Pilot Plant Mixers

Ways to improve operations and profitability

PRIMIX pilot plant mixers offer a wide range of static mixers in very small sizes to be used in pilot plants and research centres.

THE RESULT

- Suitable for Process Intensification (PI)
- Scale up possible
- Available in SS316/C276

PRIMIX™

PERFORMANCE BY DESIGN

Background

Many chemical processes are being developed and tested in a pilot plant first before evolving to a full scale production process. Reliable and repeatable mixing results are required to enable scale up. For the pilot plant itself small static mixers are required in the diameter-range of a few millimetre but with the same performance as their grown up counter parts.

The Challenge

Pilot plants are typically constructed with tubing as carrier for the liquid or gas. Making mixing elements in these small diameters requires different production methods compared to larger diameter mixing elements as often the element is made of 0.8mm sheet material. By grinding the element chains even a perfect fitting in odd sizes is guaranteed.

Design

PRIMIX uses materials from Swagelok for its mixer housings and connections. Swagelok is a worldwide established supplier for pilot plant materials. The mixing elements are being machined in our workshop to fit perfectly into the mixer housing to achieve an excellent mixing result.
A jacket can be added in case external heating or cooling is required.
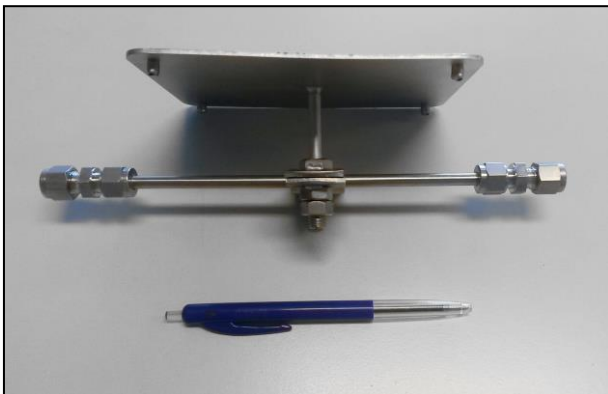To create a tube reactor several mixing sections need to be installed in series. Both standardized and bespoke models are available.
PMS (helical) and PMX (X-type) elements are available.

Solution

PRIMIX offers a complete range of static mixers for pilot plants with internal diameters of 3.5-4-6-8-10mm, with multiple connection possibilities. Most common material is 316L, but C276 is also available in a number of sizes. PRIMIX pilot plant mixers can be supplied with an ATEX Ex II 2DG certificate.

PRIMIX

Nijverheidsweg 17-F
3641 RP Mijdrecht
The Netherlands

T +31 (0) 297 28 77 78
E info@primix.com

www.primix.com