



**STATISTICAL CHECKING OF
GOODS WITH FIXED WEIGHT**



What are prepackaged goods?



According to the Law 690 (76/211/EEC) currently in force, the prepackaged or prepacked item is defined as **the combination of a product and the individual package** in which it is prepackaged.

A product is prepacked when it is **contained in packaging** of any type, sealed not in the presence of the purchaser **and prepared so that the amount of the product contained has a predetermined** value and it can not be altered without opening or clearly changing the same packaging.

The nominal mass or nominal volume of

the contents of a pre-packaged product is the mass or the volume indicated on the packaging and it corresponds to the amount of product that it should contain.

The actual content of a pre-packaged product is the amount in terms of mass or volume of product which it in fact contains.

The pre-packed goods must comply with the provisions of this Law may be marked with the EEC mark and are hereinafter referred to as “**pre-packaged EEC**”.

WHY SHOULD YOU CHECK THE WEIGHT OF PREPACKAGED PRODUCTS?

Checking the weight of prepackaged products is essential to **ensure the quality** of the production process and **to protect** both the buyer and the manufacturer.

The statistical check is governed by

Community Law n. 76/211/EEC and, depending on the Nation, governed by its national legislation in force.

The production checks may be necessary even if not used for legal for trade use but also for internal factory use, to monitor the efficiency of the production cycle.

In this case, the check criteria are no longer dictated by law but can be customized to suit your production requirements.





3. WHAT ARE THE **ADVANTAGES** FOR A PRODUCER TO RUN THESE CONTROL SYSTEMS?



For the traceability of the batch and ensuring a **perfect conformity** of the manufactured packaging, excludes any complaints of non-compliance.

The quality control of the manufactured batches in accordance

with the laws in force.

The frequent, checking of the manufactured packaging eliminates the risk of overfilling with consequent cost savings from reduced product giveaway.

WHAT HAPPENS IF A DISTRIBUTOR OR THE CONSUMER **FINDS A NON-COMPLIANCE?**

If a distributor finds a non-conforming product, normally they can refuse the delivery of the goods with obvious consequences for the manufacturer.

It also threatens to detract from the supplier relationship.

If a consumer finds an underweight package and makes complaint to the competent authority, one will be subject to an investigation which could lead to a case of commercial fraud.



Operationally, **how would you perform** the checking of the packaged goods?

THE CHECKING IS DONE BY WEIGHING, USING APPROVED SCALES LEGAL FOR TRADE USE. THE CHOICE OF THE MOST SUITABLE SCALE SHALL BE IN ACCORDANCE WITH THE CRITERIA SET BY THE LAW.

THERE ARE TWO MAIN METHODS OF CHECKING:

- The continuous checking of the lot/ batch, means that each manufactured package is weighed through an approved scale. Resulting in the elimination of all packaged products that are out of tolerance ensures that the entire lot/batch is fully compliant.
- The statistical sampling, which corresponds to the weighing through an approved scale of a sample of packaged items taken from the total lot/batch during its production, in accordance to the methods and

times prescribed by the law.

It is advisable in this case to buy an intelligent scale, able to automatically perform all of the calculations and verifications required by the law and to provide in real time the lot/batch results, by greatly simplifying and speeding up the sampling operations.

In both cases, the producer must retain the data of each lot/batch, in order to certify in case of an inspection or dispute the correct execution of the tests and the compliance of the material sold.





ACCORDING TO
WHAT CRITERIA
 DO YOU CHOOSE
 THE **MOST SUITABLE**
SCALE TO PERFORM
 THE CHECKING?

The current legislation clearly establishes which reading division the scale must have in order to be suitable to carryout the checking, based on the nominal weight to be checked.

NOMINAL QUANTITY TO WEIGH	READING DIVISION "e" OF THE SCALE
ANY WEIGHT	0.1g
from 10g	0.2g
from 50g	0.5g
from 200g	1g
from 2kg	2g
from 5kg	5g
from 10kg	10g
from 20kg	20g
from 50kg	50g

TABLE 1

For example, if you need to check 500g of pasta packaging, the scale will have a reading division "e" equal to 1g.

