

TECHNICAL FILE

annex VII part A for Directive 2006/42/CE

REVISION	01
DATE	15/12/2016
DESIGNATION OF THE MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONSTRUCTION	2017



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

PAGE LEFT EMPTY



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

This file was drafted in accordance with the appendix VII part A of the Leg. D. 27 January 2010 n.17 implementing the 2006/42/EC directive (that abrogates the 98/37/EC directive and its successive amendments) in order to apply the EC marking to the model in question and it is under the exclusive property of:



CAMA s.p.a. Located at:

Via Como, 9 - 23846 Garbagnate Monastero (LC), Italy

Registered office:

Via Vittor Pisani, 12/A – 20124 Milano, Italy

The technical file comprise:

- a general description of the machinery,
- the overall drawing of the machinery and drawings of the control circuits, as well as the pertinent descriptions and explanations necessary for understanding the operation of the machinery,
- full detailed drawings, accompanied by any calculation notes, test results, certificates, etc., required to check the conformity of the machinery with the essential health and safety requirements,
- the documentation on risk assessment demonstrating the procedure followed, including:
 - (I) a list of the essential health and safety requirements which apply to the machinery,
 - (II) the description of the protective measures implemented to eliminate identified hazards or to reduce risks and, when appropriate, the indication of the residual risks associated with the machinery,
- the standards and other technical specifications used, indicating the essential health and safety requirements covered by these standards,
- any technical report giving the results of the tests carried out either by the manufacturer or by a body chosen by the manufacturer or his authorized representative,
- a copy of the instructions for the machinery,
- where appropriate, the declaration of incorporation for included partly completed machinery and the relevant assembly instructions for such machinery,
- where appropriate, copies of the EC declaration of conformity of machinery or other products incorporated into the machinery,
- a copy of the EC declaration of conformity.

This technical file was drafted and organized by:



S.L.M. S.r.l. Located at:

Via del dosso, 54 - 22040 Alzate Brianza (CO), Italy

Registered office:

Via del dosso, 54 - 22040 Alzate Brianza (CO), Italy

Under the directions of:

CAMA s.p.a.



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

INDEX

1.	GI	ENERAL DESCRIPTION OF MACHINE	6
	1.1.	FA024 ELECTRONIC HOT-MELT TYPE BOX FORMING MACHINE	6
	1.2.	CHANGEOVER FORMAT	6
2.	0	VERALL DRAWING OF THE MACHINE	7
:	2.1.	DESCRIPTION FUNCTIONING MACHINE	8
:	2.2.	WORKING AREA	9
3.	SC	CHEME OF CONTROL CIRCUIT DIAGRAM: SRP/CS	10
(sa	fety	related part of control system)	10
	3.1.	DESCRIPTION OF THE SRP/CS CONTROL CIRCUIT	10
4.	Cŀ	HECK ON CONFORMITY OF THE MACHINE WITH ESSENTIAL H&S REQUIREMENTS ($ extit{RES}$ E $ extit{TS}$)	11
5.	RI	ISK ASSESSMENT	12
į	5.1.	MAIN HEALTH AND SAFETY REQUIREMENTS (ANNEX 2)	12
!	5.2.	RISK ASSESSMENT ACCORDING TO EN ISO 12100:2010 (ANNEX 3)	13
!	5.3.	SRP/CS VALIDATION (ANNEX 4)	19
!	5.4.	RESIDUAL RISKS (ANNEX 5)	22
6.	RE	ELEVANT STANDARDS	23
7.	TE	ECHNICAL RELATIONSHIPS	25
8.	IN	ITERNAL CONTROL MODULE OF PRODUCTION	26
9.	DI	ECLARATION OF CONFORMITY	27
10	. AI	NNEX	28



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

FIGURE INDEX

Figure 1 - Overall drawing of the machine	7
Figure 2 - Overall representation of working area	9
Figure 3 – Assesment module of RES e TS	12
Figure 4 – Risk Assessment Module	16
Figure 5 - Schematic representation of the process of risk reduction including the iterative m	
three stages	17
Figure 6 - Process of reduction of risk from the point of view of the designer	18
Figure 7 – SISTEMA software computing environment	19
Figure 8 – SRP/CS performance levels	20
Figure 9 – Performance level calculation response	20
Figure 10 – Required performance level assessment	21
Figure 11 – Residual risk Assessment Module	22
Figure 12 – Summary of procedure for release onto the market	23



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

1. GENERAL DESCRIPTION OF MACHINE

1.1. FA024 ELECTRONIC HOT-MELT TYPE BOX FORMING MACHINE

CAMA supply is an automatic packaging machinery It's function is to form case from blank, fill it with product and case closing It's composed by following group/device

