

## Washing/Cleaning ability test for viscosity controller

### Washing method for viscosity controller

- 1 Solvent circulation
- 2 Normal air + Solvent straight out washing
- 3 TURBO WASH ( Solvent circulation + compressed air )

### Purpose

Through washing the same dirty hose, the washing ability of above 3 methods will be clarified.

### Test conditions & testing object

Object : ink dirty hose

After circulation of 17 cup second of Magenta color ink for 1 hour,  
discharge magenta ink without washing. Then dry hose for 48 hours.

### Why user require " High ability of washing " for viscosity controller ?

Washing is the most important thing for proper operation of viscosity controller.

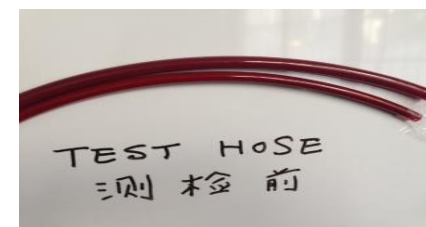
Of course, if users operator every day wash completely, it is no problems.

What always happened at users operation, " forget to wash " or " not enough wash "  
are always happening. Can not be avoided.

If users have viscosity controller with " High ability of washing ", users can wash clean even after forgetting wash.

It is very convenient and helpful for users to use viscosity controller properly and for more long time.

### Test Sample hose



### Testing method

- ① The above mentioned ink dirty hose were connected with VIS-10 (viscosity controller)
- ② We carry out washing test by the following 3 kind of washing method ( **Solvent q'ty 3 Ltr、 Test time 5 min.** )
  - 1 Solvent circulation 3 Ltr, Circulation 5 min.
  - 2 Normal air + Solvent straight out washing (Mix solvent with normal air Straight washing) 600cc/min. x 5 min.
  - 3 TURBO WASH (Solvent circulation + compressed air ) 3 Ltr, Turbo Wash 5 min.

## TEST RESULT (Washing ability result)

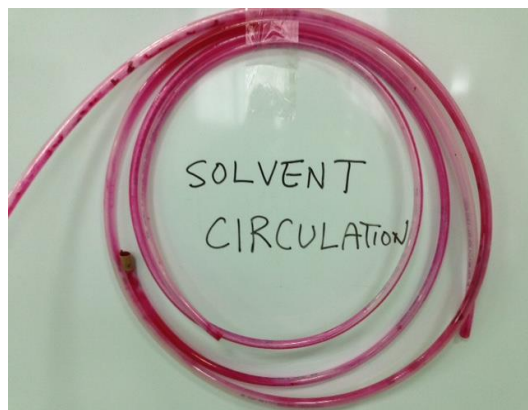
( Solvent use q'ty 3 Ltr, Washing time 5 min.)

	Ink remain	Wash Q'ty	Washing ability
1 Solvent circulation	50%	50%	<b>59</b>
2 Normal air + Solvent straight out washing	60%	40%	<b>47</b>
3 TURBO WASH (Solvent circulation + compressed air)	15%	85%	<b>100</b>

Test Sample hose



### 1 Solvent circulation



Washing ability **59**

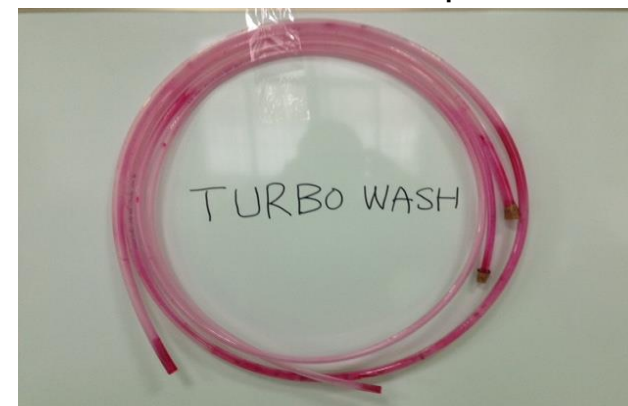
### 2 Normal air + Solvent straight out washing



Washing ability **47**

### 3 TURBO WASH

Solvent  
Compressed air



Washing ability **100**

## Washing Principle

- i Solvent must touch and wash all the dirty place completely. Otherwise no touching place can not be washed.