IN SUMMARY,
WHAT STEPS
 SHOULD THE
 MANUFACTURER
FOLLOW TO
OPERATE IN
COMPLIANCE?



Check if the product concerned is part of the e prepackaged family.



Decide whether to perform an integral or statistical checking.



Buy a weighing scale approved in respect to the features shown in the table 1.

THE SCALES

KDQ - TOUCH SCREEN

Designed for the statistical checking.

The KDQ series scales are the ideal solution for the implementation of full or customised, statistical, legal checking (as provided by the law EEC 76/211).

They are designed specifically in order to offer the customer a quality product with high performance, designed for great durability over time.

The KDQ scales are made with a 3590EGT series touch screen indicator and the "T" series precision platforms.



QUALITY MATERIALS

The weight indicator is made in AISI304 stainless steel and is sealed to meet the requirements of IP68 protection classification against ingress of water and dust (waterproof) with a high quality finish.

The "T" series weighing platform is fitted with a high precision aluminum load cell, a stainless steel plate, adjustable feet and level. It is available also in version entirely made by AISI304 stainless steel for food industry.

ADVANCED TECHNOLOGY

The 6-inch touch screen display can make available on a single screen all of the sampling data.

The integrated three way control light shows in real time if the weight is low, good or high, according to the established criteria.

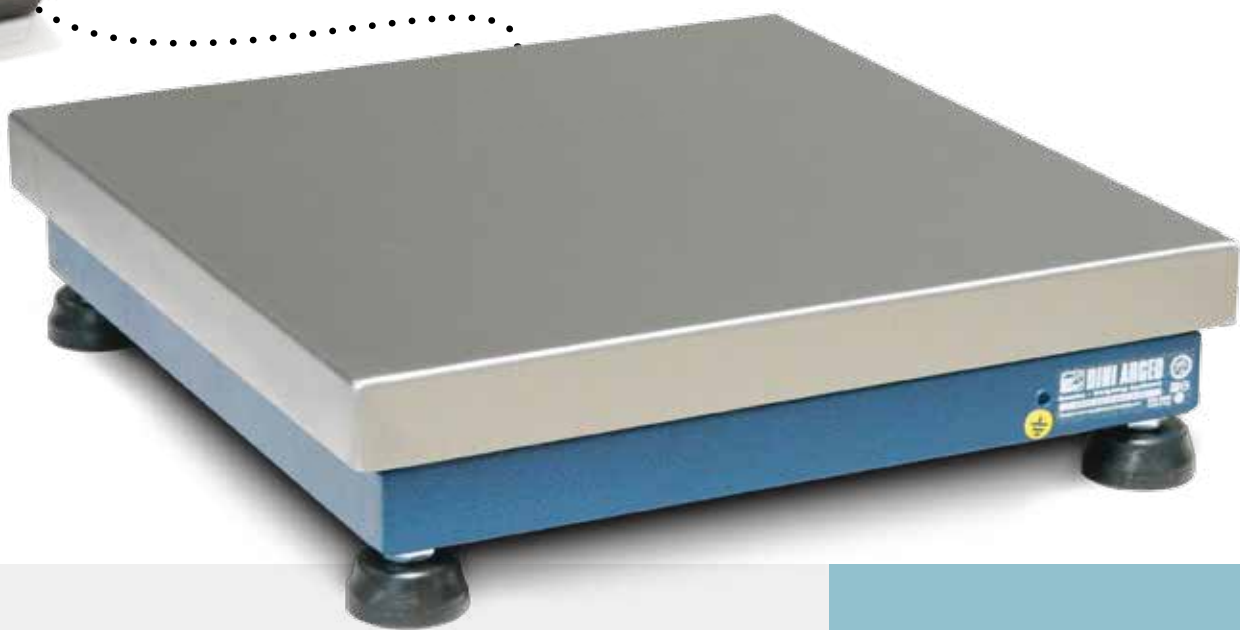
CUSTOM-MADE SOLUTIONS

All products are designed and manufactured in Italy and offer a high degree of configurability and customisation.

In addition, the wide range of available accessories allows to create mobile solutions, able to interact with PC, company network, tablet, smart phone, etc.



