	5÷33

Chladící věž

4 INSTALLATION, STARTING AND EQUIPMENT

- CONTENTS -

4.1 MACHINE TRANSPORTATION

The machine is dispatched split into the following units:
- storage structure;
- electric fans;
- insulation panelling;
- electric fan supporting structure;
- machine access ladder.

The parts are protected with waterproof sheets over the vulnerable sections and secured and/or laid on the floor of the vehicle.
The machine is dispatched along with a box containing screws and clamping plates, couplings, connection pipes and tools needed for installation.
If the machine is kept outdoors or in especially hostile environments for long periods, we suggest you protect the goods delivered to the end client and grease moving parts (especially rotary sockets) as well as protect them with waterproof sheets.

After releasing the machine parts from the clamps that secure them to the dispatch vehicle, unload them using the tools set out in paragraph "List of assembly tools".

The operator charged with installation should check the machine parts accurately and report to Breton customer support service of any damage caused in the shipping and handling operations.

We suggest you especially check:
- insulation panelling.
- electric fans.

Check carefully to detect the presence of any knocks, cracks, breakage and irregularities that may be harmful to the machine.

4.2 FOUNDATIONS

The drawings concerning the foundations of the machine are sent to the Client ahead of the delivery of the machine to allow them to be prepared.
The technical drawings of the foundations, are also a source of information to be used at the time of positioning the various component parts of the machine.

4.3 LIST OF ASSEMBLY TOOLS

Responsibility of the client.
The following is a list of the tools that the client must acquire for the correct assembly of the machine:.

A 4 steel cables or chains to lift the machine (total load capacity 5 tons/ each, length 6 m/each);
B suitable lifting equipment (gantry cranes or mobile crane for 20 tons or over);
C 4 straps for lifting low weights (5 tons capacity each, 4 metres long);
D 2 levers for moving (1 large, 1 small)
E 1 portable cutting wheel
F 1 portable drill with spindle for 3-20 mm bits;
G 1 hammer drill 800/1800 rpm and appropriate bits (6÷24);
H 1 work table with vice;
I 1 electric welder;
L 3 packs of 3.25 mm silicon electrodes;
M 1 2 m steel or aluminium ground perch;
N 4 carpenter's clamps L = 500 mm each;
O 1 optical level;
P 1 centesimal spirit level;
Q 1 box of various tools for mechanical maintenance including:
- series of fixed hexagonal spanners, series of Allen keys, hammer, uphand hammer and rubbe r mallet, series of female and male threaders, pincers and pipe wrenches, and metal hacksaw;

R 1 box of various tools for electrical maintenance work, including:
- series of insulated screwdrivers, with standard and cross-head ends, mains tester, tester, ammeter, voltmeter, wire strippers, insulated wire-cutters, soldering iron, series of terminal blocks with various connectors, cable-holding straps, insulating tape, series of electric wires of differing thicknesses.

4.4 LIFTING INSTRUCTIONS

4.4.1 Precautions

The utmost care needs to be taken during coupling, lifting and placement operations. This takes into account the kind of jobs to be carried out, the size and weights of the moving parts.

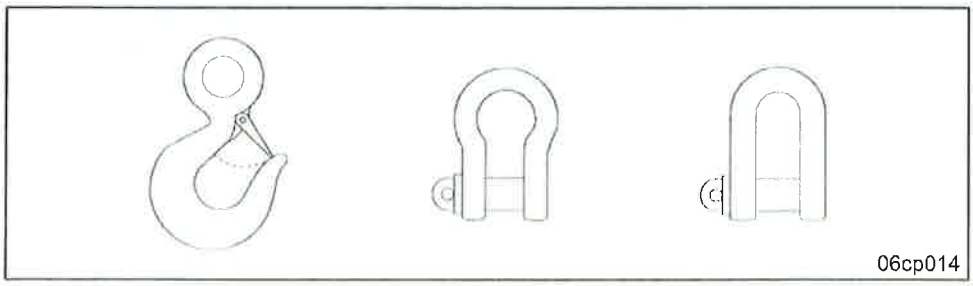
The client is responsible for arranging for and checking the suitability of the employed tools such as chains, ropes, belts, hooks, straddle carriers, lifting cranes and other lifting equipment that may be needed.

The personnel employed in the coupling, lifting and placement operations must have a basic technical training and have acquired some experience, so that they can complete the various jobs competently enough.

All handling jobs in general and lifting jobs in particular, must be performed with utmost care, making sure that all workers are kept at a safe distance, i.e. nobody should stand under stationary or moving suspended loads.

The chains, ropes or belts used for lifting, transportation and handling, must be hooked to the different parts or units in such a way as to avoid any risk of the parts being released, by using for instance safety hooks or sling hooks.

The figure below shows such hooks.



Do not lift the machine from the bottom or underneath.

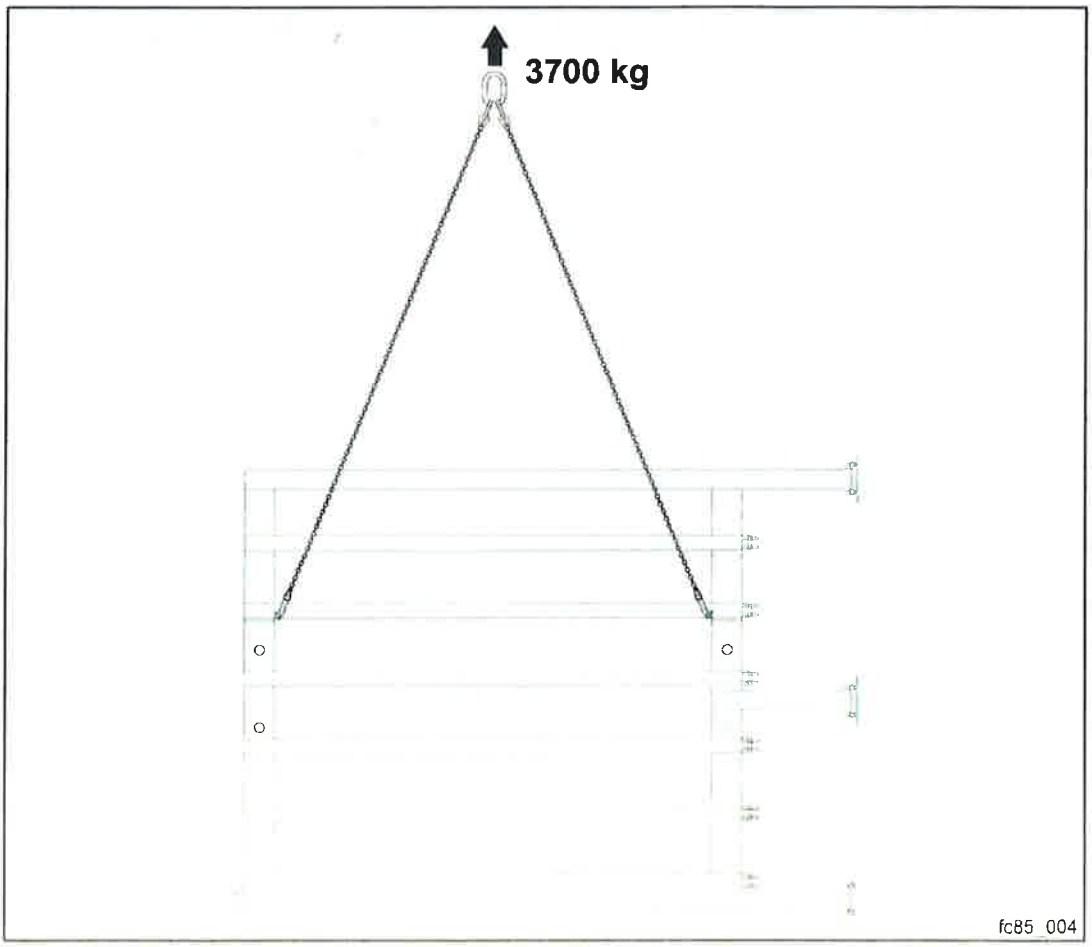
4.4.2 Storage structure unloading instructions

WARNING!
There should be no objects inside the storage structure when it is being unloaded that could burden the load to be lifted!
Unload the storage structure last of all!

