

ENGINEERING TOMORROW

Danfoss Industries

Performance Data

TDMS file	Mean_Main_FI ow_GPM	Mean_RPM	Mean_Outlet_ Pressure_Psi	Mean_Displac ement	Mean_Inlet_Te mp_F
P16_HY5_Eff_ 180F_50%_10 00rpm_1000ps i.tdms	3.0873616763 80636	1004.9044029 93996	1009.6193263 26785	11.629901685 83438	183.90433959 79843
P16_HY5_Eff_ 180F_50%_10 00rpm_2000ps i.tdms	2.6050931636 93438	1004.3885231 09772	2010.7132777 39034	9.8182595674 93225	182.66900090 60881
P16_HY5_Eff_ 180F_50%_10 00rpm_3000ps i.tdms	2.2829497356 05421	1003.8494032 11331	3010.3638509 99399	8.6087670402 63244	177.58895111 69227
P16_HY5_Eff_ 180F_50%_10 00rpm_4060ps i.tdms	1.8349353317 12156	1003.8135297 82581	4062.3186244 53057	6.9195939207 71413	183.17835645 30865
P16_HY5_Eff_ 180F_50%_10 00rpm_4351ps i.tdms	1.6926625658 5685	1003.9726017 60208	4356.0653249 70346	6.3820415122 32083	183.30743413 97009
P16_HY5_Eff_ 180F_50%_10 00rpm_4568ps i.tdms	1.5531187079 14453	1003.5481642 8582	4568.0959225 06207	5.8584081875 77538	183.39865643 36561
P16_HY5_Eff_ 180F_50%_10 00rpm_500psi. tdms	3.3505406294 41668	1000.2659556 78106	500.22619504 45252	12.680032734 5243	184.49398385 35048
P16_HY5_Eff_ 180F_50%_10 00rpm_5076ps i.tdms	1.2991745858 95865	1003.8187630 31207	5085.3663165 40212	4.8991992397 7559	183.35980876 78624
P16_HY5_Eff_ 180F_50%_15 00rpm_1000ps i.tdms	4.8808377069 28467	1505.8381775 35783	1006.0185871 0404	12.269571840 70306	183.74273487 37956
P16_HY5_Eff_ 180F_50%_15 00rpm_2000ps i.tdms	4.4269948741 00995	1506.7672104 35111	2006.7588708 65164	11.121824381 54595	182.49783964 85848
P16_HY5_Eff_ 180F_50%_15 00rpm_3000ps i.tdms	3.9745571094 09247	1505.9363658 48701	3008.4771851 00944	9.9906842864 07127	181.37373011 27879
P16_HY5_Eff_ 180F_50%_15 00rpm_4060ps i.tdms	3.4675886103 65461	1506.5413069 38071	4062.0920469 05446	8.7128390952 14088	181.00247000 21395
P16_HY5_Eff_ 180F_50%_15 00rpm_4351ps i.tdms	3.3202418906 79611	1505.7336212 73976	4354.9480594 8567	8.3470855273 03113	180.86992678 69299