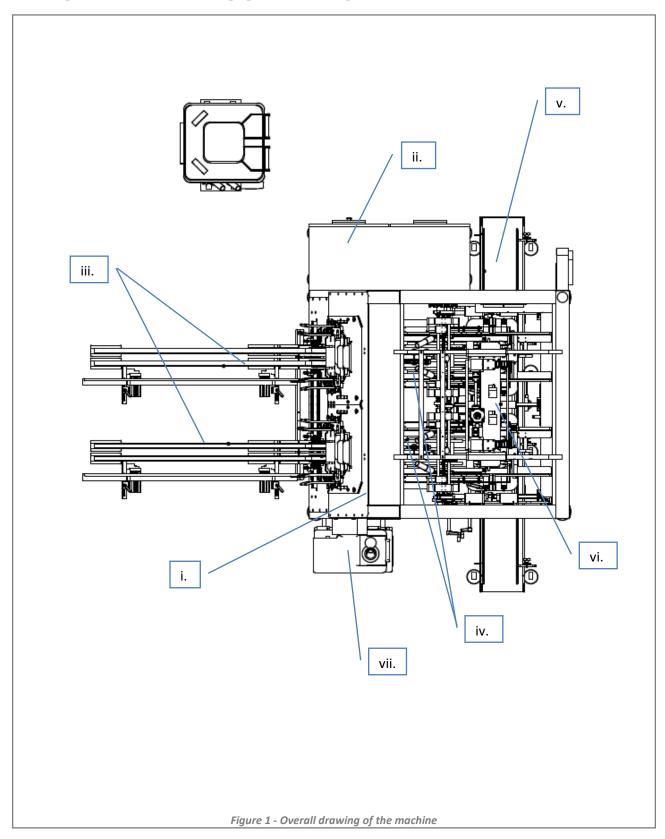
- i. Structure and safety guards
- ii. Electrical pannel
- iii. Blank magazines
- iv. Blank pick-up from magazine
- v. Lower belt conveyor
- vi. Forming area
- vii. Hot melt adhesive spray

1.2. CHANGEOVER FORMAT

The main technical features of the machine are described in ANNEX 1(Handbook)

REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

2. OVERALL DRAWING OF THE MACHINE



The parts of the machine are described in the Handbook



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

2.1. DESCRIPTION FUNCTIONING MACHINE

The description shown in detail in the manual can be summarized as follows:

INSTALLATION

The machine is delivered in part and assembled in place of installation by CAMA's operator: it must be placed and used in the workplace with a level floor perfectly level It must also be connected to power as described in handbook

USE

The machine performs the functions set out in Chapter 1
The machine must be conducted by 1 operator
It is recommended to provide necessary operator for the unload zone

The safe-working zone is outside physical guard indicated in figure 2 The reset controlled zone are indicated in figure 2 Devices accessible are intrinsically safe by design

The operator must:

- Load blanks
- Checking and driving machine
- Unloading closed case
- Changing/regulate parts for changeover

ORDINARY MACHINE'S MAINTENANCE AND CLEANING

Ordinary maintenance and cleaning, as described in the handbook, provides simple operations performed by:

- operator (QUALIFIED)
- mechanic maintainer (QUALIFIED)
- electrical maintainer (QUALIFIED)

The operations must be performed with sectioned and locked energy sources

EXTRAORDINARY MAINTENANCE

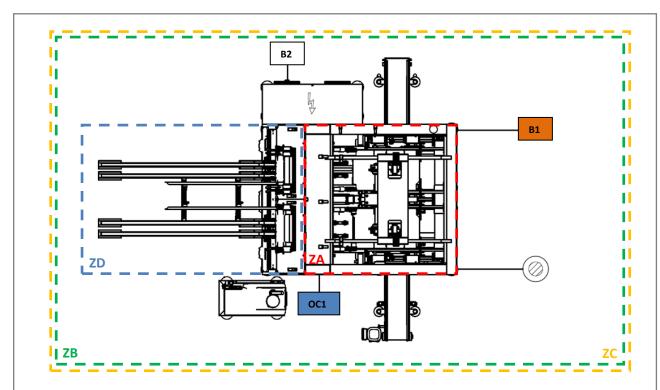
The extraordinary maintenance is performed by manufacturer

DECOMMISIONING (OUT OF SERVICE)

The decommissioning of the machine must be entrusted to specialized companies

REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

2.2. WORKING AREA



- **ZA** Dangerous zone
- **ZB** Safe-working zone
- **ZC** Span of control zone
- **ZD** Loading blank zone

Commands

OC1	B1	B2
HMI	E-STOP	E-STOP
E-STOP	STOP	
STOP	START	
START	RESET	
RESET	LOCK/UNLOCK DOOR	
LOCK/UNLOCK DOOR		

Figure 2 - Overall representation of working area



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

3. SCHEME OF CONTROL CIRCUIT DIAGRAM: SRP/CS

(safety related part of control system)

Safety related part of control system are marked in electrical wiring

3.1. DESCRIPTION OF THE SRP/CS CONTROL CIRCUIT

The relevant control circuit for the safety provides:

- LOTO System (lock out tag out)

cutting the power used on the machine through disconnectors that lock with padlocks.

