



NOZZLE SIZING & SELECTION GUIDE

Understanding pressure washer nozzle sizing, spray patterns, and pressure relationships for professional cleaning equipment.

This guide explains how nozzle size affects operating pressure, flow rate, cleaning performance, and pump protection across the Foreman pressure washer range.

i ABOUT THIS GUIDE

This guide provides a practical framework for selecting pressure washer nozzles for Foreman equipment.

It explains nozzle sizing principles, operating pressure relationships, spray angle selection, and common setup considerations for professional cleaning applications.

! TECHNICAL NOTE

Incorrect nozzle sizing can affect operating pressure, cleaning performance, bypass operation, and pump service life.

Always use correctly specified nozzles suitable for machine pressure and flow rate.

1 WHAT A NOZZLE DOES

The nozzle controls:

- operating pressure
- water flow restriction
- spray pattern
- cleaning impact

Pressure is created by restricting water flow through the nozzle orifice.

A smaller nozzle increases restriction and pressure.

A larger nozzle reduces restriction and operating pressure.

2 HOW NOZZLE SIZING WORKS

Pressure washer nozzles are sized according to:

- machine flow rate (L/min)
- operating pressure (bar)

Correct sizing is important because:

- undersized nozzles can overload pumps
- oversized nozzles reduce cleaning performance
- incorrect sizing affects unloader operation

3 FOREMAN STANDARD CONFIGURATION

Foreman standard lance assemblies are configured with:

- MV925 trigger gun
- M22M inlet connection
- 900mm zinc-plated straight lance
- Hi-Lo pressure head
- 15° nozzle configuration

Standard lance assemblies are rated for:

- 250 bar maximum pressure
- 30 L/min maximum flow
- 150°C maximum temperature

4 SPRAY ANGLE GUIDANCE

0°	15°	25°	40°
MAXIMUM IMPACT	HIGH-IMPACT	GENERAL PURPOSE	WIDE SPRAY
Maximum impact concentration. Used for specialist applications only.	High-impact cleaning pattern. Specified as standard on many Foreman professional machines.	General-purpose cleaning pattern. Suitable for larger surface cleaning applications.	Wide spray pattern for delicate surfaces and rinse work.

5 FOREMAN RECOMMENDED NOZZLE SIZES

MACHINE	MAX PRESSURE (BAR)	FLOW RATE (L/MIN)	RECOMMENDED NOZZLE
WRX-150	150	13	045
WRX-190	186	12	045
WRX-200	200	13	04
WRX-150HD	150	14	045
WRX-170HD	150	15	05
WRX-200HD	200	21	06
WRX-250HD	250	15	04
GTD-170	170	13	04
GTD-150HD	150	15	05
GTD-200HD	190	20	06

Recommended nozzle sizes are based on Foreman standard machine configuration and calibrated operating pressure.

Final operating pressure may vary depending on hose length, nozzle wear, regulator setting, and installation configuration.

6 SIGNS OF INCORRECT NOZZLE SIZE

NOZZLE TOO SMALL

- Excessive pressure
- Engine overload
- Unloader instability
- Increased pump stress



NOZZLE TOO LARGE

- Reduced cleaning performance
- Lower operating pressure
- Poor chemical injection performance



7 NOZZLE WEAR

Pressure washer nozzles wear during normal operation.

As nozzle wear increases:

- operating pressure reduces
- cleaning efficiency decreases
- water consumption increases

Nozzles should be inspected and replaced as part of routine maintenance schedules.



8 OPERATOR GUIDANCE



ALWAYS:

- verify nozzle compatibility
- use correctly rated accessories
- inspect nozzles for wear or blockage
- confirm pressure settings after replacement



NEVER:

- fit undersized nozzles without verification
- exceed accessory pressure ratings
- clean blocked nozzles using metal objects

INTERNAL LINKS



PRESSURE & FLOW RATE EXPLAINED



DRIVE SYSTEM GUIDE



FUEL TYPE COMPARISON



APPLICATION GUIDE



REGULATOR & UNLOADER GUIDE



WINTER STORAGE & FROST PROTECTION GUIDE



TURBO NOZZLE ASSEMBLIES



SERVICE KITS & MAINTENANCE

NOTE: Operating pressure and flow rate are stated at the machine. Actual performance may vary based on hose length, water supply conditions, nozzle wear.