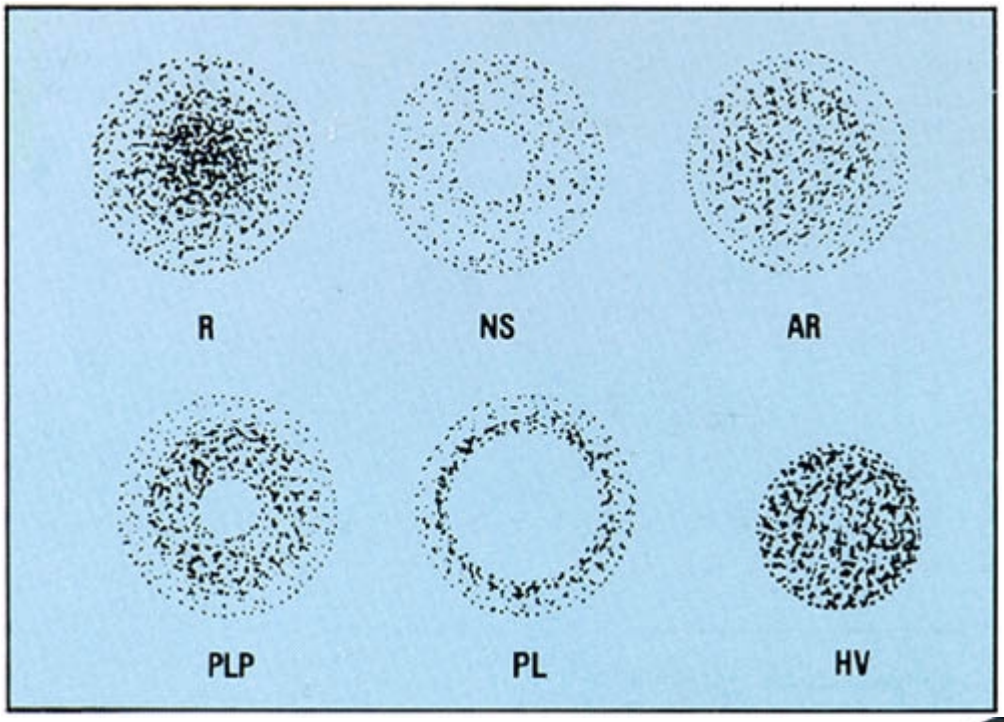
General Information

Technical Data

Spray Angles & Capacities

Critical Points

Spray Patterns



All MONARCH nozzles are stamped with the following characteristics, subject to modification on adoption of CEN standards:
- the flow (in USGPH at l00 PSI = 6.895 bar)
- manufacturing code
- spray angle;
- letters to identify the series of spray patterns;
- the, MONARCH trade mark.

MONARCH nozzles are individually tested at different production stages to assure exact conformity with master nozzles in each series.

The spray patterns (i.e. hollow cone or solid cone) described below refer to tests carried out with a 60° nozzle at a 75 mm distance from the orifice. Nozzles with spray angles of 60° or less, and with low flows in particular, the empty section of a hollow cone becomes smaller. The difference between a hollow cone and solid cone nearly disappears at this point.

Solid Cone "R" Series: .40 to 3.50 USGPH
This is the series supplied regularly unless specified otherwise. It is a good nozzle suitable for most burners. Atomization of the oil is not as fine as with the "NS" series.

Hollow Cone "NS" Series: .50 to 2.00 USGPH
This Series works best on many burners due to its exceptionally fine atomization. It produces a quiet, stable flame and is widely used on 80 and 90 flame retention burners.

Special Solid Cone "AR" Series: .50 to 3.50 USGPH
This series has become widely used due to its success in obtaining quiet combustion in flame retention head burners. Traditionally, a "cure-all" replacement nozzle, it now is increasingly specified on original equipment.

Semi-Solid Cone "PLP" Series: 2.25 to 100.00 USGPH
The standard nozzle for larger capacities. Fine atomization and "solid" spray pattern up to approximately 3.50 USGPH, gradually becoming more "hollow" in the larger sizes.

Hollow Cone "PL" Series: 2.25 to 50.00 USGPH
This series represents an extension of the "NS" type spray pattern for larger capacity sizes. Spray is not as finely atomized as the "PLP" series, but produces the best results in equipment specifying hollow cone nozzles.

Narrow Spray Angle "HV" Series: 1.65 to 60.00 USGPH
Used mostly for Semi-Industrial or Scotch Marine applications where narrow spray angle and high spray velocity is essential, and some combustion noise is not objectionable.

Heavy Oil Nozzle Series: 1.25 to 100.00 USGPH
Designed for use on 70 SSU (approx. 13 centistokes) viscosity oil at operating pressures ranging from 200-450 PSIG (13.8 to 31 bar). Write for special data sheet.