

Heavy Duty Rating Workshop

Rater/Parts Crosstab

	Total parts rated	A1_square	A2_keystone	A3_two-piece	A4_two-piece	A5_two-piece	A6_two-piece	B1_square	B2_keystone	B3_two-piece	B4_two-piece	B5_two-piece	B6_two-piece	C1_square	C2_keystone	C3_two-piece	C4_two-piece	C5_two-piece	C6_two-piece	calibration_piston_1	calibration_piston_2	D1_ism	D2_ism	Sludge														
Avis, Steve	18	●	●	●	●	●	●	●	●	●	●	●	●						●	●	●	●	●	●														
Barrera, Tony	16	●	●	●	●	●	●	●	●	●	●	●	●	●			●			●	●	●	●	●	●													
Campbell, Andy	13							●	●	●	●	●	●	●	●						●	●	●	●	●													
Caproni, David	14	●	●	●	●	●	●														●	●	●	●	●													
Castillo, George	17	●	●	●	●	●	●							●	●		●				●	●	●	●	●													
Clapperty, Leon	9	●	●	●	●	●	●														●	●			●													
Engelskirchen, Jim	11	●	●	●	●	●	●	●	●	●											●	●			●													
Foecking, Brian	16	●	●					●	●	●	●	●	●	●	●	●					●	●	●	●	●													
Garcia, Pat	8													●	●	●	●	●			●	●			●													
Greenland, Paul	10	●	●	●	●	●	●														●	●			●													
Guarda, Waldyr	16							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●													
Gutzwiller, Jim	4							●	●	●	●	●	●								●	●			●													
Hill, Howard	14							●	●	●	●	●	●	●	●	●					●	●	●	●	●													
Hills, Barry	15				●			●	●	●	●	●	●	●	●	●					●	●	●	●	●													
Holland, Steve	17							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●													
Kobrinetz, Jack	12	●												●	●	●	●	●	●	●	●	●	●	●	●													
Kuipers, Jacques	11							●	●	●	●	●	●	●	●	●					●	●			●													
Langford, Mike	12	●						●	●	●	●	●	●	●	●	●					●	●			●													
Lopez, Frank	12							●	●	●	●	●	●	●	●	●					●	●			●													
May, Marianne	19	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●													
Narasaki, Keith	12							●	●	●	●	●	●	●	●	●					●	●	●	●	●													
Pansza, Mike	16	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					●	●	●	●	●													
Radonich, Pete	15	●			●	●	●	●													●	●			●													
Rodriguez, Jesse	10	●	●											●	●	●	●	●	●	●	●	●	●	●	●													
Sanchez, Art	14	●	●	●										●	●	●	●	●	●	●	●	●	●	●	●													
Seiz, Ray	13							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●													
Tschirhart, Garland	14	●			●	●	●	●						●	●	●	●	●	●	●	●	●	●	●	●													
van Dijk, Bob	8													●	●	●	●	●	●	●	●	●	●	●	●													
Viera, Ralph	17	●	●	●	●	●	●							●	●	●	●	●	●	●	●	●	●	●	●													
Yanchar, Paul	23	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●													
Total Ratings	406	18	14	12	13	14	13	20	17	17	16	17	15	20	17	16	18	16	17	30	30	17	17	22														

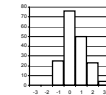
MIN RATINGS/RATER	4	MIN RATINGS/PART	12
MAX RATINGS/RATER	23	MAX RATINGS/PART	30
AVG RATINGS/RATER	14	AVG RATINGS/PART	18

Heavy Duty Diesel Rating Workshop

PART ID = calibration piston 1

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	TGF										UWPD	WPD
Tschirhart, Garland	31.00	8.17	0.20	30.48	1.60	20.00										71.45	71.45
Foecking, Brian	29.25	10.47	0.17	22.31	1.86	5.00										64.06	64.06
Avis, Steve	25.00	7.19	0.33	21.43	1.79	23.00										55.74	55.74
Kobrinetz, Jack	29.25	9.39	0.04	23.35	1.57	18.00										63.60	63.60
Castillo, George	34.00	7.65	0.09	23.66	2.18	16.00										67.58	67.58
Caproni, David	35.25	9.35	0.08	25.81	1.65	16.00										72.14	72.14
Radonich, Pete	34.75	12.35	0.09	24.25	1.65	18.00										73.09	73.09
Holland, Steve	29.50	10.03	0.15	21.63	1.58	15.00										62.89	62.89
May, Marianne	29.00	10.31	0.22	25.11	0.86	11.00										65.49	65.49
Barrera, Tony	30.82	9.59	0.19	24.68	1.13	15.00										66.41	66.41
Viera, Ralph	29.25	9.40	0.24	24.92	0.76	14.00										64.57	64.57
Pansza, Mike	32.00	7.89	0.34	22.57	2.00	16.00										64.80	64.80
Campbell, Andy	34.25	9.00	0.07	22.36	1.60	19.00										67.27	67.27
Hill, Howard	25.49	8.00	0.49	20.62	0.97	15.00										55.57	55.57
Sanchez, Art	33.75	7.48	0.34	30.20	1.50	23.00										73.27	73.27
Hills, Barry	27.54	9.25	0.23	24.01	1.14	18.00										62.17	62.17
Lopez, Frank	28.50	12.01	0.25	26.68	1.65	16.00										69.09	69.09
Greenland, Paul	31.25	8.29	0.35	26.28	2.00	17.00										68.17	68.17
Clapperty, Leon	36.80	10.56	0.47	28.25	1.34	19.00										77.42	77.42
Langford, Mike	43.25	12.08	0.30	35.70	1.44	30.00										92.77	92.77
Rodriguez, Jesse	33.00	12.72	0.20	29.47	1.17	10.00										76.56	76.56
Guarda, Waldyr	27.10	9.83	0.28	21.06	2.40	11.00										60.67	60.67
Engelskirchen, Jim	33.50	7.88	0.20	37.75	1.78	19.00										81.11	81.11
Narasaki, Keith	36.90	13.00	0.00	31.14	2.00	26.00										83.04	83.04
Yanchar, Paul	30.50	10.13	0.09	26.72	1.28	15.00										68.72	68.72
Seiz, Ray	39.70	11.50	0.41	38.89	1.35	14.00										91.85	91.85
van Dijk, Bob	35.00	7.75	0.00	36.10	2.40	25.00										81.25	81.25
Kuipers, Jacques	34.50	9.60	0.10	32.00	3.30	42.00										79.50	79.50
Gutzwiller, Jim	35.25	10.07	0.08	23.67	1.25	20.00										70.31	70.31
Garcia, Pat	27.25	6.60	0.04	22.09	0.92	9.00										56.90	56.90
MAXIMUM	43.25	13.00	0.49	38.89	3.30	42.00										92.77	92.77
MINIMUM	25.00	6.60	0.00	20.62	0.76	5.00										55.57	55.57
RANGE (MAX-MIN)	18.25	6.40	0.49	18.27	2.54	37.00										37.20	37.20
MEAN	32.09	9.58	0.20	26.77	1.60	17.83										70.25	70.25
STD	4.17	1.73	0.14	5.17	0.53	6.92										9.46	9.46



