

# MUGELLO CIRCUIT

## INTEGRATING SOUND WITH A FAMOUS RACE COURSE

A COMMUNITY CASE STUDY - SEPTEMBER 2009

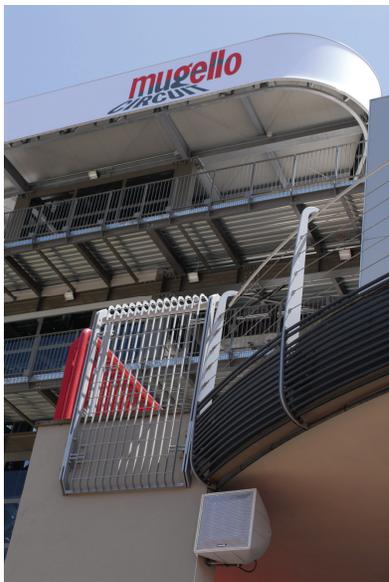
### ABOUT THE FACILITY

Mugello Circuit is a scenic racetrack that winds for 5.245 kilometers through the Italian countryside. Located in Italy's Tuscany region near Florence, Mugello features several sharp turns and one long straightaway. The track is elevated in some sections, making the spectators feel like part of the action.

Mugello, which was designed during the 1970s and remodeled in 1991, is used for Formula One testing. The MotoGP, one of the world's premier motorcycling championships, is held each year at this modern facility, as does the German Touring Car Masters Series. Mugello has also hosted Formula 5000, Formula 3000 and Formula 2 championships. International car manufacturers like Ferrari use the facility as their test center.

### THE SOUND SYSTEM

The project, which started in May 2008, required building a sound system for several distinct areas of Mugello Circuit. Prase Engineering, the firm that handled the design and installation, first conducted a thorough review of the racetrack. In addition to coverage



needed for the spectator sections, they needed solutions required for the pit lane, starting grid and various service areas.

"We had studied the circuit to understand exactly the areas to be covered by sound," said Giuseppe Del Fabbro of Prase Engineering. "We spent almost one year to design and modify the layout for the electronics required. When we started to install loudspeakers, we had to ensure that the loudspeakers, with special brackets, remained precisely in the necessary positions."

Prase opted to use Community Professional's R-Series. Del Fabbro said they needed weather-resistant speakers that delivered high performance and could handle all types of atmospheric conditions.

### SOUND SYSTEM (CONTINUED)

Racetracks are extremely loud with engines roaring and thousands of fans cheering on the drivers. Mugello needed loudspeakers with excellent audio quality and intelligibility that produce high sound pressure levels. This was especially true in the pit lane and starting grid. The R-Series – with the versatile R.25 and R.5 – gave the installation team the ideal solution. And since these loudspeakers have compact dimensions, they also had minimal visual impact.

The complexity of the application required using numerous different brands and devices to solve all of the racetrack's needs. The system features Biamp AudiaFLEX CM and DaVinci software. Powered by Bittner XV 1600 amplifiers, it also has InOut SMIP wide band omnidirectional microphones and Sonos media players.

“We've worked with the technical department of Mugello Circuit, integrating their needs with our suggestions,” said Del Fabbro. “The result is complete control of the system, and expandability through time in order to meet future requirements. A positive sound result was obtained, especially in difficult zones such as the pit lane and pit lane boxes. We hit the mark: customer

### EQUIPMENT HIGHLIGHTS

- 94 Community R.25-94TZ Loudspeakers
- 21 Community R.5-94Z and 6 R.5HP Loudspeakers
- 2 Community 2 R.5SUB subwoofers
- Biamp AudiaFLEX CM
- Bittner XV 1600 amplifiers

Community's R-Series Application Guide profiling over twenty indoor and outdoor installations can be downloaded from [www.communitypro.com](http://www.communitypro.com). The Application Guide shows how to overcome common acoustical challenges using R-Series and provides model recommendations for common applications such as sports venues, convention centers and warehouses.

Community's All-Weather/All-Purpose product brochure featuring WET and R-Series can also be downloaded from [www.communitypro.com](http://www.communitypro.com)

### THE LOUDSPEAKERS

There is a Community R-Series for every installation. Highly weather resistant for outdoor applications, but very appropriate for indoor use as well, the R-Series offers exceptional voice clarity and sound projection capability. R-Series systems are found in the world's premier amusement parks, sports arenas, cruise ships and racetracks, as well as countless university and high school sports fields.



**R.25**



**R.5HP**



**R.5**

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*Community has been a leading supplier of professional loudspeaker systems since 1968. Headquartered in Chester, Pennsylvania, Community distributes its products to over fifty countries on six continents.*