

3.3 Dimensões e massa



3.3.1 Máquina

As quotas indicadas são em mm.

Dimensões da máquina	
Comprimento	4 600
Largura	1 300
Altura	3 150

A massa total da máquina é de 3 200 kg.



3.4 Parâmetros elétricos

Os parâmetros elétricos a considerar para o funcionamento correto da máquina são os seguintes:

ALIMENTAÇÃO ELÉTRICA	
Tipo da corrente	Alternada
Tensão nominal	3x400 + Terra VAC $\pm 10\%$
Frequência nominal	50 Hz $\pm 10\%$
Corrente máxima	120 A
Potência instalada	60 W

MOINHO MODELO XRT 45.65 SV

MANUAL DE INSTRUÇÕES

MÁQUINA Nº	: 191/06
Nr. SÉRIE	: M.150.017
ANO	: 2006
MOTOR MOINHO	: 37 kW
CLIENTE	: INTERECYCLING
GRELHA C/ FUROS	: Ø 10 mm
OPÇÃO	: Transporte pneumático c/ Separador de metais e descarga em Big-Bag duplo.

EM ANEXO:

DESENHO Nº E-178	- LISTA DE PEÇAS
DESENHO Nº E-146	- TENSÃO DAS CORREIAS
DESENHO Nº E-147	- AFIAMENTO DAS LÂMINAS
DESENHO Nº 01-5237-80	- AFINAÇÃO DAS LÂMINAS
DESENHO Nº 01-5374-80	- ESQUEMA ELÉCTRICO
DESENHO Nº 01-5375-80	- ESQUEMA ELÉCTRICO
DESENHO Nº 01-5376-80	- ESQUEMA ELÉCTRICO
DESENHO Nº 01-5377-80	- ESQUEMA ELÉCTRICO
DESENHO Nº 01-5378-80	- ESQUEMA ELÉCTRICO
DESENHO Nº 01-5379-80	- ESQUEMA ELÉCTRICO
DESENHO Nº 01-5380-80	- ESQUEMA ELÉCTRICO
DESENHO Nº 01-5381-80	- ESQUEMA ELÉCTRICO
DESENHO Nº 01-5243-80	- TRANSPORTE PNEUMÁTICO

OPERATING MANUAL

3. MACHINE IDENTIFICATION

Drawing n°	:1227/14
Description	:Blue Pike
Year of building	: 2014
Machine n°	: 1457



OPERATING MANUAL

4. LIST OF DIRECTIVES AND REGULATIONS APPLY

Directive/ Rule	Ediction	Titel
EN 292-1	1992	Fundamental concepts: general design principles, terminology, methodology
EN 292-2	1992	Fundamental concepts: general principles for design, specifications and technical principles
EN 294	1992	Safety distances to prevent danger zones being reached by the upper limbs
EN 349	1992	Minimum gaps to avoid crushing of parts of the human body
EN 26385	1991	Ergonomic principles in the design of work systems
EN 999	1993	Approach speeds of parts of the body for the positioning of the safety devices
EN 60204-1	1993	Electrical equipment of machines. Part 1: General requirements
CEI-EN-50082-2 CEI-EN-61000-4-4 CEI-EN-61000-4-2 CEI-EN-55011	-	Electromagnetic compatibility Electromagnetic compatibility Electromagnetic compatibility Industrial radio interference

OPERATING MANUAL

EN 418	1992	Emergency stop device, functional aspects, design principles
2006/42/CE	2010	New machinery directive

OPERATING MANUAL

6. MARKING

The machine is equipped with a metal tag securely fastened by riveting, on which are the necessary data for the 'unambiguous identification of the same, namely:

- The name of the manufacturer
- The symbol "CE"
- The serial number assigned by the manufacturer
- The model
- The year of construction

7. DRAWINGS

DRAWING N°	DENOMINATION
1227/14/1	Electric Scheme

8. DESCRIPTION OF THE MACHINE

The car in question was designed and built to cut the x hermetic refrigeration compressors alternative to dispose of and recycle

DANGER

- THE MACHINE IS USED "SAFELY" FOR WORKING ABOVE AND ONE OPERATOR.
- ANY OTHER USE OF THE MACHINE OTHER THAN THE ABOVE TO BE IS CONSIDERED IMPROPER.
- THE MANUFACTURER SHALL NOT BE LIABLE FOR ANY DAMAGE TO PERSONS OR PROPERTY RESULTING FROM 'IMPROPER USE OF THE MACHINE.



OPERATING MANUAL

9. ALIMENTATION

9.1. Pneumatic connection

Connect the FRL group to the distribution network of compressed air, ensuring a constant pressure of 7 bar + - 1.

9.2. Electrical connection

Connect the plug of the machine to the power strip Multiple power 380V -16 to industrial

10. TUNING AND FIRST START

10.1. Preparation, checks and tests before starting

Before starting the setup of the machine, you must perform a series of checks to avoid risks or problems during this phase.



DANGER

PERFORMANCE OF THESE CHECKS AND PREPARATION FOR THE FIRST START MUST BE CARRIED OUT BY QUALIFIED TECHNICAL PERSONNEL OF THE COMPANY "Albatech Swiss Technology SA", OR BY A TRAINED BY THE SAME



OPERATING MANUAL

10.2 . Check Pneumatic Plant

It should be checked by using the machine :

- The state of use of the compressed air supply pipes
- Tightening the fittings
- The value of the supply pressure.
- Ensure that the compressed air supply is suitably free of moisture and filtered

10.3. Verification of safety systems

Before putting the machine , check the security systems of which it is equipped, as follows :

- Check that the stop button is working properly
- Check that the light curtains are functioning properly
- Make sure all doors are closed

CONTROL EMERGENCY STOP

- Press the red stop button and verify that pressing the start buttons cycle the actuators remain stationary.
- Press the cycle start independently and verify that the port does not close
- Ensure that releasing a button to start the cycle, the door stops or not open again
- Check that keeping the buttons pressed with the door closed , interrupting the photocell barrier placed in the cargo door stops or not open again



ALBATECH
SWISS TECHNOLOGY S.A.