yi within 1 70.0%
 yi within 2 96.7%
 yi within 3 98.9%

PART ID = calibration piston 1

YI VALUES

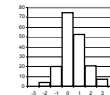
	Groove 1	Groove 2	Groove 3	Land 2	Land 3	TGF										UWPD	WPD	MEAN	STD
Tschirhart, Garland	-0.26	-0.82	-0.01	0.72	-0.01	0.31										0.13	0.13	0.02	0.44
Foecking, Brian	-0.68	0.51	-0.22	-0.86	0.47	-1.85										-0.65	-0.65	-0.49	0.76
Avis, Steve	-1.70	-1.38	0.95	-1.03	0.35	0.75										-1.53	-1.53	-0.64	1.13
Kobrinetz, Jack	-0.68	-0.11	-1.19	-0.66	-0.06	0.02										-0.70	-0.70	-0.51	0.42
Castillo, George	0.46	-1.12	-0.82	-0.60	1.08	-0.26										-0.28	-0.28	-0.23	0.70
Caproni, David	0.76	-0.14	-0.90	-0.19	0.09	-0.26										0.20	0.20	-0.03	0.47
Radonich, Pete	0.64	1.60	-0.82	-0.49	0.09	0.02										0.30	0.30	0.21	0.73
Holland, Steve	-0.62	0.26	-0.36	-0.99	-0.04	-0.41										-0.78	-0.78	-0.47	0.42
May, Marianne	-0.74	0.42	0.13	-0.32	-1.40	-0.99										-0.50	-0.50	-0.49	0.58
Barrera, Tony	-0.30	0.00	-0.11	-0.40	-0.89	-0.41										-0.41	-0.41	-0.37	0.26
Viera, Ralph	-0.68	-0.11	0.29	-0.36	-1.58	-0.55										-0.60	-0.60	-0.52	0.54
Pansza, Mike	-0.02	-0.98	1.03	-0.81	0.74	-0.26										-0.58	-0.58	-0.18	0.73
Campbell, Andy	0.52	-0.34	-1.01	-0.85	-0.02	0.17										-0.31	-0.31	-0.27	0.50
Hill, Howard	-1.58	-0.92	2.13	-1.19	-1.19	-0.41										-1.55	-1.55	-0.78	1.24
Sanchez, Art	0.40	-1.22	1.03	0.66	-0.19	0.75										0.32	0.32	0.26	0.70
Hills, Barry	-1.09	-0.19	0.21	-0.53	-0.87	0.02										-0.85	-0.85	-0.52	0.48
Lopez, Frank	-0.86	1.40	0.36	-0.02	0.09	-0.26										-0.12	-0.12	0.06	0.65
Greenland, Paul	-0.20	-0.75	1.13	-0.10	0.74	-0.12										-0.22	-0.22	0.03	0.60
Clapperty, Leon	1.13	0.56	1.99	0.29	-0.49	0.17										0.76	0.76	0.64	0.73
Langford, Mike	2.67	1.44	0.73	1.73	-0.31	1.76										2.38	2.38	1.60	0.99
Rodriguez, Jesse	0.22	1.81	-0.01	0.52	-0.81	-1.13										0.67	0.67	0.24	0.92
Guarda, Waldyr	-1.19	0.14	0.58	-1.10	1.49	-0.99										-1.01	-1.01	-0.39	1.00
Engelskirchen, Jim	0.34	-0.99	-0.01	2.12	0.33	0.17										1.15	1.15	0.53	0.93
Narasaki, Keith	1.15	1.98	-1.49	0.84	0.74	1.18										1.35	1.35	0.89	1.03
Yanchar, Paul	-0.38	0.32	-0.82	-0.01	-0.61	-0.41										-0.16	-0.16	-0.28	0.35
Seiz, Ray	1.82	1.11	1.54	2.34	-0.47	-0.55										2.28	2.28	1.29	1.19
van Dijk, Bob	0.70	-1.06	-1.49	1.80	1.49	1.04										1.16	1.16	0.60	1.21
Kuipers, Jacques	0.58	0.01	-0.75	1.01	3.18	3.48										0.98	0.98	1.18	1.46
Gutzwiller, Jim	0.76	0.28	-0.91	-0.60	-0.67	0.31										0.01	0.01	-0.10	0.57
Garcia, Pat	-1.16	-1.73	-1.19	-0.90	-1.28	-1.28										-1.41	-1.41	-1.29	0.24
Yi MAXIMUM	2.67	1.98	2.13	2.34	3.18	3.48										2.38	2.38	1.60	1.46
Yi MINIMUM	-0.02	0.00	-0.01	-0.01	-0.01	0.02										0.01	0.01	0.02	0.24
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00										0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00										1.00	1.00		
Ratings MEAN	32.09	9.58	0.20	26.77	1.60	17.83										70.25	70.25		
Ratings STD	4.17	1.73	0.14	5.17	0.53	6.92										9.46	9.46		

Heavy Duty Diesel Rating Workshop

PART ID = calibration piston 2

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	TGF										UWPD	WPD
Caproni, David	55.00	13.34	0.58	24.27	2.06	55.00										95.25	95.25
Kobrinetz, Jack	49.85	11.71	1.10	21.70	2.14	43.00										86.50	86.50
Viera, Ralph	54.00	12.08	1.21	22.03	1.48	46.00										90.80	90.80
Holland, Steve	51.99	13.51	1.03	21.25	2.54	46.00										90.32	90.32
Barrera, Tony	50.25	12.09	1.23	24.24	1.89	41.00										89.69	89.69
Castillo, George	54.75	12.48	1.35	22.05	2.17	40.00										92.80	92.80
Foecking, Brian	51.25	14.74	1.12	23.54	2.20	38.00										92.84	92.84
Radonich, Pete	50.50	15.03	1.63	24.25	2.27	43.00										93.68	93.68
Tschirhart, Garland	52.50	10.65	0.87	26.55	2.12	43.00										92.69	92.69
Avis, Steve	50.20	11.70	1.10	21.00	1.95	41.00										85.95	85.95
May, Marianne	51.75	13.34	1.02	20.95	2.20	42.00										89.26	89.26
Panza, Mike	53.00	10.20	1.46	20.30	1.51	48.00										86.47	86.47
Campbell, Andy	48.75	10.30	1.25	21.04	2.41	41.00										83.75	83.75
Hill, Howard	50.80	14.26	1.95	20.55	1.84	41.00										89.40	89.40
Greenland, Paul	51.25	11.13	1.20	24.40	1.94	40.00										89.92	89.92
Lopez, Frank	49.00	13.93	1.79	21.99	2.18	40.00										88.89	88.89
Langford, Mike	54.75	13.66	0.76	34.99	2.41	40.00										106.57	106.57
Yanchar, Paul	50.00	13.52	0.93	22.68	1.86	41.00										88.99	88.99
Seiz, Ray	52.37	14.15	1.05	38.12	1.53	41.00										107.22	107.22
Guarda, Waldyr	52.60	12.65	0.96	19.00	3.47	49.00										85.68	85.68
Sanchez, Art	47.00	11.81	1.03	26.88	1.99	48.00										88.71	88.71
Rodriguez, Jesse	54.00	14.54	0.67	27.36	2.08	37.00										98.65	98.65
Narasaki, Keith	53.30	16.30	0.70	36.80	3.10	48.00										110.20	110.20
Hills, Barry	52.75	13.20	1.07	20.44	2.31	45.00										89.77	89.77
van Dijk, Bob	47.50	9.13	1.01	30.10	1.50	42.00										89.24	89.24
Kuipers, Jacques	53.25	11.20	0.77	19.32	2.61	43.50										87.15	87.15
Clapperty, Leon	44.33	14.17	0.72	26.00	1.82	40.00										87.04	87.04
Engelskirchen, Jim	50.50	12.92	0.88	34.18	2.87	38.00										101.35	101.35
Gutzwiller, Jim	53.76	13.54	1.73	26.09	3.04	40.00										98.15	98.15
Garcia, Pat	46.00	8.92	0.63	21.71	1.80	34.00										79.06	79.06
MAXIMUM	55.00	16.30	1.95	38.12	3.47	55.00										110.20	110.20
MINIMUM	44.33	8.92	0.58	19.00	1.48	34.00										79.06	79.06
RANGE (MAX-MIN)	10.67	7.38	1.37	19.12	1.99	21.00										31.14	31.14
MEAN	51.23	12.67	1.09	24.79	2.18	42.48										91.97	91.97
STD	2.66	1.76	0.35	5.20	0.48	4.22										7.00	7.00