1 Solvent circulation	Solvent touch and wash all the dirty place completely	OK	◎
3 TURBO WASH			

2 Normal air + solvent straight out wash	Touch and wash not all the dirty place due to normal air mixed. Many not touched places happen. As straight out washing, touching times is very few times compared with circulation. Touching power of normal air is weaker than compressed air.	NG	X
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1 Solvent circulation	As there no air or no compressed air, only touching to dirty place. So called " <b>Brushing effect</b> " can not be performed.	NG	X
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3 TURBO WASH	As compressed air contained in circulation solvent, countless plenty of compressed air perform "Brushing effect " and increase washing ability.	OK	◎
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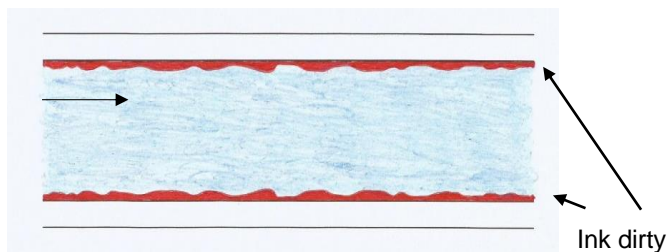
		Solvent touching area	Wash "Brushing effect" *1
1	Solvent circulation	ALL	No
2	Normal air + Solvent straight out wash	Part	Yes (small) 、 Bubble power(Weak)
3	TURBO WASH (Solvent cir. + Compressed air)	ALL	Yes (Big) 、 Bubble power(Strong)

\*1 Wash " **Brushing effect** "

Bubble(air) in the circulated solvent touch and remove ink dirty such as "**Brushing** "

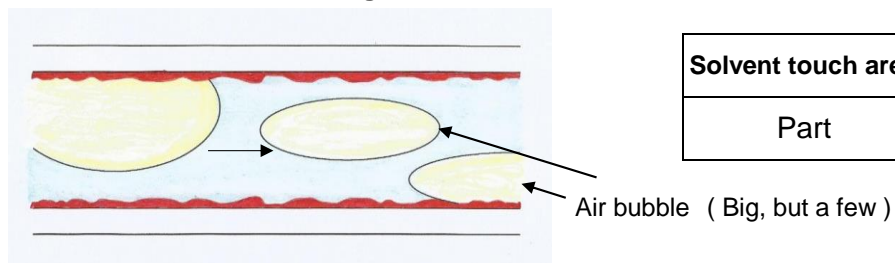
The above is so called Wash "**Brushing effect** " by bubble.

### 1. Solvent circulation



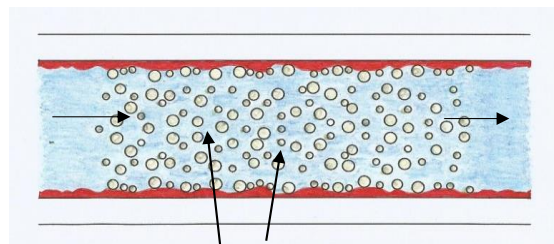
Solvent touch area	Wash "Brushing " effect	Washing ability
ALL	NO	<b>59</b>

### 2. Normal air + Solvent straight out wash



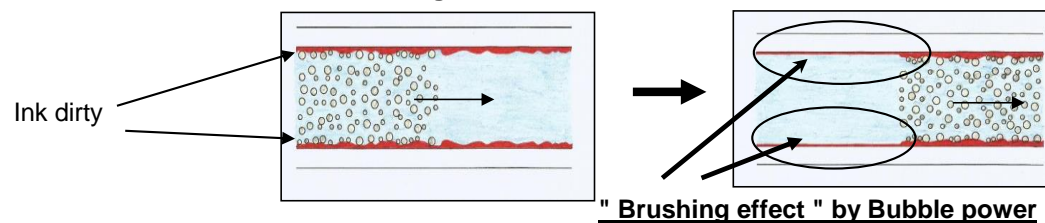
Solvent touch area	Wash "Brushing " effect	Washing ability
Part	YES (small)、 Bubble power(Weak)	<b>47</b>