Year 2014

OPERATING MANUAL

BARRIER
PHOTOELECTRIC



CYCLE START
BUTTON

RED STOP
BUTTON

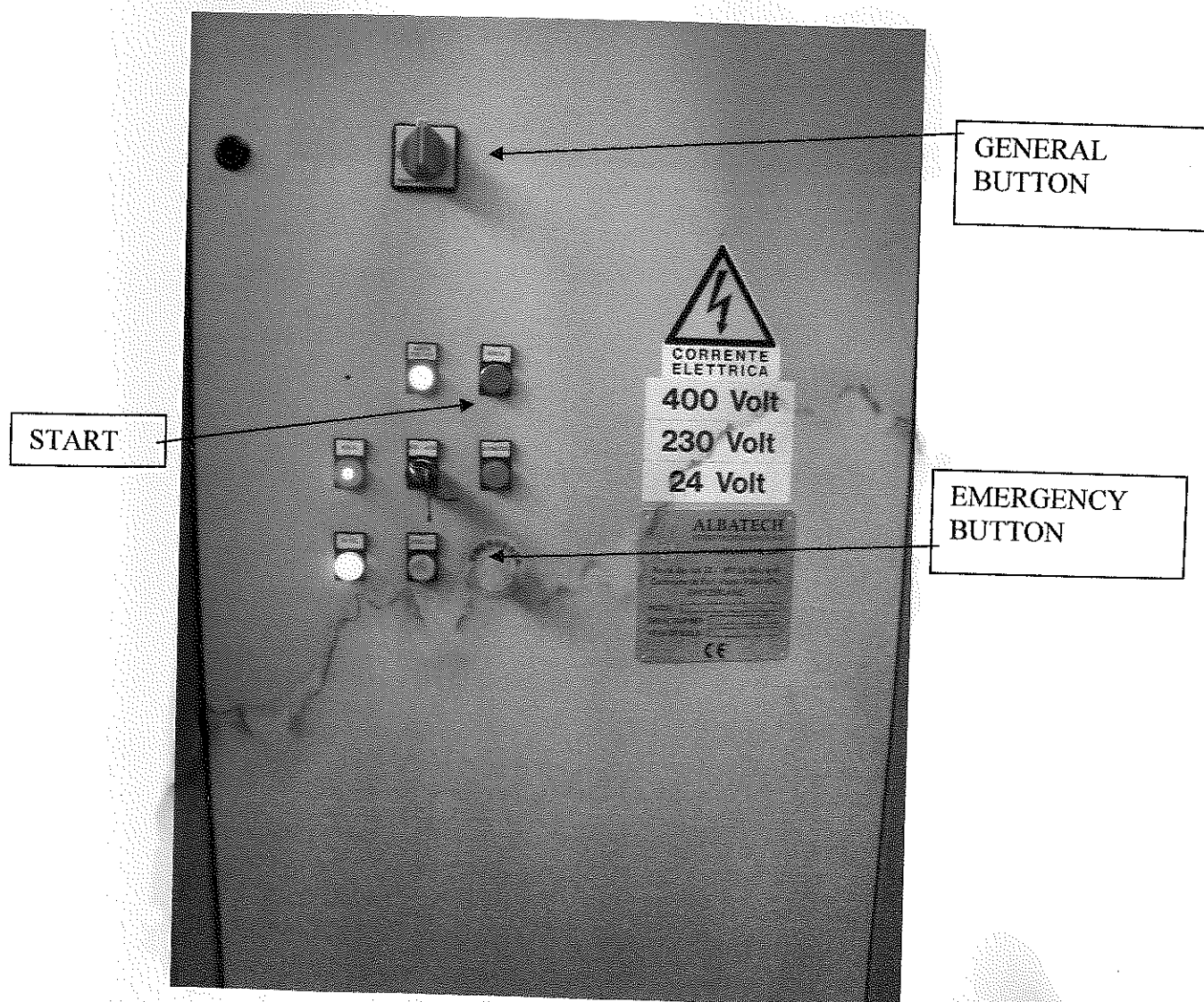


OPERATING MANUAL

11.2. Start-up and commissioning

To start the machine to perform the operations in the sequence listed below:

- Turn switch to ON
- Restore emergency button (if enabled)
- Press the START button



3.2 Máquina em geral



A máquina em questão destina-se à moagem de materiais variados, quer metálicos quer inertes, conforme especificado melhor no *parágrafo 3.6*.

Em especialmente uma correia de carga à entrada (unidade funcional 2, denominada no quadro “correia 12”) da máquina alimenta diretamente o moinho com martelos de moagem do qual, após efetuar o processo, o material é extraído por meio de canal vibratório e transferido à descarga onde poderá ser armazenado em caixa ou recolhido por outro equipamento (eventual correia de descarga).