yi within 1 71.1%
 yi within 2 93.9%
 yi within 3 100.0%

PART ID = calibration piston 2

YI VALUES

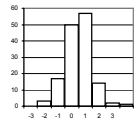
	Groove 1	Groove 2	Groove 3	Land 2	Land 3	TGF										UWPD	WPD	MEAN	STD
Caproni, David	1.42	0.38	-1.48	-0.10	-0.24	2.97										0.47	0.47	0.49	1.30
Kobrinetz, Jack	-0.52	-0.55	0.02	-0.59	-0.07	0.12										-0.78	-0.78	-0.39	0.36
Viera, Ralph	1.04	-0.34	0.34	-0.53	-1.44	0.83										-0.17	-0.17	-0.05	0.79
Holland, Steve	0.29	0.48	-0.19	-0.68	0.75	0.83										-0.24	-0.24	0.13	0.54
Barrera, Tony	-0.37	-0.33	0.40	-0.11	-0.60	-0.35										-0.33	-0.33	-0.25	0.29
Castillo, George	1.32	-0.11	0.74	-0.53	-0.01	-0.59										0.12	0.12	0.13	0.64
Foecking, Brian	0.01	1.17	0.06	-0.24	0.05	-1.06										0.13	0.13	0.03	0.61
Radonich, Pete	-0.28	1.34	1.53	-0.10	0.19	0.12										0.24	0.24	0.41	0.66
Tschirhart, Garland	0.48	-1.15	-0.64	0.34	-0.12	0.12										0.10	0.10	-0.10	0.54
Avis, Steve	-0.39	-0.55	0.02	-0.73	-0.47	-0.35										-0.86	-0.86	-0.52	0.30
May, Marianne	0.20	0.38	-0.21	-0.74	0.05	-0.11										-0.39	-0.39	-0.15	0.36
Panza, Mike	0.67	-1.41	1.06	-0.86	-1.38	1.31										-0.78	-0.78	-0.27	1.10
Campbell, Andy	-0.93	-1.35	0.45	-0.72	0.48	-0.35										-1.17	-1.17	-0.60	0.73
Hill, Howard	-0.16	0.90	2.47	-0.82	-0.70	-0.35										-0.37	-0.37	0.08	1.10
Greenland, Paul	0.01	-0.88	0.31	-0.08	-0.49	-0.59										-0.29	-0.29	-0.29	0.37
Lopez, Frank	-0.84	0.71	2.01	-0.54	0.01	-0.59										-0.44	-0.44	-0.01	0.95
Langford, Mike	1.32	0.56	-0.96	1.96	0.48	-0.59										2.09	2.09	0.87	1.20
Yanchar, Paul	-0.46	0.48	-0.47	-0.41	-0.66	-0.35										-0.42	-0.42	-0.34	0.34
Seiz, Ray	0.43	0.84	-0.12	2.56	-1.34	-0.35										2.18	2.18	0.80	1.40
Guarda, Waldyr	0.52	-0.01	-0.38	-1.11	2.68	1.54										-0.47	-0.47	0.29	1.25
Sanchez, Art	-1.59	-0.49	-0.18	0.40	-0.39	1.31										-0.46	-0.46	-0.23	0.83
Rodriguez, Jesse	1.04	1.06	-1.21	0.49	-0.20	-1.30										0.96	0.96	0.23	1.00
Narasaki, Keith	0.78	2.06	-1.13	2.31	1.92	1.31										2.60	2.60	1.56	1.26
Hills, Barry	0.57	0.30	-0.08	-0.84	0.28	0.60										-0.31	-0.31	0.03	0.50
van Dijk, Bob	-1.40	-2.01	-0.24	1.02	-1.40	-0.11										-0.39	-0.39	-0.62	0.95
Kuipers, Jacques	0.76	-0.84	-0.93	-1.05	0.90	0.24										-0.69	-0.69	-0.29	0.79
Clapperty, Leon	-2.60	0.85	-1.07	0.23	-0.74	-0.59										-0.70	-0.70	-0.67	1.00
Engelskirchen, Jim	-0.28	0.14	-0.61	1.80	1.44	-1.06										1.34	1.34	0.51	1.10
Gutzwiller, Jim	0.95	0.49	1.82	0.25	1.79	-0.59										0.88	0.88	0.81	0.79
Garcia, Pat	-1.97	-2.13	-1.33	-0.59	-0.78	-2.01										-1.84	-1.84	-1.56	0.59
Yi MAXIMUM	-2.60	-2.13	2.47	2.56	2.68	2.97										2.60	2.60	-1.56	1.40
Yi MINIMUM	0.01	-0.01	0.02	-0.08	0.01	-0.11										0.10	0.10	-0.01	0.29
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00										0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00										1.00	1.00		
Ratings MEAN	51.23	12.67	1.09	24.79	2.18	42.48										91.97	91.97		
Ratings STD	2.66	1.76	0.35	5.20	0.48	4.22										7.00	7.00		

Heavy Duty Diesel Rating Workshop

PART ID = Piston A1 - square cut

RATED VALUES

	Groove 1	Groove 2	Groove 3	Groove 4	Land 2	Land 3	Land 4	TGF							UWPD	WPD
Barrera, Tony	67.53	25.00	0.10	0.02	18.24	0.33	0.20	78.00							111.41	399.85
Pansza, Mike	64.03	25.00	0.02	0.00	18.68	0.30	0.10	53.00							108.13	389.61
Caproni, David	69.00	25.00	0.20	0.10	18.27	0.36	0.10	60.00							113.03	407.65
Castillo, George	65.00	25.00	0.05	0.00	17.97	0.28	0.05	68.00							108.35	387.00
Avis, Steve	70.78	24.20	0.22	0.10	19.02	0.27	0.10	70.00							114.69	402.95
May, Marianne	67.75	24.67	0.04	0.00	18.61	0.29	0.08	70.00							111.44	389.59
Tschirhart, Garland	68.25	23.40	0.10	0.10	16.52	0.50	0.10	58.00							108.97	384.07
Radonich, Pete	68.25	25.00	0.10	0.00	18.10	0.20	0.00	65.00							111.65	389.10
Kobrinetz, Jack	67.02	24.64	0.19	0.12	17.60	0.26	0.20	67.00							110.03	402.27
Viera, Ralph	67.00	25.00	0.16	0.10	17.83	0.21	0.08	77.00							110.38	399.01
Foecking, Brian	56.75	25.00	0.00	0.00	18.50	0.39	0.00	60.00							100.64	379.22
Greenland, Paul	65.50	25.00	0.20	0.10	16.46	0.45	0.07	67.00							107.78	398.56
Clapperty, Leon	60.51	24.90	0.21	0.16	16.07	0.22	0.20	64.00							102.27	395.71
Engelskirchen, Jim	60.25	25.00	0.20	0.20	18.99	0.40	0.20	60.00							105.24	412.72
Yanchar, Paul	60.28	24.20	0.05	0.03	18.00	0.20	0.05	66.00							102.81	374.88
Sanchez, Art	52.50	25.00	0.50	0.10	18.10	0.53	0.10	42.00							96.83	404.45
Langford, Mike	59.08	24.20	0.70	0.20	18.88	0.73	0.20	55.00							103.99	427.26
Rodriguez, Jesse	65.78	25.00	0.20	0.10	20.43	0.20	0.10	56.00							111.81	408.79
MAXIMUM	70.78	25.00	0.70	0.20	20.43	0.73	0.20	78.00							114.69	427.26
MINIMUM	52.50	23.40	0.00	0.00	16.07	0.20	0.00	42.00							96.83	374.88
RANGE (MAX-MIN)	18.28	1.60	0.70	0.20	4.36	0.53	0.20	36.00							17.86	52.38
MEAN	64.18	24.73	0.18	0.08	18.13	0.34	0.11	63.11							107.75	397.37
STD	4.89	0.45	0.17	0.07	1.03	0.14	0.07	8.73							4.81	12.82