### 3. TURBO WASH( Solvent cir. + Compressed air )



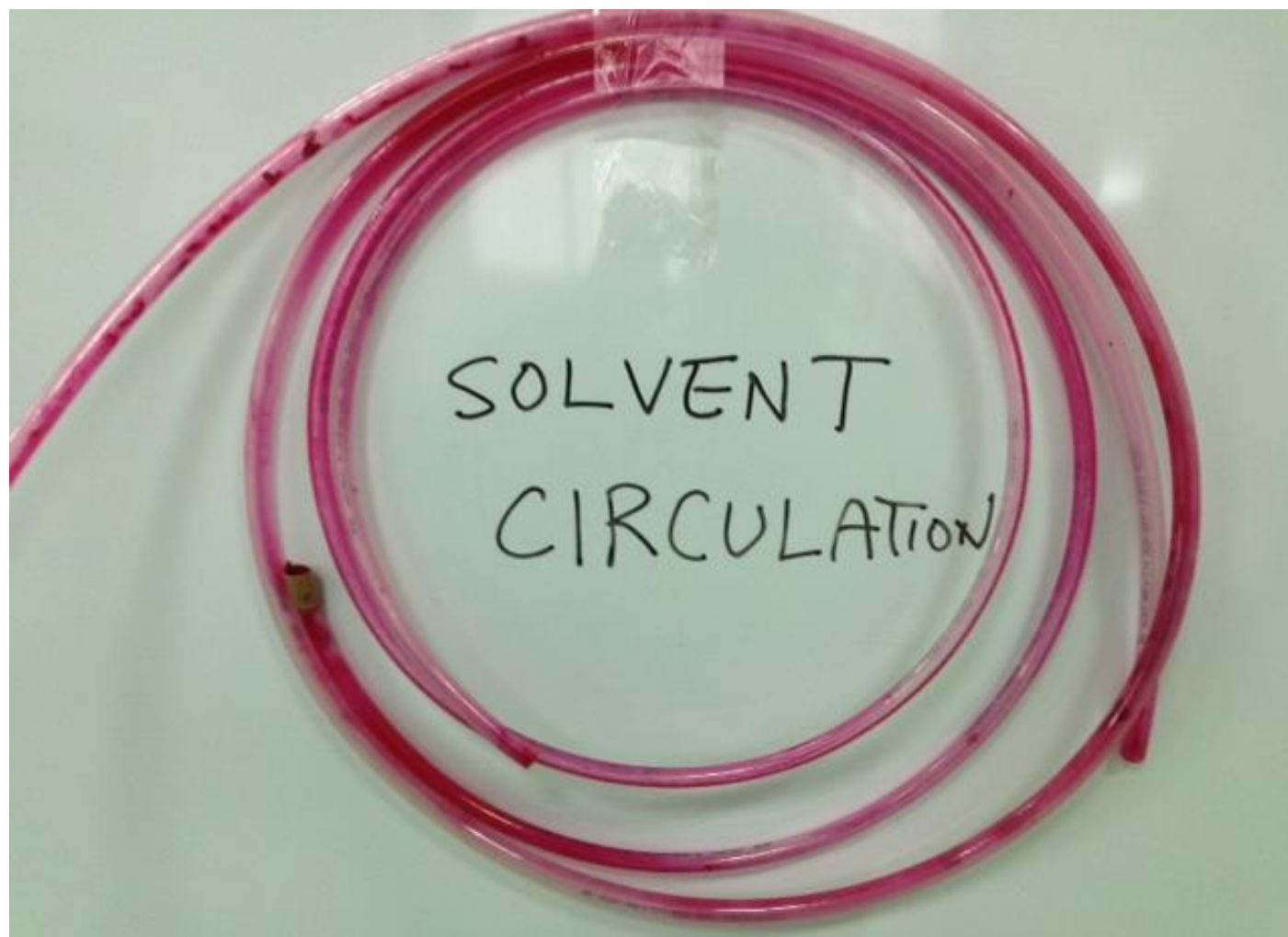
Solvent touch area	Wash "Brushing " effect	Washing ability
ALL	YES (Big)、 Bubble power (Strong)	<b>100</b>

