

About the GyraFlex rotating nozzles

Anro Spray Solutions was asked if they would be able to develop a new kind of rotating nozzle, that would fill the gap in the existing rotating nozzle range.

Conventional nozzles were either high speed rotating versions or slow rotating versions with internal parts.

Customers have indicated that in high speed rotating nozzles, both impact and coverage of the spray were not sufficient. High nozzle rotation results in a shearing of the droplets into smaller sizes, thus reducing effective throw as well as impact, both of which are necessary for good cleaning.

With standard slow rotating nozzles, the turbine or sleeve bearings can cause excessive friction. Because of the friction the nozzle can fail to rotate constantly when spraying foam, making the nozzles highly unreliable. The first tests results with the new rotating head with adjustable joints were very encouraging. The new rotating nozzles would gyrate as well as being very flexible. The GyraFlex was born.

Tests conducted, indicate the coverage of the GyraFlex nozzle was outstanding, even at low pressures and capacities. Since there are no internal parts the full energy of

the liquid is used for cleaning and only a very small portion is used to rotate the nozzle.

This results in better performance at the same operating conditions, or same performance using less water and/or pressures than conventional rotating nozzles.

The GyraFlex is the first rotating nozzle, without internal parts, where the revolutions can be controlled by simply changing the position of the ball.

The nozzle differentiates itself further through its flexibility in spray distribution, capacity and coverage.

The GyraFlex can be used as a slow rotating high impact-nozzle, or as a high speed rinsing nozzle. The GyraFlex nozzle was not only developed for cleaning tanks, containers or vessels, but also for CIP installations where the nozzles need to cover a larger area than that achieved through the use of stationary nozzles. As mentioned, the GyraFlex is particularly well suited for spraying foam and water.

Capacities: The capacity range of the GyraFlex nozzle is very wide, from 3,7 liters @ 2 bar up to 216 liters per minute @ 20 bar. The adjustable joint fits all 1/4" nozzles with spray angles from 0° to 120°.

The GyraFlex is guaranteed to rotate at low or high capacities, wide or narrow spray angles no matter what the selected position of the adjustable joint is. The coverage with foam varies from 100 centimeters up to 400 centimeters, depending on pressure, position, medium and capacity.

Coverage up to 600 centimeters can be achieved with water.

Construction: The inlet of the nozzle is a 1/2" BSPT female connection for the standard version or a 3/8" BSPP female connection for the mini version. The stem, the ball and the locknut are made of 304 stainless steel* with a PTFE rotating head. The nozzlehead is selfcleaning and is lubricated by a film of water.

The GyraFlex nozzle makes no use of any gaskets. Therefore this nozzle is suitable for most applications with high temperatures and chemicals.

The rotating head is equipped with either two or three adjustable joints that will fit all 1/4" flat spray-, solid stream- and full cone nozzles. Or 1/8" nozzles in case of the MiniGyraFlex.

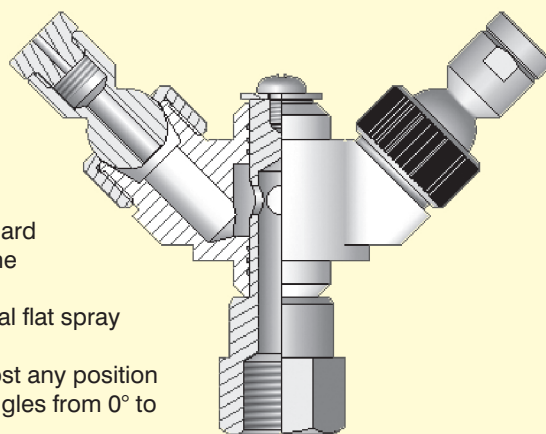
* AISI 316 optional

How to choose the correct GyraFlex for your application:

For each GyraFlex nozzle you will find an indicator with the standard coverage per model. The extra sketches on these pages are some examples of the other possible spray patterns.

The capacity tables also indicates the spray angle of the individual flat spray nozzles.

Due to its flexibility the GyraFlex nozzles can be adjusted to almost any position and assembled with all standard flat spray nozzles, with spray angles from 0° to 120°. If you need assistance contact your local sales office.



Typical applications: The GyraFlex nozzle is particularly suitable for CIP installations as used in filling machines in the beverage and dairy industries, spiral freezers, tanks and ovens.