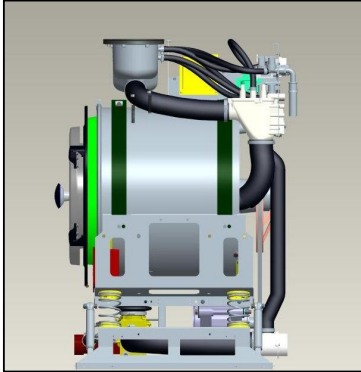
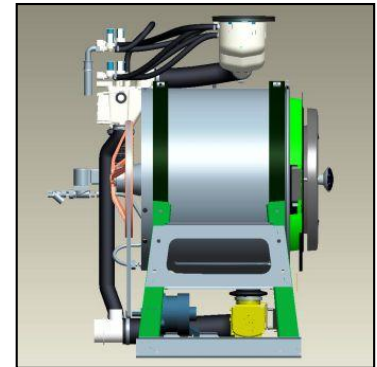


400G VS 100 G WASHERS



400 G



100 G

Considering the cost variance between 400 G and 100 G washers, we are often required to quantify the advantage of 400 G machines versus investment cost, so the below summary deals with these variances and advantages.

Why do 400 G washers cost more?

400 G means the machine is extracting water at 400 times the acceleration of gravity, so this results in shorter turnaround times, longer linen/terry life and 25% less energy usage in drying requirements. To accommodate this higher extraction the machine requires a larger bearing housing and shaft, this costs more to manufacture.

400 G washers also have a suspension system, so this is totally freestanding and thus simple to install, more expensive to manufacture. The 100 G washers don't have a suspension system, thus requires a 300 mm reinforced concrete plinth and chemical bolt down, which is costly and time consuming to install, concrete also requires a 21 day curing time. Images above detail the 400 G washer with suspension and 100 G without.

Will a 400 G washer last as long as a 100 G washer or cost more to maintain?

400 G washers will in most cases last longer and cost less to maintain, this is due to 4 factors:

- 1) The suspension system absorbs vibration and places less stress on the machine
- 2) The out of balance situations are handled by software monitoring the motor and the out of balance hardware installed below the suspension, which sends a signal to the machine's control in the case of excessive vibration and the machine reduces extract rpm to prevent damage
- 3) The 10/18/24 kg 400 G washers have feet, which lift the base of the machine off the floor, this means the machines base is not in contact with water or detergents which often spill in a laundry and thus lowering rust potential.
- 4) Larger bearing housing and shaft, built stronger to last longer

If I purchase a 24 kg combo, won't production be the same from a 400 G and 100 G washer?

In most cases no, dryers paired with a 100 G washers often battle to keep up with this washer's output and this is as a result of slower drying times. We estimate this slow down in drying time will mean 2 less loads per shift, i.e. a 400 G washer is capable of 10 cycles in 8 hours, where a 100 G washer 8 cycles per 8 hours, purely due to drying times. For certain customers washing delicate items, which don't retain much moisture, dryers may keep up with 100 G washers, however we are applying the norm in our calculations.

What will the long term cost be to run 400 G versus 100 G washers?

Combo 1 - 10 kg washer & matching dryer

100 G - Cost per kg output over 5 year period = R0,77

400 G - Cost per kg output over 5 year period = R 0,58

Combo 2 - 18 kg washer & matching dryer

100 G - Cost per kg output over 5 year period = R0,52

400 G - Cost per kg output over 5 year period = R 0,42

Combo 3 - 24 kg washer & matching dryer

100 G - Cost per kg output over 5 year period = R0,47

400 G - Cost per kg output over 5 year period = R 0,42

Combo 2 - 35 kg / 40 kg washer & matching dryer

100 G - Cost per kg output over 5 year period = R0,90

400 G - Cost per kg output over 5 year period = R 0,50

* Detailed analysis and calculation detailed later in this document

Detailed Cost Explanation

PAIRING 1 & 2

MFR25 - Maytag Industrial Washer, 10 kg, 100 G - R 50'500
MDE35 - Maytag Industrial Dryer, 16 kg, ECO (11 kW) - R 42'000