KDQ TOUCH



APPROVED
FOR LEGAL FOR TRADE USE



The KDQ scales are approved for legal for trade use and offer very high weighing performance, up to 2 x 6000e multi range.

The advantage this offers to a user is to be able to check prepackaged goods with different weight ranges using the same scale.

2x3000e
6000e
2x6000e


CUSTOM-MADE SOLUTIONS, FOR YOUR EVERY NEED.



Counter
version



Mobile version
on cart

LOADING SURFACE	CAPACITY	APPROVED READING DIVISION "e" for statistical legal/full checking in legal for trade use.	 READING DIVISION "d" FOR INTERNAL FACTORY USE for customized / full checking.
230x330	from 3 to 15kg	from 1 to 5g	from 0.1 to 2g
330x330	from 6 to 30kg	from 1 to 10g	from 0.2 to 5g
400x400	from 15 to 150kg	from 2 to 50g	from 0.5 to 20g
400x500	from 30 to 150kg	from 5 to 50g	from 1 to 20g
500x500	from 30 to 150kg	from 5 to 50g	from 1 to 20g
500x600	from 60 to 300kg	from 10 to 100g	from 2 to 50g
600x600	from 60 to 300kg	from 10 to 100g	from 2 to 50g
700x700	from 150 to 600kg	from 50 to 200g	from 10 to 100g



AND IF YOU NEED GREATER ACCURACY?

No problem, here **THE SOLUTION FOR YOU!**

Connecting via a serial port a high precision scale, it is possible to check prepackaged-goods of just a fewgrams in accordance with the table 1 shown previously.



KDO TOUCH

W1	GROSS	250	1
			12:02 05/08/13
TARE	10	OPERATOR	Marco
LINE - LOT	1234567890	COMMENT	
ARTICLE	Yogurt 250g		
TARGET	250 g	WGH. OVER T1	0
T1	9 g	WGH. OVER T2	0
T2	18 g	WGH. UNDER T1	0
AVERAGE WEIGHT	250.0 g	WGH. UNDER T2	0
WEIGHS	001/030	WGH. OK	1
4 WAITING SAMPLE 002/030			
START	CHECK	CANCEL	>>

TOUCH SCREEN DISPLAY

a valuable help to speed up the checking operations.

Thanks to the 6-inch touch screen display, to check a new sample is very easy:

- 1 The weight is clearly shown in the upper part of the display, along with the tare weight of the prepackaging.
- 2 All data of the current lot are easily accessible at all times.
- 3 The statistical data are available and updated in real time.
- 4 The messages guide the operator through the entire sample.

JOHN SMITH LTD
5TH AVENUE
LONDON
www.johnsmith.ltd.uk



LINE 2
LOT: 35232
SPAGHETTI
PACKAGE 350g
TARGET: 350 g

WGT 1 350 g

MADE 13/10/2012 14:45

Best before 13/10/2012
Keep at 4°C

The printout is completely customizable.

WHITE CLARK LTD
15TH AVENUE
BIRMINGHAM
www.whiteclark.ltd.uk




LINE 0
LOT: AA21456FH12
OPERATOR: ALEX
WORK SHIFT: AFTERNOON
PRODUCT CODE: 124
CHIPS conf. 500 g
TARGET: 500.00 g

BEGIN TIME DATE 05/04/2012 13:10

1	500.00 g
2	500.00 g
3	500.00 g
3	500.00 g

JOHN BROWN LTD
10 MARKET STREET
LIVERPOOL
www.johnbrown.ltd.uk



LINE 5
LOT: 1234567890
ORANGE JUICE
TARGET: 100.00 ml

BEGIN TIME DATE 05/04/2012 13:10

1	90.00 ml
2	100.00 ml
3	100.00 ml
3	100.00 ml

END TIME DATE 05/04/2012 16:25

TARGET	500.00 g
T1	15.00 g
T2	30.00 g
AVERAGE WGT.	0 g
STD. DEV.	500.00 g
WGT > T1	0
WGT > T2	0
WGT > T3	0
WGT < T1	0
WGT < T2	0
WGT < T3	0
WGT OK	30
MAX WGT	500.00 g
MIN WGT	500.00 g

** LOT ACCEPTED **

END TIME DATE 05/04/2012 16:25

TARGET	100.00 ml
T1	4.50 ml
T2	9.00 ml
AVERAGE WGT.	99.67 ml
STD. DEV.	2.50 ml
WGT > T1	0
WGT > T2	0
WGT > T3	0
WGT < T1	0
WGT < T2	1
WGT < T3	0
WGT OK	29
VOL. MAX	100.00 ml
VOL. MIN	90.67 ml

** LOT REFUSED **

USB KEY

FOR RECORDING THE WEIGHS.
100% QUALITY, SAFETY, PROFESSIONALITY.