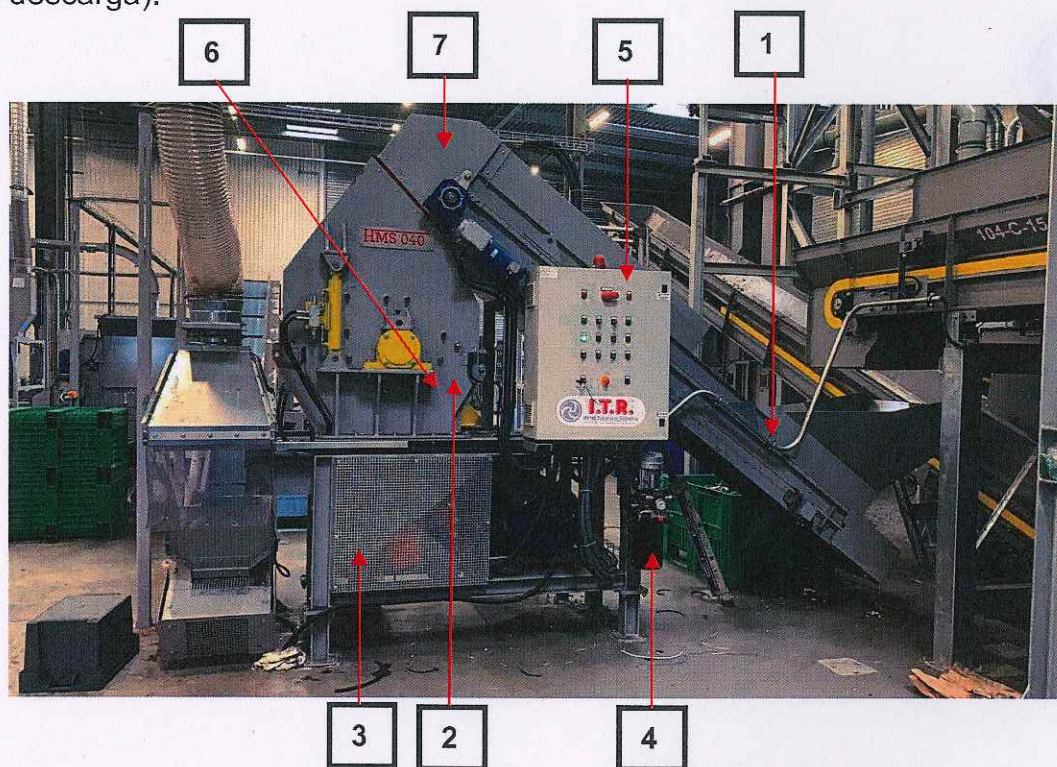


Fig. 3.1 Conjunto da máquina

1	Correia de carga (unidade funcional 2, denominada no quadro “correia 12”)
2	Corpo base do moinho HMS040
3	Canal vibratório, para o transporte do material à descarga
4	Centralina hidráulica
5	Quadro de comando do operador. Contém o controlo de todos os serviços necessários para a ligação e o funcionamento da máquina.
6	Capota do moinho HMS040
7	Auricular de carga

Description of the material flows

Refrigerator recycling plant

System *HECKERT*

General

During the processing of the refrigerators in our system, the useful and noxious materials contained in the refrigerators do not undergo any physical or chemical changes.

All processes taking place may be summarized under the general term "sorting" of the materials present in the composites.

The only exception is the condensation of the chlorofluorocarbons recovered from the refrigeration circuit and from the polyurethane foams. However, the only change occurring here is the thermally induced change in the state of aggregation from the gaseous to the liquid state.

This ensures that at no time in the entire process flow, starting from the supply of the refrigerators up to the point where useful and noxious materials are discharged from the system, by-products may be formed through chemical decomposition or oxidation (combustion).

Supply

Depending on the contractor in question, the following supply variants may be used:

- Delivery by container trucks or container trains
The refrigerators are unloaded directly in the shop. The vehicle can reverse into the shop and unload the containers immediately beside the processing area. The refrigerators are unloaded exclusively by hand in order to prevent the refrigeration circuits from becoming damaged. From the containers, the refrigerators are directly supplied for further processing.
- Delivery by trucks
The truck is also unloaded in the shop. A 70 m² steel trough (shaded in red in the drawing) serves as storage area. From this storage area, the refrigerators are supplied for further processing.

Disposal stage 1

The chlorofluorocarbon and the oil from the refrigeration circuit are removed simultaneously.

This technique constitutes the state of the art both in ecological and technical respect.

The system is characterized e.g. by:

- **the joint withdrawal of chlorofluorocarbon and refrigeration machine oil in one operation under hermetic conditions**

Thanks to the fact that the refrigerating machine oil is also withdrawn under hermetic conditions, the gas emitted from the compressed oil in the compressor is prevented from escaping. During the expansion (withdrawal) of the refrigerating machine oil, the chlorofluorocarbon, which has become dissolved in the oil during the operation of the refrigerator, is emitted in the form of gas bubbles. According to studies carried out by the "Ökofep" Institute in February 1988, the amount of gas emitted during the draining of the oil into open containers constitutes up to 30 % by weight of the total amount of R12 chlorofluorocarbon present in the refrigeration circuit.

The CFC-fluorocarbon-oil suction plant is an optimal contribution to the disposal in consideration of the environmental protection of discarded cooling appliances, the refrigeration cycles of which are containing the refrigerants R12, R22, R134A and R502. In case of the refrigerant R134a, the correspondingly approved refrigerant bottles are to be used.

With this suction plant the demands of the „Manual of disposal of cooling appliances“ of the German Environment authority are fulfilled (correct handling of the plant presupposed).

The suction plant consists of the following four main components:

1. Recovery Service Piercing Pliers
2. Evaporation Vessels
3. Suction Aggregate
4. Refrigerant Bottles

The plant is subdivided into the low pressure range and into the high pressure range:

Low pressure range

The lowest point of the refrigeration cycle is to be opened by means of recovery service piercing pliers, and the CFC-oil compound is completely sucked off by means of low pressure (approx. 200 - 600 mbar). The refrigerator oil is first retained in the 1st evaporation vessel. When the highest filling level is reached, the oil will be pumped over to the 2nd vessel, where it will be heated and atomized. The CFC will be evaporated and will be continuously sucked off. The result of this method is a

residual halogen content in the oil of less than 0,1 Vol. % allowing a recycling of the now non-contaminated waste oil and avoiding that it must be treated as toxic waste.

High pressure range

The CFC will be compressed, condensed and bottled. The bottles will be forwarded to a specialized company for recycling or disposal.

It is possible to effect the suction process on several old cooling appliances at a time

Sequence of operations in disposal stage 1

The refrigerators are placed one by one onto a conveyor belt and automatically adjusted to the required working level.

The throughput capacity of about 35 to 40 refrigerators/h has been optimized with respect to the next processing step.

Handling of the compressor

The compressor capsula, which has been drained in the aforesaid manner, is now demounted.

Then it is placed over a drip channel to allow any oil still remaining in the capsula to flow out. When it has been completely emptied after some time, the compressor is put into a small container with oil-tight bottom. Thereafter, the compressor fraction can be supplied for further processing to a scrap preparation plant.

Disposal stage 2

See "Description of process technique of PU recycling plant".

Utilization of useful and disposal of noxious materials

During the processing of refrigerators, the following useful materials and **noxious materials** are obtained and recycled:

Iron and non-ferrous metals, sorted

This fraction is made available by the company for reuse directly via scrap metal dealers.

Compressors, deoiled

Compressors are also recycled via scrap metal dealers.

