Publisher: René Gerber AG, Werkstrasse 35, 3250 Lyss, Switzerland

Sorting of smallest parts

The name René Gerber AG stands not only for the world's best brushing, polishing- and honing machines, but also for the phenomenal thickness grading apparatuses. These machines have been developed to simplify work processes in an amazingly simple way. The user has four types of apparatuses at his disposal for sorting a wide variety of small parts according the diameter on the thickness of the parts made of various materials: the DS 120, DS 200, DS 300 and DS 450.

Main areas

Thickness grading apparatuses are used wherever small parts can be measured or sorted by means of two parallel surfaces.

In particular, they can:
- sort into different thickness categories
- sort out good parts and rejects
- sort out bent parts
- sort out parts with bones or similar defects

What can be sorted

Small parts such as row plant (ébauches) and décolletage parts, clock and industrial stones, cylindrical pins, balls, toothed wheels (pignons).

The advantages of these clever devices

- Sorting accuracy 0.005 ... 0.010 mm
- Simple operation
- Low-noise running
- longevity

How does the thickness grading apparatus work?

As with many other inventions that make work easier, the principle of the thickness grading apparatus is amazingly simple. Sorting is based on the smallest dimension of a part, which can be limited by two parallel surfaces. In the thickness grading apparatus, these parallel surfaces are formed by the annular "measuring edges" of two slowly rotating bells. The width of the measuring gap can be precisely adjusted, parts below the set mass pass through the gap. By gradually enlarging the measuring gap it is possible to sort into the category "too small - good - too large" and within the category "good" into different tolerance groups.

The phenomenal Gerber thickness grading apparatuses DS 120, 200, 300 und 450

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Application example: sorting of watch strap pins

The aim is to sort out all band pins in the following tolerance field:
Minimum tolerance: Ø 1.240
Maximum tolerance: Ø 1.250

In the first step, the sorting thickness is set to the tolerance Ø 1,240. All pins that do not correspond to the tolerance will fall out as "too small". The sorting thickness is then set to tolerance Ø 1,240. All parts that fall out now are within the target tolerance and are therefore "good".

In the following the technical data of the four different types:

Technical data DS 120

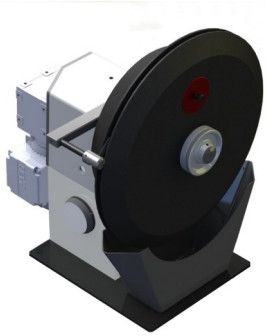
Sorting accuracy	0.005 mm
Filling weight	200 g
Filling opening diameter	14 mm
Bell diameter	120 mm
Width of measuring edge, optional	1 or 3 mm
Weight of the apparatus	24 kg
Voltage	220V/50Hz

Technical data DS 200

Sorting accuracy	0.01 mm
Filling weight	250-400 g
Filling opening diameter	25 mm
Bell diameter	200 mm
Width of measuring edge, optional	5 or 10 mm
Weight of the apparatus	26 kg
Voltage	220V/50Hz

Technical data DS 300

Sorting accuracy	0.01 mm
Filling weight	3.5 kg
Filling opening diameter	38 mm
Bell diameter	300 mm
Width of measuring edge, optional	8 or 15 mm
Weight of the apparatus	42.8 kg
Voltage	220V/50Hz
Running time, adjustable until	30 min



Technical data DS 450

Sorting accuracy	0.01 mm
Filling weight	5.5 kg
Filling opening diameter	60 mm
Bell diameter	450 mm
Width of measuring edge, optional	13 mm
Weight of the apparatus	86 kg
Voltage	3x400V/50Hz
Running time, adjustable until	30 min

Please contact us. We will be happy to advise you.

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