- Emergency stop buttons: if pressed, they stop all hazardous.

- Safety guard interlocks: if opened, they stop all hazardous movements.

Safety control unit: manage all safety function

Relays: actuate safety function where is electrical necessary

Inverter with STO function: realize a safe torque off on moving device without inertia
 Driver with STO function: realize a safe torque off on moving device without inertia
 Redundant brakes: realize a brake function on vertical axes (SBC - Rexroth)

Electric pneumatic valve: discharge pneumatic supply

- Reset controlled zone: enable restart until reset pressure from visible position

The SRP/CS of the machine is manufactured according to the UNI EN ISO 13849-1:2008



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

4. CHECK ON CONFORMITY OF THE MACHINE WITH ESSENTIAL H&S REQUIREMENTS (*RES* E *TS*)

The documents required for the verification of conformity of the machine to the RES and TS are stored as:

Traceability of documents:

- INSTRUCTION MANUAL
- ELECTRICAL WIRING
- PNEUMATIC WIRING
- CONSTRACTION DRAWING
- LAYOUT
- TEST
- ASSESSMENT
- PROCEDURE
- TECNICAL SHEET
- INSTALLED MACHINERY INSTRUCTION AND COMEPONENTS INSTRUCTION
- CONFORMITY DECLARATION
- TEST MODULE

All documents are attached in digital format in a specific folder by job and stored on corporate servers [ECS]

REACH (Registration, Evaluation and Authorization of Chemicals)

As manufacturers of machinery, we assessed the obligation to introduce a product on the market made with substances that do not harm the health and / or the environment following the guidelines provided in regulation N. 1907/06 / EC of 18 December 2006.



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

5. RISK ASSESSMENT

The risk assessment comprises 3 (or more) documents:

The first responds to the main health and safety requirements

The second is the risk assessment and it must contain at least one document for each moment of the assessment The third is the validation of the control circuits according to company standards

Specific assessments and/or documents can be traced according to the information in Chapter 4

5.1. MAIN HEALTH AND SAFETY REQUIREMENTS (ANNEX 2)

Timely assessment of main H&S requirements indicated in the Appendix I of the Leg. D. 27 January 2010 n. 17 implementing the 2006/42/EC Directive, organized in the following diagrams:

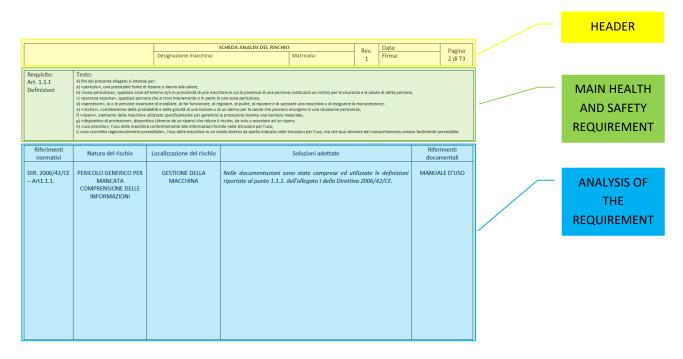


Figure 3 – Assesment module of RES e TS

Every requirement stipulated by LAW has undergone qualitative analysis: for more information, please see the references in the document and/or risk assessment for the following level, drafted according to international standards



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

5.2. RISK ASSESSMENT ACCORDING TO EN ISO 12100:2010 (ANNEX 3)

Risk assessment according to EN ISO 12100:2010: applying the hybrid tool of the ISO TR 14121-2:2013 for the risk assessment, quot.:

General

Hybrid tools or methods for risk estimation exist that combine two of the approaches described into the norm. Commonly these are graphs that contain within them either matrices or scoring system for one of the element of risk. A certain amount of quantification can also be incorporated into any of the qualitative approaches, such as by living frequency ranges to probabilities or exposures. For example, something that is 'likely' can be expressed as being once a year, a 'high' exposure can be specified as being hourly.

Follows the applied method, extract from the example of hybrid tool or method for risk estimation described in the norm.

