



# NEW ZEALAND'S LEADER IN HAZCHEM SAFETY SYNCHRO SERIES BREATH RESPONSIVE PAPR



NEW ZEALAND'S LEADER IN HAZCHEM SAFETY SOLUTIONS

# INTRODUCTION

1. Introducing the Synchro Series PAPR respirators from STS Shigematsu
2. Synchro PAPR respirators are the latest in “Breath Responsive” PAPR
3. This presentation sets out the product information you need to know and the key benefits of the Synchro range

# SHIGEMATSU

- Japan's leading respiratory manufacturer
- Shigematsu, pronounced Shig-e-mat-su (or STS for short)
- In business for over 100 years (established 1917)
- Manufacturers of high-quality respiratory protection
- Represented by **pH7** in New Zealand

# THREE NEW PAPR RESPIRATORS



**Sync01**



**Sync09**



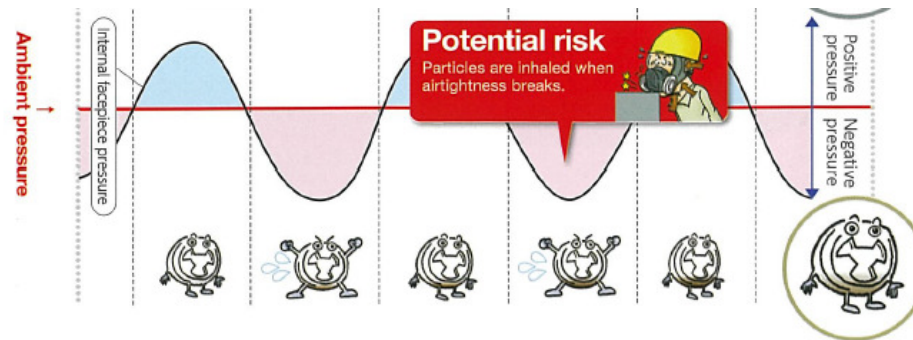
**Sync11**

# BREATH RESPONSIVE PAPR EXPLAINED

## Negative Pressure Masks

### Reusable Respirator

Breathing by lung capacity only.

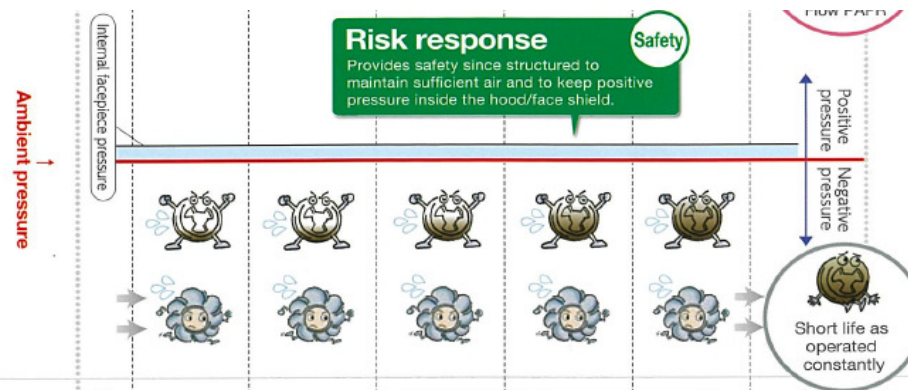


- Air pressure in the mask goes from positive to negative when breathing.
- Higher risk of contaminants entering the mask when inhaling
- Good face seal is essential
- Tiring for the wearer