TDMS file	Mean_Main_FI ow_GPM	Mean_RPM	Mean_Outlet_ Pressure_Psi	Mean_Displac ement	Mean_Inlet_Te mp_F
P16_HY5_Eff_ 180F_50%_15 00rpm_4568ps i.tdms	3.2046528372 07456	1506.3654584 26752	4572.7171650 62306	8.0531111733 81485	180.78293997 74828
P16_HY5_Eff_ 180F_50%_15 00rpm_500psi. tdms	5.1728302555 44752	1505.8012962 17597	507.33484643 63557	13.003903155 40709	183.84460041 09119
P16_HY5_Eff_ 180F_50%_15 00rpm_5076ps i.tdms	2.9450849378 70128	1506.2739888 30953	5078.4164115 75548	7.4012888873 65514	180.75255445 51907
P16_HY5_Eff_ 180F_50%_18 00rpm_1000ps i.tdms	5.9283101918 1666	1803.8976306 62245	1019.7575189 94589	12.440338249 97917	183.05035193 98759
P16_HY5_Eff_ 180F_50%_18 00rpm_2000ps i.tdms	5.5905902664 12073	1804.3509073 25973	2011.5673879 24915	11.728697768 30795	180.42550696 49491
P16_HY5_Eff_ 180F_50%_18 00rpm_3000ps i.tdms	5.0766242315 11603	1803.8521977 70275	3014.2636860 6464	10.653373460 29921	180.82202720 99638
P16_HY5_Eff_ 180F_50%_18 00rpm_4060ps i.tdms	4.6151568239 22216	1804.0141992 61792	4062.9762958 87805	9.6841086438 76753	181.09327619 87582
P16_HY5_Eff_ 180F_50%_18 00rpm_4351ps i.tdms	4.4768312397 34588	1804.0981965 36326	4352.7877308 58515	9.3934178530 31414	181.01458203 67546
P16_HY5_Eff_ 180F_50%_18 00rpm_4568ps i.tdms	4.3479743245 83849	1804.2753823 00224	4563.3017948 78376	9.1221503259 48427	180.75508846 41883
P16_HY5_Eff_ 180F_50%_18 00rpm_500psi. tdms	6.2420998531 96537	1802.9468785 55568	498.78347687 77385	13.105738027 1534	182.56479930 79184
P16_HY5_Eff_ 180F_50%_18 00rpm_5076ps i.tdms	4.0701379576 58142	1804.9914602 80163	5063.0175778 92205	8.5358554377 36249	180.80802846 57353
P16_HY5_Eff_ 180F_50%_20 00rpm_1000ps i.tdms	6.6774966788 64608	2001.3368138 45769	997.56833043 44493	12.630097106 85469	183.48739664 99069
P16_HY5_Eff_ 180F_50%_20 00rpm_2000ps i.tdms	6.3031050981 15388	2001.5971223 20058	2015.5191816 32563	11.920405414 5368	180.87633008 46039

TDMS file	Mean_Main_FI ow_GPM	Mean_RPM	Mean_Outlet_ Pressure_Psi	Mean_Displac ement	Mean_Inlet_Te mp_F
P16_HY5_Eff_ 180F_50%_20 00rpm_3000ps i.tdms	5.7490580816 09446	2001.5225621 51087	3012.3233767 27246	10.872998279 72876	181.40783380 69478
P16_HY5_Eff_ 180F_50%_20 00rpm_4060ps i.tdms	5.2963935620 53219	2001.4715021 45852	4061.1708246 08462	10.017145070 96565	181.94002118 79558
P16_HY5_Eff_ 180F_50%_20 00rpm_4351ps i.tdms	5.2165441416 2893	2001.6683775 2284	4348.6541909 96449	9.8651544946 80473	178.88893609 56486
P16_HY5_Eff_ 180F_50%_20 00rpm_4568ps i.tdms	5.0334772298 41308	2003.0798617 98097	4568.1188039 39808	9.5122489587 96619	181.44163819 02958
P16_HY5_Eff_ 180F_50%_20 00rpm_500psi. tdms	6.9951497241 59165	2000.5719941 09456	493.14454490 7906	13.235976210 24796	182.12676395 13717
P16_HY5_Eff_ 180F_50%_20 00rpm_5076ps i.tdms	4.7227228620 27485	2002.4803561 77638	5079.0358291 22859	8.9276489101 015	181.91818478 78103
P16_HY5_Eff_ 180F_50%_25 00rpm_1000ps i.tdms	8.6104732292 04601	2502.9611594 28832	1008.6819931 46682	13.022250611 46941	178.49491905 3331
P16_HY5_Eff_ 180F_50%_25 00rpm_2000ps i.tdms	7.9677319267 94253	2503.4454543 5973	2010.5509509 46965	12.047854666 09471	183.87810423 79566
P16_HY5_Eff_ 180F_50%_25 00rpm_3000ps i.tdms	7.5249074904 65834	2503.6977083 73509	3006.1203843 90453	11.377122828 64725	179.09624529 38903
P16_HY5_Eff_ 180F_50%_25 00rpm_4060ps i.tdms	7.1008674074 28137	2503.3786562 84033	4059.6094381 57002	10.737372838 24623	179.46721214 42145
P16_HY5_Eff_ 180F_50%_25 00rpm_4351ps i.tdms	6.9185305078 58774	2504.0317757 73252	4352.2149017 11685	10.458927121 42729	179.73935333 77888
P16_HY5_Eff_ 180F_50%_25 00rpm_4568ps i.tdms	6.8048109779 26182	2502.9806429 01252	4563.9768633 90851	10.291335077 74057	180.04930785 26406
P16_HY5_Eff_ 180F_50%_25 00rpm_500psi. tdms	8.8642865863 45532	2502.8194665 72524	508.37361266 99802	13.406870285 23381	177.61602357 71617

