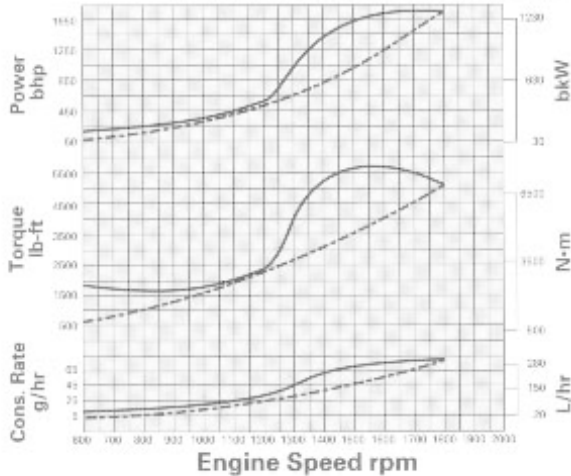


### PERFORMANCE CURVES

#### D Rating – 1800 rpm 1305 bkW (1750 bhp) 1775 mhp



#### Prop Demand Curve Data

| Speed rpm | Power bkW | Torque N-m | Fuel Cons g/bkW-hr | Fuel Rate L/hr |
|-----------|-----------|------------|--------------------|----------------|
| 1800      | 1305      | 6923       | 203                | 315.9          |
| 1600      | 917       | 5470       | 203                | 222.2          |
| 1400      | 614       | 4188       | 214                | 156.9          |
| 1200      | 387       | 3077       | 225                | 103.5          |
| 1000      | 224       | 2137       | 230                | 61.4           |
| 800       | 115       | 1368       | 245                | 33.4           |
| 600       | 48        | 769        | 300                | 17.3           |

#### TMI — DM2893-04

#### Max Power Curve Data

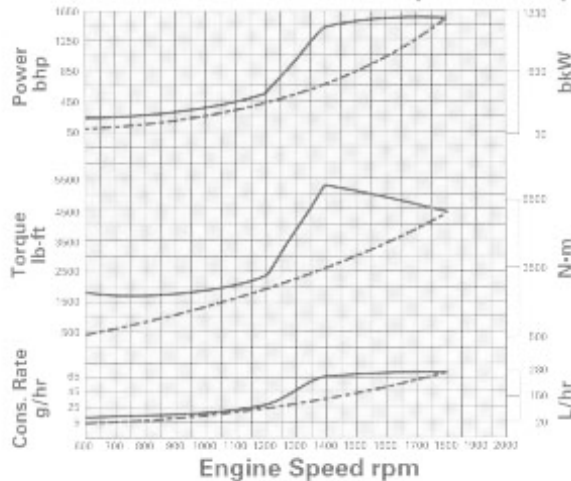
| Power bkW | Torque N-m | Fuel Cons g/bkW-hr | Fuel Rate L/hr |
|-----------|------------|--------------------|----------------|
| 1305      | 6923       | 203                | 315.9          |
| 1305      | 7789       | 193                | 299.5          |
| 1070      | 7298       | 197                | 251.7          |
| 407       | 3239       | 222                | 107.9          |
| 254       | 2426       | 230                | 69.6           |
| 192       | 2292       | 234                | 53.6           |
| 155       | 2467       | 246                | 45.5           |

| Speed rpm | Power bhp | Torque lb-ft | Fuel Cons lb/bhp-hr | Fuel Rate g/hr |
|-----------|-----------|--------------|---------------------|----------------|
| 1800      | 1750      | 5106         | .334                | 83.5           |
| 1600      | 1229      | 4034         | .334                | 58.7           |
| 1400      | 823       | 3089         | .352                | 41.4           |
| 1200      | 519       | 2269         | .369                | 27.3           |
| 1000      | 300       | 1576         | .378                | 16.2           |
| 800       | 154       | 1009         | .402                | 8.8            |
| 600       | 65        | 567          | .493                | 4.6            |

| Power bhp | Torque lb-ft | Fuel Cons lb/bhp-hr | Fuel Rate g/hr |
|-----------|--------------|---------------------|----------------|
| 1750      | 5106         | .334                | 83.5           |
| 1750      | 5745         | .316                | 79.1           |
| 1435      | 5383         | .325                | 66.5           |
| 546       | 2389         | .366                | 28.5           |
| 341       | 1789         | .378                | 18.4           |
| 257       | 1690         | .385                | 14.2           |
| 208       | 1820         | .405                | 12.0           |

**D RATING** – Planing hull vessels such as offshore patrol boats, customs, police, and some fire and fishing boats. Also used for bow and stern thrusters.

#### C Rating – 1800 rpm 1119 bkW (1500 bhp) 1521 mhp



#### Prop Demand Curve Data

| Speed rpm | Power bkW | Torque N-m | Fuel Cons g/bkW-hr | Fuel Rate L/hr |
|-----------|-----------|------------|--------------------|----------------|
| 1800      | 1119      | 5934       | 203                | 270.1          |
| 1600      | 786       | 4688       | 207                | 193.4          |
| 1400      | 526       | 3590       | 216                | 135.6          |
| 1200      | 331       | 2637       | 224                | 88.8           |
| 1000      | 192       | 1831       | 232                | 53.0           |
| 800       | 98        | 1172       | 259                | 30.3           |
| 600       | 41        | 659        | 319                | 15.8           |