Impact-tough butadiene-polystyrene in the form of granules (grain size about 15 mm and smaller) (see amendmend sheet)

Plastics processing companies use the polystyrene fraction for manufacturing new products. The material is transported by trucks. It is used in the manufacture of extrusion profiles or other end products (e.g. flower pots). A so-called utilization agreement concluded between the refrigerator disposal company and the material processing company ensures that there is an outlet channel for the material. The maximum storage capacity is about 20 t.

Degassed polyurethane in the form of powder (grain size < 0.2 mm, see amendmend sheet)

This material is processed into a high-quality water-repellent oil-binding.

Chlorofluorocarbons, mainly R12 and R11, and small quantities of R502 and R22 (waste material code number 55220)

The recovered chlorofluorocarbon can be supplied to manufacturers in need of this substance. Controlled incineration in a hazardous-waste incineration plant is also possible, but not envisaged at present. The chlorofluorocarbons are collected by local refrigeration wholesalers. Various recycling models for used chlorofluorocarbons have already been established in the market.

Used oil (chlorine content < 0.2 %, waste material code number 54102)

The oils recovered from the refrigeration circuit are filled into containers approved for materials of class A1, AII and B and stored in the shop on an impregnated floor (steel trough).

When the used oil is being collected, it is usually pumped from the storage containers into the collecting tank trucks. Thus, the refrigerator recycling company need not bother about the relevant legal regulations for the transport of hazardous goods. The used oil will usually be collected by local used-oil dealers.

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3.1 Application

The Rasper 1207 is designed for granulation of cable, aluminium scrap, cans.

If the machine is used for any other purposes than the above-mentioned this will be at the customer's own risk and responsibility.

3.2 Technical specification for Rasper 1207

Rotor length:- 1200 mm

Rotor diameter:- 332 mm

Rotor speed:- 120 rpm

Knives:- 12 flying knives

3 static knives

(The flying knives are mounted in 3 sections
with 4 knives in each)

Motor: 90 kW/50 Hz/3 x 400 V/1400 rpm

Weight of the machine:- approx. 5000 kg

Weight of the inlet hopper:- approx. 500 kg

Total height: 3200 mm

Total width: 3240 mm

Total length: 1750 mm

Apresentação geral

2.4. Características técnicas

Caraterísticas gerais

Temperatura de utilização:	de -15 °C a +40 °C
Higrometria:	65 % em média
Funcionamento normal:	8 h por dia, 5 dias por semana
Limpeza: corrosão)	é possível utilizar um jato de alta pressão (atenção à
Manutenção:	utilizar uma corrente de quatro ramais de 35 toneladas
Nível sonoro:	95-100 dB(A) a 1 metro (variável conforme o material a triturar)
Parafusos:	tipo 8.8

Caraterísticas elétricas

Quadro 2 - Caraterísticas elétricas em função das zonas geográficas

Inglês	Francês	Europa	Estados Unidos	Canadá
Line voltage	Tensão de linha (3 x...)	400 V	460-480 V	480-575 V
Tolerance	Tolerância	+/- 10 %	+/- 10 %	+/- 10 %
Frequency	Frequência	50 Hz	60 Hz	60 Hz

Peso

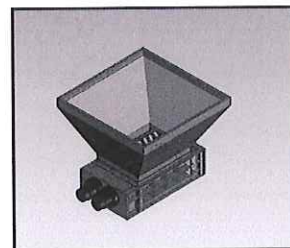
Quadro 3 - Peso do equipamento

		Peso/Weight
Máquina	Máquina	18000 kg
Frame	Estrutura	5600 kg
Engine power	Motor	1600 kg
Base	Base	2140 kg
Door	Porta	800 kg
Upper hopper	Tremonha superior	540 kg
Transmission case	Caixa de transmissão	430 kg

	Peso/Weight
Extrator vibratório	624 kg
Ponte + escada	410 kg
Porta-grelha	420 kg
Grelha	2 x 60 kg

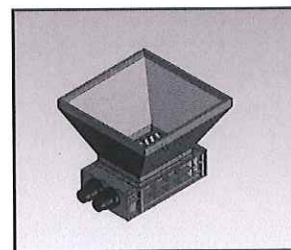
Consulte os esquemas para mais detalhes.

CARACTERÍSTICAS DA MÁQUINA



Características Principais:

Tipo de Máquina:.....	Destroçador DS2 MAK 150	
Comprimento:.....	3300	mm
Largura:.....	1440	mm
Altura:.....	3150	mm
Peso Total:.....	14,1	Tons
<i>Câmara de Corte:</i>		
Comprimento:.....	1500	mm
Largura:.....	1100	mm
<i>Lâminas:</i>		
Nº de lâminas (conforme espessura e tipo de máquina):.....	60/30/20	Peç
Nº de facas por Lâminas:.....	5	Peç
Espessuras usuais (conforme tipo de máquina):.....	25/50/75	mm
<i>Unidade Hidráulica:</i>		
Comprimento:.....	1750	mm
Largura:.....	1510	mm
Altura:.....	2420	mm
Capacidade de óleo:.....	1200	Lt.
Peso:.....	2,5	Tons



Potência:.....	2 x 55	Kw
Rotação Variável:.....	18 / 12	Rpm
Tensão:.....	220/ 380/ 440	Volts
Opcionais:		
Lubrificação Centralizada:	☒	
Automática:	☐	
Manual:	☒	
Tapete de Carga:.....	☒	
Tapete de Saída:.....	☒	
Sistema de Aspiração:.....	☐	
Grelhas Granolométricas:.....	☐	

