ELMRIDGE® Liqui-Jet® Solids Eductors

TLST Series

WITH WASHDOWN FOR HIGHER CAPACITIES AND DISCHARGE HEADS

ELMRIDGE 'TLST Series' Liqui-Jet Solids Eductors use liquid under pressure as the Motive fluid, and effectively pump, slurry, or convey granular solids. The principle of operation for the TLST Series is the same as for the TLS Series shown previously, however, the TLST Series Solids eductor has higher Motive Nozzle flowrates for the same Motive Pressure. TLST Series Solids Eductors are also typically used with Washdown Water supplied via a specially designed feed hopper, dramatically increasing the Suction capacity and available Discharge pressure of a given eductor by reducing or eliminating the amount of ambient air that must be compressed by the eductor. Standard 'TLST Series' Liqui-Jet Solids Eductors have been designed for the optimal combination of obtainable Suction Solids Flowrate and eductor Discharge Pressure. Approximate operating characteristics (Water Motive based on 100 lb/cu-ft granular free-flowing solids - with approximately 10% additional water for washdown), for standard models are shown below, and special units are also available to meet your specifications. Standard materials of construction are PVC, CPVC, Bronze/Brass, Cast Iron/Steel, all Carbon Steel, and 316L Stainless Steel. Ceramic liners are also available. Other materials are available upon request. Threaded, flanged, sanitary, buttweld, or socket weld connections (except Cast Iron), depending on configuration.









SEE INDIVIDUAL DIMENSIONAL DRAWINGS BY STYLE

ELMRIDGE® Liqui-Jet® Solids Eductors

TLST Series

Table 1

Approx. Suction Capacity (cu-ft/hr), Water Consumption (usgpm), and Avail. Disch. Press. (psig) for TLST Series Liqui-Jet Solids Eductors using 70 Deg F Motive Water (with approx. 10% add'l washdown water)

(100 lb/cu-ft powder, Gravity fed, Atmospheric Suction)