#### Max Power Curve Data

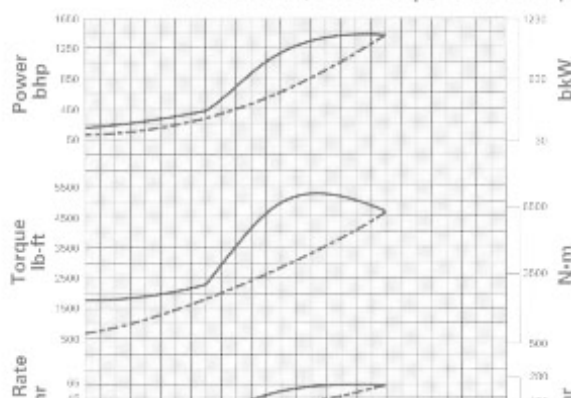
| Power bkW | Torque N-m | Fuel Cons g/bkW-hr | Fuel Rate L/hr |
|-----------|------------|--------------------|----------------|
| 1119      | 5934       | 203                | 270.1          |
| 1119      | 6676       | 201                | 267.5          |
| 1046      | 7135       | 205                | 254.9          |
| 407       | 3239       | 223                | 108.1          |
| 254       | 2426       | 230                | 69.6           |
| 192       | 2292       | 234                | 53.6           |
| 155       | 2467       | 246                | 45.5           |

| Speed rpm | Power bhp | Torque lb-ft | Fuel Cons lb/bhp-hr | Fuel Rate g/hr |
|-----------|-----------|--------------|---------------------|----------------|
| 1800      | 1500      | 4377         | .333                | 71.4           |
| 1600      | 1054      | 3458         | .339                | 51.1           |
| 1400      | 706       | 2648         | .355                | 35.8           |
| 1200      | 444       | 1945         | .369                | 23.4           |
| 1000      | 257       | 1350         | .381                | 14.0           |
| 800       | 132       | 864          | .426                | 8.0            |
| 600       | 56        | 486          | .525                | 4.2            |

| Power bhp | Torque lb-ft | Fuel Cons lb/bhp-hr | Fuel Rate g/hr |
|-----------|--------------|---------------------|----------------|
| 1500      | 4377         | .333                | 71.4           |
| 1500      | 4924         | .330                | 70.7           |
| 1403      | 5262         | .336                | 67.3           |
| 546       | 2389         | .366                | 28.6           |
| 341       | 1789         | .378                | 18.4           |
| 257       | 1690         | .385                | 14.2           |
| 208       | 1820         | .405                | 12.0           |

**C RATING** – Vessels such as ferries, harbor tugs, fishing boats moving at higher speeds out and back (e.g. lobster, crayfish, and tuna), offshore service boats, and also displacement hull yachts and short trip coastal freighters where engine load and speed are cyclical.

#### C Rating – 1600 rpm 1052 bkW (1410 bhp) 1430 mhp



#### Prop Demand Curve Data

| Speed rpm | Power bkW | Torque N-m | Fuel Cons g/bkW-hr | Fuel Rate L/hr |
|-----------|-----------|------------|--------------------|----------------|
| 1600      | 1052      | 6276       | 194                | 243.1          |
| 1400      | 704       | 4805       | 204                | 171.4          |
| 1200      | 444       | 3530       | 216                | 114.2          |
| 1000      | 257       | 2451       | 219                | 67.0           |
| 800       | 131       | 1569       | 222                | 34.8           |
| 600       | 56        | 883        | 265                | 17.5           |

#### Max Power Curve Data

| Power bkW | Torque N-m | Fuel Cons g/bkW-hr | Fuel Rate L/hr |
|-----------|------------|--------------------|----------------|
| 1052      | 6276       | 194                | 243.1          |
| 1052      | 7172       | 198                | 248.5          |
| 800       | 6366       | 210                | 199.8          |
| 325       | 3104       | 224                | 86.9           |
| 220       | 2626       | 228                | 59.7           |
| 154       | 2451       | 231                | 42.5           |

| Speed rpm | Power bhp | Torque lb-ft | Fuel Cons lb/bhp-hr | Fuel Rate g/hr |
|-----------|-----------|--------------|---------------------|----------------|
| 1600      | 1410      | 4629         | .319                | 64.2           |
| 1400      | 945       | 3544         | .336                | 45.3           |
| 1200      | 595       | 2604         | .355                | 30.1           |
| 1000      | 344       | 1808         | .360                | 17.7           |
| 800       | 176       | 1157         | .365                | 9.2            |
| 600       | 74        | 651          | .436                | 4.6            |

| Power bhp | Torque lb-ft | Fuel Cons lb/bhp-hr | Fuel Rate g/hr |
|-----------|--------------|---------------------|----------------|
| 1410      | 4629         | .319                | 64.2           |
| 1410      | 5290         | .326                | 65.6           |
| 1073      | 4695         | .344                | 52.8           |
| 436       | 2289         | .369                | 23.0           |
| 295       | 1937         | .374                | 15.8           |
| 207       | 1808         | .380                | 11.2           |



- Prop Demand ----- 3.0 Exponent
- Engine Performance Parameters: Power +/- 3%;  
Specific Fuel Consumption +/- 3%; Fuel Rate +/- 5%.

**C RATING** – Vessels such as ferries, harbor tugs, fishing boats moving at higher speeds out and back (e.g. lobster, crayfish, and tuna), offshore service boats, and also displacement hull yachts and short trip coastal freighters where engine load and speed are cyclical.