2 TECHNICAL DATA

GSH 600/800

Cutting chamber opening:	Data in mm:	788x695
Rotor dimension:	Diameter in mm:	600
	Width of cut in mm:	800
Rotor type S-3	3-knives-version	
Rotor knives:	Rows of knives:	3
	No. of rotor knives:	3 x 2
Rotor type S-5	5-knives-version	
Rotor knives:	Rows of knives:	5
	No. of rotor knives:	5 x 2
Rotor type S-7	7-knives-version	
Rotor knives:	Rows of knives:	7
	No. of rotor knives:	7 x 2
Rotor type A-4	4-knives-version	
Rotor knives:	Rows of knives:	4
	No. of rotor knives:	4 x 4
Stator knives:	No. of stator knives:	2
	Rows of stator knives:	2
Deflection wedge:		Yes/No
Block knife:	No. of block knives:	2
Rotor speed (50 Hz):	rpm	518
Width:	Data in mm:	1850
Length:	Data in mm:	2300
Height:	Data in mm:	3000
Drive motor:	Power in kW:	75; 90
Screen:	Type and screen hole size dependent on the application and customer requirements.	Hydraulic opening of screen holder
Opening device:	Standard	Hydraulic opening
Machine weight:	In kg	Approx. 4900
Electrical connection data:	markings are attached to the machine	
Noise level: Depends on plant location and type of grinding material!	Without noise equipment, in dB(A):	Approx. 110
	With noise equipment in dB(A):	depends on type of soundproof
Dimensions:	See Layout drawing	

ORIGINAL INSTRUCTION
PART A: Basic machine
Shredder ZSS Series

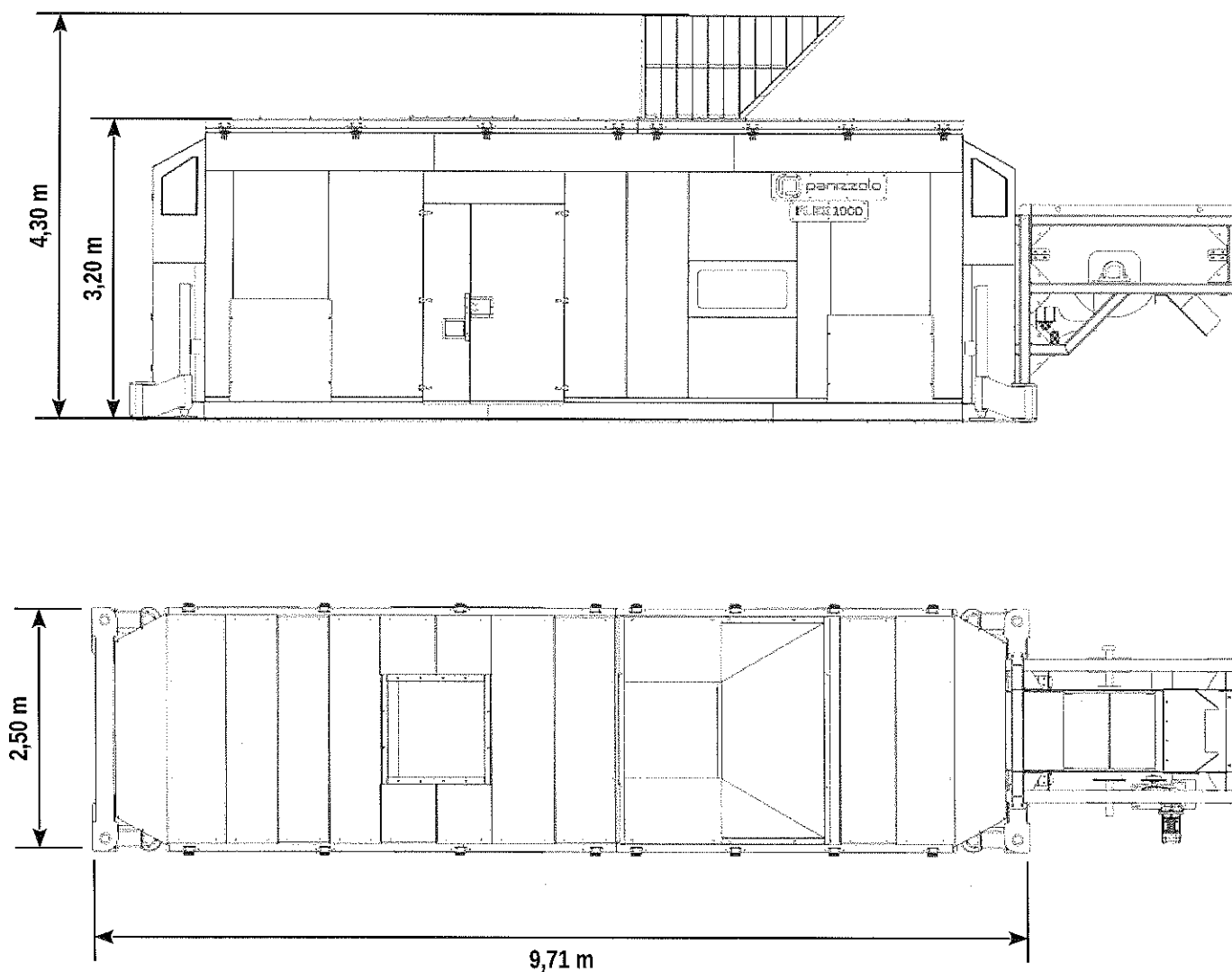


2.4 **ZSS 1500** - Intpolymers

Feeding chamber opening:	Data in mm:	1420x1610
Rotor dimension:	Diameter in mm:	457
	Width of cut in mm:	1410
Rotor type E		
Rotor knives:	No. of rotor knives:	68/102
Stator knives:	No. of stator knives:	5
	Rows of stator knives:	1x5
Rotor speed (50 Hz):	rpm	74
Width:	Data in mm:	2590
Length:	Data in mm:	2450
Height:	Data in mm:	2540
Drive motor:	Power in kW:	75
Motor hydraulic unit:	Power in kW:	5.6
Screen:	Type and screen hole size dependent on the application and customer requirements.	Manual opening of screen holder
Machine weight:	In kg	Approx. 6770
Electrical connection data:	markings are attached to the machine	
Noise level: Depends on plant location and type of grinding material!	Without noise equipment, in dB(A):	Approx. 95
	With noise equipment in dB(A):	depends on type of soundproof
Dimensions:	See Layout drawing	

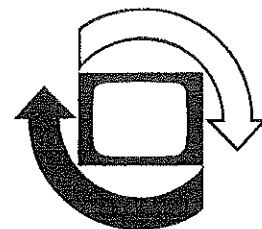
2.5 Dimensões e peso

2.5.1 Máquina



 PESOS 	
MÁQUINA (sem berço, tremonha e rotor)	27.200 kg
MÁQUINA (com tremonha, berço e rotor)	32.300 kg

