



**NANYA PLASTICS CORP.**

**SUSTAINABILITY**

**DOPE DYEING NEW TECHNOLOGY**

# Innovational Dope Dyeing

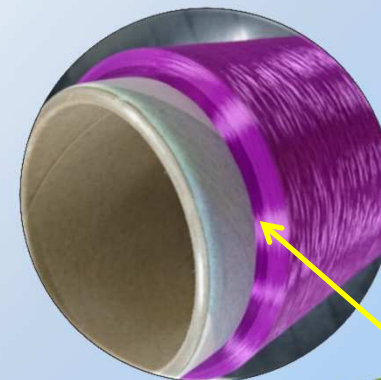


- **Dope dyeing system**

System	Pros	Cons
Pigment	good color fastness	dull color, limited series of color
Solvent	better color development, more brilliant	migration problem
Carbon	good color fastness, low-cost	hard to achieve proper color shade

- **Revolutionary dope dyeing spinning system**

- Combines advantages of pigment and solvent system
  - Good color fastness
  - Color more brilliant
  - More colors available
- Flexible production
  - Chang color in a short time
- Specification: 75/72, 150/48 DTY



# Innovational Dope Dyeing



## Plans of development

- **First phase**
  - Development of black color with bluish shade
  - Possibility of matching other brand's black (such as Nike, adidas black....)
  - Excellent color fastness





# Innovational Dope Dyeing



- **Second phase**
  - Development of color bank containing about 1,000 colors
  - Develop Fluorescent Color With Good Light-fastness  
Could Be Match EN 471 Standard

Chromuch	Chromuch	Chromuch	Chromuch	Chromuch	Chromuch	Chromuch	Chromuch	Chromuch	Chromuch	Chromuch	Chromuch
1GA11	1HA12	2HA17	2FB11	3HA17	3MA12	4PA11	5MA19	5TA11	6TA17	6AA12	1AA17
1GA12	1HA13	2HA16	2FB12	3HA16	3MA13	4PA12	5MA18	5TA12	6TA16	6AA13	1AA16
1GA13	1HA14	2HA15	2FB13	3HA15	3MA14	4PA13	5MA17	5TA13	6TA15	6AA14	1AA15
1GA14	1HA15	2HA14	2FB14	3HA14	3MA15	4PA14	5MA16	5TA14	6TA14	6AA15	1AA14
1GA15	1HA16	2HA13	2FB15	3HA13	3MA16	4PA15	5MA15	5TA15	6TA13	6AA16	1AA13
1GA16	1HA17	2HA12	2FB16	3HA12	3MA17	4PA16	5MA14	5TA16	6TA12	6AA17	1AA12
1GA17	1HA18	2HA11	2FB17	3HA11	3MA18	4PA17	5MA13	5TA17	6TA11	6AA18	1AA11
	1HA19				3MA19		5MA12			6AA19	
1HA11	1HA10			3MA11	3MA10	5MA10	5MA11		6AA11	6AA10	

Chromuch	Chromuch	Chromuch	Chromuch	Chromuch	Chromuch	Chromuch	Chromuch	Chromuch	Chromuch
5MA50	5MA59	5MA58	5MA57	5MA56	5MA55	5MA54	5MA53	5MA52	5MA51
5MA40	5MA49	5MA48	5MA47	5MA46	5MA45	5MA44	5MA43	5MA42	5MA41
5MA30	5MA39	5MA38	5MA37	5MA36	5MA35	5MA34	5MA33	5MA32	5MA31
5MA20	5MA29	5MA28	5MA27	5MA26	5MA25	5MA24	5MA23	5MA22	5MA21
5MA10	5MA19	5MA18	5MA17	5MA16	5MA15	5MA14	5MA13	5MA12	5MA11
5MAB0	5MAB9	5MAB8	5MAB7	5MAB6	5MAB5	5MAB4	5MAB3	5MAB2	5MAB1
5MAD0	5MAD9	5MAD8	5MAD7	5MAD6	5MAD5	5MAD4	5MAD3	5MAD2	5MAD1
5MAG0	5MAG9	5MAG8	5MAG7	5MAG6	5MAG5	5MAG4	5MAG3	5MAG2	5MAG1
5MAL0	5MAL9	5MAL8	5MAL7	5MAL6	5MAL5	5MAL4	5MAL3	5MAL2	5MAL1

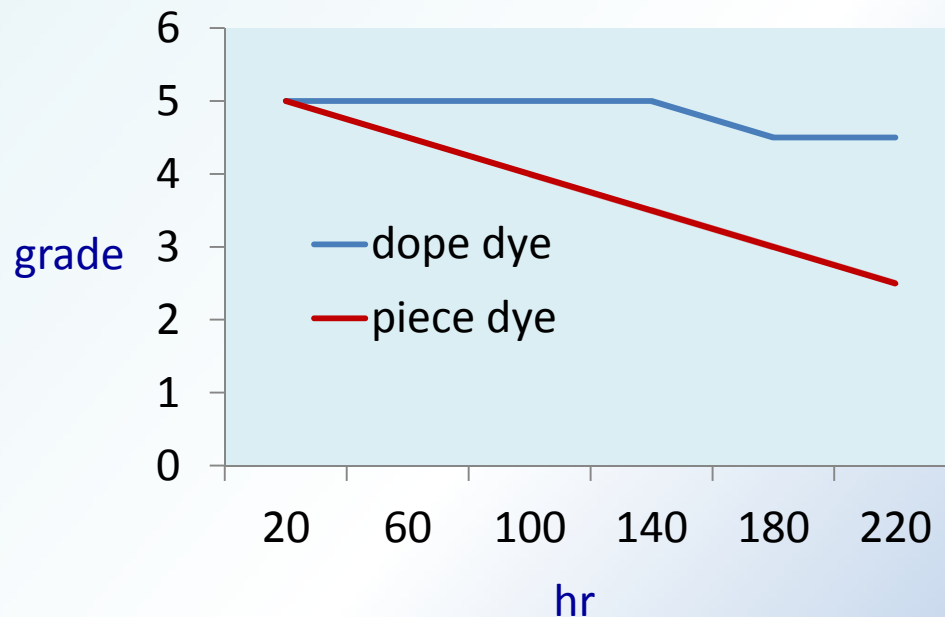
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**Excellent color fastness**  
(black color)