1 Remove the anchors that hold the storage structure onto the means of transport.

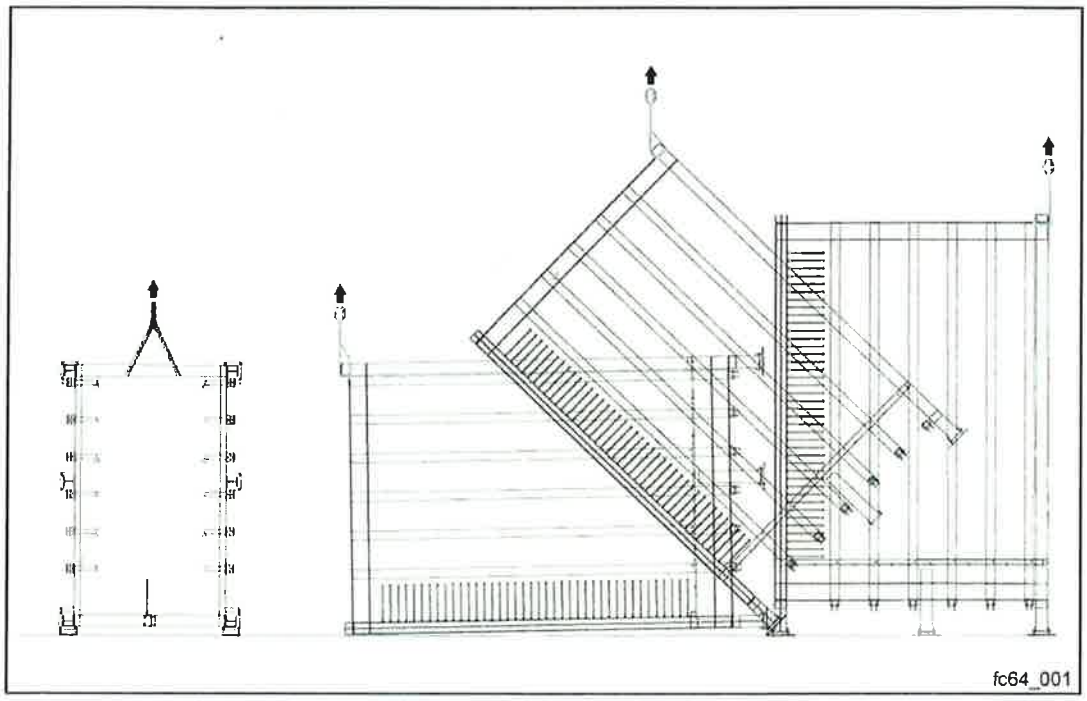
2 Fix the 4 lifting hooks on the shackles for lifting the storage structure, as illustrated in figure fc85_004.

3 Be careful when lifting the load.



4 Remove the lifting hooks once the structure has been unloaded onto the ground, use 2 belts to sling the upper tubular section as illustrated in figure fc64_001.

5 Attach the 2 slings to the crane hook or to the straddle carrier and slowly lift the storage structure until it is vertical. Keep the lifting slings vertically through the lifting phase.



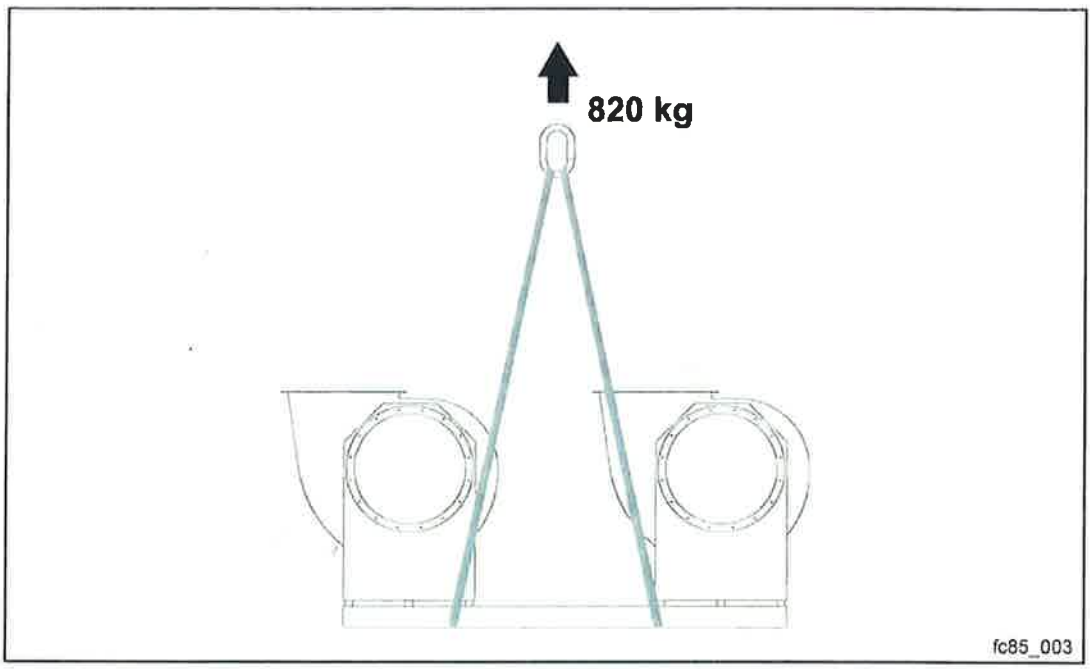
fc64_001

4.4.3 Electric fans unloading instructions

1 Remove the anchors that hold the electric fans to the means of transportation.

2 Sling the electric fans with the belts as illustrated in figure fc85_003.

3 Be careful when lifting the load.



4.4.4 Placing and levelling the machine

The machine must be installed and set up only by "Engineers Breton".

4.5 ELECTRICAL CONNECTION OF THE MACHINE

The machine is supplied with a pre-wired electric system and its power is usually supplied from below through a duct in its base.
Flexible cable tubes are employed.
The electrical drawings concerning the line where the machine will be fitted, show the power supply cable widths and specifications for their use.
It is thus necessary to connect the power supply cables following the directions on the electrical diagrams and make sure that the wire connection terminals are clamped properly.

4.6 GUARDS

Guards are usually supplied along with the machine and must be installed.
The panel-supporting columns should be secured to the ground using FISCHER, 4 bolts for each column.
If the guards are provided by the client, the following factors must be considered:

- Guards must be at least 2500 mm high.
- Guards must withstand predictable environmental and operating forces: 10 kg at a speed of 6 m/s at a height of 1 metre over a 6 dm² surface.
- The minimum distance at which a guard frame must be placed relative to the moving machine parts must be 900 mm (EN 294 -1993).

4.7 UNLOADED TESTS FOR MACHINE FIRST START-UP

These operations are performed when the machine is first started up by a technician from Breton in the presence of a "PRODUCTION MANAGER" and the machine operators.