Thanks to the built-in USB key into the weight indicator, each lot/batch, with its weights and statistical report, is automatically and in real time recorded and is available in Excel format for further processing.

The memory key has a storage capacity of 5,000,000 of weighs, so it can record months of continuous work without ever being downloaded to a PC.

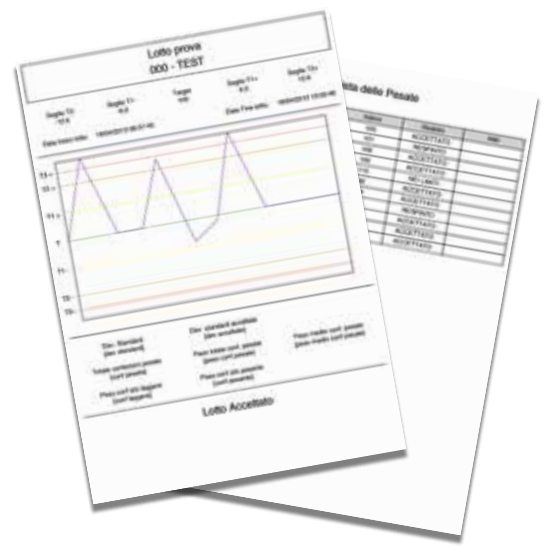
The recorded data on the key can be customized and differentiated from the printing on paper: both devices work independently.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Begin Date	Begin Time	Product	Nom. Quantity (g)	Operator	Lot	Tare (g)	T1 (g)	T2 (g)	Max WGT (g)	Min WGT (g)	Std. Dev.	n° refuse	n° comply	conformity
2	23/10/12	15:05	Yogurt - conf. 150g	150	4	2012-547	25	6	12	150	150	0	0	30	Accepted
3	24/10/12	09:00	Yogurt - conf. 500g	500	3	2012-548	30	9	18	500	500	0	0	30	Accepted
4	25/10/12	10:45	Yogurt - conf. 250g	250	5	2012-549	28	9	18	250	250	0	0	30	Accepted
5	26/10/12	13:50	Yogurt - conf. 150g	150	2	2012-550	25	6	12	150	150	0	0	30	Accepted
6	27/10/12	08:24	Yogurt - conf. 500g	500	4	2012-551	30	9	18	500	500	0	0	30	Accepted
7	28/10/12	11:40	Yogurt - conf. 150g	150	1	2012-552	25	6	12	150	150	0	0	30	Accepted
8	29/10/12	12:00	Yogurt - conf. 500g	500	3	2012-553	30	9	18	500	500	0	0	30	Accepted
9	30/10/12	16:50	Yogurt - conf. 500g	500	2	2012-554	30	9	18	500	500	0	0	30	Accepted
10	31/10/12	08:00	Yogurt - conf. 500g	500	4	2012-555	30	9	18	500	500	0	0	30	Accepted
11	01/11/12	09:00	Yogurt - conf. 150g	150	1	2012-556	25	6	12	150	150	0	0	30	Accepted
12	02/11/12	12:26	Yogurt - conf. 250g	250	2	2012-557	28	9	18	250	250	0	0	30	Accepted
13	03/11/12	13:10	Yogurt - conf. 150g	150	4	2012-558	25	6	12	150	150	0	0	30	Accepted
14	04/11/12	10:20	Yogurt - conf. 250g	250	3	2012-559	28	9	18	250	250	0	0	30	Accepted
15	05/11/12	13:27	Yogurt - conf. 150g	150	2	2012-560	25	6	12	150	150	0	0	30	Accepted
16	06/11/12	14:32	Yogurt - conf. 150g	150	4	2012-547	25	6	12	150	150	0	0	30	Accepted
17	07/11/12	15:54	Yogurt - conf. 250g	250	3	2012-548	28	9	18	250	250	0	0	30	Accepted
18	08/11/12	16:25	Yogurt - conf. 500g	500	5	2012-549	30	9	18	500	500	0	0	30	Accepted
19	09/11/12	12:05	Yogurt - conf. 150g	150	2	2012-550	25	6	12	150	150	0	0	30	Accepted
20	10/11/12	08:00	Yogurt - conf. 500g	500	4	2012-551	30	9	18	500	500	0	0	30	Accepted
21	11/11/12	15:00	Yogurt - conf. 150g	150	1	2012-552	25	6	12	150	150	0	0	30	Accepted
22	12/11/12	09:38	Yogurt - conf. 500g	500	3	2012-553	30	9	18	500	500	0	0	30	Accepted
23	13/11/12	09:49	Yogurt - conf. 500g	500	2	2012-554	30	9	18	500	500	0	0	30	Accepted
24	14/11/12	11:57	Yogurt - conf. 500g	500	4	2012-555	30	9	18	500	500	0	0	30	Accepted
25	15/11/12	10:00	Yogurt - conf. 150g	150	1	2012-556	25	6	12	150	150	0	0	30	Accepted
26	16/11/12	14:24	Yogurt - conf. 500g	500	2	2012-557	30	9	18	500	500	0	0	30	Accepted
27	17/11/12	15:13	Yogurt - conf. 150g	150	4	2012-558	25	6	12	150	150	0	0	30	Accepted
28	18/11/12	16:07	Yogurt - conf. 250g	250	3	2012-559	28	9	18	250	250	0	0	30	Accepted
29	19/11/12	11:02	Yogurt - conf. 150g	150	2	2012-560	25	6	12	150	150	0	0	30	Accepted
30															
31															
32															



