

Dyeing Technology Developments

	Thies GmbH		Fong's Europe GmbH	
	2011 iMaster H ₂ O	2000 (or similar) eco-soft plus	2011 Then-Airflow® SYN 600 G2	2000 (or similar) Then-Airflow® AFE 450
Applications	bleaching, dyeing	bleaching, dyeing	bleaching, dyeing, softening	bleaching, dyeing, softening
Dye method	discontinuous	discontinuous	discontinuous	discontinuous
Technology	jet	jet	aerodynamic	aerodynamic
Fibers	cotton, viscose, polyester, blends	cotton, viscose, polyester, blends	cotton, viscose, polyester, polyamide, blends	cotton, viscose, polyester, polyamide, blends
Fabric construction	woven, knitted	woven, knitted	woven, knitted	woven, knitted
Dyeing temperature (°C)	140	140	135	135
Maximum capacity per fabric store (kg)	250 knitwear	250 knitwear	300 woven or knitwear	225 woven or knitwear
Maximum number of fabric stores	8	8	6	6
Liquor ratio: natural fibers	1:3.7	1:6	1:3.5	1:4
Liquor ratio: man-made fibers	1:3	1:5	1:2.2	1:2.5
Rinsing time (minutes) depending on shade	60-180	120-300	cellulosics: 60-90 man-made: 12-20	cellulosics: 60-90 man-made: 12-20
Total energy consumption	0.03-0.28 (kw/kg of fabric)	N/A	18-22 (kw/hour)	18-22
Self-cleaning filter system	Yes	No	Yes	No
Total water consumption (l/kg)	17-50	40-100	cotton: 38-45 man-made: 18-22	cotton: 45-54 man-made: 24-28
Total production time (minutes) depending on substrate, shade depth	120-480	180-600	cotton: 280-360 man-made: 210-260	cotton: 280-360 man-made: 210-260