Anexo I- Linha de reciclagem de monitores e televisores (abertura do cinescópio)



Bildröhrenzerlegesystem BZS 0410 mit den Arbeitsplätzen RCP - B 13 und ITP - B 12

Übersicht über die mitgelieferten Unterlagen

- | | | |
|-----|--|--|
| 0. | Konformitätserklärung für Bildröhrenrecyclinganlage BZS 0410, 2 Bl. | |
| 1. | Gebrauchsanleitung für das Bildröhrenzerlegesystem BZS 0410, Z - Nr. 012 13000 - 00 GA, 15. Bl., Ausgabe 11/00 | |
| 2. | Bildband RCP - B13, | Z.-Nr.: 012 13 000 - 01 BB, 11 Bl., Ausgabe 11/00 |
| 3. | Bildband ITP - B 12, | Z.-Nr.: 012 13 000 - 02 BB, 4 Bl., Ausgabe 11/00 |
| 4. | RCP - B13, elektrischer Übersichtsplan
Übersichtsstückliste | Z.-Nr.: 712 13 000 - 01 ÜP, 1 Bl., Ausgabe 11/00
Z.-Nr.: 712 13 000 - 01 ST, 1 Bl., Ausgabe 11/00 |
| 5. | RCP - B13, Übersichtsplan Sensoren | Z.-Nr.: 712 13 000 - 02 ÜP, 1 Bl., Ausgabe 11/96 |
| 6. | RCP - B13, Heizbandführung | Z.-Nr.: 712 13 000 - 03 ÜP, 1 Bl., Ausgabe 02/98 |
| 7. | RCP - B13, SVE 3, Stromversorgungseinschub
SVE 3, Stückliste | Z.-Nr.: 012 13 201 - 00 SP, 2 Bl., Ausgabe 10/00
Z.-Nr.: 012 13 201 - 00 ST, 1 Bl., Ausgabe 10/00 |
| 8. | RCP - B13, SVK Stromversorgungskarte
SVK, Stückliste | Z.-Nr.: 612 13 201 - 01 SP, 1 Bl., Ausgabe 10/00
Z.-Nr.: 612 13 201 - 01 ST, 1 Bl., Ausgabe 10/00 |
| 9. | RCP - B13, ZÜK, Zeitsteuerung, Überstromkarte
ZÜK, Stückliste
ZÜK, Bauplan | Z.-Nr.: 712 13 201 - 02 SP, 1 Bl., Ausgabe 10/00
Z.-Nr.: 712 13 201 - 02 ST, 2 Bl., Ausgabe 10/00
Z.-Nr.: 712 13 201 - 02 BP, 1 Bl., Ausgabe 10/00 |
| 10. | RCP - B13, SLK, Steuerlogikkarte
SLK, Stückliste
SLK, Bauplan | Z.-Nr.: 712 13 201 - 03 SP, 1 Bl., Ausgabe 10/00
Z.-Nr.: 712 13 201 - 03 ST, 1 Bl., Ausgabe 10/00
Z.-Nr.: 712 13 201 - 03 BP, 1 Bl., Ausgabe 10/00 |
| 11. | RCP - B13, Bedienpult
BP Stückliste | Z.-Nr.: 612 13 202 - 01 SP, 1 Bl., Ausgabe 10/00
Z.-Nr.: 612 13 202 - 01 ST, 1 Bl., Ausgabe 10/00 |
| 12. | RCP - B13, SAK, Sensoranschlußkarte
SAK, Stückliste | Z.-Nr.: 612 13 203 - 00 SP, 1 Bl., Ausgabe 10/00
Z.-Nr.: 612 13 203 - 00 ST, 1 Bl., Ausgabe 10/00 |
| 13. | RCP - B13, Pneumatikplan
Mechanik/Pneumatik, Stückliste | Z.-Nr.: 812 13 301 - 00 PN, 1 Bl., Ausgabe 10/00
Z.-Nr.: 812 13 301 - 00 ST, 1 Bl., Ausgabe 10/00 |
| 14. | ITP - B12, Gesamtstromlaufe
Stückliste | Z.-Nr.: 060 02 201 - 01 SP, 1 Bl., Ausgabe 10/00
Z.-Nr.: 060 02 201 - 01 ST, 1 Bl., Ausgabe 10/00 |

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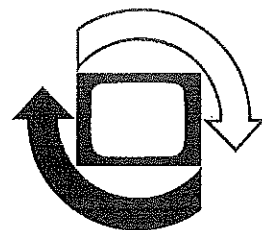
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Dipl.-Ing. Hans-Georg Glatzel

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HBR Berlin-Charlottenburg
Reg.-Nr. 44418
USt-Id Nr:
DE 1517 47 070

<http://www.vicor-berlin.de>
E-mail: vicooffice@vicor-berlin.de



Konformitätserklärung für Bildröhrenrecyclinganlage BZS 0410

1. Name und Anschrift des Herstellers

VICOR GmbH
Wilhelminenhofstraße 76/77
12459 Berlin - Deutschland

2. Kurzbeschreibung der Maschinen

Die Bildröhrenrecyclinganlage BZS 0410, bestehend aus einem Bildröhrendemontagestand vom Typ RCP-B 13 und einem Implosionsschutztrennplatz vom Typ ITP – B 12, dient zum Zerlegen von vorbereiteten Fernsehbildröhren (BR) in den gängigen Abmessungen 12 Zoll bis 32 Zoll Bilddiagonale mit dem Ziel einer sortenreinen Werkstoffrückgewinnung und verlustarmen Selektierung von Schadstoffen. Zur Anlage gehören zum Absaugen der Leuchtstoffschicht ein Industriestaubsauger z.B. der T 37 von der Firma CFM mit Spezial-Staubsammelbehälter und zum Absaugen der Luft an Arbeitsplätzen z.B. ein Entstauber PF – 2 B der Firma PIONIER.

