

Recirculating heat for all roast sizes

BeanScene speaks to Roastquip Managing Director Will Notaras about his longstanding relationship with IMF roasters and the importance of sustainable roasting solutions.

When it comes to purchasing roasting equipment, speed and consistency are one thing, but environmental considerations are another. To Roastquip Managing Director Will Notaras, climate change is everyone's responsibility.

"It's almost impossible to not have this in mind when looking to install a new roaster," says Will.

"Not only do IMF roasters reduce greenhouse gases into the atmosphere, but they also save roasting companies enormous amounts of money in energy costs, so it's a win-win situation."

IMF have been manufacturing low nitrous oxide (NOx) recirculating heat technology drum roasters for more than 25 years and is a pioneer of this technology.

"Unlike conventional roasters that use a burner for the roaster and a separate burner (afterburner) to treat the emissions, IMF roasters use only one burner chamber," says Will.

As the coffee is roasted, emissions leave the drum and enter the burner chamber to incinerate and purify the hot air. Some of the clean heat in the burner chamber, which would otherwise be released into the atmosphere, is recirculated back into the drum, saving between 30 to 47 per cent in gas consumption.

IMF roasters feature its exclusive Vortex and Equaliser roasting technology. The Vortex system mixes ambient air into the hot airstream before it enters the roaster via an electronically operated modulating valve that makes hundreds of calculations per second. This ensures air is already at the correct temperature before it enters the drum. The Equaliser ensures the same volume of hot air both



inside and surrounding the drum surface enters the roaster. This creates even heat distribution across the surface of the coffee beans, resulting in coffee roasted with precision and consistency.

"The whole recirculating heat process is fully automated resulting in maximum heat efficiency," says Will.

IMF's first Australian installed roaster was in Adelaide in 1999. Over the years, IMF roasters have been upgraded with advanced features due to the high demands of Australian roasters. Through IMF's Australasian agent Roastquip who have been exclusive IMF agents since 2012, it has installed more than 70 plants in Australia and New Zealand, making it one of the largest selling roasters in Australia.

IMF's roasters are easily adaptable to

customer's needs, with 50 parameters that can be adjusted per profile.

"Bean and air temperatures as well as drum speed and airflow can be adjusted at each step of the 12-step profile, giving the operator unlimited control over how much conductive and convective heat can be applied, which is especially important when roasting for espresso coffee," Will says.

"Manual override of any of the parameters can also be done in real time, and up to 1000 profiles can be stored."

Will says IMF has a precision temperature stability of one-degree accuracy, making it one of the most consistent roasters on the market.

"As well as this, the chaff extractor system removes chaff automatically into a bin. A double filter system cleans green

bean dust while loading the coffee, and a built-in maintenance schedule reminds the operator when to carry out maintenance. A modem is fitted as standard for remote assistance,” Will says.

He adds that IMF’s compact, space saving roasters mean owners do not require a large premises, therefore saving considerable rent or warehouse purchase costs. All IMF industrial roasters incorporate the afterburner, loader on scale, destoner and continuous chaff extractor all in one compact unit, so no separate afterburner required.

“The roaster arrives fully assembled so there is minimal set-up costs. Once flues, gas, power, air and water are connected, the roaster is ready to go on day one,” Will says.

“Silos and blenders are also available which are electronically controlled from the roasters PLC to load the green and roasted coffee automatically.”

All IMF roasters are compliant to Australian Gas Association (AGA) regulations, including IMF’s new model shop roasters, which use the same gas saving recirculating heat technology as its industrial roasters.

“The new six-kilogram and 15-kilogram models have larger



Using the same technology as IMF’s industrial roasters, the IMF shop roaster is suited to cafés and roasteries where space is limited.

touchscreens, and now are fitted with Riello burners just like the industrial roasters,” says Will.

IMF and its Australian agent Roastquip will exhibit one of the new Automatic IMF 15-kilogram shop roasters

at the 2022 Melbourne International Coffee Expo in September.

“IMF automatic shop roasters offer all the technological components of industrial roasters in small and compact dimensions, ensuring high quality production. The roasters are complete with integrated afterburner to reduce emissions, management software, and an easy chaff collection bin, all incorporated into the roaster,” says Will.

It’s not just IMF’s roaster leading the way with sustainable solutions in mind. IMF’s Italy-based headquarters in Occhiobello has installed solar panels on its roof to provide much of the electricity for the manufacturing of the roasters.

“Further upgrades to the factory to reduce greenhouse gases is a priority for IMF, as is its continuous research and development on all their product lines,” says Will.

“When it comes to environmental sustainability, it’s Roastquip’s and IMF’s main focus for the year ahead, with a primary target to continually reduce our carbon footprint.”

For more information on Roastquip and IMF roasters, visit www.roastquip.com.au




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WE ARE CARBON NEUTRAL

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 Certified by Climate Active for our business operation.



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