WEICHECK

THE PC PROGRAM
FOR THE SUPERVISION OF THE CHECKING
OF YOUR PRODUCTION LINES.



- **Databases of products**, containers, production, statistics, operators, tolerance systems, additional tares, sampling plans (associable to each article) and quality levels.
- **Designed for statistical analysis** based on the tables of the law 690/78 and from those in the UNI ISO 2859 norms or based on the tables directly configured by the user.
- **Management of a number of production lines** (independent weighing stations), allowing to maintain an updated database containing all the articles data, the productions, the accepted or refused lots/batch, the operators and the statistical data of each sample.
- **Management of the fiscal memory** on the weight indicator that guarantees the approval of the system.
- **Reporting of end of lot/batch and processing / printing** of the overall “**Judgment**” with details on “Acceptance” or “Rejection” of the lot/batch according to the assigned sampling plan, the tolerance system, and the quality level to be achieved; recording of a historical weighs database for further processing.
- **Checking of production progress in real time** with the help of the distributiongraph of the samples within the range and the detection synoptic.
- **Export / import** into the program of the customer **data** or **databases** based on the provided specifications.





“YOUR WORLDWIDE PARTNER FOR WEIGHING”

DINI ARGEO
FRANCE sarl
Nogent-sur-Marne - France
info.fr@diniargeo.com

DINI ARGEO
GMBH
Sinsheim - Germany
info.de@diniargeo.com

DINI ARGEO
UK Ltd
Taunton - United Kingdom
info.uk@diniargeo.com

DINI ARGEO WEIGHING
INSTRUMENTS Ltd
Shanghai - China
info.cn@diniargeo.com

DINI ARGEO
WEIGHBRIDGES
Calto (RO) – Italy
info@diniargeo.com



HEAD OFFICE

Via Della Fisica, 20
41042 Spezzano di Fiorano Modena - Italy
Tel. +39.0536 843418 Fax. +39.0536 843521
info@diniargeo.com

SERVICE ASSISTANCE

Via Dell'Elettronica, 15
41042 Spezzano di Fiorano Modena - Italy
Tel. +39.0536 921784 Fax. +39.0536 926654
service@diniargeo.com

