# Guardian®

### Batch Blender





Guardian<sup>®</sup> Model WXA050 for up to 4 Components.

The Guardian® gravimetric Batch Blender was developed for processors who want the simplicity of operation and low cost of gravimetric batch blending, as well as superior blend homogeneity. For these customers, PROCESS CONTROL offers the Guardian® blender, backed by PROCESS CONTROL's more than 30 years of experience and design expertise.

The simple user interface works by asking the operator to enter the required information. For example, when the RECIPE key is pressed, the blender asks for the weight percentage of each ingredient. The operator then presses RUN and the blender does the rest. The operator station can store at least 100 recipes for easy recall. Detailed information and management

reports are also available quickly and easily.

The Guardian® blender has segmented material hopper that holds from two to four ingredients. Each ingredient is mounted above a fast acting V-gate valve. Materials are dispensed sequentially into a common weighing hopper in the desired proportions, blended in a separate homogenizing mixer, and then passed on to the processing machine.

PROCESS CONTROL's engineers have produced a metering and weighing system that controls every ingredient, in every batch, to + / - 0,02 % of batch size. This is a more precise measure than reporting accuracy by averaging over several batches as in common in the industry. Typical single-screw extruders cannot provide enough mixing to compensate for blend variations between batches.

In addition to precise batch-tobatch metering, the performance of the mixer is critical to your end product. The mixer design determines how homogeneous, or uniform, the blend is. Since typical extruders mix over no more than 10-20 screw flights. the blender must provide thorough mixing before the extruder. Mixers that do little more than slowly stir the material and those that have significant "death zones" that never get agitated should be avoided. Inadequate mixing can lead to inconsistent product

characteristics such as color streaks. PROCESS CONTROL's Guardian® blender has a carefully engineered mixer that thoroughly homogenizes the material for the most consistent finished product.

The Guardian® blender is the perfect combination of precise metering and thorough blend homogenisation in an economical, easy-to-operate package.

#### Standard features:

➤ integral loading platform for mounting platform for mounting

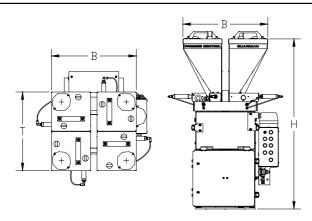
vacuum receivers

- easy material clean-out with access doors and drain
- support for a wide variety of communications protocols
- ➤ attached air hose & nozzle for cleaning

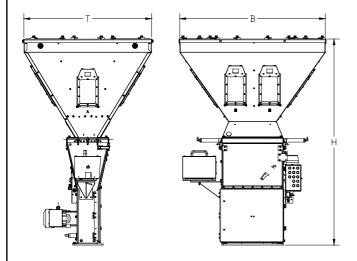


Guardian<sup>®</sup> Model WXA012 for up to 4 Components.

## Guardian® Batch Blender



WXA013 (1,25 kg/batch) and WXA025 (2,5 kg/batch)



WXA050 (5 kg/batch) and WXA120 (12 kg/batch)

Model WXA	Number Comp.	H (mm)	B (mm)	T (mm)	Weigh* (kg)
013	4	901	449	449	80
025	4	1.206	526	526	160
050	4	1.673	1.075	734	250
050	6	1.746	1.166	1.024	270
120	4	2.039	1.090	825	295
120	6	2.089	1.167	1.024	320
120	8	2.018	1.339	1.136	340
120	12	2.018	2.039	1.146	350

<sup>\*:</sup> Weigh without material conveying system and material.

#### **SPECIFICATION**

Accuracy: better than 0,02% per Component

and batch.

Throughput: (Please ask PROCESS CONTROL)

Air consumption: less than 150 dm<sup>3</sup>/h (6 mm water

gauge).

Power supply: 230V/1Ph/50Hz (WXA013, 025, 050)

400V/3Ph/50Hz (WXA120)

(60Hz available)

#### **OPTIONS**

- Gravimetric Extrusion Control Gravitrol®
- Material Hopper
- Stand with Blow Through
- Stand for Container



## PROCESS CONTROL Corporation Headquarters

6875 Mimms Drive, Atlanta, GA 30340 USA Tel: (+1) 770 449-8810 Fax: (+1) 770 449-5445 Plant for Europe

#### PROCESS CONTROL GmbH

Industriestr. 15, 63633 Birstein, Germany
Tel: +49 (0) 60 54 – 91 29 0 Fax: +49 (0) 60 54 – 91 29 99
E-Mail: info@ProcessControl-GmbH.de
Internet: www.ProcessControl-GmbH.de