Hybrid tool or method for risk estimation

This risk estimation tool or method quantifies the qualitative parameters. It is a hybrid method of a numerical scoring and a risk matrix.

The Annex 2 should be used in conjunction with the following guidance information.

Pre-risk estimation

Ticking this box indicates this is the first risk estimation. It is done in the concept phase where only specification and sketches are available. No detail drawings are made at this stage. It is used to decide on the major systems of a machine, for example, mechanical drive line or servo drives, hot air or ultra sonic sealing, movable guard or light barrier.

Intermediate risk estimation

The intermediate risk estimation box is ticket for all intermediate risk estimations performed during the development of a machine. Two sets of hazards are dealt with in this phase. Where in the pre-risk estimation phase protective/risk reduction measures were indicated, these are implemented and assessed again in this phase. The design of the machine changes during the development. Risk assessment have to follow together with the design review along the project. New hazards are dealt with in this phase.

Follow-up risk estimation

This box is ticket at the follow-up risk estimation. Follow-up is done on implemented protective/risk reduction measures. No new hazard should appear in this phase. Nevertheless, where a new hazard is identified when following up on protective/risk reduction measures, this new hazard is also estimated and evaluated in this phase. If it requires a protective/risk reduction measure, a follow-up has to be done again on this protective measure/risk reduction.



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

Reference number (ref. no.)

The reference number, or serial number, is used to give each identified hazard a number for reference purposes.

Type hazard number (type no.)

Type no. Hazard type or group number is used to classify the hazard. The numbers refer to those given for the type or group according to ISO 12100:2010, table B.1.

Hazard

Describe the hazard. The type no. Identifies the type or group of hazard. Indicate the origin of the hazard type or group. For example, if the hazard is a crushing hazard this is indicated by "1" in the type no. column and by "crushing" in the hazard column.

The same hazard can require several estimation due to different hazardous situations and hazardous events.

Severity, Se

"Se" is the severity of possible harm a san out come from the identified hazard. The severity is scored as follows:

- 1 Scratches, bruises that are cured by first aid or similar;
- 2 More severe scratches, bruises, stabbing, which require medical attention from professionals;
- 3 Normally irreversible injury; i twill be slightly difficult to continue work after healing;
- 4 Irreversible injury in such as way that i twill be very difficult to continue work after healing, if possible at all.

Frequency, Fr

"Fr" is the average interval between frequency of exposure and its duration. The frequency is scored as follow:

- 2 interval between exposure is more than a year;
- 3 interval between exposure is more than two weeks but less than or equal to o year;
- 4 interval between exposure is more than a day but less than or equal to two weeks;
- 5 interval between exposure is more than a hour but less than or equal to a day; where the duration is shorter than 10 min, the above values may be decreased to the next level;
- 5 Interval less than or equal to an hour this value is not to be decreased at any time.

Probability, Pr

"Pr" is the probability of occurrence of a hazardous event. Consider, for example, human behaviour, reliability of components, accident history and the nature of the component system (for example, a knife is always sharp, a flue exhaust pipe is always hot, electricity is dangerous by nature) to determinate the level of probability. The probability is scored as follows:



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

- 1. Negligible: for example, this kind of component never fails so that a hazardous event occurs. No possibility of human error.
- 2. Rarely: for example, it is unlikely this kind of component will fail so that hazardous event occurs. Human error is unlikely.
- 3. Possible: for example, this kind of component can fail so that a hazardous event occurs. Human error is possible.
- 4. Likely: for example, this kind of component will probably fail so that a hazardous event occurs. Human errors likely.
- 5. Very high: for example, this kind of component s not made for this application. I twill fail so that a hazardous event occurs. Human behaviour is such that the likelihood of error s vey high

Avoidance, Av

"Av" is the possibility of avoiding or limiting harm. Consider, for example, whether the machine to be operated by skilled or unskilled persons, how quickly a hazardous situation can lead to harm, and the awareness of risk by mean of general information, direct observation or through warning sings, so as to determine the level of avoidance. The possibility of avoidance is scored as follows:

- 1. Likely: for example, it is likely that contact with moving parts behind an interlocked guard will be avoided in most of cases should the interlocking fail and the movement continue.
- 3. Possible: for example, it is possible to avoid an entanglement hazard where the speed is slow and there is sufficient space or otherwise it is easy to avoid moving part of machinery.
- 5. Impossible: for example, it is impossible to avoid a sudden appearance of a powerful laser beam, or in case of an explosion.

Class, Cl

"CI" is the class. Fr, Pr, Av are the constituent factor that form the probability of occurrence of harm as describe in ISO 12100:2010, 5.5.2.3. Each of the three factors should be estimated independently of each other. The worst credible assumption should be used for each factor. Fr, Pr e Av are added together in Cl. The Cl is the sum of Fr, Pr e Av, i.e. Cl = Fr + Pr + Av.