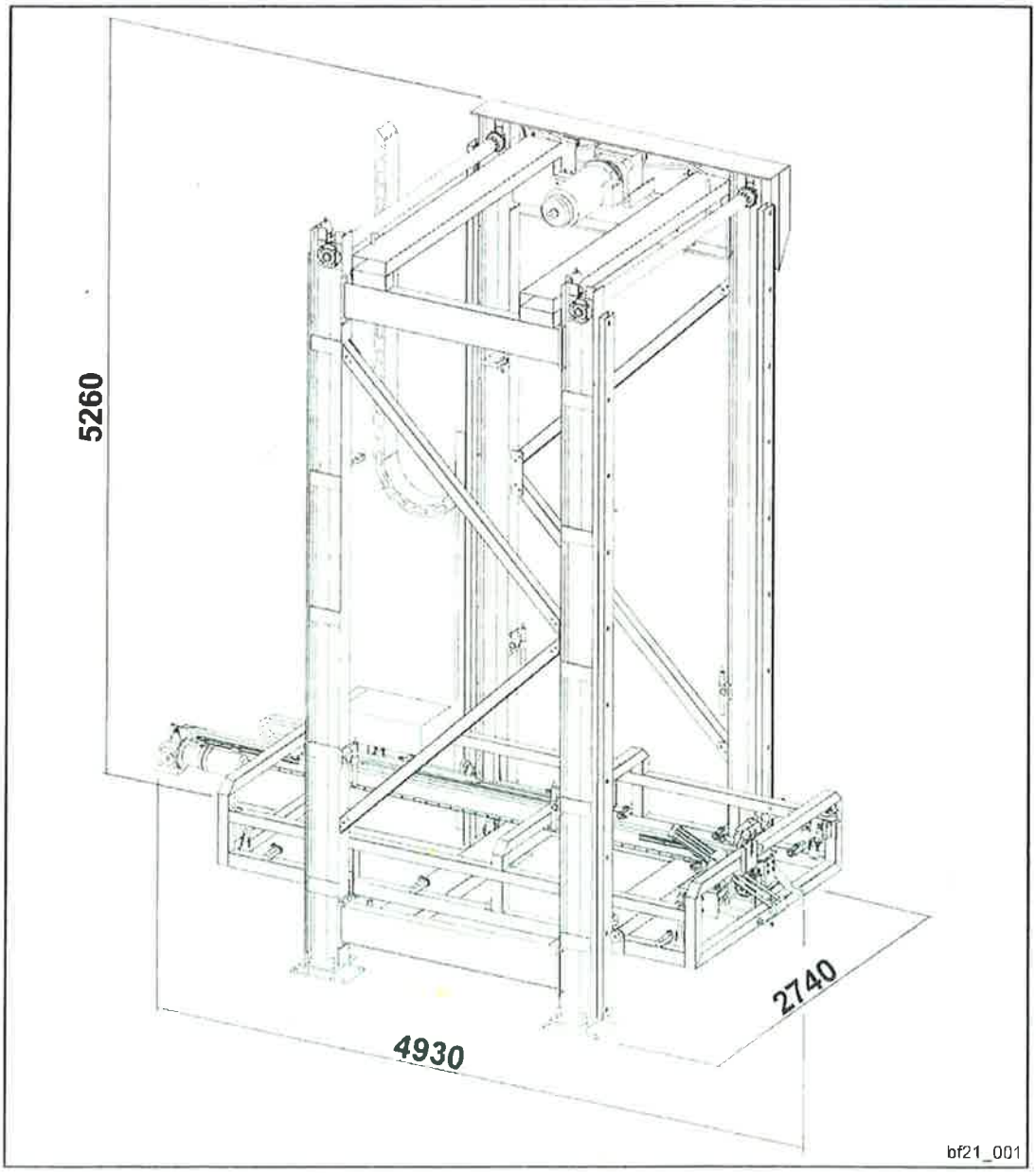
Before switching on the machine:

- Make sure the machine has been adequately installed mechanically and it is stable.
- Electric connections are correct and the electric power supply is within the specified limits;
- Make sure the safety guards are installed.
- Make sure the protection systems are fitted.
- Make sure physical environment (temperature, humidity) matches requirements.

After switching on the machine:

- The "start", "stop", operating mode controls (including key selectors) are working as planned;
- Each axis moves and is limited as envisaged;
- Make sure the emergency stop and safety stop circuits and devices (if provided) work properly.
- Make sure the external power sources can be disabled and cut off.
- Programming and response elements work properly;
- Make sure the guards and interlocks work as required.
- Make sure various safety devices are fitted in place (e.g. guards, indicators).
- At reduced speed the machine works adequately and can handle products;
- Make sure that in automatic (normal) operating mode, the machine works adequately and can perform the required task at the required speed and load.

2.2 OVERALL DIMENSIONS



2.3 TECHNICAL DATA TABLES

2.3.1 Machine technical data

DIMENSIONS / WEIGHTS	Weight	daN (kg)	4000
	Max. capacity	daN (Kg)	850
	Width	mm	2740
	Length	mm	4930
	Height	mm	5260
	Height of work surface	mm	720
	Carriage lift travel	mm	3850
	Traverse travel for slab support loading/unloading	mm	3820
	Hook rotation	degrees	90
POWER / CONSUMPTION	Carriage lift motor	kW	7,5
	Pusher carriage motor	kW	1,1
SPEED / TIME	Lifting speed at 10/67 Hz	m/min	3/20
	Traverse speed at 10/55 Hz	m/min	5/30
	Cycle time	s	120÷160
NOTES	Sound pressure level	dB(A)	74
	Environmental specifications:		
	- Min. / Max. temperature	°C	5÷40
	- Relative Humidity at 15 °C		80%

2.3.2 Material technical data

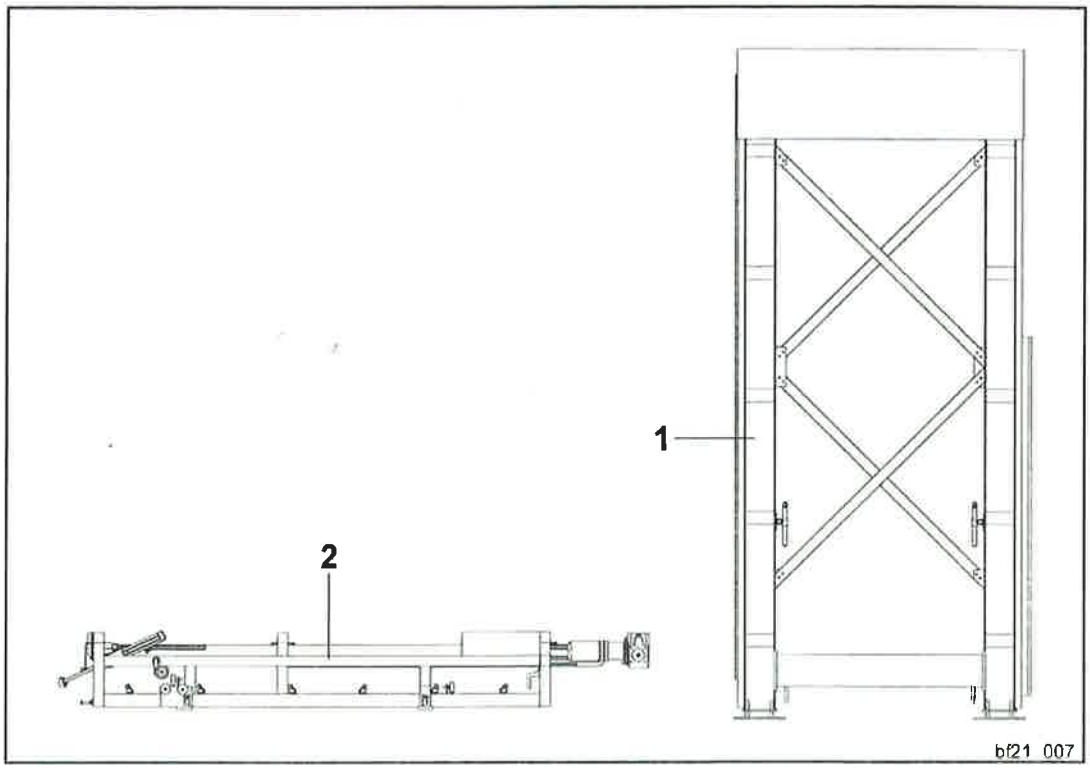
DIMENSIONS	Min./max. length	mm	3420
	Min./max. width	mm	1830
	Min./max. thickness	mm	70
NOTES	Slab supports with slab		

Základní / vykládací jednotka

- CONTENTS -

4.1 MACHINE TRANSPORTATION

The machine is dispatched split into the following units:
- base frame **1**;
- vertically-moving carriage **2**.



