7. EQUIPMENT SETS

Each auger filler screw correspond to one tube, one retainer and one stop-shoot. The correct equipment set depend on the dosing volume.

How to determine a equipment set

It is important to know the dosing volume of the product.

Example:
Product **weight** = 12g
Product **density** = 0.4 g/cc

$$\text{Volume} = \frac{\text{Weight}}{\text{Density}} = \frac{12\ g}{0.4\ g/cc} = 30\ cc$$

This way we know how much volume correspond to 12 g of this product. Now we have to choose the adequate equipment set.

To obtain the best efficiency it is necessary that the number of turns are between two and four. Considering this, calculate which auger filler is more appropriate.

$$X = \frac{\text{Product Volume}}{\text{Auger filler turn volume}} = \frac{30\ cc}{8.25\ cc/turn} = 3.6\ turns$$

The correct equipment is the number 8 because it doses the desired product in 3.6 turns (this is between 2 and four). In the table the next page there are the equipments numbers, its retainer, auger filler screw and stop-shoot. You can also see the maximum diameter of the screw and the volume per turn for each one.

Equipments sets table

Auger filler screw

Tube

Stop-chute
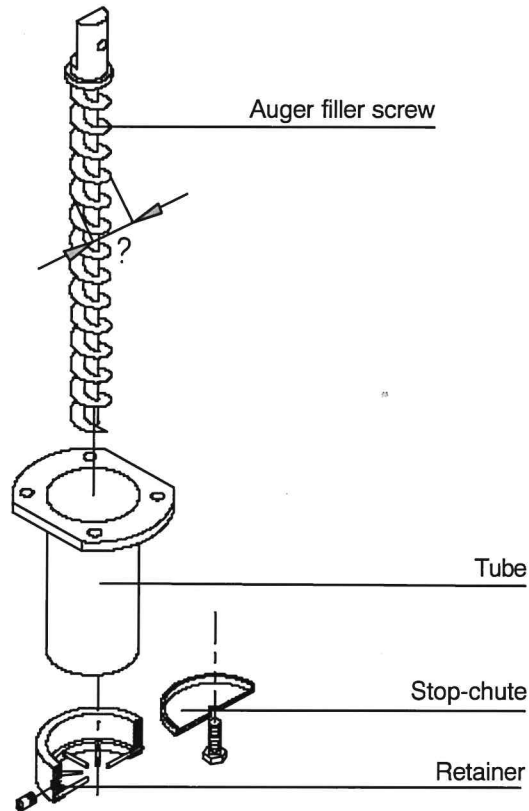
Retainer

FORMAT NUMBER	TUBE	RETAINER	AUGER FILLER SCREW	STOP CHUTE	VOLUME c.c./PER TURN	Ø
1	1.31.060.001.004	1.35.060.041.004	1.35.060.001.004	1.35.060.052.004	0.1	8
2	1.31.060.002.004	1.35.060.041.004	1.35.060.002.004	1.35.060.052.004	0.2	8
3	1.31.060.003.004	1.35.060.042.004	1.35.060.003.004	1.35.060.053.004	0.27	11
4	1.31.060.004.004	1.35.060.043.004	1.35.060.004.004	1.35.060.054.004	0.63	14
5	1.31.060.005.004	1.35.060.044.004	1.35.060.005.004	1.35.060.055.004	1.30	16.7
6	1.31.060.006.004	1.35.060.045.004	1.35.060.006.004	1.35.060.056.004	2.35	19.4
7	1.31.060.007.004	1.35.060.046.004	1.35.060.007.004	1.35.060.057.004	4.62	24.5
8	1.31.060.008.004	1.35.060.047.004	1.35.060.008.004	1.35.060.058.004	8.25	29.3
9	1.31.060.009.004	1.35.060.048.004	1.35.060.009.004	1.35.060.059.004	17.2	35.4