

## Why use a Spectrophotometer?

- **Spectrophotometers give precise objective data**

Visual assessment with the eye is unreliable. Within any given environment, different lighting will affect how a colour is assessed (think of the extreme example of sodium street lighting.)

Humans suffer from retinal fatigue, very poor colour memory, colour blindness (1/12 men, 1/200 women), background effects (colour viewed over-black looks different to over-white) and colours viewed cannot be recorded for future reference.

With 'human' measurement, colour communication is reliant on non-exact verbal descriptions, unclear tolerances and subject to variable human opinions.

- **Agreed tolerances make pass/fail decisions easy**

Precise standards and acceptable variations can be agreed internally, with suppliers and customers.

Standards can be accepted that ensure costly rejects are minimized and customers stick to the agreed standard/tolerance. Numbers not opinions count.

- **Using spectrophotometers, color communication is accurate and reliable**

Colour co-ordinates and spectral data allow exact standards to be communicated to all. There is no longer a need to be reliant on old and faded Pantone books, physical samples and rough estimates that result in painful miscommunications.

- **Using spectrophotometers, standards and samples can be stored**

Complete records can be kept and data reviewed, hence costly and wasteful mistakes will not be repeated and integrity of production can be insured.

## Common Uses of Spectrophotometers

- **Quality Assurance**

Quality of incoming and outgoing raw materials and products can be monitored as well as Quality Assurance on the production line, ensuring products are made to specification, minimising costly material and time wastage.

- **Colour Matching**

Faster matching of customers colours. No more time consuming guesses and estimates.

- **Customer Standards**

Exact definition of customer standards can be made and agreed upon. Ensuring no miscommunication and unfortunate "negotiations" over poor colour compliance.

- **Time + Wasted Materials = £'s.** How much are you really wasting?