TDMS file	Mean_Main_FI ow_GPM	Mean_RPM	Mean_Outlet_ Pressure_Psi	Mean_Displac ement	Mean_Inlet_Te mp_F
P16_HY5_Eff_ 180F_50%_25 00rpm_5076ps i.tdms	6.5024183675 16385	2503.3772008 70055	5080.5618423 88127	9.8324500231 89002	180.62507420 26565
P16_HY5_Eff_ 180F_50%_30 00rpm_1000ps i.tdms	10.390750731 95075	3004.0168178 94431	1019.2969754 17048	13.093558623 09245	181.31943336 18832
P16_HY5_Eff_ 180F_50%_30 00rpm_2000ps i.tdms	9.8540128214 60268	3003.3283198 41834	2015.1223813 18812	12.420052233 84033	179.32294920 09703
P16_HY5_Eff_ 180F_50%_30 00rpm_3000ps i.tdms	9.3613509923 3968	3003.0912732 61213	3006.3392583 03165	11.800030655 10712	179.70146947 57857
P16_HY5_Eff_ 180F_50%_30 00rpm_4060ps i.tdms	8.7589982513 17688	3003.5641039 82429	4069.1013649 1192	11.039023796 34158	180.05549162 75287
P16_HY5_Eff_ 180F_50%_30 00rpm_4351ps i.tdms	8.4846477781 01634	3003.9918568 99582	4359.1411750 47474	10.691739495 5465	180.57702914 32824
P16_HY5_Eff_ 180F_50%_30 00rpm_4568ps i.tdms	8.4043857903 3919	3005.4875043 0153	4575.9700394 80316	10.585332131 90732	180.96108940 52596
P16_HY5_Eff_ 180F_50%_30 00rpm_500psi. tdms	10.666957717 63221	3002.7899021 70655	503.95708531 65226	13.447103855 03071	183.72681259 2954
P16_HY5_Eff_ 180F_50%_30 00rpm_5076ps i.tdms	8.0678884588 93634	3003.4413903 99458	5078.3774416 75218	10.168429129 71423	182.84596426 04022
P16_HY5_Eff_ 180F_50%_35 00rpm_1000ps i.tdms	12.180134839 61889	3498.8833028 55798	1006.2324145 89971	13.177583206 83048	176.36578286 38055
P16_HY5_Eff_ 180F_50%_35 00rpm_2000ps i.tdms	11.665262716 05031	3497.1382103 68997	2010.2448593 82169	12.626849575 03101	179.00589796 59434
P16_HY5_Eff_ 180F_50%_35 00rpm_3000ps i.tdms	11.015654697 14884	3498.1346044 26215	3009.2963163 35753	11.920293273 32722	180.09763504 84761
P16_HY5_Eff_ 180F_50%_35 00rpm_4060ps i.tdms	10.141265772 26684	3496.5250415 8876	4060.0733237 91565	10.979151496 69296	181.05321455 24007