The parts are protected with waterproof sheets over the vulnerable sections and secured and/or laid on the floor of the vehicle.
The machine is dispatched along with a box containing screws and clamping plates, couplings, connection pipes and tools needed for installation.
If the machine is kept outdoors or in especially hostile environments for long periods, we suggest you protect the goods delivered to the end client and grease moving parts (especially rotary sockets) as well as protect them with waterproof sheets.

After releasing the machine parts from the clamps that secure them to the dispatch vehicle, unload them using the tools set out in paragraph "List of assembly tools".

The operator charged with installation should check the machine parts accurately and report to Breton customer support service of any damage caused in the shipping and handling operations.

We suggest you especially check:
- Motors / reduction gears;.
- Limit switches and safety photocells.

Check carefully to detect the presence of any knocks, cracks, breakage and irregularities that may be harmful to the machine.

4.2 FOUNDATIONS

The drawings of the foundations of the machine are sent to the client in advance of the despatch of the machine, in order to allow them to be prepared.
The technical foundation drawings also provide information to be used when positioning the various parts making up the machine.

4.3 LIST OF ASSEMBLY TOOLS

Customer's responsibility

The following is a list of the tools that the client must acquire for the correct assembly of the machine.

A **4** steel **cables** or chains to lift the machine (total load capacity 5 tons/ each, length 6 m/each);
B suitable **lifting equipment** (gantry cranes or mobile crane for 20 tons or over);
C **4 straps** for lifting low weights (5 tons load capacity each, 4 metres long);
D **2 levers** for handling (a large one and a small one);
E **1 grinding wheel** with portable disk;
F **1 portable drill** with spindle for 3-20 mm bits;
G **1 hammer drill** 800/1800 rpm and appropriate bits (6÷24);
H **1 work bench** with vice;
I **1 electric welder**;
L **3 packs** of 3.25 mm silicon electrodes;
M 1 2 m steel or aluminium ground **perch**;
N **4 carpenter's clamps** L = 500 mm each;
O **1 optical level**;
P **1 centesimal spirit level**;
Q **1 box of various tools** for mechanical maintenance including:
- set of hexagon wrenches, set of Allen wrenches, hammer, uphand hammer and rubber hammer, set of tap and die chasers, pliers and pipe wrenches, hacksaw;

R **1 box of various tools** for electrical maintenance work, including:
- series of insulated screwdrivers, with standard and cross-head ends, mains tester, tester, ammeter, voltmeter, wire strippers, insulated wire-cutters, soldering iron, series of terminal blocks with various connectors, cable-holding straps, insulating tape, series of electric wires of differing thicknesses.

4.4 LIFTING INSTRUCTIONS

4.4.1 Precautions

The utmost care needs to be taken during coupling, lifting and placement operations. This takes into account the kind of jobs to be carried out, the size and weights of the moving parts.

The **client** is responsible for arranging for and checking the suitability of the employed tools such as chains, ropes, belts, hooks, straddle carriers, lifting cranes and other lifting equipment that may be needed.

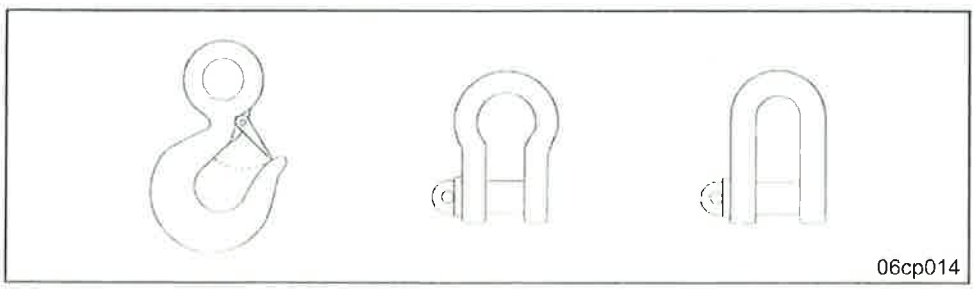
The personnel employed in the coupling, lifting and placement operations must have a basic technical training and have acquired some experience, so that they can complete the various jobs competently enough.

4.4.2 Instructions for unloading the base frame and the vertically-moving carriage

All handling operations in general and lifting operations in particular must be carried out with utmost care, by ensuring that all workers are strictly kept at a safe distance, i.e. nobody stays under suspended stationary or moving loads.

The chains, cables or belts used for lifting, handling or carrying, must be coupled to the various parts or units so as to prevent any dangers of uncoupling using safety hooks or shackles for example.

The following figure shows an example of such couplings.



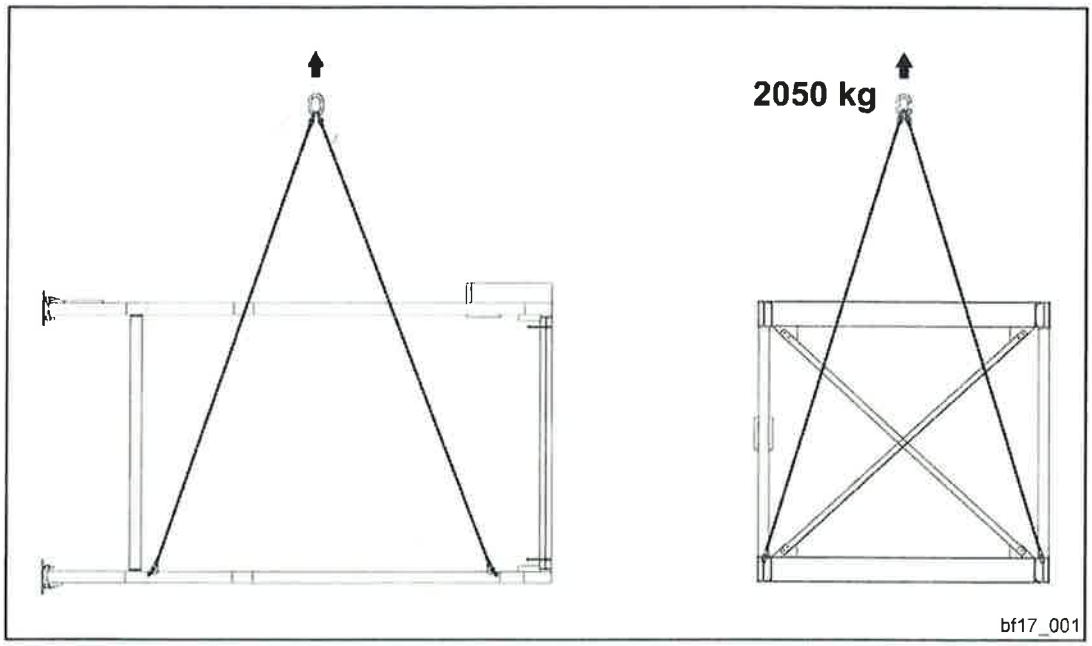
Do not lift the machine from the bottom or underneath.

WARNING:
When you unload the base frame make sure no item is inside that would make heavier the weight to lift!
Unload the base frame last!

