

SCALEMASTER® Descaling Nozzles

Series 694

The original member of what is now a large family of nozzle designs, the SCALEMASTER® was a major advance in descaling technology. It incorporated a long list of features to provide the fine surface finish demanded by mill operators for hot rolled product.

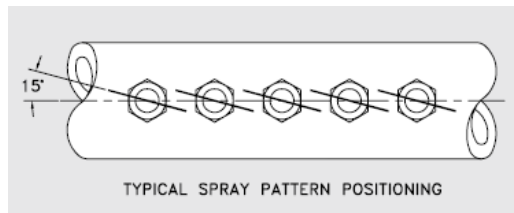
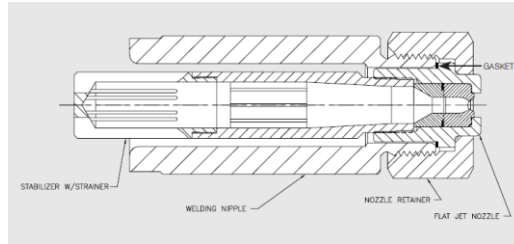
When tight nozzle spacing is not the primary issue, the original SCALEMASTER® design delivers excellent scale removal combined with long service life and very solid construction. The tip assemblies are self-aligning in the bases using internal flats. Once the bases are mounted on the header, the sprays will always have the optimum overlap.

A complete unit consists of the following components:

- Nozzle tip
- Retainer cap
- Strainer/stabilizer
- Gasket
- Nozzle base

The base is normally a permanent part of the header. All the components in the family work with any of the nozzle tips, so no specific tip or strainer is required. The gasket should be replaced when installing a new tip. (A new gasket is included with each tip.) Strainers can normally be reused once, but should be inspected for wear or damage.

Consult with your Lechler representative for assistance in designing the optimum configuration of nozzle angle, capacity, spacing and spray distance for your strip, plate or any hot rolling application.



| Ordering Number | Spray Angle | | | | Mat No. | | Minimum Free Passage (in.) | Flow Rate (Gallons Per Minute) | | | | | | | |
|-----------------|-------------|-----|-----|-----|---------|----|----------------------------|--------------------------------|----------|----------|---------------------------|----------|----------|----------|----------|
| | 22° | 26° | 30° | 40° | 27 | 11 | | 700 psi | 1000 psi | 1500 psi | litres per minute 120 bar | 2000 psi | 2500 psi | 3000 psi | 3500 psi |
| 694 | 495 | 496 | 497 | 498 | ✓ | ✓ | 0.042 | 2.2 | 2.6 | 3.0 | 13.2 | 3.7 | 4.2 | 4.6 | 5.0 |
| 694 | 535 | 536 | 537 | 538 | ✓ | ✓ | 0.043 | 2.8 | 3.3 | 4.0 | 16.4 | 4.7 | 5.2 | 5.7 | 6.2 |
| 694 | 565 | 566 | 567 | 568 | ✓ | ✓ | 0.047 | 3.3 | 3.9 | 4.8 | 19.7 | 5.6 | 6.2 | 6.8 | 7.4 |
| 694 | 605 | 606 | 607 | 608 | ✓ | ✓ | 0.059 | 4.2 | 5.1 | 6.2 | 25.3 | 7.1 | 8.0 | 8.8 | 9.4 |
| 694 | 645 | 646 | 647 | 648 | ✓ | ✓ | 0.063 | 5.1 | 6.1 | 7.0 | 30.7 | 8.7 | 9.7 | 10.6 | 11.5 |
| 694 | 685 | 685 | 687 | 688 | ✓ | ✓ | 0.071 | 6.6 | 7.9 | 9.7 | 39.4 | 11.2 | 12.5 | 13.7 | 14.8 |
| 694 | 725 | 726 | 727 | 728 | ✓ | ✓ | 0.075 | 8.3 | 9.9 | 12.1 | 49.3 | 14.0 | 15.6 | 17.1 | 18.5 |
| 694 | 765 | 766 | 767 | 768 | ✓ | ✓ | 0.091 | 10.6 | 12.7 | 15.6 | 63.5 | 18.0 | 20.1 | 22.0 | 23.8 |
| 694 | 805 | 806 | 807 | 808 | ✓ | ✓ | 0.106 | 13.0 | 15.8 | 19.3 | 78.8 | 22.3 | 24.9 | 27.3 | 29.5 |
| 694 | 845 | 846 | 847 | 848 | ✓ | ✓ | 0.118 | 16.3 | 19.5 | 23.9 | 97.5 | 27.6 | 30.9 | 33.8 | 36.5 |
| 694 | 885 | 886 | 887 | 888 | ✓ | ✓ | 0.134 | 20.6 | 24.6 | 30.1 | 122.0 | 34.7 | 38.8 | 42.6 | 46.0 |
| 694 | - | 906 | 907 | 908 | ✓ | ✓ | 0.145 | 22.9 | 27.4 | 33.6 | 136.0 | 38.8 | 43.3 | 47.5 | 41.3 |
| 694 | - | 916 | 917 | 918 | ✓ | ✓ | 0.149 | 24.6 | 29.4 | 36.0 | 146.0 | 41.6 | 46.5 | 50.9 | 55.0 |

| Component | Ordering No. | |
|---|-----------------------|--------------------|
| Welding nipple Material: AISI 304 | Length: L=230mm | 069.411.1C.00 |
| | L=100mm | 069.410.1C.00 |
| | L=73mm | 069.410.1C.73 |
| Jet stabilizer Material: Brass | without filter S= 74 | 069.431.16 |
| | with filter S=110 | 069.454.16 |
| | with filter S=130 | 069.455.16 |
| Gasket Material: Copper | | 095.015.34.04.02 |
| Nut (Standard) Material: 416SS | Hex32 | 069.400.1A |
| Alignment tip/Blank tip Material: Mild steel | Data sheet on request | 069.490.01.00 |
| | | 069.490.01.01 |
| | | 069.490.01.02 |
| Disassembly tool Material: Mild steel | Data sheet on request | 069.491.01 |
| Tip extractor | Data sheet on request | 095.009.00.12.71.0 |