yi within 1 74.3%
 yi within 2 95.8%
 yi within 3 99.3%

PART ID = Piston A1 - square cut

Yi VALUES

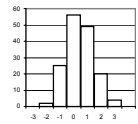
	Groove 1	Groove 2	Groove 3	Groove 4	Land 2	Land 3	Land 4	TGF							UWPD	WPD	MEAN	STD
Barrera, Tony	0.68	0.59	-0.46	-0.88	0.11	-0.07	1.39	1.71							0.76	0.19	0.40	0.79
Pansza, Mike	-0.03	0.59	-0.93	-1.18	0.54	-0.28	-0.11	-1.16							0.08	-0.61	-0.31	0.64
Caproni, David	0.99	0.59	0.12	0.30	0.14	0.14	-0.11	-0.36							1.10	0.80	0.37	0.48
Castillo, George	0.17	0.59	-0.75	-1.18	-0.15	-0.42	-0.86	0.56							0.13	-0.81	-0.27	0.62
Avis, Steve	1.35	-1.18	0.23	0.30	0.87	-0.49	-0.11	0.79							1.44	0.44	0.36	0.81
May, Marianne	0.73	-0.14	-0.81	-1.18	0.47	-0.35	-0.41	0.79							0.77	-0.61	-0.07	0.72
Tschirhart, Garland	0.83	-2.96	-0.46	0.30	-1.56	1.13	-0.11	-0.59							0.25	-1.04	-0.42	1.21
Radonich, Pete	0.83	0.59	-0.46	-1.18	-0.03	-0.99	-1.61	0.22							0.81	-0.65	-0.25	0.86
Kobrinetz, Jack	0.58	-0.21	0.06	0.60	-0.51	-0.56	1.39	0.45							0.47	0.38	0.26	0.59
Viera, Ralph	0.58	0.59	-0.12	0.30	-0.29	-0.92	-0.41	1.59							0.55	0.13	0.20	0.69
Foecking, Brian	-1.52	0.59	-1.04	-1.18	0.36	0.33	-1.61	-0.36							-1.48	-1.42	-0.73	0.88
Greenland, Paul	0.27	0.59	0.12	0.30	-1.61	0.78	-0.56	0.45							0.01	0.09	0.04	0.69
Clapperty, Leon	-0.75	0.37	0.17	1.19	-1.99	-0.85	1.39	0.10							-1.14	-0.13	-0.16	1.04
Engelskirchen, Jim	-0.80	0.59	0.12	1.78	0.84	0.43	1.39	-0.36							-0.52	1.20	0.47	0.86
Yanchar, Paul	-0.80	-1.18	-0.75	-0.73	-0.12	-0.99	-0.86	0.33							-1.03	-1.75	-0.79	0.57
Sanchez, Art	-2.39	0.59	1.85	0.30	-0.03	1.34	-0.11	-2.42							-2.27	0.55	-0.26	1.56
Langford, Mike	-1.04	-1.18	3.01	1.78	0.73	2.75	1.39	-0.93							-0.78	2.33	0.81	1.67
Rodriguez, Jesse	0.33	0.59	0.12	0.30	2.23	-0.99	-0.11	-0.81							0.84	0.89	0.34	0.92
Yi MAXIMUM	-2.39	-2.96	3.01	1.78	2.23	2.75	-1.61	-2.42							-2.27	2.33	0.81	1.67
Yi MINIMUM	-0.03	-0.14	0.06	0.30	-0.03	-0.07	-0.11	0.10							0.01	0.09	0.04	0.48
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							1.00	1.00		
Ratings MEAN	64.18	24.73	0.18	0.08	18.13	0.34	0.11	63.11							107.75	397.37		
Ratings STD	4.89	0.45	0.17	0.07	1.03	0.14	0.07	8.73							4.81	12.82		

Heavy Duty Diesel Rating Workshop

PART ID = Piston A3 - two-piece

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %		UWPD	WPD
Pansza, Mike	28.62	18.04	1.53	22.51	7.41	1.70	1.86	2.70	4.50	12.00	11.00	7.00	0.00		88.87	337.25
Caproni, David	30.00	23.50	2.56	28.00	10.58	1.81	1.95	4.04	4.20	8.00	18.00	1.00	0.00		106.64	400.78
Castillo, George	25.61	18.68	2.04	21.60	9.23	2.13	1.52	7.20	6.15	13.00	18.00	8.00	0.00		94.16	341.43
Avis, Steve	23.98	18.46	1.25	21.25	10.56	1.28	0.87	7.20	7.34	9.00	6.00	7.00	0.00		92.19	269.94
Barrera, Tony	29.36	24.08	1.23	25.33	10.37	1.80	1.13	1.95	1.65	13.00	25.00	11.00	0.00		96.89	318.45
May, Marianne	29.55	17.45	2.02	24.75	11.22	2.60	1.55	6.00	7.35	14.00	9.00	13.00	0.00		102.49	364.94
Viera, Ralph	28.20	20.37	2.36	25.17	8.54	2.39	2.24	7.36	7.20	16.00	14.00	12.00	1.00		103.83	408.66
Greenland, Paul	30.20	20.20	2.58	32.95	9.39	2.30	1.73	3.00	7.21	13.00	12.00	13.00	1.00		109.56	390.13
Engelskirchen, Jim	21.60	19.72	1.68	36.25	7.51	1.36	0.88	7.50	7.50	14.00	10.00	15.00	0.00		104.00	285.99
Clapperty, Leon	25.81	17.64	1.06	22.20	11.65	1.24	0.77	2.70	5.70	15.00	17.00	6.00	0.00		88.77	259.44
Sanchez, Art	27.00	21.25	1.54	18.88	11.26	1.46	1.00	4.06	3.90	13.00	9.00	1.00	0.00		90.35	296.42
Yanchar, Paul	26.10	19.50	1.73	24.32	10.53	2.12	1.02	6.00	6.15	8.00	18.00	11.00	0.00		97.47	313.89
MAXIMUM	30.20	24.08	2.58	36.25	11.65	2.60	2.24	7.50	7.50	16.00	25.00	15.00	1.00		109.56	408.66
MINIMUM	21.60	17.45	1.06	18.88	7.41	1.24	0.77	1.95	1.65	8.00	6.00	1.00	0.00		88.77	259.44
RANGE (MAX-MIN)	8.60	6.63	1.52	17.37	4.24	1.36	1.47	5.55	5.85	8.00	19.00	14.00	1.00		20.79	149.22
MEAN	27.17	19.91	1.80	25.27	9.85	1.85	1.38	4.98	5.74	12.33	13.92	8.75	0.17		97.93	332.27
STD	2.65	2.15	0.52	5.01	1.43	0.46	0.49	2.11	1.83	2.64	5.40	4.58	0.39		7.23	50.63