1 Remove the clamps that lock the base frame to the dispatch vehicle.

2 Attach the 4 lifting hooks to the shackles on the base frame as shown in figure bf17_001.

3 Be careful when lifting the load.

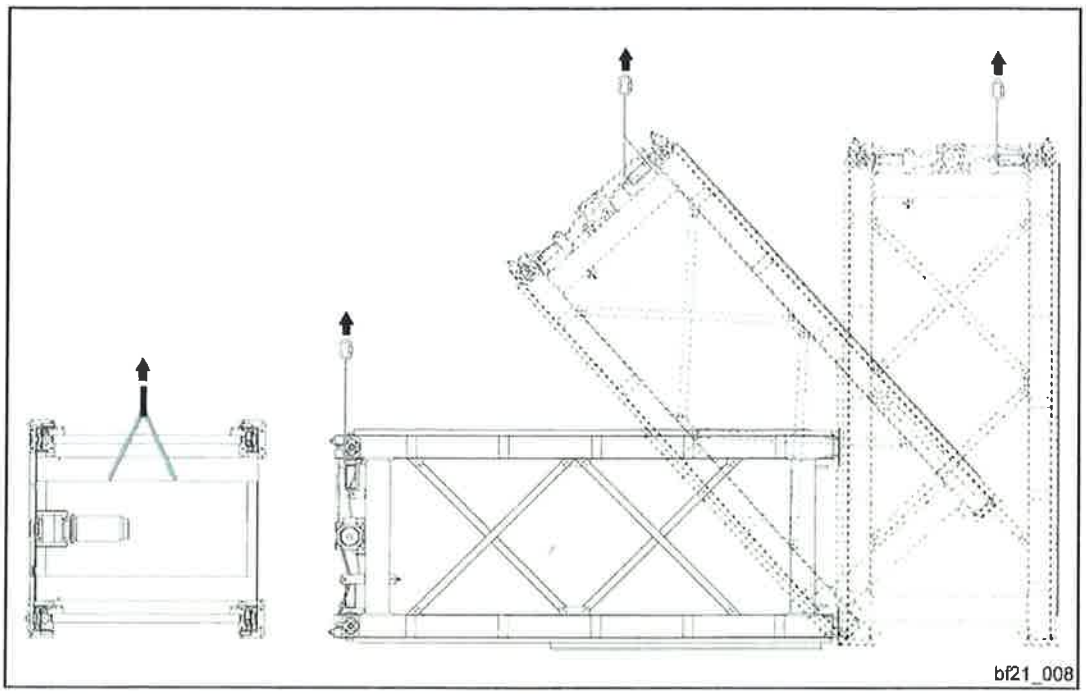


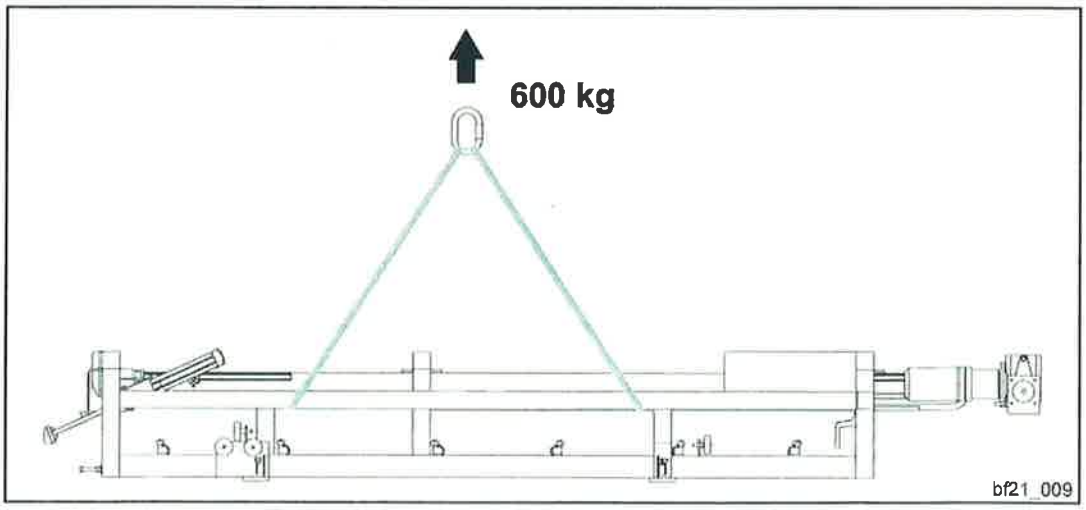
4 When the base frame has been laid on the ground remove the 4 lifting shackles, use 2 slings to sling the upper tubular cross member as shown in figure bf21_008.

5 Attach the 2 slings to the crane hook or to the straddle carrier and slowly lift the base frame until it is vertical. Keep the lifting slings vertically through the lifting phase.

6 Attach the slings to the lifting hook and the side tubular frames of the vertically-moving carriage as shown in figure bf21_009;

7 Be careful when lifting the load and when laying it on the ground.



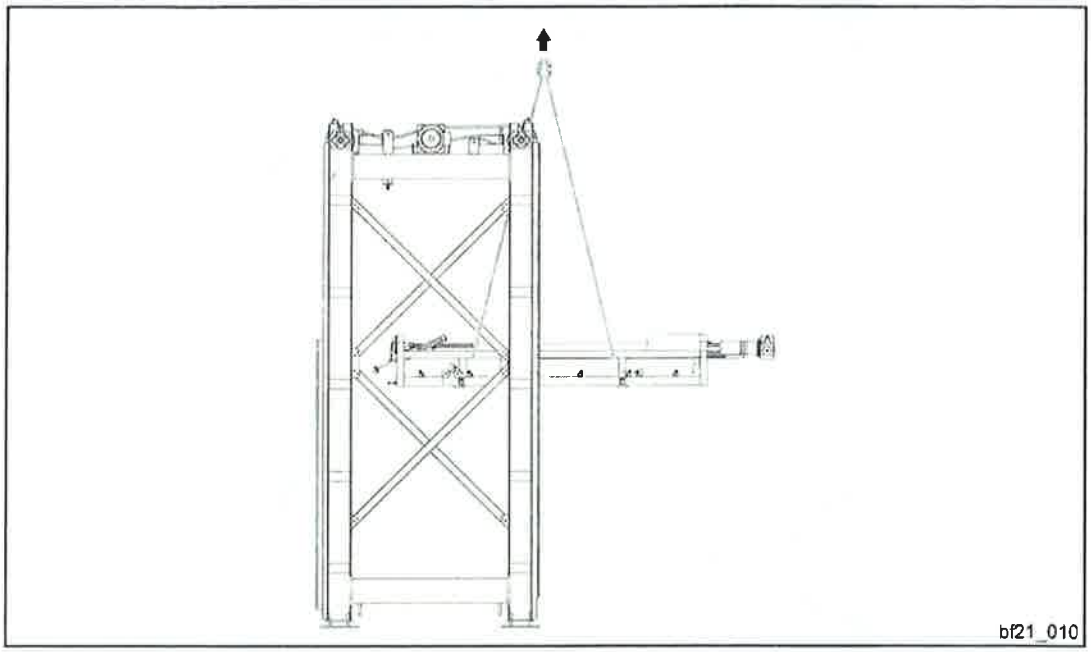


4.4.3 Placing and levelling the machine

1 Move the base frame to the installation site and lay it on the ground.

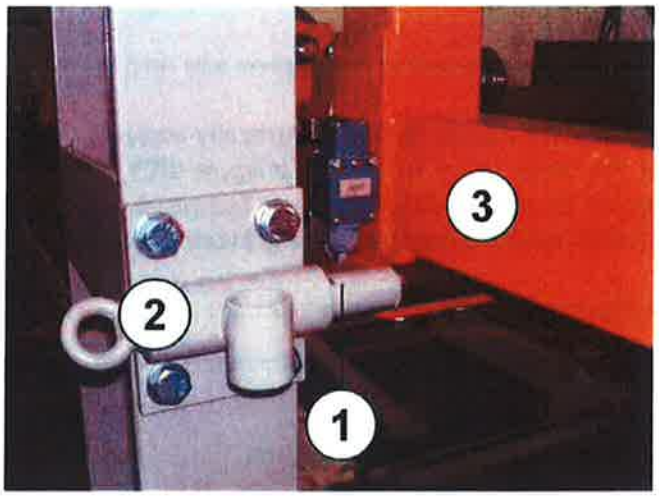
2 Use the straddle carrier to lift the vertically-moving carriage and place it inside the base frame as shown in figure bf21_010. Then rest the carriage on the underneath conveyor but place wooden bars between the conveyor and the carriage so the machines will not be damaged.