| Model | (100 10/60 | Operating Water Pressure (psig) | | | | | | | | |
|--------|--|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|------------------|
| Number | | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 120 | 140 |
| Number | Suction Capacity (cu-ft/hr) | 10 | 12 | 14 | 16 | 17 | 20 | 22 | 25 | 27 |
| TLST3 | Water Consumption (usgpm) | 10.3 | 12.6 | 14.5 | 16.2 | 17.8 | 20.6 | 23.0 | 25.1 | 27.2 |
| | Avail. Disch. Press. (psiq) | 6.4 | 9.6 | 12.8 | 16.0 | 19.2 | 25.6 | 32.0 | 38.5 | 44.8 |
| TLST4 | Suction Capacity (cu-ft/hr) | 18 | 23 | 26 | 29 | 32 | 37 | 41 | 45 | 49 |
| | Water Consumption (usgpm) | 18.8 | 23.0 | 26.6 | 29.7 | 32.6 | 37.7 | 42.1 | 46.1 | 49.8 |
| | Avail. Disch. Press. (psig) | 6.4 | 9.6 | 12.8 | 16.0 | 19.2 | 25.6 | 32.0 | 38.5 | 44.8 |
| TLST5 | . • | 34 | 41 | 47 | 53 | 58 | 67 | 75 | 82 | 89 |
| | Suction Capacity (cu-ft/hr) | 34.2 | 41.9 | 48.4 | 54.0 | 59.3 | 68.5 | 76.6 | 83.8 | 90.5 |
| | Water Consumption (usgpm) | 6.4 | 9.6 | 12.8 | 16.0 | 19.2 | 25.6 | 32.0 | 38.5 | 44.8 |
| | Avail. Disch. Press. (psig) | 60 | 74 | | 96 | 104 | 120 | 134 | 147 | 159 |
| TLST6 | Suction Capacity (cu-ft/hr) | 61.6 | 75.4 | 85 | 97.2 | 106.7 | 123.3 | 137.9 | | 162.9 |
| | Water Consumption (usgpm) | 6.4 | 9.6 | 87.1 12.8 | 16.0 | 19.2 | 25.6 | | 150.8 38.5 | 44.8 |
| TLST7 | Avail. Disch. Press. (psig) | | | | | | | 32.0 | | |
| | Suction Capacity (cu-ft/hr) | 109 110.8 | 133 135.8 | 154 156.8 | 172 175.0 | 188 192.1 | 217 221.9 | 242 248.2 | 265 272 | 287 293 |
| | Water Consumption (usgpm) Avail. Disch. Press. (psiq) | 6.4 | 9.6 | 12.8 | 16.0 | 192.1 | 25.6 | 32.0 | 38.5 | 44.8 |
| | · · · · · · | 144 | 176 | 204 | 228 | 249 | 288 | 32.0 | 352 | 381 |
| TLST8 | Suction Capacity (cu-ft/hr) | 147.1 | 180.2 | 208.1 | 232.2 | 255.0 | 295 | 329 | 360 | 389 |
| | Water Consumption (usgpm) | 6.4 | 9.6 | 12.8 | 16.0 | 19.2 | 25.6 | 32.0 | 38.5 | 44.8 |
| TLST9 | Avail. Disch. Press. (psig) | 191 | 234 | 271 | 303 | 331 | 382 | 427 | | 505 |
| | Suction Capacity (cu-ft/hr) | 195.3 | 239.2 | 276 | 308 | 339 | 391 | 437 | 468 478 | 517 |
| | Water Consumption (usgpm) | 6.4 | 9.6 | 12.8 | 16.0 | 19.2 | 25.6 | 32.0 | 38.5 | 44.8 |
| TLST10 | Avail. Disch. Press. (psig) | 254 | 310 | 359 | 402 | 438 | 506 | 565 | 620 | 670 |
| | Suction Capacity (cu-ft/hr) | 258.9 | 317 | 366 | 409 | 449 | 519 | 580 | 634 | 685 |
| | Water Consumption (usgpm) | 6.4 | 9.6 | 12.8 | 16.0 | 19.2 | 25.6 | 32.0 | 38.5 | 44.8 |
| TLST11 | Avail. Disch. Press. (psig) Suction Capacity (cu-ft/hr) | 338 | 414 | 479 | 536 | 585 | 676 | 754 | 827 | 894 |
| | Water Consumption (usgpm) | 349 | 427 | 494 | 551 | 605 | 699 | 781 | 855 | 923 |
| | Avail. Disch. Press. (psig) | 6.4 | 9.6 | 12.8 | 16.0 | 19.2 | 25.6 | 32.0 | 38.5 | 44.8 |
| TLST12 | Suction Capacity (cu-ft/hr) | 439 | 537 | 621 | 696 | 758 | 876 | 979 | 1073 | 1159 |
| | Water Consumption (usgpm) | 455 | 557 | 644 | 718 | 789 | 911 | 1019 | 1115 | 1204 |
| | Avail. Disch. Press. (psig) | 6.4 | 9.6 | 12.8 | 16.0 | 19.2 | 25.6 | 32.0 | 38.5 | 44.8 |
| | Suction Capacity (cu-ft/hr) | 593 | 726 | 839 | 940 | 1025 | 1184 | 1322 | 1450 | 1566 |
| TLST13 | Water Consumption (usgpm) | 605 | 742 | 857 | 956 | 1050 | 1212 | 1356 | 1483 | 1602 |
| | Avail. Disch. Press. (psig) | 6.4 | 9.6 | 12.8 | 16.0 | 19.2 | 25.6 | 32.0 | 38.5 | 44.8 |
| TLST14 | Suction Capacity (cu-ft/hr) | 787 | 964 | 1114 | 1248 | 1361 | 1572 | 1755 | 1925 | 2080 |
| | Water Consumption (usgpm) | 804 | 985 | 1137 | 1269 | 1394 | 1610 | 1800 | 1969 | 2127 |
| | Avail. Disch. Press. (psig) | 6.4 | 9.6 | 12.8 | 16.0 | 19.2 | 25.6 | 32.0 | 38.5 | 44.8 |
| TLST15 | Suction Capacity (cu-ft/hr) | 1045 | 1279 | 1479 | 1657 | 1806 | 2087 | 2331 | 2555 | 2761 |
| | Water Consumption (usgpm) | 1067 | 1307 | 1510 | 1685 | 1850 | 2137 | 2390 | 2615 | 2824 |
| | Avail. Disch. Press. (psig) | 6.4 | 9.6 | 12.8 | 16.0 | 19.2 | 25.6 | 32.0 | 38.5 | 44.8 |
| TLST16 | Suction Capacity (cu-ft/hr) | 1384 | 1693 | 1958 | 2193 | 2391 | 2763 | 3085 | 3382 | 3655 |
| | Water Consumption (usgpm) | 1412 | 1730 | 1999 | 2230 | 2449 | 2829 | 3164 | 3461 | 3738 |
| | Avail. Disch. Press. (psig) | 6.4 | 9.6 | 12.8 | 16.0 | 19.2 | 25.6 | 32.0 | 38.5 | 44.8 |
| | Avaii. Discii. Pless. (psig) | 0.4 | 9.0 | 12.0 | 10.0 | 13.4 | 23.0 | UZ.U | 50.5 | ++ .∪ |

This table is a guide only and may not be suitable by itself for sizing Liqui-Jet Solids Eductors. It will be our pleasure to assist you.