yi within 1 67.3%
 yi within 2 96.2%
 yi within 3 100.0%

PART ID = Piston A3 - two-piece

YI VALUES

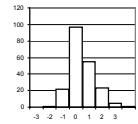
	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %		UWPD	WPD	MEAN	STD
Pansza, Mike	0.55	-0.87	-0.52	-0.55	-1.70	-0.32	0.98	-1.08	-0.68	-0.13	-0.54	-0.38	-0.43		-1.25	0.10	-0.45	0.67
Caproni, David	1.07	1.67	1.47	0.55	0.51	-0.09	1.16	-0.44	-0.84	-1.64	0.76	-1.69	-0.43		1.20	1.35	0.31	1.10
Castillo, George	-0.59	-0.57	0.47	-0.73	-0.44	0.61	0.29	1.05	0.23	0.25	0.76	-0.16	-0.43		-0.52	0.18	0.03	0.56
Avis, Steve	-1.20	-0.67	-1.06	-0.80	0.49	-1.24	-1.03	1.05	0.87	-1.26	-1.47	-0.38	-0.43		-0.79	-1.23	-0.61	0.80
Barrera, Tony	0.83	1.94	-1.11	0.01	0.36	-0.11	-0.50	-1.43	-2.23	0.25	2.05	0.49	-0.43		-0.15	-0.27	-0.02	1.13
May, Marianne	0.90	-1.14	0.43	-0.10	0.95	1.63	0.35	0.48	0.88	0.63	-0.91	0.93	-0.43		0.63	0.65	0.39	0.75
Viera, Ralph	0.39	0.22	1.09	-0.02	-0.92	1.18	1.75	1.13	0.80	1.39	0.02	0.71	2.14		0.82	1.51	0.81	0.78
Greenland, Paul	1.14	0.14	1.51	1.53	-0.32	0.98	0.72	-0.93	0.80	0.25	-0.35	0.93	2.14		1.61	1.14	0.75	0.85
Engelskirchen, Jim	-2.10	-0.09	-0.23	2.19	-1.63	-1.06	-1.01	1.19	0.96	0.63	-0.73	1.37	-0.43		0.84	-0.91	-0.07	1.22
Clapperty, Leon	-0.51	-1.05	-1.43	-0.61	1.25	-1.33	-1.23	-1.08	-0.02	1.01	1.25	-0.60	-0.43		-1.27	-1.44	-0.54	0.88
Sanchez, Art	-0.06	0.62	-0.50	-1.28	0.98	-0.85	-0.76	-0.43	-1.00	0.25	-0.91	-1.69	-0.43		-1.05	-0.71	-0.52	0.72
Yanchar, Paul	-0.40	-0.19	-0.13	-0.19	0.47	0.59	-0.72	0.48	0.23	-1.64	0.76	0.49	-0.43		-0.06	-0.36	-0.07	0.62
Yi MAXIMUM	-2.10	1.94	1.51	2.19	-1.70	1.63	1.75	-1.43	-2.23	-1.64	2.05	-1.69	2.14		1.61	1.51	0.81	1.22
Yi MINIMUM	-0.06	-0.09	-0.13	0.01	-0.32	-0.09	0.29	-0.43	-0.02	-0.13	0.02	-0.16	-0.43		-0.06	0.10	-0.02	0.56
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		
Ratings MEAN	27.17	19.91	1.80	25.27	9.85	1.85	1.38	4.98	5.74	12.33	13.92	8.75	0.17		97.93	332.27		
Ratings STD	2.65	2.15	0.52	5.01	1.43	0.46	0.49	2.11	1.83	2.64	5.40	4.58	0.39		7.23	50.63		

Heavy Duty Diesel Rating Workshop

PART ID = Piston B2 - keystone

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Upper Skirt	Under-crown	TGF	2nd GF	TLHC, %	TLFC, %			UWPD	WPD
Barrera, Tony	26.75	37.75	1.12	7.49	35.18	1.65	0.49	1.57	7.00	42.00	0.00	0.00			112.00	264.52
Holland, Steve	25.75	40.00	1.25	6.38	33.80	2.17	0.78	1.45	10.00	38.00	0.00	0.00			111.58	292.31
Foecking, Brian	25.50	40.75	1.30	3.28	32.80	1.51	0.44	1.78	13.00	53.00	0.00	0.00			107.35	262.96
Campbell, Andy	27.00	41.50	1.97	8.64	25.80	2.22	0.53	1.08	10.00	55.00	0.00	0.00			108.74	290.04
Avis, Steve	26.50	38.50	0.91	9.00	31.40	1.00	0.40	0.96	8.00	41.00	0.00	0.00			108.67	224.85
Pansza, Mike	26.00	42.25	1.44	14.81	39.25	2.24	0.63	1.63	16.00	36.00	0.00	0.00			128.25	312.54
Hill, Howard	27.25	38.49	1.80	11.05	29.04	2.22	0.42	1.02	12.00	59.00	0.00	0.00			111.29	280.60
May, Marianne	25.25	42.25	1.32	6.17	33.20	1.81	0.54	1.43	8.00	51.00	0.00	2.00			111.97	274.47
Hills, Barry	26.16	42.25	1.33	4.05	31.03	2.13	0.17	0.96	12.00	65.00	0.00	0.00			108.08	251.90
Langford, Mike	26.90	42.25	1.38	19.00	36.14	2.17	0.37	1.24	7.00	35.00	0.00	1.00			129.45	290.92
Narasaki, Keith	29.50	42.50	2.10	11.60	26.30	2.90	0.40	1.30	22.00	31.00	0.00	0.00			116.60	316.90
Guarda, Waldyr	26.50	27.25	2.20	9.14	30.05	2.94	0.75	2.34	22.00	19.00	0.00	0.00			101.17	332.62
Lopez, Frank	25.50	25.00	1.81	11.74	27.89	2.67	1.00	1.98	10.00	13.00	0.00	0.00			97.59	316.86
Seiz, Ray	26.59	36.25	0.92	11.54	30.20	2.49	0.70	1.52	2.00	60.00	0.00	0.00			110.21	286.65
Engelskirchen, Jim	26.25	31.00	1.23	8.77	38.79	1.96	0.20	1.50	27.00	28.00	0.00	0.00			109.70	253.19
Kuipers, Jacques	30.75	42.25	2.21	8.50	33.72	1.16	0.32	0.88	23.00	31.00	0.00	0.00			119.79	269.57
Yanchar, Paul	28.00	35.50	1.53	10.90	31.66	1.97	0.54	1.54	10.00	30.00	0.00	1.00			111.64	283.11
MAXIMUM	30.75	42.50	2.21	19.00	39.25	2.94	1.00	2.34	27.00	65.00	0.00	2.00			129.45	332.62
MINIMUM	25.25	25.00	0.91	3.28	25.80	1.00	0.17	0.88	2.00	13.00	0.00	0.00			97.59	224.85
RANGE (MAX-MIN)	5.50	17.50	1.30	15.72	13.45	1.94	0.83	1.46	25.00	52.00	0.00	2.00			31.86	107.77
MEAN	26.83	37.98	1.52	9.53	32.13	2.07	0.51	1.42	12.88	40.41	0.00	0.24			112.00	282.59
STD	1.44	5.46	0.42	3.81	3.86	0.54	0.21	0.39	6.84	14.84	0.00	0.56			8.08	27.48