3 Detach the straddle carrier hook from the slings.



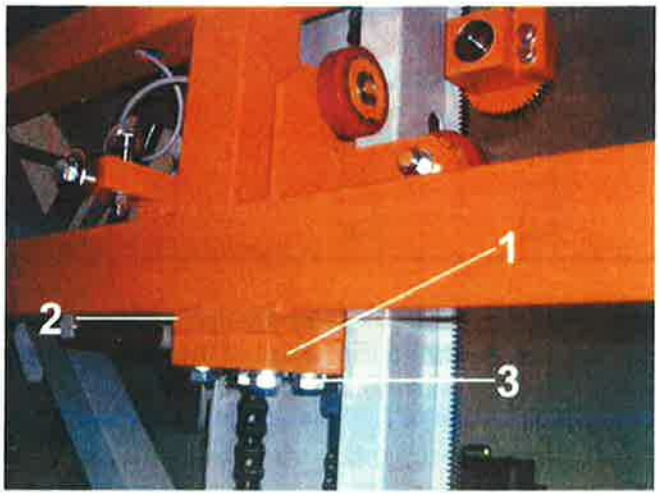
4 With the straddle carrier hook pass the upper cross members of the base frame and attach it again to the slings of the vertically-moving carriage. Then lift the vertically-moving carriage.

5 Insert the 4 safety pins (fig. bf21_004 , item **1**) into the relevant holes (fig. bf21_004, item **2**) and rest the vertically-moving carriage (fig. bf21_004, item **3**).



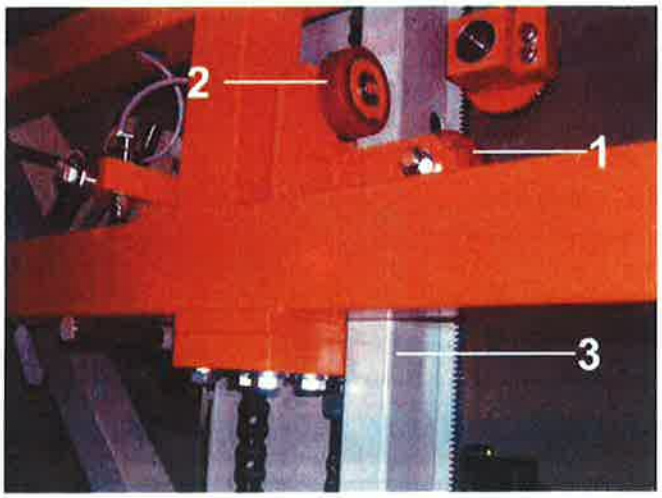
bf21_004

6 Move each plate secured to the lifting chain (fig. bf21_011, item **1**) corresponding to the welded plate fitted under the vertically-moving carriage (fig. bf21_01, item **2**) and lock it using the supplied bolts (fig. bf21_011, item **3**).

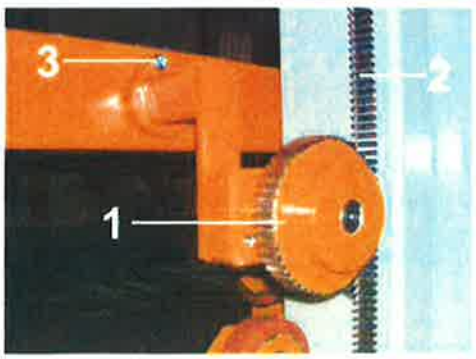


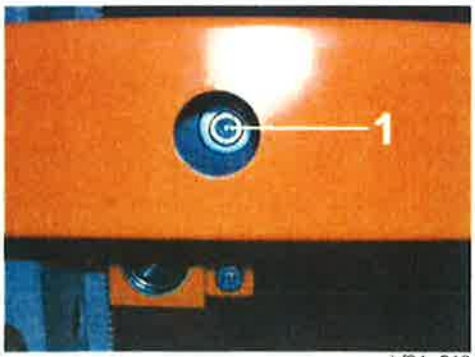
bf21_011

7 Install the vertically sliding wheels (fig. bf21_01, item **1-2**) so they are in contact with the column (fig. bf21_011 item **3**).
8 Use a spirit level to check that the vertically-moving carriage is adequately flat. Then fit the vertically sliding wheels.



bf21_011

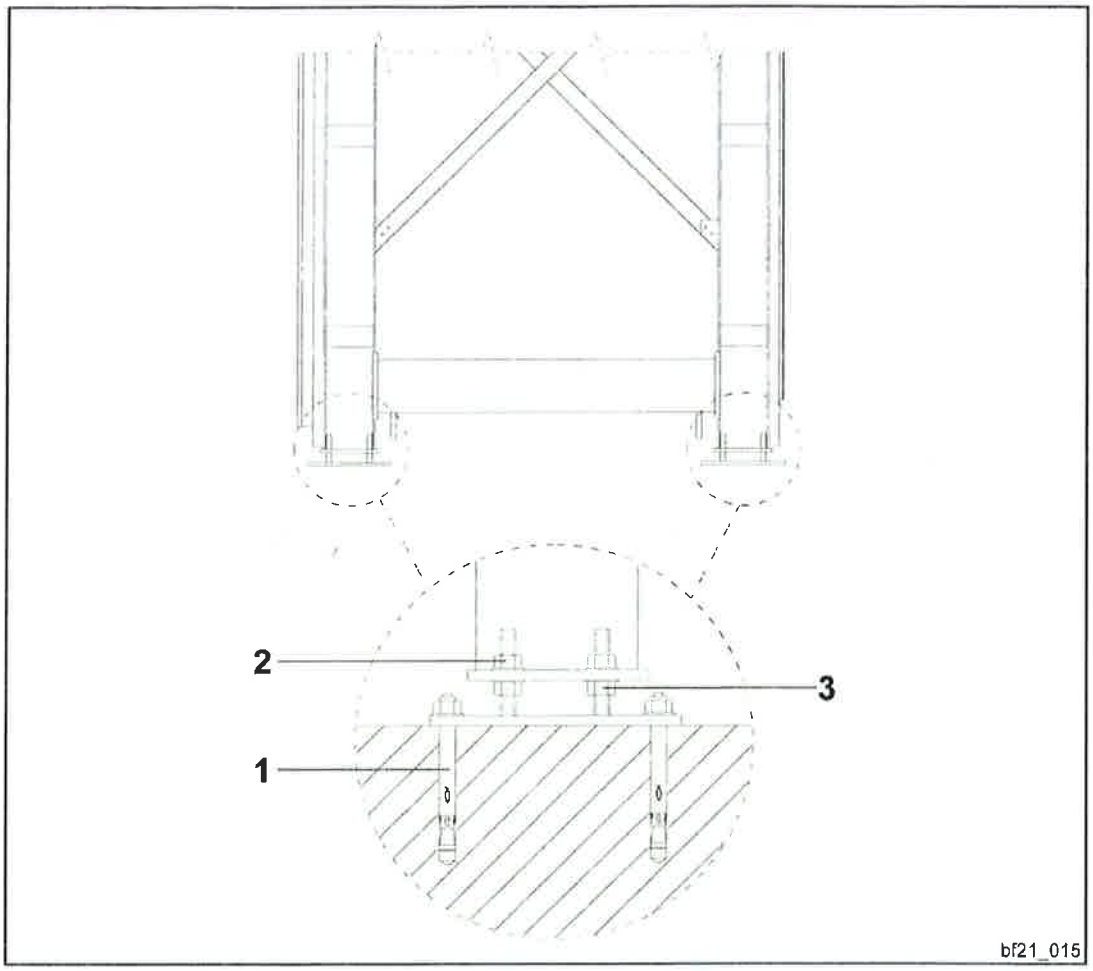




bf21_013

11 Fit the slab support loading/unloading station to the slab cooling storage using the cross member (fig. bf21_014 item **1**) and the nuts provided (fig. bf21_014 item **2**).

bf21_014



4.5 ELECTRICAL CONNECTION OF THE MACHINE

The machine is supplied with a pre-wired electric system and its power is usually supplied from below through a duct in its base.
Flexible cable tubes are employed.
The electrical drawings concerning the line where the machine will be fitted, show the power supply cable widths and specifications for their use.
It is thus necessary to connect the power supply cables following the directions on the electrical diagrams and make sure that the wire connection terminals are clamped properly.