2.1 RCP – B 13

Dieser Platz ist als Steharbeitsplatz für eine Person konzipiert und dient zum umweltgerechten Recycling von Bildröhren. Dazu werden die Bildröhren in der Nähe der Lotnaht durch einen Thermoschock geöffnet, danach wird die Metallmaske aus der Bildröhre entfernt und die giftige Leuchtstoffschicht wird von der Bildschirminnenseite abgerieben und dabei trocken abgesaugt. Konus, Bildschirm und Metallteile werden einer Weiterverwendung zugeführt. Die Arbeitsperson wird gegen entstehende Dämpfe und Stäube beim Bearbeiten der Bildröhren durch eine Entstaubungsanlage geschützt. Die einzelnen Arbeitsschritte werden über eine elektronische Steuerung in Abhängigkeit von Sensoren gesteuert und werden bis auf wenige Arbeitsschritte (Öffnen der Bildröhre und Leuchtstoffabsaugung) automatisch ausgeführt.

2.2 ITP – B 12

Dieser Platz ist als Steharbeitsplatz für eine Person konzipiert und dient zum Entfernen des Implosionsschutzbandes von den angelieferten Bildröhren und wenn erforderlich, auch der unter den Metallbändern liegenden Klebebändern aus Stoff bzw. Folie. Für diesen Zweck wird die Bildröhre am Konushals durch das Gewicht eines Spannhohres auf einen drehbaren Teller gedrückt und kann leicht bearbeitet werden. Das Auftrennen des Metallbandes erfolgt mit einem Trennschleifer. Für das Spannen der Bildröhre ist eine Zweihandbedienung vorgesehen.

3. Fabrikatbezeichnung

Fabrikatbezeichnung: Bildröhrenrecyclinganlage
Typ: BZS 0410
Seriennummer: ITP – B 12:00 – 66; RCP – B 13:00 – 65
Gekennzeichnet mit: CE-Zeichen und CE-Typenschild; Baujahr 2000

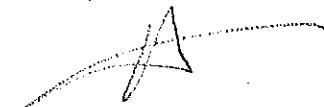
4. Bescheinigung

Der Hersteller bescheinigt hiermit, dass die geltenden Maschinenrichtlinien (89/392/EWG) für „Sicherheit von Maschinen“ EN 292-1, -2 als auch für „Elektrische Ausrüstung an Industriemaschinen“ EN 60 204-1 eingehalten werden.
Der Prüfbericht Nr. 960 240 zur Einhaltung der EMV-Richtlinie liegt dieser Erklärung bei.

5. Angaben zum Unterzeichner

Dipl.-Ing. Hans-Georg Glatzel
Geschäftsführer

Berlin, Februar 2001


Hans-Georg Glatzel
Geschäftsführer

VICOR GmbH
VIDEO · COMPUTER · RECYCLING
Wilhelminenhofstr. 76/77 · 12459 Ber
Telefon : (0 30) 538 80 00

Anexo II- Linha de Reciclagem de equipamentos de frigorífico (remoção de gás e óleo na fase I e remoção de CFC na fase II)

Instrução de Operação

Unidade de condensação de solventes

CRYO - CONDAP[®] **18 - 210**



Para uma operação segura e para evitar danos, leia esta

Instrução de Operação cuidadosa e atentamente!

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Ihr Partner für
Elektrowärme
und Elektromaschinenbau

Kleinesdar Wärmetechnik GmbH · Röntgenstr. 29 · 32107 Bad Salzuflen



Kleinesdar
Wärmetechnik GmbH
Gewerbepark OWL
Röntgenstraße 29
32107 Bad Salzuflen
Tel.: 05221 76399-0
Fax: 05221 76399-10
info@kleinesdar.de
www.kleinesdar.de

Konformitätserklärung / Declaration of Conformity
(Nach der Richtlinie 2006/95 EG / of directive 2006/95 EG)

für **Elektro- Heizflansch** / for electric heating-flange
Art.- Nr. 032.01.122 / Art.- no. 032.01.122

Hersteller / Manufacturer : Kleinesdar Wärmetechnik GmbH
Röntgenstr. 29
32107 Bad Salzuflen
Tel.: 05221 76399-0
Fax: 05221 76399-10

Die oben aufgeführten Artikel wurden entwickelt und gefertigt in Übereinstimmung mit folgenden Normen und Richtlinien:

The above mentioned subject would designed and manufactured in accordance to the following standards and directives

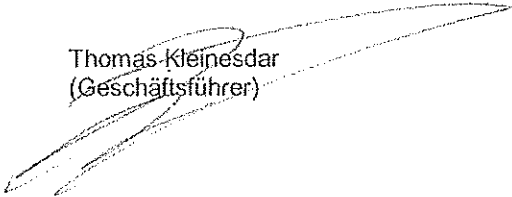
harmonisierte Norm EN 60 335 Teil 1 / harmonised standard EN 60355 part 1
VDE 0720

gemäß den Bestimmungen der Niederspannungsrichtlinie des Europäischen Parlaments und des Rates vom 12. Dezember 2006.

According to the regulation of the low voltage directive of the European Parliament and the council dated 12 December 2006

Bad Salzuflen, 08.08.2011

Thomas Kleinesdar
(Geschäftsführer)



Ihr Partner für
Elektrowärme
und Elektromaschinenbau

Kleinesdar Wärmetechnik GmbH · Röntgenstr. 29 · 32107 Bad Salzuffen



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Röntgenstraße 29
32107 Bad Salzuffen
Tel.: 052 21 7 63 99-0
Fax: 052 21 7 63 99-10
info@kleinesdar.de
www.kleinesdar.de

Konformitätserklärung / Declaration of Conformity
(Nach der Richtlinie 2006/95 EG / of directive 2006/95 EG)

für **Elektro- Einschraubheizkörper G2"** / for electric screw-in-heater G2"
Art.- Nr. 032.01.146 / Art.- no. 032.01.146

Hersteller / Manufacturer : Kleinesdar Wärmetechnik GmbH
Röntgenstr. 29
32107 Bad Salzuffen
Tel.: 05221 76399-0
Fax: 05221 76399-10

Die oben aufgeführten Artikel wurden entwickelt und gefertigt in Übereinstimmung mit folgenden Normen und Richtlinien:

The above mentioned subject would designed and manufactured in accordance to the following standards and directives

harmonisierte Norm EN 60 335 Teil 1 / harmonised standard EN 60355 part 1
VDE 0720

gemäß den Bestimmungen der Niederspannungsrichtlinie des Europäischen Parlaments und des Rates vom 12. Dezember 2006.