yi within 1 74.5%
 yi within 2 96.6%
 yi within 3 99.5%

PART ID = Piston B2 - keystone

YI VALUES

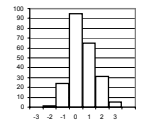
	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Upper Skirt	Under-crown	TGF	2nd GF	TLHC, %	TLFC, %			UWPD	WPD	MEAN	STD
Barrera, Tony	-0.06	-0.04	-0.94	-0.54	0.79	-0.78	-0.11	0.38	-0.86	0.11	0.00	-0.42			0.00	-0.66	-0.22	0.50
Holland, Steve	-0.75	0.37	-0.64	-0.83	0.43	0.18	1.26	0.07	-0.42	-0.16	0.00	-0.42			-0.05	0.35	-0.04	0.56
Foecking, Brian	-0.93	0.51	-0.52	-1.64	0.17	-1.05	-0.35	0.92	0.02	0.85	0.00	-0.42			-0.58	-0.71	-0.27	0.73
Campbell, Andy	0.12	0.64	1.07	-0.23	-1.64	0.28	0.09	-0.88	-0.42	0.98	0.00	-0.42			-0.40	0.27	-0.04	0.72
Avis, Steve	-0.23	0.09	-1.45	-0.14	-0.19	-1.99	-0.52	-1.19	-0.71	0.04	0.00	-0.42			-0.41	-2.10	-0.66	0.74
Pansza, Mike	-0.58	0.78	-0.19	1.38	1.84	0.31	0.56	0.53	0.46	-0.30	0.00	-0.42			2.01	1.09	0.54	0.82
Hill, Howard	0.29	0.09	0.67	0.40	-0.80	0.28	-0.42	-1.03	-0.13	1.25	0.00	-0.42			-0.09	-0.07	0.00	0.58
May, Marianne	-1.10	0.78	-0.47	-0.88	0.28	-0.49	0.14	0.02	-0.71	0.71	0.00	3.14			0.00	-0.30	0.08	1.04
Hills, Barry	-0.47	0.78	-0.45	-1.44	-0.29	0.11	-1.59	-1.19	-0.13	1.66	0.00	-0.42			-0.49	-1.12	-0.36	0.87
Langford, Mike	0.05	0.78	-0.33	2.48	1.04	0.18	-0.66	-0.47	-0.86	-0.36	0.00	1.36			2.16	0.30	0.41	1.03
Narasaki, Keith	1.86	0.83	1.38	0.54	-1.51	1.54	-0.52	-0.31	1.33	-0.63	0.00	-0.42			0.57	1.25	0.42	1.00
Guarda, Waldyr	-0.23	-1.96	1.62	-0.10	-0.54	1.61	1.12	2.36	1.33	-1.44	0.00	-0.42			-1.34	1.82	0.27	1.37
Lopez, Frank	-0.93	-2.38	0.68	0.58	-1.10	1.11	2.29	1.43	-0.42	-1.85	0.00	-0.42			-1.79	1.25	-0.11	1.40
Seiz, Ray	-0.17	-0.32	-1.42	0.53	-0.50	0.78	0.89	0.25	-1.59	1.32	0.00	-0.42			-0.22	0.15	-0.05	0.81
Engelskirchen, Jim	-0.41	-1.28	-0.69	-0.20	1.72	-0.21	-1.45	0.20	2.07	-0.84	0.00	-0.42			-0.29	-1.07	-0.20	1.01
Kuipers, Jacques	2.73	0.78	1.64	-0.27	0.41	-1.69	-0.89	-1.39	1.48	-0.63	0.00	-0.42			0.96	-0.47	0.16	1.24
Yanchar, Paul	0.81	-0.45	0.03	0.36	-0.12	-0.19	0.14	0.30	-0.42	-0.70	0.00	1.36			-0.05	0.02	0.08	0.53
Yi MAXIMUM	2.73	-2.38	1.64	2.48	1.84	-1.99	2.29	2.36	2.07	-1.85	0.00	3.14			2.16	-2.10	-0.66	1.40
Yi MINIMUM	0.05	-0.04	0.03	-0.10	-0.12	0.11	0.09	0.02	0.02	0.04	0.00	-0.42			0.00	0.02	0.00	0.50
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			1.00	1.00		
Ratings MEAN	26.83	37.98	1.52	9.53	32.13	2.07	0.51	1.42	12.88	40.41	0.00	0.24			112.00	282.59		
Ratings STD	1.44	5.46	0.42	3.81	3.86	0.54	0.21	0.39	6.84	14.84	0.00	0.56			8.08	27.48		

Heavy Duty Diesel Rating Workshop

PART ID = Piston B3 - two-piece

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %		UWPD	WPD
Foecking, Brian	20.50	5.99	1.18	16.03	4.36	2.64	1.58	2.64	1.95	7.00	1.00	3.00	1.00		56.87	262.90
Campbell, Andy	21.70	4.44	1.75	17.00	4.24	1.97	0.67	6.90	4.50	4.00	0.00	1.00	0.00		63.17	210.19
Holland, Steve	17.87	2.90	1.22	13.44	2.65	1.67	0.66	7.50	7.50	4.00	0.00	0.00	0.00		55.41	174.48
Avis, Steve	18.63	2.83	0.91	16.62	2.53	1.62	0.55	4.50	6.30	4.00	0.00	2.00	0.00		54.49	161.21
Barrera, Tony	19.73	3.89	0.68	28.73	4.01	2.08	1.26	2.10	1.80	5.00	1.00	17.00	1.00		64.26	225.46
Pansza, Mike	18.49	3.89	1.99	35.74	3.85	2.11	1.48	3.44	3.30	10.00	1.00	22.00	0.00		74.29	271.83
Hill, Howard	15.80	5.44	1.20	15.43	3.86	0.87	0.27	0.38	2.10	8.00	2.00	3.00	2.00		45.35	133.96
Hills, Barry	22.17	3.48	0.40	17.97	4.73	2.09	0.62	6.30	2.10	9.00	1.00	8.00	0.00		59.86	181.29
Langford, Mike	19.56	4.13	1.25	28.00	2.69	0.90	0.53	1.68	3.30	2.00	0.00	4.00	1.00		62.04	165.71
Lopez, Frank	21.21	4.20	1.30	13.78	3.97	1.78	0.56	4.75	2.80	6.00	0.00	2.00	0.00		54.34	181.96
Narasaki, Keith	18.40	5.80	2.10	17.10	4.40	2.00	1.30	5.70	3.40	15.00	1.00	6.00	0.00		60.20	251.90
Seiz, Ray	15.28	2.40	1.10	15.02	2.65	0.75	0.52	1.50	1.50	1.00	0.00	1.00	0.00		40.72	131.18
Kuipers, Jacques	13.76	4.10	1.14	17.18	3.39	2.26	0.04	4.50	6.60	4.00	0.00	5.00	1.00		52.97	145.37
Guarda, Waldyr	16.65	4.50	1.15	24.40	5.14	2.25	0.82	7.50	3.30	12.00	0.00	10.00	3.00		65.71	212.97
Engelskirchen, Jim	18.65	3.83	1.55	28.00	3.42	2.03	0.80	7.50	6.60	9.00	0.00	4.00	0.00		72.38	217.45
Yanchar, Paul	21.50	5.40	1.00	24.00	4.60	1.95	0.51	6.30	2.70	10.00	1.00	8.00	1.00		67.96	194.25
Gutzwiller, Jim	16.31	6.28	2.08	41.60	5.45	2.19	1.00	1.95	3.15	5.00	1.00	32.00	2.00		80.00	258.14
MAXIMUM	22.17	6.28	2.10	41.60	5.45	2.64	1.58	7.50	7.50	15.00	2.00	32.00	3.00		80.00	271.83
MINIMUM	13.76	2.40	0.40	13.44	2.53	0.75	0.04	0.38	1.50	1.00	0.00	0.00	0.00		40.72	131.18
RANGE (MAX-MIN)	8.41	3.88	1.70	28.16	2.92	1.89	1.54	7.13	6.00	14.00	2.00	32.00	3.00		39.28	140.65
MEAN	18.60	4.32	1.29	21.77	3.88	1.83	0.77	4.42	3.70	6.76	0.53	7.53	0.71		60.59	198.84
STD	2.44	1.14	0.47	8.23	0.89	0.53	0.42	2.39	1.90	3.72	0.62	8.60	0.92		10.03	45.08