4.6 GUARDS

Guards are usually supplied along with the machine and must be installed. The panel-supporting columns should be secured to the ground using FISCHER, 4 bolts for each column.
If the guards are provided by the client, the following factors must be considered:

- Guards must be at least 2500 mm high;
- Guards must withstand predictable environmental and operating forces: 10 kg at a speed of 6 m/s at a height of 1 metre over a 6 dm² surface;
- The minimum distance at which a guard frame must be placed relative to the moving machine parts must be 900 mm (EN 294 -1993).

4.7 UNLOADED TESTS FOR MACHINE FIRST START-UP

These operations are performed when the machine is first started up by a technician from Breton in the presence of a "PRODUCTION MANAGER" and the machine operators.

Before switching on the machine:

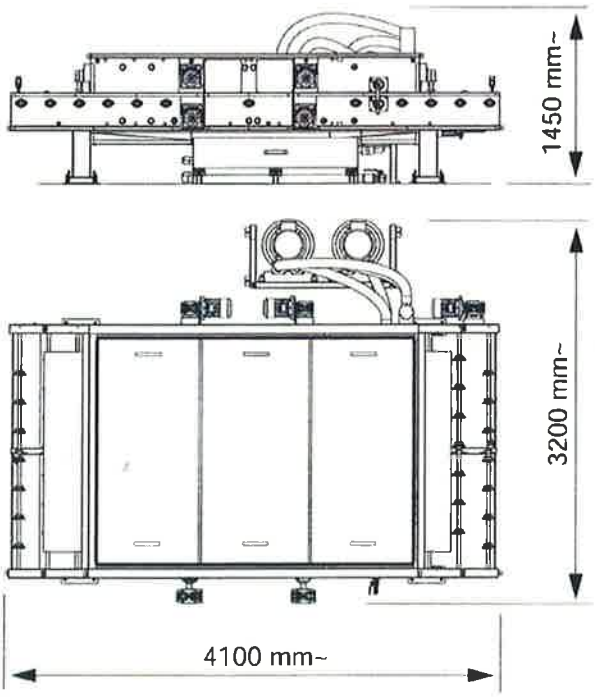
- Make sure the machine has been adequately installed mechanically and it is stable.
- Electric connections are correct and the electric power supply is within the specified limits;
- Make sure the safety guards are installed.
- Make sure the protection systems are fitted.
- Make sure physical environment (temperature, humidity) matches requirements.

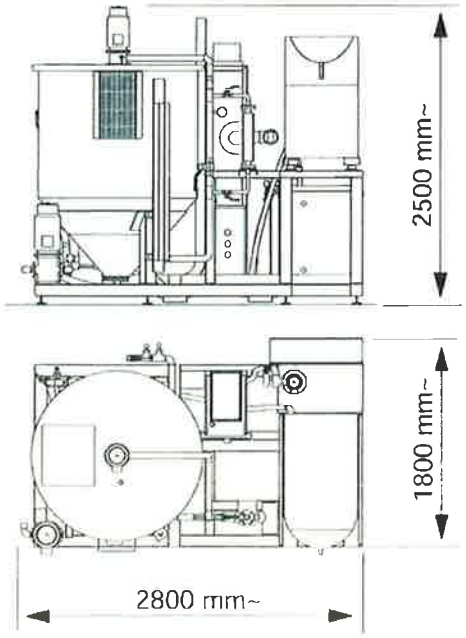
After switching on the machine:

- The "start", "stop", operating mode controls (including key selectors) are working as planned;
- Each axis moves and is limited as envisaged;
- Make sure the emergency stop and safety stop circuits and devices (if provided) work properly.
- Make sure the external power sources can be disabled and cut off.
- Programming and response elements work properly;
- Make sure the guards and interlocks work as required.
- Make sure various safety devices are fitted in place (e.g. guards, indicators).
- At reduced speed the machine works adequately and can handle products;
- Make sure that in automatic (normal) operating mode, the machine works adequately and can perform the required task at the required speed and load.