## Constant Airflow PAPR

### Constant Air Flow PAPR

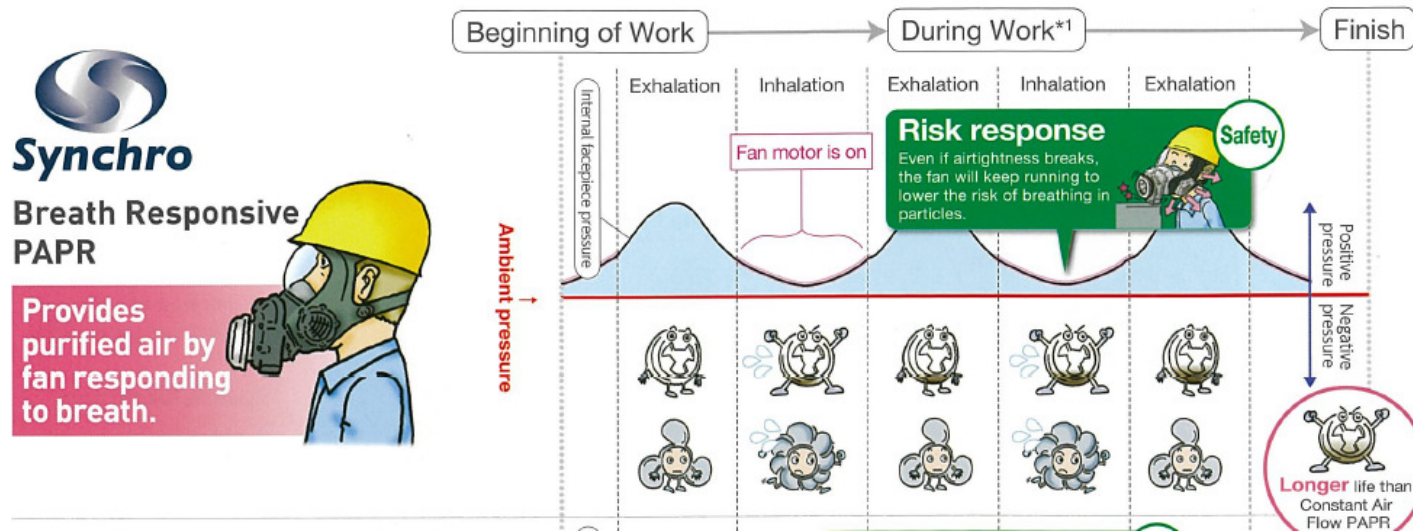
Provides purified air constantly by fan.



- Air pressure in the mask is always positive (safer).
- Easy breathing for the wearer
- Filter and battery ALWAYS on so you need a large battery (heavy) and you burn through filters faster.

# BREATH RESPONSIVE PAPR EXPLAINED

## Breath Responsive PAPR



- Air pressure in the mask is always positive (**safer**).
- Fan motor only works when you inhale = **longer** battery life / **smaller** battery
- Filter only working when inhaling = **longer** filter life / **smaller** filters
- If the face seal is broken, the motor keeps working like a constant flow PAPR to maintain positive pressure

### 3 KEY BENEFITS

#### Compact & Lightweight

- <770g
- No cables or cords to get tangled

#### Better Communication

- Speech amplifier (Sync09)
- Speech diaphragm (Sync01)

#### Simple to Use

- No on/off switch
- Just put it on and start working



# A CLOSER LOOK AT THE SYNC01

6-Point head harness

Wide polycarbonate 3D curved visor (EN 166 1B)

Replaceable Filters

Filter change indicator

Speech diaphragm

Fan unit / motor

Li-ion battery for 9+ hours of operation\*

- EN 12942: 1998 + A2: 2008
- AS/NZS 1716:2012
- IEC 60529:2001 IP65 Rated

\*Estimated battery life by filter:  
VP3 >9hr | VA1P3 >8hr

- Key markets:
  - Asbestos removal
  - Silica dust
  - Agricultural spraying
  - Paint spraying
- AS/NZS 1716:2012 Filters
  - VP3 – Particulate – STS40350
  - VA1P3 – Organic Vapour Particulate – STS40250
- Sizes:
  - Medium - STS40400
  - Large - STS40401



# A CLOSER LOOK AT THE SYNC09

6-Point head harness

Widest polycarbonate 3D curved visor, anti-scratch / anti-fog (EN 166 1B)

