

Review of Standard Programs
22 August 2018



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Program Summary

Product Name	Quality Records		Approval Records	Off-Specifications
	Planned	Value		
Medium Soil	Water Usage / L per Kg XOrb Retention / % Cycle Time / m Temperature / °C TP1 Rating Chemical Cost / p per Kg pH Measurement	5.4 < 0.1 50 40 Good - Excellent 4 7.9	✓	
Medium Soil (Whites Only)	Water Usage / L per Kg XOrb Retention / % Cycle Time / m Temperature / °C TP1 Rating Chemical Cost / p per Kg pH Measurement	5.4 < 0.1 50 40 Average - Excellent 5 7.8	X	Veg Dye < 1Y from Excellent
Heavy Soil	Water Usage / L per Kg XOrb Retention / % Cycle Time / m Temperature / °C TP1 Rating Chemical Cost / p per Kg pH Measurement	7.2 < 0.1 58 60 Good - Excellent 4 7.9	✓	
Heavy Soil (Whites Only)	Water Usage / L per Kg XOrb Retention / % Cycle Time / m Temperature / °C TP1 Rating Chemical Cost / p per Kg pH Measurement	6.6 < 0.1 54 60 Good - Excellent 5 7.6	✓	
Heavy Soil+ (Whites Only)	Water Usage / L per Kg XOrb Retention / % Cycle Time / m Temperature / °C TP1 Rating Chemical Cost / p per Kg pH Measurement	7.2 < 0.1 58 60 Good - Excellent 5 7.5	✓	

Table 1.1 Review of 25kg Wash Programs

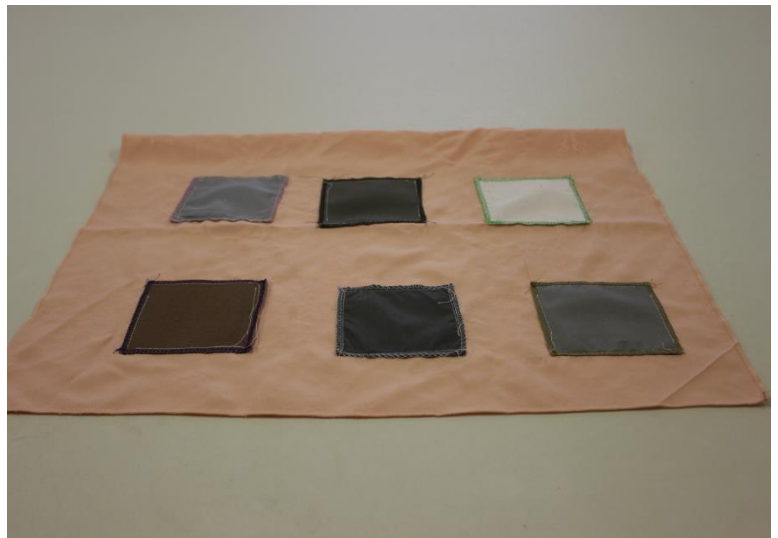
The wash programs conform to our acceptance criteria:

- The average water consumption is significantly lower than 9 litres per kilogram.
- XOrb retention is negligible for standard ballast (less than 10).
- Cycle time is less than one hour.
- Highest wash temperature is 60°C.
- The TP1 rating is good or excellent for each stain type (see TP1 analysis for further detail).
- Chemical cost is between 4 and 5 pence per kilogram.
- The programs are readily transferable to third party chemical suppliers.

TPI Analysis

We used an FCRA industry standard for evaluation of wash efficacy. The TPI test piece consists of stain types that are synonymous with commercial-sized washing machines. We have previously compared wash quality analysis with competitor machines / chemical suppliers. This provides us with irrefutable evidence that the Xeros machine performs to a high standard.

RATING KEY	
EXCELLENT	
GOOD	
AVERAGE	
FAIR	
POOR	
BAD	



Wash Program	Cotton	Veg Dye	Min Oil	Veg Oil	Blood	Protein
Medium Soil	90	35	53	50	86	58
Medium Soil (Whites Only)	89	47	50	52	85	48
Heavy Soil	89	36	57	52	88	66
Heavy Soil (Whites Only)	90	48	53	52	85	53
Heavy Soil+ (Whites Only)	88	48	54	50	85	57

Table 1.2 TPI Reflectance Results and Associated Ratings

Summary

The TPI results are very encouraging. We can exclude the Vegetable Dye result for Medium and Heavy Soil because it only responds to chlorinated bleach which is dosed for the Whites Only programs. We have made a slight concession for the Medium Soil (Whites Only) program. The reflectance value for Vegetable Dye is 1Y lower than an excellent rating which is barely perceptible to the eye. Project Assurance granted the concession as this result could be construed as good.

Conclusion

The standard programs form a sustainable package that offers reduced water consumption, competitive chemical cost and improved productivity without detriment to wash efficacy.

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