According to the regulation of the low voltage directive of the European Parliament and the concil dated 12 December 2006

Bad Salzuffen, 08.08.2011

Thomas Kleinesdar
(Geschäftsführer)

Kleinesdar
Wärmetechnik GmbH
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32107 Bad Salzuffen
Tel.: 05221 76399-0
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Ihr Partner für
Elektrowärme
und Elektromaschinenbau

Kleinesdar Wärmetechnik GmbH · Röntgenstr. 29 · 32107 Bad Salzuflen



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info@kleinesdar.de
www.kleinesdar.de

Konformitätserklärung / Declaration of Conformity
(Nach der Richtlinie 2006/95 EG / of directive 2006/95 EG)

für Elektro- Einschraubheizkörper G1½ " / for electric screw-in-heater G1 ½ "
Art.- Nr. 032.01.147 / Art.- no. 032.01.147

Hersteller / Manufacturer : Kleinesdar Wärmetechnik GmbH
Röntgenstr. 29
32107 Bad Salzuflen
Tel.: 05221 76399-0
Fax: 05221 76399-10

Die oben aufgeführten Artikel wurden entwickelt und gefertigt in Übereinstimmung
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harmonisierte Norm EN 60 335 Teil 1 / harmonised standard EN 60355 part 1
VDE 0720

gemäß den Bestimmungen der Niederspannungsrichtlinie des Europäischen
Parlaments und des Rates vom 12. Dezember 2006.
According to the regulation of the low voltage directive of the European Parliament and the
concil dated 12 December 2006

Bad Salzuflen, 08.08.2011

Thomas Kleinesdar
(Geschäftsführer)
Kleinesdar
Wärmetechnik GmbH
Röntgenstr. 29
32107 Bad Salzuflen
Tel.: 05221 76399-0
Fax: 05221 76399-10

Instalação para eliminação de líquido de refrigeração

Nível 1 - Aspiração

**Para uma operação segura e
para evitar danos,
leia este manual de instruções
atenta e cuidadosamente!**

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Fax: +49 (0) 281 95277 - 26
Home: <http://www.herco-gmbh.com>

EC-Conformity-Declaration for Machinery
(EC-Directive 98/37/EEC)

The manufacturer

Herco Kühltechnik
Hermanns & Co GmbH
Rudolf-Diesel-Str. 28
D 46485 Wesel
Tel.: +49 281 952770
Fax: +49 281 9527726
Email: info@herco-gmbh.com

Hereby declares that the machinery described hereafter

Degassing unit for all refrigerants and oil within the refrigeration circuit of old domestic and industrial refrigerators and freezers

SOLVENT RECOVERY PLANT
(Description)

Step 1
(Type)

3983
(Identification-No.)

Complies with the following EC-Directives:

European Machinery Directive 98/37/EEC
Low Voltage Directive 2006/95/EC
European Pressure Directive 97/23/EC
ATEX directive 94/9/EEC
EMV-Directive 89/336/EC

Used standards, directives and technical specifications:

- EN ISO 12100-1: Safety of machinery – basic concepts, general principles for design – part 1: Basic terminology and methodology
- EN ISO 12100-2: Safety of machinery – basic concepts, general principles for design – part 2: Technical principles
- DIN EN ISO 14121-1 Safety of machinery/risk analysis
- DIN EN ISO 14122 – Safety of machinery
- DIN EN 954-1/ISO 13849-1 Low-Voltage Switchgear and control gear assemblies
- EN 60204-1: Safety of machinery – electrical equipment of machines – part 1: General requirements
- EN 1127-1: ATEX, basic concept, general principles for design
- EN 954-1: Safety of machinery – safety-related parts of control systems – part 1: General principles for design
- EN 60079-14/DIN EN 50014, electrical components in ATEX defined areas
- VDE 0100: installation of low voltage systems
- BGV A3: accident prevention regulation for electrical systems and equipment
- EN 13463 non electrical components in ATEX defined areas

Comments:

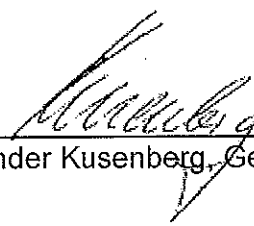
The design and Manufacturing of the above mentioned system is in accordance with the listed Safety and Health regulations.

The following components are functionally integrated with the equipment; however are not part of our scope of supply and therefore not part of this EC-Declaration.

- Conveyor system that feed the refrigerators to the piercing stations
- Liquid transfer of FCKW/CKW/Pentane/Propane/Butane to storage vessel
- Liquid transfer of oil to storage vessel

Wesel, 15.02.2010

Location, Date



Alexander Kusenberg, General Manager

Anexo III- Linha de trituração de plásticos I e II



Veerweg 5-7 -- 5145 NS Waalwijk
The Netherlands
Tel. +31416820218
www.hermion.nl

EC-DECLARATION OF CONFORMITY
(According to Annex II A of the Machinery Directive)

We,

Hermion B.V.
Veerweg 5-7
NL - 5145 NS Waalwijk
Tel. +31 416 820218

herewith declare, on our own responsibility, that the machine:

Mixing unit

Serial no.: 028-25.58021628.080001.11.14
Year of construction: 2013

which this declaration refers to, is in accordance with the conditions of the following Directives:

- Machinery Directive 2006/42/EG
- EMC- Directive 2004/108/EG
- Low Voltage Directive 2006/95/EG

and is in conformity with the following standards:

NEN-EN-ISO 12100, NEN-EN 349, NEN-EN 953, NEN-EN-ISO 13857, NEN-EN-ISO 13849-1,
NEN-EN-IEC 60204-1, NEN-EN 618, NEN-EN-ISO 14122-2, NEN-EN-ISO 14122-3

Waalwijk, Netherlands, December 2013

M.B. Driessen