Total cost - R 92'500 (excl. vat and installation)
Max output per 8 hour shift = 80 kg
Max output per above over 365 day year = 29'200 kg
Cost per kg capacity - R 9'250
Cost per kg output per year = R3,18
Cost per kg output over 5 year period = R 0,62
Increase in drying cost vs 400 G pairing = R 0,15 per kg (estimated @ 15 mins)
Net cost per kg output over 5 year period = **R0,77**

MXS25 - Maytag Industrial Washer, 10 kg, 400 G - R 63'500
MDE35 - Maytag Industrial Dryer, 16 kg, ECO (11 kW) - R 42'000

Total cost - R 105'500 (excl. vat and installation)
Max output per 8 hour shift = 100 kg
Max output per above over 365 day year = 36500 kg
Cost per kg capacity - R 10'550
Cost per kg output per year = R2,89
Cost per kg output over 5 year period = **R 0,58**

PAIRING 2 & 3

MXR40 - Maytag Industrial Washer, 18 kg, 100 G - R 70'500
MDE78 - Maytag Industrial Dryer, 34 kg, ECO (18 kW) - R 58'000

Total cost - R 128'500 (excl. vat and installation)
Max output per 8 hour shift = 144 kg
Max output per above over 365 day year = 52'560 kg
Cost per kg capacity - R 7'139
Cost per kg output per year = R2,44
Cost per kg output per 5 year period = R 0,42
Increase in drying cost vs 400 G pairing = R 0,10 per kg (estimated @ 15 mins)
Net cost per kg output = **R0,52**

MXS40 - Maytag Industrial Washer, 18 kg, 400 G - R 90'000
MDE52 - Maytag Industrial Dryer, 23 kg, ECO (18 kW) - R 50'000

Total cost - R 140'000 (excl. vat and installation)
Max output per 8 hour shift = 180 kg
Max output per above over 365 day year = 65'700 kg
Cost per kg capacity - R 7'780
Cost per kg output per year = R2,13
Net cost per kg output per 5 year period = **R 0,42**

PAIRING 4 & 5

MXR55 - Maytag Industrial Washer, 24 kg, 100 G - R 75'000
MDE78 - Maytag Industrial Dryer, 34 kg, ECO (18 kW) - R 58'000

Total cost - R 133'000 (excl. vat and installation)
Max output per 8 hour shift = 192 kg
Max output per above over 365 day year = 70'080 kg
Cost per kg capacity - R 5'542
Cost per kg output per year = R1,89
Cost per kg output per 5 year period = R 0,37
Increase in drying cost vs 400 G pairing = R 0,10 per kg (estimated @ 15 mins)
Net cost per kg output = **R0,47**

MXS55 - Maytag Industrial Washer, 24 kg, 400 G - R 124'000
MDE78 - Maytag Industrial Dryer, 34 kg, ECO (18 kW) - R 58'000

Total cost - R 182'000 (excl. vat and installation)
Max output per 8 hour shift = 240 kg
Max output per above over 365 day year = 87'600 kg
Cost per kg capacity - R 7'583
Cost per kg output per year = R2,08
Net cost per kg output per 5 year period = **R 0,42**

PAIRING 5 & 6

MFR80 - Maytag Industrial Washer, 35 kg, 133 G - R 142'000
MDE120 - Maytag Industrial Dryer, 55 kg (72 kW) - R 128'000

Total cost - R 270'000 (excl. vat and installation)
Max output per 8 hour shift = 280 kg
Max output per above over 365 day year = 102'200 kg
Cost per kg capacity - R7'714
Cost per kg output per year = R 2,64
Cost per kg output per 5 year period = R 0,52
Increase in drying cost vs 400 G pairing = R 0,38 per kg (estimated @ 15 mins) *
Net cost per kg output = **R0,90**

MFS100 - Maytag Industrial Washer, 40 kg, 350 G - R 240'000
MDE120 - Maytag Industrial Dryer, 55 kg (72 kW) - R 128'000

Total cost - R 368'000 (excl. vat and installation)
Max output per 8 hour shift = 400 kg
Max output per above over 365 day year = 146'000 kg
Cost per kg capacity - R 9'200
Cost per kg output per year = R2,52
Net cost per kg output per 5 year period = **R 0,50**

* MFS100 and MFR80 may be paired with 2 x MDE78 and loads shared between the dryers, R 0,20 increase in drying cost as a result, the only problem with this is possible overloading of dryers

* Costing calculated on 19/09/2014, machine pricing may vary