AATCC <sub>III</sub> A  
(wash temp. 71°C)



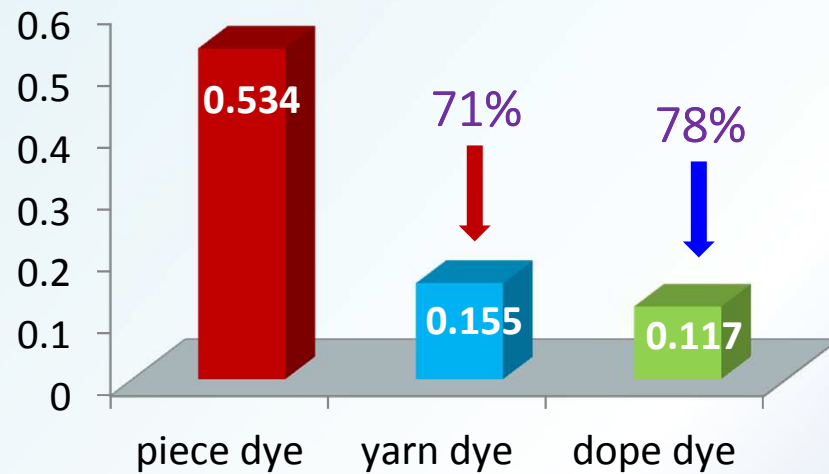
# Innovational Dope Dyeing



## Eco-friendly

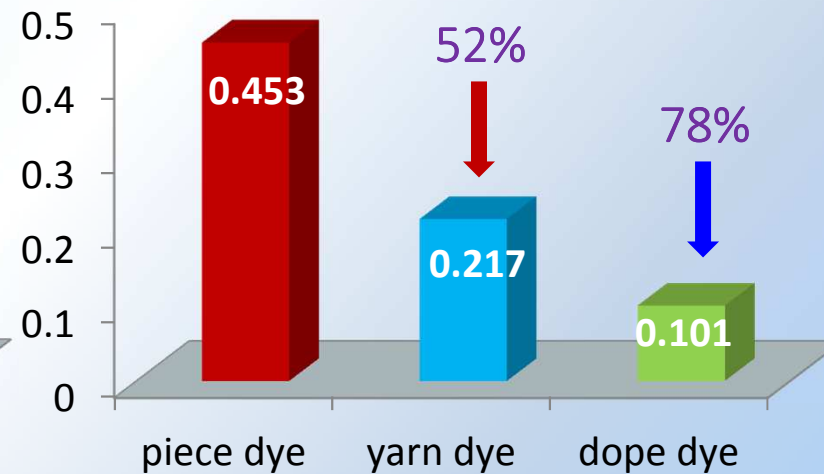
- piece dye
- yarn dye
- dope dye

KWH/Y



Energy Consumption

Kg/Y



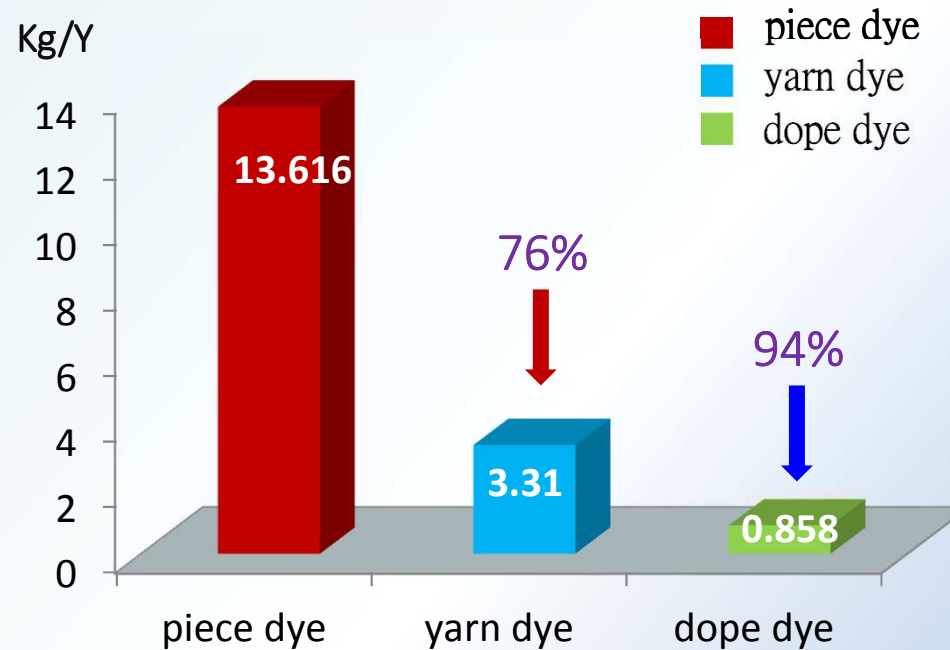
CO<sub>2</sub> Emission

Woven (based on fabric weight 120 G/Y)

# Innovational Dope Dyeing



Eco-friendly



Water Consumption

Woven (based on fabric weight 120 G/Y)