Risk estimation

The risk estimated by using the matrix in the upper part of the form reproduced on the next page.

Where the severity, "Se", crosses the class, "Cl", in the red area, the risk is high.

Where the severity, "Se", crosses the class, "Cl", in the yellow area, the risk is medium.

Where the severity, "Se", crosses the class, "Cl", in the green area, the risk is low.

Details

The accident scenario should be described here. Put the hazard reference number for the particular hazard in the left column and describe the accident scenario in the right. Where photos are used, the reference to them can be made here.



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

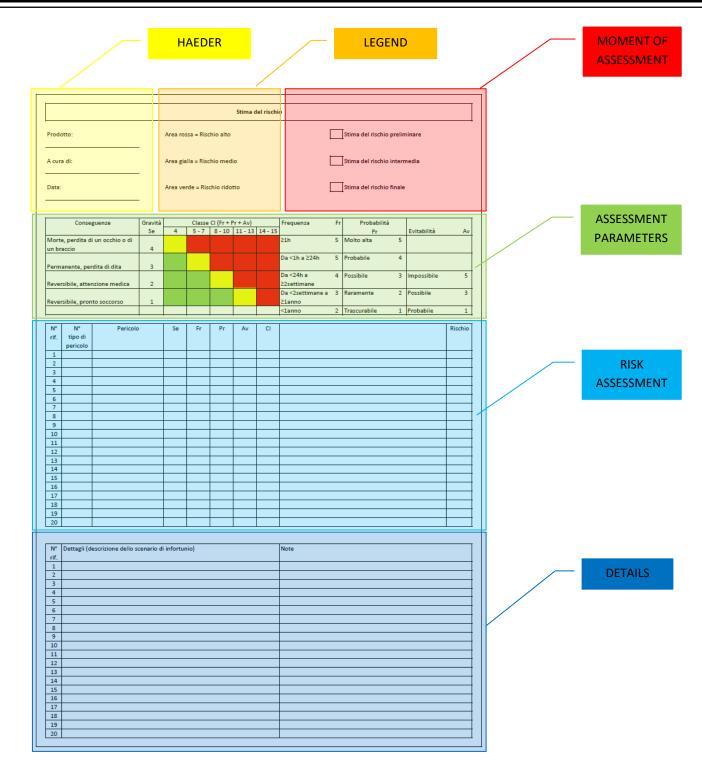


Figure 4 – Risk Assessment Module

The indicated protection measures are described at the following level, or in the relevant parts of Chapter 4

REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

The use of the described instrument demonstrates the application of the process of reducing the risk, described in Figure 1 of EN ISO 12100:2010, which is shown here:

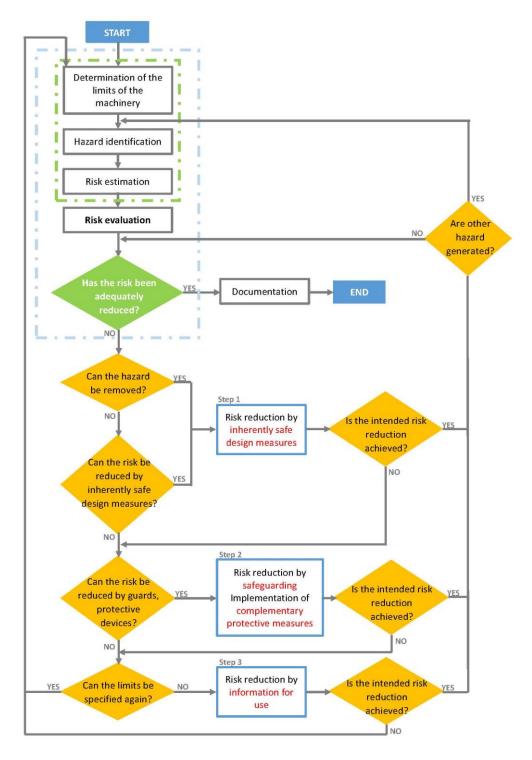


Figure 5 - Schematic representation of the process of risk reduction including the iterative method of the three stages



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

The process of the risk reduction, from the design point of view of the machine, has followed as indicated by Figure 2 of EN ISO 12100:2010, which is reported here:

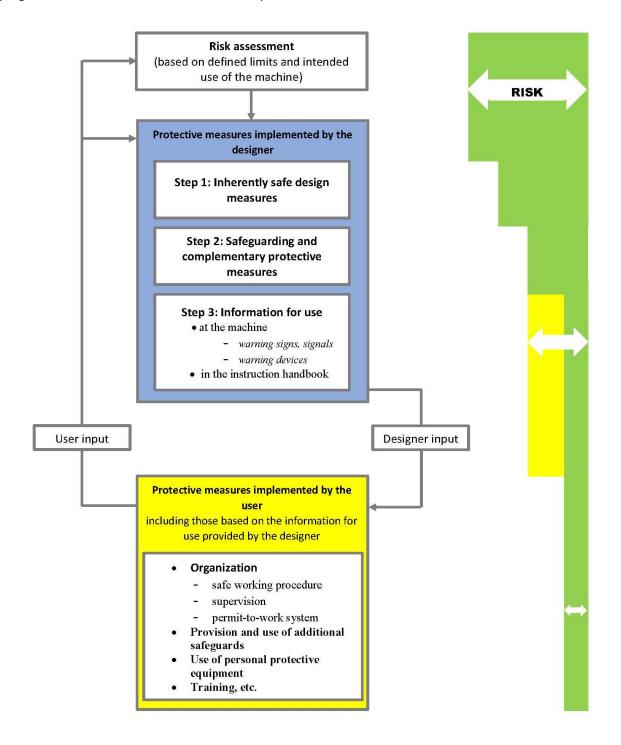


Figure 6 - Process of reduction of risk from the point of view of the designer



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

5.3. SRP/CS VALIDATION (*ANNEX 4***)**

SRP/CS assessment according to EN ISO 13849-1:2008.

The risk reduction strategy prevents implementing the relevant control circuits for the SRP/CS safety (Chapter 3) whose functions are:

Emergency Stop function
Safety-related stop function initiated by safeguard
Enabling device function

The calculation is carried out with the "SISTEMA" software auxiliary: the graphic interface and some details on the operational method are reported in order to understand the results

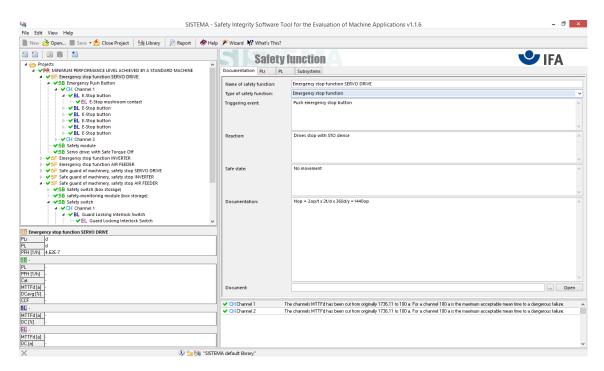


Figure 7 – SISTEMA software computing environment

REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

The SRP/CS performance is based on the levels reported here:



Figure 8 – SRP/CS performance levels

PR	Project:	Corresponds to the inspected machine
SF	Safety Function	Corresponds to the safety function and a failure can lead to
		an immediate risk increase
SB	Subsystem	Corresponds to the logic unit block according to the ILO performance
CH	Channel	Corresponds to the identified channel according to the Category
BL	Block	Corresponds to the logic unit block of the device participating in the SF
EL	Element	Corresponds to the electrical contact of the respective block

The object of this type of performance is to rebuild the SRP/CS logic unit structure according to the data provided by various device manufacturers

The Performance Level reached, expressed in the probability of failures per hour (PFH), is calculated by combining:

Category Category according to the *ILO* logic unit
MTTFd Average time for hazardous failure
DCavg Average diagnostic coverage
CCF Common cause of failure



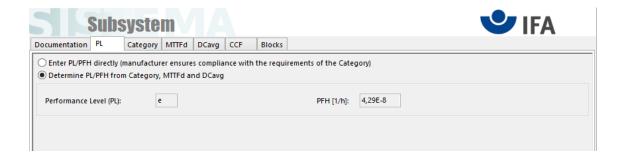


Figure 9 – Performance level calculation response



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

The result must be compared with the Required Performance Level assessed in the Risk Assessment phase

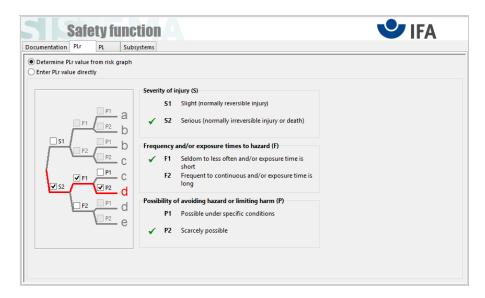


Figure 10 – Required performance level assessment

The response can be consulted on the first page of the report.