Replaceable Filters

Filter change indicator

Speech amplifier

Fan unit / motor

Li-ion battery for 11.5+ hours of operation\*

- EN 12942: 1998 + A2: 2008
- AS/NZS 1716:2012
- IEC 60529:2001 IP65 Rated

\*Estimated battery life by filter:  
VP3 >11.5hr | VA1P3 >9.5hr | VABE1P3 >8.5hr

- Key markets:
  - Asbestos removal
  - Silica dust
  - Agricultural spraying
  - Paint spraying
  - Chemical industry
  - Pharmaceutical industry

- AS/NZS 1716:2012 Filters
  - VP3 – Particulate – STS40350
  - VA1P3 – Organic Vapour Particulate – STS40250
  - VABE1P3 – STS40251

- Sizes:
  - Medium - STS40470
  - Large - STS40471





# A CLOSER LOOK AT THE SYNC11



Compact & lightweight  
<450g



Universal size silicone  
facepiece

Replaceable Filters

Filter  
change  
indicator

Integrated fan unit / motor

Li-ion battery for 14+ hours  
of operation\*

\*Estimated battery life by filter:  
VP3 >14hr | VA1P3 >11hr | VABE1P3 >11hr

- EN 12942: 1998 + A2: 2008
- AS/NZS 1716:2012
- IEC 60529:2001 IP63 Rated

- Key markets:
  - Asbestos removal (class B)
  - Agricultural spraying
  - Surface preparation
  - Paint spraying
  - Chemical industry
  - Forensics clean up
  - Post fire clean up

- AS/NZS 1716:2012 Filters
  - VP3 – Particulate – STS40350
  - VA1P3 – Organic Vapour  
Particulate – STS40250
  - VABE1P3 – STS40251

- Sizes:
  - Universal - STS40450

# BATTERY & FILTER INDICATORS

## Battery Life Indicator

LED flashes to inform the battery condition.

Battery Life Indicator Patterns (2LEDs)	State	Remaining Voltage
■ ■	Full charge	At least 8.0 V
■ ■	–	7.9 - 7.4 V
■ ■	Low charge	7.3 - 7.0 V
□ ■	Low charge	Less than 6.9 V
■ □	The fan is locked.	
Alternately lights		

■ : Light ■ : Flashing □ : No light



## Filter Replacement Indicator

LED flashes when it is time to replace the filter.



Sync09




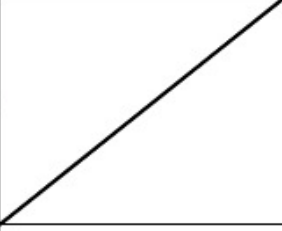













Sync11



Sync01

# FILTER SUMMARY

Standard	AS/NZS 1716 : 2012			EN12942:1998+A2: 2008
Sync01VP3 				
Sync09VP3 				
Sync11VP3 				

STS40350

STS40250

STS40251

STS40253

# PART NUMBERS

pH7 item code	Description	UoM	Notes
STS40400	SYNC01VP3 -M	Set	Includes: mask, motor, VP3 filters, battery, charger, mask covers, flow indicator, storage box
STS40401	SYNC01VP3 -L	Set	Includes: mask, motor, VP3 filters, battery, charger, mask covers, flow indicator, storage box
STS40470	SYNC09VP3 –M	Set	Includes: mask, motor, VP3 filters, battery, charger, mask covers, flow indicator, storage box
STS40471	SYNC09VP3 -L	Set	Includes: mask, motor, VP3 filters, battery, charger, mask covers, flow indicator, storage box
STS40450	SYNCH11VP3 –M/L	Set	Includes: mask, motor, VP3 filters, battery, charger, mask covers, flow indicator, storage box
STS40350	VP3	Each	P3 particulate filter 10/box, 100/ctn
STS40250	VA1P3	Each	Organic Vapour and gases + Particulates – 20/ctn
STS40251	VABE1P3	Each	Organic Vapour, Inorganic gases and vapours ,sulphur dioxide and other acid gases, particulates – 20/ctn
STS40253	VA1B2E2K1P3	Each	This “multigas” filter has passed the EN standards only 20/ctn

Note: A full list of spare parts is available on request



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