TDMS file	Mean_Main_FI ow_GPM	Mean_RPM	Mean_Outlet_ Pressure_Psi	Mean_Displac ement	Mean_Inlet_Te mp_F
P16_HY5_Eff_ 180F_50%_35 00rpm_4351ps i.tdms	9.9771960342 4101	3498.6725163 33682	4350.5789393 58078	10.794891413 13749	181.77159580 93973
P16_HY5_Eff_ 180F_50%_35 00rpm_4568ps i.tdms	9.8503417323 96103	3498.8468021 33094	4566.4222553 54572	10.657111185 75919	181.98966228 91649
P16_HY5_Eff_ 180F_50%_35 00rpm_500psi. tdms	12.498297773 62266	3498.9712850 639	503.04077115 90372	13.521461264 82094	178.59474368 42998
P16_HY5_Eff_ 180F_50%_35 00rpm_5076ps i.tdms	9.5645794132 4627	3498.9673238 78652	5076.0115200 12307	10.347587857 52487	182.03216718 35119
P16_HY5_Eff_ 180F_50%_50 0rpm_1000psi. tdms	1.2971206641 28306	503.02368722 09104	1010.6315711 00495	9.7612776542 02338	182.79544779 24737
P16_HY5_Eff_ 180F_50%_50 0rpm_2000psi. tdms	0.9018419725 538692	503.52687420 94622	2006.7244450 09702	6.7798345213 28768	182.76573893 3146
P16_HY5_Eff_ 180F_50%_50 0rpm_500psi.t dms	1.5274968012 38055	502.75166767 59432	506.11785482 65194	11.501111510 4548	181.17561213 0545

Statistics

Column	Min	Max	Average	Median	IQR
Mean_Main_Fl	0.9018419725	12.498297773	6.1075001413	5.7490580816	4.8264876437
ow_GPM	538692	62266	19114	09446	65763
Mean_RPM	502.75166767	3498.9712850	2102.9799790	2001.4715021	1496.8354103
	59432	639	03272	45852	76107
Mean_Outlet_	493.14454490	5085.3663165	2977.6998735	3012.3233767	3338.0760028
Pressure_Psi	7906	40212	94169	27246	03091
Mean_Displac ement	4.8991992397	13.521461264	10.573363945	10.691739495	2.5605344520
	7559	82094	420049	5465	62198
Mean_Inlet_Te	176.36578286	184.49398385	181.26291643	181.09327619	2.4557989129
mp_F	38055	35048	898617	87582	0447