yi within 1 72.4%
 yi within 2 97.3%
 yi within 3 100.0%

PART ID = Piston B3 - two-piece

YI VALUES

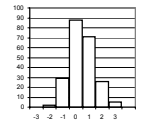
	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %		UWPD	WPD	MEAN	STD
Foecking, Brian	0.78	1.47	-0.24	-0.70	0.54	1.53	1.91	-0.74	-0.92	0.06	0.75	-0.53	0.32		-0.37	1.42	0.35	0.93
Campbell, Andy	1.27	0.10	0.97	-0.58	0.41	0.26	-0.25	1.04	0.42	-0.74	-0.85	-0.76	-0.77		0.26	0.25	0.07	0.70
Holland, Steve	-0.30	-1.25	-0.16	-1.01	-1.38	-0.31	-0.27	1.29	2.00	-0.74	-0.85	-0.88	-0.77		-0.52	-0.54	-0.38	0.90
Avis, Steve	0.01	-1.32	-0.81	-0.63	-1.52	-0.40	-0.53	0.03	1.37	-0.74	-0.85	-0.64	-0.77		-0.61	-0.83	-0.55	0.67
Barrera, Tony	0.46	-0.39	-1.31	0.85	0.14	0.46	1.15	-0.97	-1.00	-0.47	0.75	1.10	0.32		0.37	0.59	0.14	0.78
Pansza, Mike	-0.05	-0.38	1.48	1.70	-0.03	0.53	1.67	-0.41	-0.21	0.87	0.75	1.68	-0.77		1.37	1.62	0.65	0.90
Hill, Howard	-1.15	0.98	-0.20	-0.77	-0.02	-1.82	-1.20	-1.69	-0.84	0.33	2.36	-0.53	1.41		-1.52	-1.44	-0.41	1.23
Hills, Barry	1.46	-0.74	-1.90	-0.46	0.96	0.49	-0.37	0.79	-0.84	0.60	0.75	0.05	-0.77		-0.07	-0.39	-0.03	0.88
Langford, Mike	0.39	-0.17	-0.09	0.76	-1.34	-1.76	-0.58	-1.15	-0.21	-1.28	-0.85	-0.41	0.32		0.14	-0.73	-0.46	0.72
Lopez, Frank	1.07	-0.11	0.01	-0.97	0.10	-0.11	-0.51	0.14	-0.47	-0.21	-0.85	-0.64	-0.77		-0.62	-0.37	-0.29	0.51
Narasaki, Keith	-0.08	1.30	1.71	-0.57	0.59	0.32	1.25	0.54	-0.16	2.22	0.75	-0.18	-0.77		-0.04	1.18	0.54	0.86
Seiz, Ray	-1.36	-1.69	-0.41	-0.82	-1.38	-2.05	-0.60	-1.22	-1.16	-1.55	-0.85	-0.76	-0.77		-1.98	-1.50	-1.21	0.50
Kuipers, Jacques	-1.98	-0.20	-0.33	-0.56	-0.55	0.81	-1.74	0.03	1.52	-0.74	-0.85	-0.29	0.32		-0.76	-1.19	-0.43	0.90
Guarda, Waldyr	-0.80	0.16	-0.30	0.32	1.42	0.79	0.11	1.29	-0.21	1.41	-0.85	0.29	2.49		0.51	0.31	0.46	0.90
Engelskirchen, Jim	0.02	-0.43	0.54	0.76	-0.52	0.37	0.06	1.29	1.52	0.60	-0.85	-0.41	-0.77		1.18	0.41	0.25	0.75
Yanchar, Paul	1.19	0.95	-0.62	0.27	0.81	0.22	-0.63	0.79	-0.53	0.87	0.75	0.05	0.32		0.73	-0.10	0.34	0.60
Gutzwiller, Jim	-0.94	1.72	1.66	2.41	1.77	0.67	0.53	-1.03	-0.29	-0.47	0.75	2.85	1.41		1.94	1.32	0.95	1.20
Yi MAXIMUM	-1.98	1.72	-1.90	2.41	1.77	-2.05	1.91	-1.69	2.00	2.22	2.36	2.85	2.49		-1.98	1.62	-1.21	1.23
Yi MINIMUM	0.01	0.10	0.01	0.27	-0.02	-0.11	0.06	0.03	-0.16	0.06	0.75	0.05	0.32		-0.04	-0.10	-0.03	0.50
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		
Ratings MEAN	18.60	4.32	1.29	21.77	3.88	1.83	0.77	4.42	3.70	6.76	0.53	7.53	0.71		60.59	198.84		
Ratings STD	2.44	1.14	0.47	8.23	0.89	0.53	0.42	2.39	1.90	3.72	0.62	8.60	0.92		10.03	45.08		

Heavy Duty Diesel Rating Workshop

PART ID = Piston B5 - two-piece

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %		UWPD	WPD
Foecking, Brian	33.50	23.61	1.52	23.00	28.91	9.41	0.41	11.82	5.05	33.00	15.00	3.00	0.00		137.23	505.11
Holland, Steve	39.81	25.00	0.81	16.57	16.28	5.72	0.50	9.20	3.38	28.00	34.00	2.00	0.00		117.27	391.42
Campbell, Andy	34.50	23.50	1.49	22.10	29.50	6.96	0.50	10.13	6.01	26.00	9.00	0.00	0.00		134.69	462.24
Castillo, George	33.00	28.26	1.42	21.11	16.02	8.95	0.46	10.10	5.82	28.00	37.00	1.00	0.00		125.14	467.96
Caproni, David	32.75	24.72	1.22	27.25	16.60	6.14	0.80	5.40	1.50	13.00	4.00	7.00	0.00		116.38	418.06
Avis, Steve	33.50	22.08	0.60	21.38	32.33	7.71	0.34	10.10	5.40	27.00	18.00	1.00	0.00		133.44	451.01
Pansza, Mike	33.50	26.27	1.24	21.50	38.40	7.36	0.48	8.64	4.25	24.00	33.00	5.00	2.00		141.64	494.08
Hill, Howard	42.00	27.21	0.64	20.81	21.44	9.10	0.21	9.62	5.02	47.00	37.00	2.00	0.00		136.05	470.29
Langford, Mike	31.45	22.18	0.96	21.32	20.72	6.14	0.50	3.46	5.48	13.00	10.00	0.00	0.00		112.21	391.12
Lopez, Frank	32.00	23.43	0.95	23.30	25.71	7.84	0.36	7.30	10.38	29.00	15.00	2.00	0.00		131.26	444.49
Seiz, Ray	32.75	22.65	0.82	18.10	25.45	6.45	0.60	9.20	7.37	16.00	35.00	2.00	0.00		123.39	422.19
Guarda, Waldyr	48.50	22.50	0.67	15.26	23.00	8.14	0.72	8.72	5.10	46.00	21.00	3.00	2.00		132.61	479.43
Hills, Barry	33.50	23.91	1.37	21.70	32.46	7.94	0.54	6.00	3.60	33.00	36.00	2.00	0.00		131.02	484.21
Narasaki, Keith	40.80	25.50	1.80	18.10	29.70	7.10	1.00	2.90	4.90	32.00	26.00	2.00	2.00		131.80	508.65
Kuipers, Jacques	29.50	24.12	0.71	12.66	27.09	5.97	0.52	3.60	5.95	28.00	35.00	3.00	0.00		110.12	396.67
Yanchar, Paul	38.25	28.54	0.88	22.56	27.22	6.94	0.45	9.68	6.08	31.00	42.00	2.00	0.00		140.60	462.46
Greenland, Paul	36.25	30.70	1.25	20.80	29.73	5.83	0.60	8.60	5.95	31.00	35.00	1.00	2.00		139.71	463.77
MAXIMUM	48.50	30.70	1.80	27.25	38.40	9.41	1.00	11.82	10.38	47.00	42.00	7.00	2.00		141.64	508.65
MINIMUM	29.50	22.08	0.60	12.66	16.02	5.72	0.21	2.90	1.50	13.00	4.00	0.00	0.00		110.12	391.12
RANGE (MAX-MIN)	19.00	8.62	1.20	14.59	22.38	3.69	0.79	8.92	8.88	34.00	38.00	7.00	2.00		31.52	117.53
MEAN	35.62	24.95	1.08	20.44	25.92	7.28	0.53	7.91	5.37	28.53	26.00	2.24	0.47		129.09	453.71
STD	4.80	2.49	0.36	3.42	6.26	1.18	0.18	2.68	1.85	9.29	12.03	1.71	0.87		9.97	37.93