CAMA realize its SRP/CS comply with an internal approved standard

This standard is stored on CAMA's server

For each machinery is available the software validation stored as described in chapter 4



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

5.4. RESIDUAL RISKS (*ANNEX 5***)**

Despite the planning and all measures of precaution, the operator may be exposed to residual risks; the document attached assesses and describes them: each potential consequence detected by table B1 of EN ISO 12100:2010 is assessed as described in the figure.

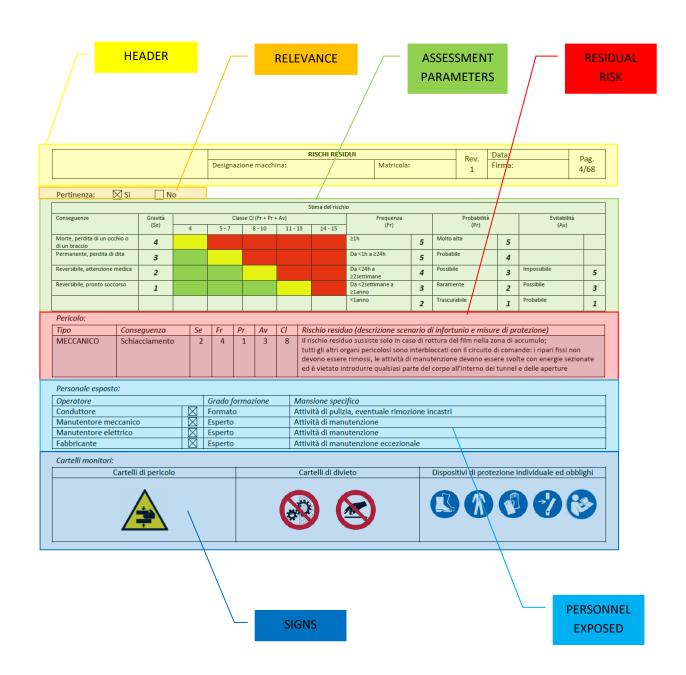


Figure 11 – Residual risk Assessment Module

The evaluation of residual risks should demonstrate that the maximum was done to minimize the risk; for further information on the indicated protective measures, refer to the documents in Chapter 4



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

6. RELEVANT STANDARDS

1 - Legal reference texts

For the machine:

Legislative Decree 27 January 2010, n. 17 - Implementing the 2006/42/EC directive relating to machines. The machines produces follow the procedure for release onto the market described in this document and red :

The following diagram summarizes the procedures laid down in the articles 12 and 13: Partly completed machinery Product referred to the article 1, § 1, from a) to f) eferred to the Technical report -Machinery categories Machinery categories included in the not included in the Assembly instructions Instructions annex IV annex IV Project doesn't totally mply with the harmoni Project totally complies with the harmonized standards doesn't meet all ap Conformity assessment with internal checks on the Full quality assurance manufacture manufacture nnex VIII, point 3 EC declaration of conformity incorporation nex II. part 1, section A nnex II, part 1, section B **EC** marking article 16 * The harmonized standards are not available, don't cover all the essential requirements of safety and health protection, or are not applied or are only partially Chromatic code: Product category Documents Procedure Declaration - marking

Figure 12 – Summary of procedure for release onto the market

For the low voltage directive:

Directive 2014/35/UE valid from 26 February 2014, concerning the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits, entering into force on 20/04/2016 and replacing the 2006/95/EC directive.

For the directive on electromagnetic compatibility:

Directive 2014/30/UE valid from 26 February 2014, concerning the harmonisation of the laws of the Member States relating to electromagnetic compatibility (recast) entering into force on 20/04/2016 replacing the 2004/108/EC directive.



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

2 - Reference technical rules

EN ISO 12100:2010 Safety of machinery -

General principles for design – risk assessment and risk reduction

EN ISO 13849-1:2015 Safety of machinery -

Safety- related parts of control systems - Part 1: General Principles for design

EN ISO EN ISO 11161:2007/A1:2010 Safety of machinery –

Integrated manufacturing systems – Basic requirements

EN ISO 13850:2015 Safety of machinery -

Emergency stop - Principles for design

EN ISO 13855:2010 Safety of machinery -

Positioning of safeguards with respect to the approach speeds of parts of human body

EN ISO 13857:2008 Safety of machinery -

Safety distances to prevent hazard zones being reached by upper and lower limbs

EN ISO 14120:2015 Safety of machinery -

Guards – General requirements for the design and construction of fixed and movable guards

EN ISO 14119:2013 Safety of machinery -

Interlocking devices associated with guards – Principles for design and selection

ISO/TR 14121-2:2013 Safety of machinery -

Risk assessment - Part 2: Practical guidance and examples of methods

EN ISO 14122-1:2001/A1:2010 Safety of machinery -

Permanent means of access to machinery

EN 60204-1/A1:2009 Safety of machinery -

Electrical equipment of machines - Part 1: General requirements

EN 61439-2:2012 - Low-voltage switchgear and controlgear assemblies -

Part 2: Power switchgear and controlgear assemblies

EN ISO 4414:2010 Pneumatic fluid power -

General rules and safety requirements for system and their components.