Outliers

Mean_Displacement	Mean_Inlet_Temp_F
4.89919923977559	nan
nan	176.3657828638055

VE Pivot

Outlet Pressure	2102
2977.0	78.19690297030978

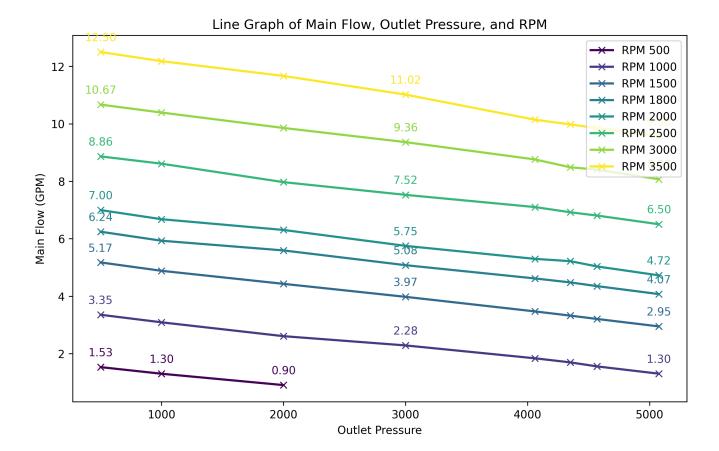
ME Pivot

Outlet Pressure	2102
2977.0	84.23826199627528

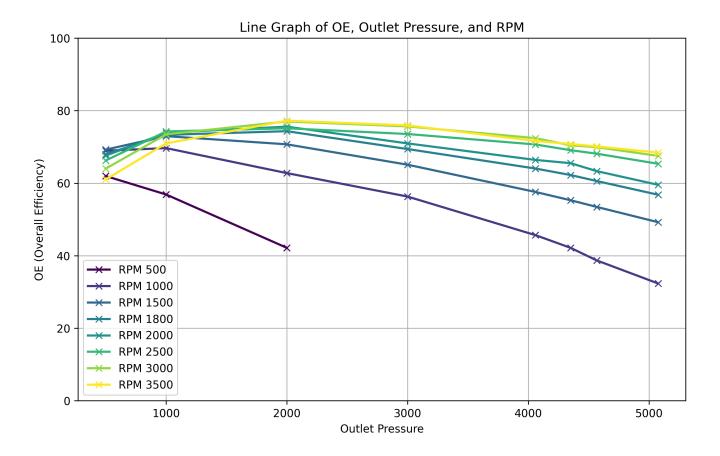
OE Pivot

Outlet Pressure	2102
2977.0	65.10760285941734

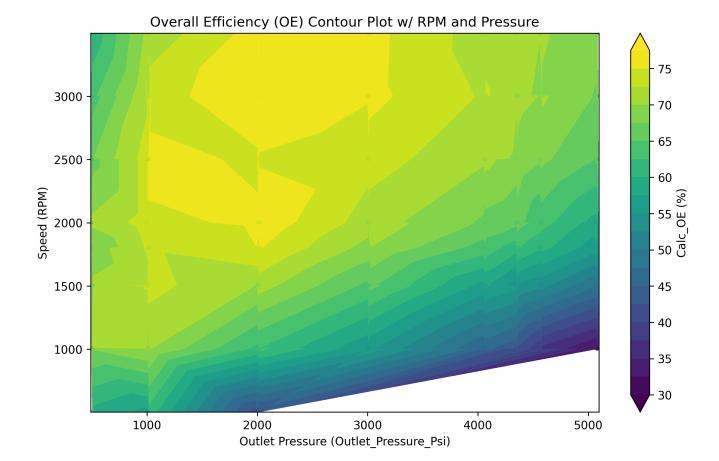
flow_line_plot



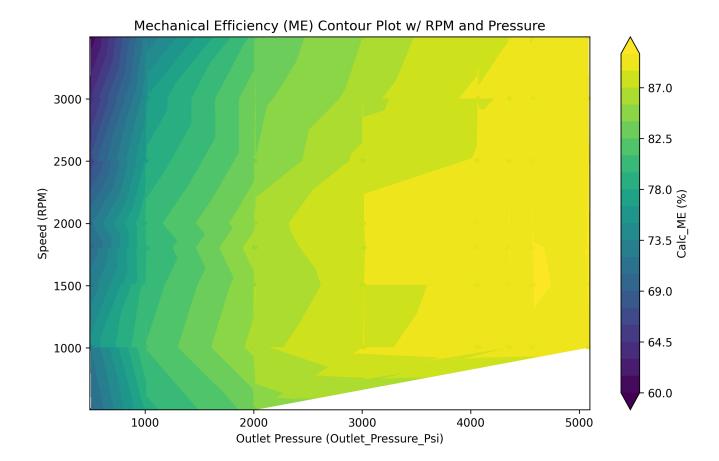
