

# MARKET LEADERS IN FILTRATION

## RONA™ FM3 REFINING OIL System

## RONA™ SUPERSORB LENTICULAR CARTRIDGE Filter



### FEATURES

- Remove suspended impurities from the oil
- Remove or reduce the oil decomposition products from the oil
- Reduce dark colour produced during frying
- The fryer oil must be filtered at a regular frequency or continuously in order to extend the fry life of the oil
- Improved product flavour and colour
- Cost effective, pay back period within 12 months
- Easy setup
- Both in sheet form and lenticular

After two weeks

- Reduced free fatty acids
- Reduced soap concentration in oil
- Reduced TPM (Total Polar Material)
- Greater levels of tocopherols

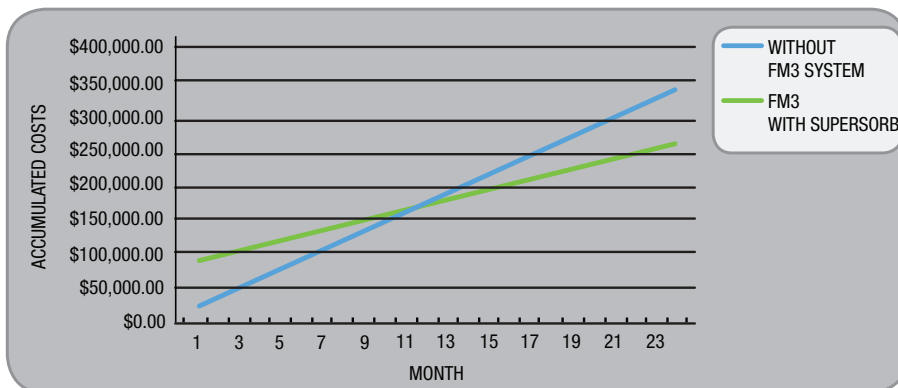
### APPLICATIONS OF PRODUCT

- Cooking Oil
- Industrial Fryers

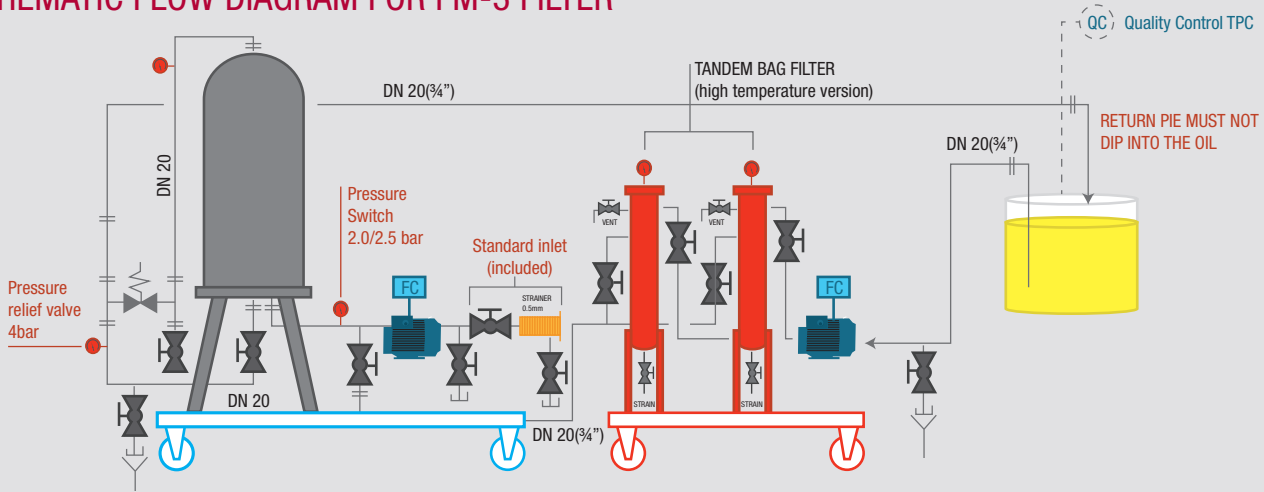
### PAYBACK PERIOD ^:

^ Payback period is dependent on each site, contact PGA Sales Representative for more information

- Before installations of FM3 systems 3 Days, replace 9 times per month
- After installation of FM3 system 1,800 litres, replace 3 times per month



## SCHEMATIC FLOW DIAGRAM FOR FM-3 FILTER



## TESTING

BASELINE (absorbent)				FM3		
DAY	SOAP*	TPM**	Tocopherols Vitamin A	SOAP*	TPM**	Tocopherols
1	5	3.8	563.6	0	3.8	554.8
6	5	61.9	340.4	0	3	580.6
12	5	5.4	283.2	5	4.4	584.7
Fresh Oil	5	2.9	626.8	5	2.5	627.3

### The test was conducted in two parts:

#### Baseline:

Where the current adsorption treatment was conducted starting with fresh oil but with no other changes in operating the operating procedure

#### FM-3:

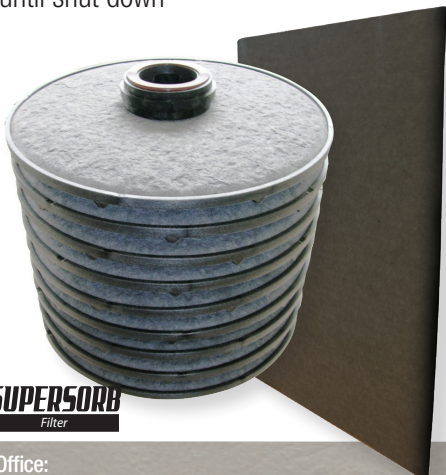
The test was started with fresh oil but the oil was pre-filtered through a bag filter and then filtered through FM-3 filter continuously until shut down

\*Soap is formed from free fatty acids mixing with calcium or magnesium. The calcium or magnesium is derived from the food that is being fried. Oil literally forms soap over time.

Soap formation correlates well with other polar materials and as it is cheaper and easier to perform tests with soap detection, we utilise these results to monitor oil performance. Additional information regarding additional test results are available upon request.

\*\*TPM means any compound present in the oil that is not neutral triglyceride (Triglyceride (triacylglycerol, TAG or triacylglyceride) is an ester composed of a glycerol bound to three fatty acids). This includes, monoglycerides, diglycerides, FFA (Free Fatty Acids), oxidized FFA and other compounds, oxidative and thermal polymers, free glycerol, moisture, etc

If the oil sample is not clean and contains sediments, the polar reading is high. If the oil has moisture the polar reading is high.



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Filter

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