EN 415-7:2006+A1:2008 – Safety of packaging machines

Part 7: Group and secondary packaging machines

EN 415-10:2014 - Safety of packaging machines

Part 10: Genaral requirements

EN 619:2002+A1:2010- Continuous handling equipment and systems

Safety and EMC requirements for equipment for mechanical handling of unit loads



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

7. TECHNICAL RELATIONSHIPS

The technical relationships are archived in the in the company server according to the logic unit indicated in chapter 4.

The declaration of noise level is reported and the noise level relationship is attached (Annex 6)

Machine:		
Type:		
Serial N°:		
\	/ALUES OF NOISE LEVEL DECLARED DIF	
		Operative mode 1
Level of weigh	ted sound power A, Lw [dBA]	
Level of sound	pressure of weighted emission A, Lpf in	
the operator po		
Values determined in accordance with the procedure for noise tests UNI EN ISO 4871:2009, using the basic rule UNI EN ISO 3746:2011.		
	nission values reported are the sum of the measured values and of th	ne associated uncertainty, and represent
	he range of values likely to be found in the measurements.	
Values determined	in accordance with the procedure for noise tests UNI EN ISO 48.	71:2009, using the basic rule UNI EN ISO



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

8. INTERNAL CONTROL MODULE OF PRODUCTION

(Att. VIII of D.Lgs. 27 January 2010 n. 17 implementing of the Directive 2006/42/EC)

In order to ensure the machine compliance to this technical report and to the requirements of the rule, the validation will be run before the machine is marketed according to the "Internal Control Module of Production" as indicated by Att. VIII of D.Lgs. 27 January 2010 n. 17 implementing of Directive 2006/42/EC.

The module is a check list, in which the different points refer to:

Directive 2006/42/EC general nature verifications
 EN 60204-1:2006 electronic nature verifications

• EN ISO 415 serie specific verifications

The failure to fill out and the fulfillment of the points established by the checklist implies a re-examination of the machine.

Integral process of safety validation of CAMA machinery is composed by:

FASE 1 Preliminary safety check of project
 FASE 2 Engineering of physical guard
 FASE 3 Intermediate check of guard

FASE 4 Final check of projectSSV Safety software validation

- ICMP Internal control module of production



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

9. DECLARATION OF CONFORMITY

A copy of the declaration of conformity is provided

DECLARATION OF CONFORMITY

CE

(DIRECTIVE 2006/42/CE – Annex II A)
(TRANSLATED FROM ITALIAN)

Business name and address of the company manufacturing the machinery

CAMA 1 S.p.A. Via Como. 9

23846 Garbagnate Monastero (LC) Italia

Phone: +39 031 879811 Fax: +39 031 856373

Name and address of the company authorized to produce the technical file SLM s.r.l. - Via del Dosso, 54 - 22040 Alzate B.za (CO) - ITALIA - Tel. 031 5621592

i. - Via dei Dosso, 54 - 22040 Alzate B.za (CO) - ITALIA - Tel. 031 562159.

	_		п	_
ı,		LΑ	ıĸ	г,

That machinery:

DESIGNATION MACHINERY: DESIGNATION TYPE: SERIAL NUMBER:

YEAR:

SUMMARY DESCRIPTION:

Is conforming to:

- Directive 2006/42/CE (Machinery)
- Directive 2014/30/EU (Low tension)
- Directive 2014/35/EU (EMC)

I salso conforming to:

- UNI EN ISO 12100:2010
- UNI EN ISO 13849-1:2016
- CEI EN 60204-1:2006

Garbagnate Monastero,

Signature CAMA 1 S.p.A. Riccardo Panepinto (Direttore Operativo)



REVISION	01
DATE	15/12/2016
DESIGNATION OF MACHINERY	FORMING MACHINE
DESIGNATION OF TYPE	FA024
SERIAL NUMBER	20161160FA024
YEAR OF CONTRUCTION	2017

10. ANNEX

Follow the list of the appendices and the potential additions:

N° ALLEGATO	DESCRIZIONE
ANNEX 1	HANDBOOK
ANNEX 2	RES & TS
ANNEX 3	RISK ASSESSMENT
ANNEX 4	SAFETY SOFTWARE VALIDATION
ANNEX 5	RESIDUAL RISK
ANNEX 6	NOISE LEVEL REPORT