efficiency_map_plot



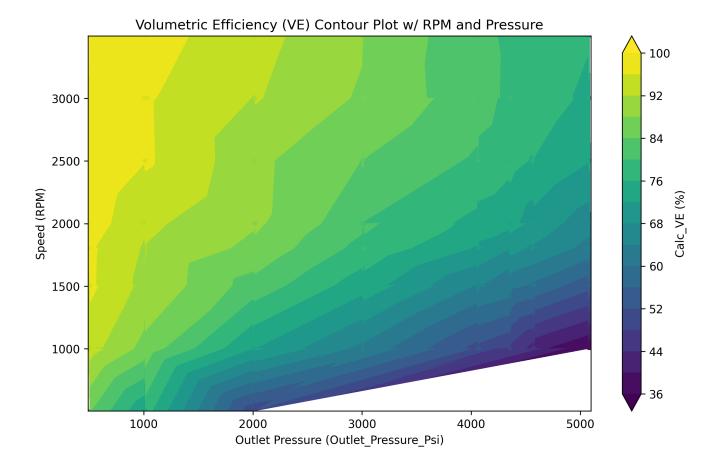
oe_contour_plot



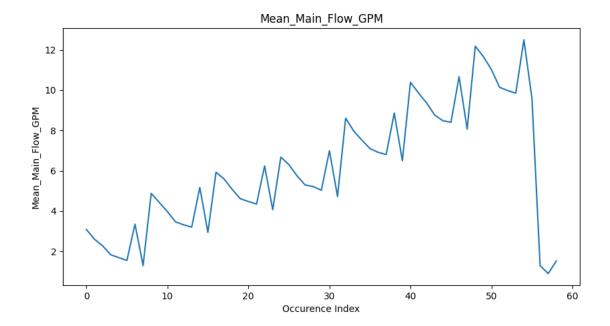
me_contour_plot



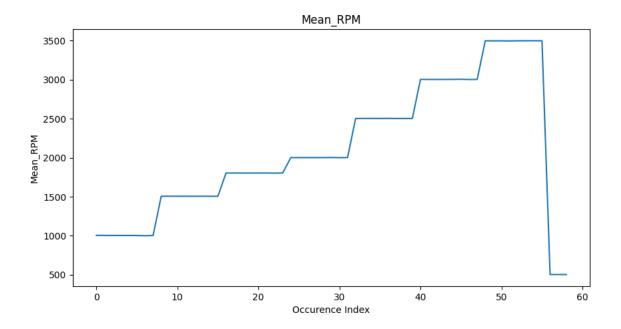
ve_contour_plot



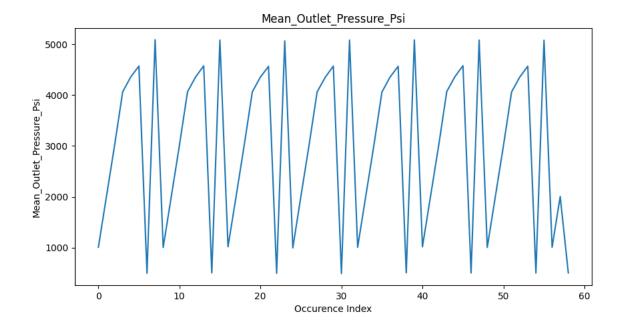
Mean_Main_Flow_GPM Plot



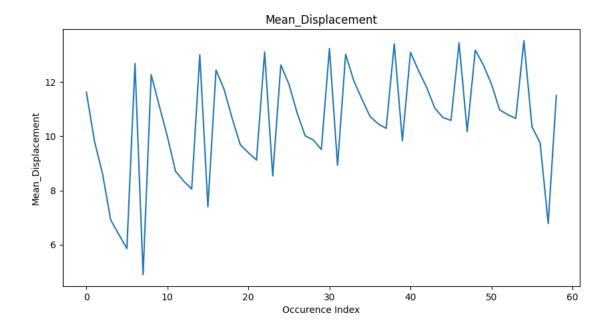
Mean_RPM Plot



Mean_Outlet_Pressure_Psi Plot



Mean_Displacement Plot



Mean_Inlet_Temp_F Plot

