

# We're on a roll with DiGital Scroll

**Why run an air conditioning unit at 100% of capacity when less than half of that may be all that is required?** Temperzone's DiGital Scroll technology is making its presence felt in a wider number of applications as people in all sorts of home and work environments feel the difference... and enjoy it.

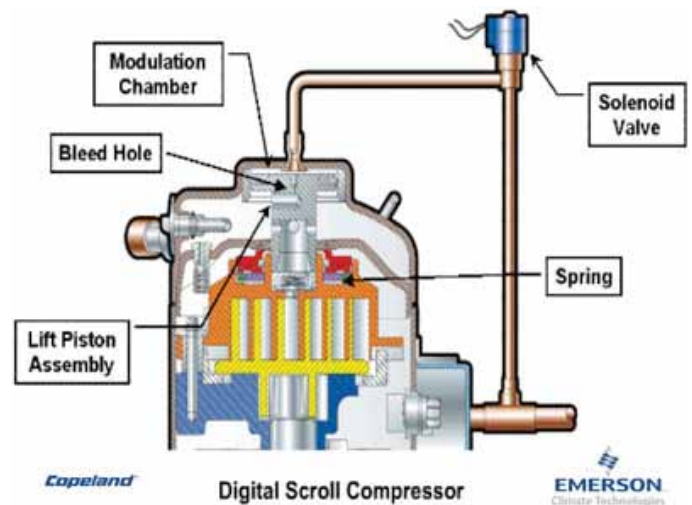
Temperzone's South Australian manager Ryan Wijayasekera says that DiGital Scroll technology allows the unit to sense the amount of capacity required to heat or cool the area and only uses what is necessary. "That's one of the great things about this technology," says Ryan, "If a unit only needs 40% of its capacity to work effectively, it scrolls down to that level of usage." Ryan adds that it's even better when you look at the largest commercial applications where two compressors are deployed. He says, "If only one of the units is needed at 40% capacity and the other isn't needed at all, the equipment can effectively be running at as little as 20% capacity!"

## EXCELLENT TEMPERATURE CONTROL

The kinds of applications where DiGital Scroll technology really proves its worth are often those considered to be the most challenging. For example, hotel function rooms are frequently unused for a large part of the day and require very little capacity to be kept at the right temperature level. "Fill the room with 50 or 100 people and it's a different story," Ryan points out.

**"WHAT WAS ADEQUATE CAPACITY EARLIER IN THE DAY ISN'T NEARLY ENOUGH. BUT WITH DIGITAL SCROLL TECHNOLOGY, THE ROOM IS KEPT AT A COMFORTABLE AND CONSISTENT TEMPERATURE, EVEN WHEN IT'S FULL OF GUESTS."**

The advantages apply to many other applications too. For example, buildings with a large glass area to the west are often quite comfortable in the morning; even if the day is warm the air conditioning will only need to draw on a relatively small percentage of its capacity. Subject the same room to the hot afternoon sun, however, and it can become distinctly



uncomfortable. Ryan says that many school buildings built in the sixties and seventies were designed without sufficient thought to their occupants' comfort – designs which often feature walls of glass facing entirely the wrong direction.

## SUCCESS IN COMMERCIAL MARKETS

Ryan Wijayasakera reports that the DiGital Scroll range has been meeting with a great deal of success in commercial markets. "Consultants are finding that areas which were previously very difficult to service with one piece of equipment are ideal candidates for these examples of Temperzone's superior technology. For example, there are many show rooms where a large DiGital Scroll unit can successfully do a job which may have previously required two separate pieces of equipment. This is clearly a considerable advantage."

## KEEPING EVERYTHING UNDER CONTROL

Another of Temperzone's advantages in commercial applications is the ability to control the unit without a Temperzone controller. "Our products are compatible with most Building Management Systems," says Ryan, "so they can be run without using our own controllers. This is very useful for building managers who will typically have several different types of equipment to deal with on any given day."

### AT HOME WITH DIGITAL SCROLL

DiGital Scroll is also finding its way into more and more homes, with domestic units of 17.5kW and 21kW capacity available at this stage. The variable capacity feature makes the units extremely suitable for homes with zoned installations, because the 'intelligent' unit knows when to cut back on compressor capacity when there isn't sufficient demand. "As with commercial and industrial applications, the compressor reduces its capacity to match the load," says Ryan.

Ryan points out that there could be energy savings to consider too. Ryan says, "Not starting and stopping a compressor when a set point is reached is likely to help, and running a unit at a small percentage of its capacity also has implications for energy use." Effective air conditioning can work hand-in-hand with insulation to control a room's temperature, and help prevent over-investment in either area.

### A CRITICALLY IMPORTANT ROLE

Ryan reports that the applications for which DiGital Scroll technology is being used continues to grow.

"One of the more interesting installations was a hospital operating theatre. Here, consistent temperature is absolutely critical for both the patient and the sensitive equipment, and it became clear the Temperzone DiGital Scroll equipment was the right answer."

### THE FUTURE FOR DIGITAL SCROLL

Temperzone's DiGital Scroll range now covers the domestic models mentioned and commercial units up to 45kW. Ryan Wijayasekera says that the technology will find its way into much larger units than available at present. "It really is the way of the future," he says, "offering the flexibility needed to take care of areas with variable heat loads and spaces where accurate temperature control is important. No wonder these models are finding such wide acceptance. No wonder we're on a roll with DiGital Scroll!"