Pracka – presun

2.2 OBRYSOVÉ ROZM RY





03lr004

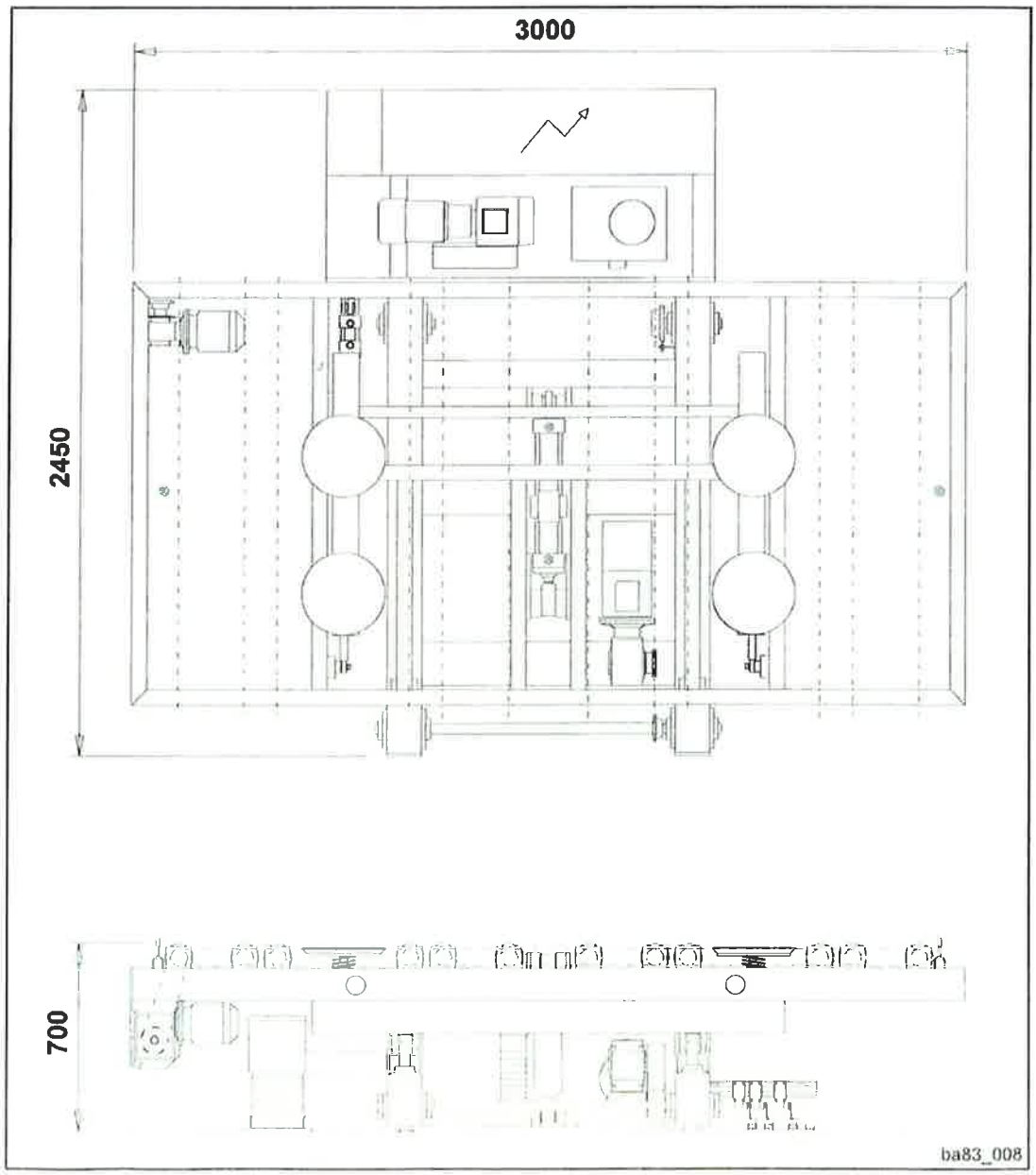
2.3 TABULKA TECHNICKÝCH ÚDAJŮ

POPIS	MJ	ÚDAJE
Opracovávaný materiál		Aglomerované desky
Minimální-maximální délka desek	mm	3080÷3350
Minimální-maximální šířka desek	mm	1250÷1650
Minimální-maximální tloušťka desek		12÷36
Technické údaje stroje		
Výška plochy průchodu desek	mm	720
Hmotnost oplachovací jednotky	kg	2300
~~Hmotnost zařízení na úpravu PVA a kalů~~ SEPARACNÍ JEDNOTKA	~~kg~~	~~2200~~
Hmotnost sušicího soustrojí	kg	300
Motor válečkového pásu	kW	0,55
Motor spodních kartáčů	kW	0,55 x 2
Motor horních kartáčů	kW	0,55 x 2
Motor poklesu/stoupání horních kartáčů	kW	0,24
Motor horního / spodního ventilátoru	kW	11 x 2
Hluk		
Úroveň akustického tlaku	dB (A)	82

DEMONTÁŽ +
Vozík – instalace

2.2 ROZMĚRY

Pozice personálu obsluhy se mění podle směru pracovního procesu.



2.3 TABULKA TECHNICKÝCH ÚDAJŮ

2.3.1 Technické údaje stroje

ROZMĚRY / HMOTNOSTI	Hmotnost	daN (kg)	2000
	Max. zdvíhatelná hmotnost	daN (kg)	400
	Šířka	mm	3000
	Délka	mm	2450
	Výška	mm	700
	Výška pracovní plochy	mm	690÷770
	Průměr válců	mm	102
	Krok válců	mm	119/476
	Průměr koleček	mm	180
	Rozchod koleček	mm	1000
	Průměr přísavek	mm	300
	Počet přísavek		4
VÝKONY / SPOTŘEBA	Motor válců	kW	0,75
	Motor koleček	kW	1,5
	Hydraulická jednotka	kW	4
	Motor vakuového čerpadla	kW	1,1
RYCHLOST / ČASY	Rychlost otáčení válců při 50 Hz	m/min	24
	Rychlost přesunu při 50 Hz	m/min	35
	Čas cyklu	s	30
POZNÁMKY	Úroveň akustického tlaku	dBA	83
	Vlastnosti prostředí:		
	Teplota min /max	°C	5÷40
	Vlhkost RH při 15 °C		80%

2.3.2 Technické údaje materiálu

ROZMĚRY	Délka min. / max.	mm	3070÷3200
	Šířka min. / max.	mm	1240÷1560
	Tloušťka min. / max.	mm	7,5÷32,5
POZNÁMKY	Desky		

Točna - přesun

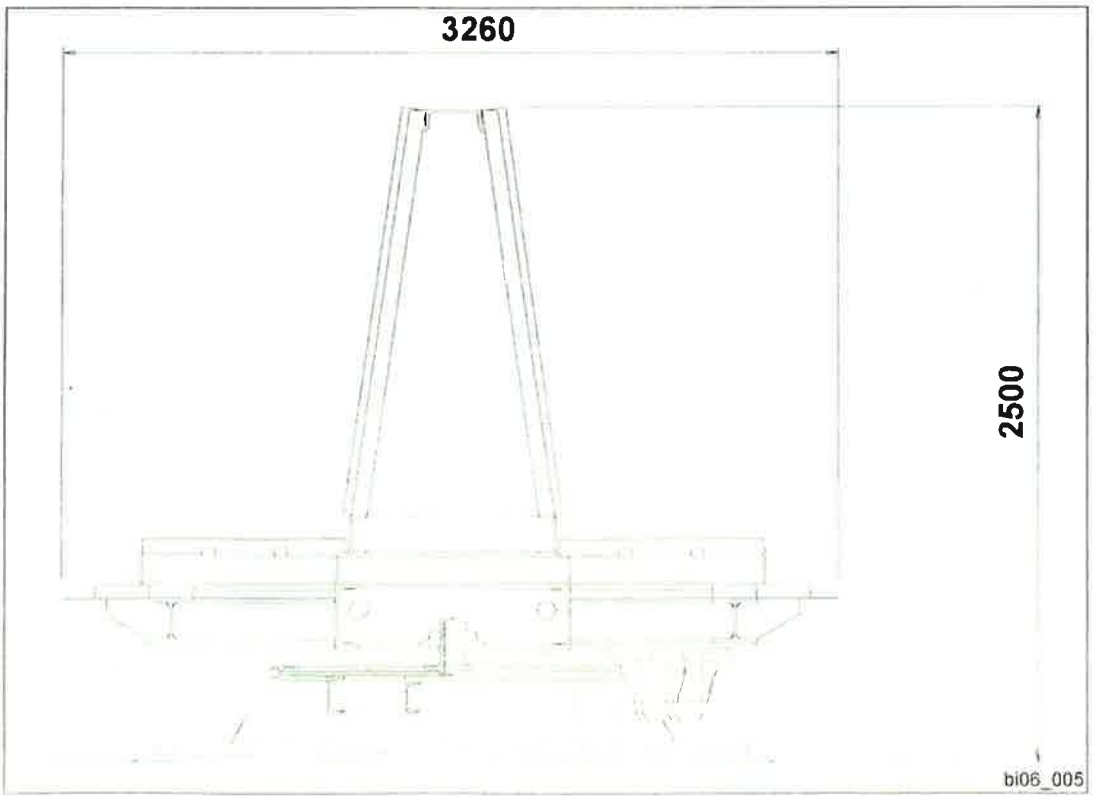
2.1 ÚVOD

Otočná platforma se stojanem na uložení desek byla realizována výhradně za účelem uložení dvou balíků desek.

- Nosná struktura je vyrobena z elektricky svařované oceli a může se otáčet kolem vertikální osy o 180 stupňů, otáčivý pohyb se děje na kolečkách, které se pohybují po kovové kruhové dráze.
- balíky desek jsou položeny na dřevěných trámcích a jsou uloženy se sklonem 8 stupňů

Otočná platforma se stojanem na uložení desek je obvykle zařazena do zařízení, které obsahuje:
- Kontrolní a ovládací systém.
- Veškeré orgány, zařízení nebo čidla, která jsou nezbytná pro zajištění nakládacího / vykládacího cyklu desek.
- Veškerá rozhraní pro komunikaci nebo kontrolu zařízení.

2.2 ROZMĚRY



2.3 TABULKA TECHNICKÝCH ÚDAJŮ

2.3.1 Technické údaje stroje

ROZMĚRY / HMOTNOSTI	Hmotnost	daN (kg)	2500
	Max. otočná hmotnost	daN (kg)	20000
	Max. neotočná nosnost	daN (kg)	40000
	Max. průměr stroje	mm	3260
	Výška stroje	mm	2500
	Průměr opěrných koleček	mm	295
	Max. tloušťka balíku desek	mm	1000
VÝKONY / SPOTŘEBA	Motor otáčení	kW	0,75
RYCHLOST / ČASY	Rychlost otáčení	rad/sek	0,08
	Čas otočení o 180°	sek	40
	Čas cyklu	sek	70
POZNÁMKY	Vlastnosti prostředí :		
	- Teplota min /max	°C	5÷40
	- Vlhkost RH při 15 °C		80%

2.3.2 Technické údaje materiálu

ROZMĚRY	Délka min. / max.	mm	1200÷3500
	Šířka min. / max.	mm	600÷2200
	Tloušťka min. / max.	mm	10÷80
POZNÁMKY	Desky		