#### Wash " Brushing effect "



1 Solvent circulation

3 Ltr, Circulation 5 min.



Ink dirty remain 50 %

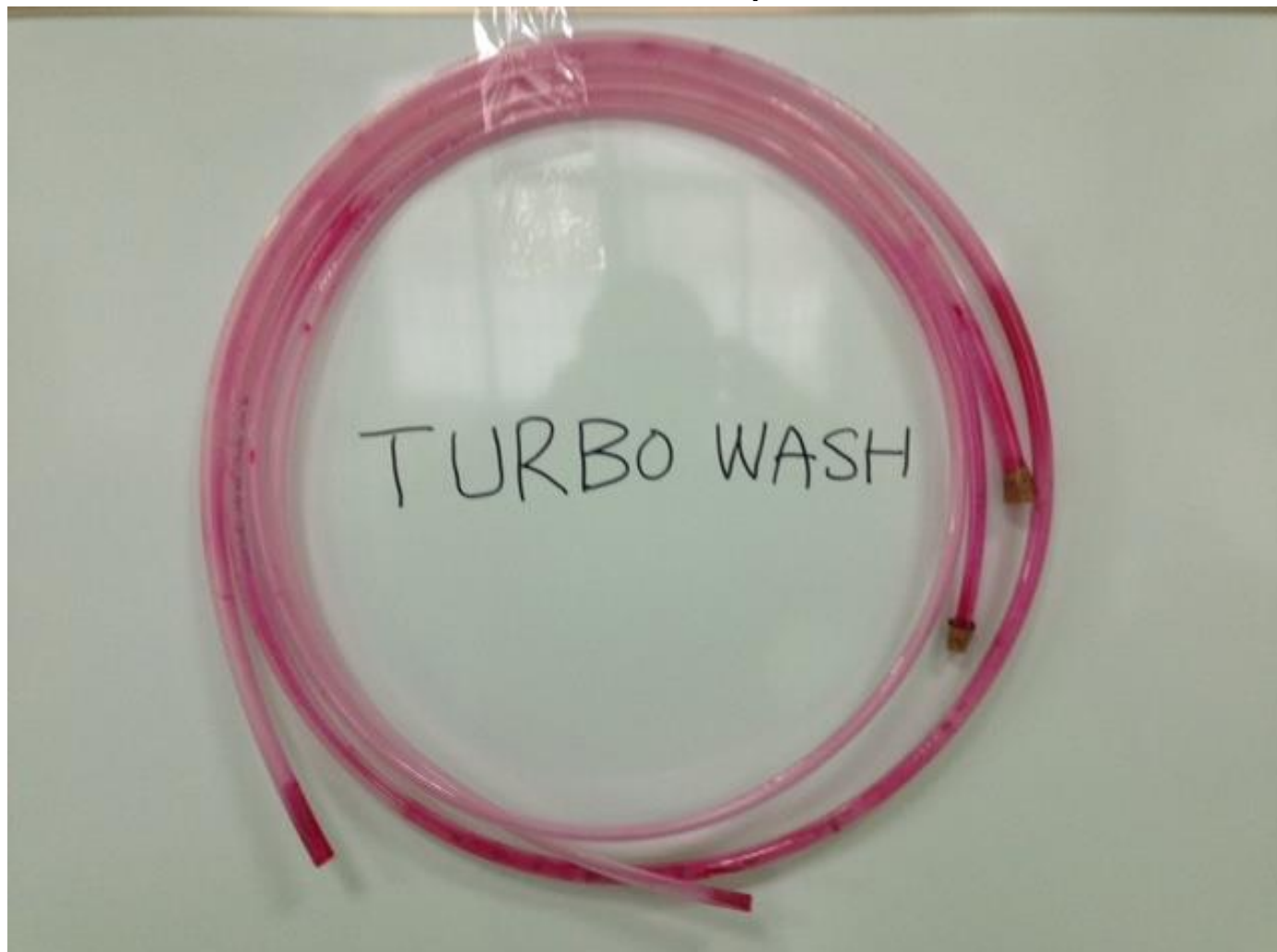
2 Normal air + Solvent straight out wash 600cc/min. x 5 min. Total 3 Ltr



Ink dirty remain 60 %



3 TURBO WASH (Solvent circulation + Compressed air) 3 Ltr, 5 min.



Ink dirty remain 15 %

## Test Sample hose



Ink dirty remain 100 %



**Viscon (Japan) official Blog English " What is viscosity controller ? "**

[URL : https://visconjapan.com/en/](https://visconjapan.com/en/)

**Viscon (Japan) official Blog Japanese ” たかが粘コン、されど粘度コントローラー ”**

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