Synavax™ sustainability accelerated

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Very Simple.

CASE STUDY
P. 1 of 2
Nerteks Ltd. Sti
Textile Manufacturer

Award Winning Energy Saving and Asset Protection Coatings

GEOGRAPHICAL AREA:
Turkey
Distributor: Kolorgen Ltd.

ISSUE:

Reduce energy consumption for polyester yarn dyeing process.

SOLUTION:

Syanvax™ Heat Shield™ High Heat Insulation coating applied to the exterior of the dyeing machine.

Coverage: 10-coats

RESULTS:

- ✓ Reduced energy consumption by 47.5% in total for the 185 minute process
- ✓ Lowered the condensed water (used steam) over the process from 4890 kg to 2569 kg - A savings of 2321 kg steam use.
- ✓ Measurements were collected over 3-months worth of process cycles and averaged for the savings result
- ✓ Insulation coating stood up to the humid dyehouse environment without degrading or losing performance

Textile manufacturer Nerteks reduced their energy consumption for yarn dyeing by 47.5% by Insulating their machines with Heat Shield™ High Heat coating.

Energy consumption is measured by measuring condensed water (used steam) through hot water meters.

Side by side measurements were made on both un-insulated and machines coated with Heat Shield™ High Heat thermal insulation coating.

To compensate for hot water meter differences, the meters were taken off one machine and installed onto the other and vice versa.

The measurements were collected over 3 months, and averaged.

Results:

Steam use uncoated: 4890kg
Steam use insulated: 2569kg

SAVINGS OF: 2321kg steam per process cycle

ENERGY SAVINGS: 47.5%

Energy Consumption Data for a Polyester Yarn Dyeing Process Cycle of 185 minutes

	Un-insulated Machine condensed water / kg	Heat Shield™ High Heat Coated Machine condensed water / kg
Heat water from 40°C to 135°C (65 minutes)	1976	1765 | 10.7 % less
Process at 135°C (40 minutes)	970	345 | 64.4% less
Cool and Drain (25 minutes)		
Heat water from 40°C to 80°C (20 minutes)	565	100 | 82.3% less
Process at 80°C (20 minutes)	1379	359 | 74.0% less
Cool and Drain (15 minutes)		
Total	**4890**	**2569 |47.5% less**