yi within 1 71.9%
 yi within 2 96.8%
 yi within 3 100.0%

PART ID = Piston B5 - two-piece

Yi VALUES

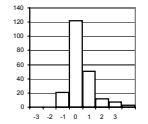
	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %		UWPD	WPD	MEAN	STD
Foecking, Brian	-0.44	-0.54	1.22	0.75	0.48	1.82	-0.65	1.46	-0.17	0.48	-0.91	0.45	-0.54		0.82	1.35	0.37	0.87
Holland, Steve	0.87	0.02	-0.76	-1.13	-1.54	-1.32	-0.16	0.48	-1.07	-0.06	0.67	-0.14	-0.54		-1.19	-1.64	-0.50	0.81
Campbell, Andy	-0.23	-0.58	1.13	0.49	0.57	-0.27	-0.16	0.83	0.35	-0.27	-1.41	-1.30	-0.54		0.56	0.22	-0.04	0.73
Castillo, George	-0.55	1.33	0.94	0.20	-1.58	1.42	-0.38	0.82	0.25	-0.06	0.91	-0.72	-0.54		-0.40	0.38	0.14	0.85
Caproni, David	-0.60	-0.09	0.39	1.99	-1.49	-0.97	1.48	-0.94	-2.09	-1.67	-1.83	2.78	-0.54		-1.28	-0.94	-0.39	1.45
Avis, Steve	-0.44	-1.15	-1.32	0.27	1.02	0.37	-1.03	0.82	0.02	-0.16	-0.67	-0.72	-0.54		0.44	-0.07	-0.21	0.71
Pansza, Mike	-0.44	0.53	0.44	0.31	1.99	0.07	-0.27	0.27	-0.60	-0.49	0.58	1.61	1.75		1.26	1.06	0.54	0.84
Hill, Howard	1.33	0.91	-1.21	0.11	-0.71	1.55	-1.74	0.64	-0.19	1.99	0.91	-0.14	-0.54		0.70	0.44	0.27	1.04
Langford, Mike	-0.87	-1.11	-0.33	0.26	-0.83	-0.97	-0.16	-1.66	0.06	-1.67	-1.33	-1.30	-0.54		-1.69	-1.65	-0.92	0.66
Lopez, Frank	-0.75	-0.61	-0.36	0.84	-0.03	-0.92	-0.23	2.71	0.05	-0.91	0.48	-0.14	-0.54		0.22	-0.24	-0.03	0.91
Seiz, Ray	-0.60	-0.92	-0.72	-0.69	-0.07	-0.70	0.39	0.48	1.08	-1.35	0.75	-0.14	-0.54		-0.57	-0.83	-0.30	0.69
Guarda, Waldyr	2.68	-0.98	-1.13	-1.52	-0.47	0.73	1.04	0.30	-0.14	1.88	-0.42	0.45	1.75		0.35	0.68	0.35	1.18
Hills, Barry	-0.44	-0.42	0.80	0.37	1.05	0.56	0.06	-0.71	-0.96	0.48	0.83	-0.14	-0.54		0.19	0.80	0.13	0.64
Narasaki, Keith	1.08	0.22	1.99	-0.69	0.60	-0.15	2.57	-1.87	-0.25	0.37	0.00	-0.14	1.75		0.27	1.45	0.48	1.14
Kuipers, Jacques	-1.27	-0.33	-1.02	-2.28	0.19	-1.11	-0.05	-1.61	0.32	-0.06	0.75	0.45	-0.54		-1.90	-1.50	-0.67	0.93
Yanchar, Paul	0.55	1.44	-0.55	0.62	0.21	-0.29	-0.43	0.66	0.39	0.27	1.33	-0.14	-0.54		1.15	0.23	0.33	0.65
Greenland, Paul	0.13	2.31	0.47	0.10	0.61	-1.23	0.39	0.26	0.32	0.27	0.75	-0.72	1.75		1.07	0.27	0.45	0.85
Yi MAXIMUM	2.68	2.31	1.99	-2.28	1.99	1.82	2.57	-1.87	2.71	1.99	-1.83	2.78	1.75		-1.90	-1.65	-0.92	1.45
Yi MINIMUM	0.13	0.02	-0.33	0.10	-0.03	0.07	-0.05	-0.23	0.02	0.05	0.00	-0.14	-0.54		0.19	-0.07	-0.03	0.64
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		
Ratings MEAN	35.62	24.95	1.08	20.44	25.92	7.28	0.53	7.91	5.37	28.53	26.00	2.24	0.47		129.09	453.71		
Ratings STD	4.80	2.49	0.36	3.42	6.26	1.18	0.18	2.68	1.85	9.29	12.03	1.71	0.87		9.97	37.93		

Heavy Duty Diesel Rating Workshop

PART ID = Piston C2 - keystone

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Upper Skirt	Under-crown	TGF	2nd GF	TLHC, %	TLFC, %			UWPD	WPD
Radonich, Pete	30.75	29.55	0.35	3.80	28.50	1.99	0.35	1.65	12.00	15.00	0.00	0.00			96.94	231.75
Tschirhart, Garland	27.50	38.90	0.65	3.63	40.50	1.40	0.18	1.42	8.00	33.00	0.00	0.00			114.18	232.38
May, Marianne	27.50	31.39	0.62	1.70	26.07	1.09	0.10	0.75	11.00	22.00	0.00	0.00			89.22	178.86
Viera, Ralph	28.00	30.11	0.64	3.80	28.70	0.85	0.12	1.17	15.00	22.00	0.00	0.00			93.39	186.32
Kobrinetz, Jack	27.50	27.09	0.56	3.37	24.77	0.86	0.12	1.25	10.00	30.00	0.00	0.00			85.52	176.53
Foecking, Brian	27.00	27.25	0.33	1.82	25.97	2.04	0.04	1.98	17.00	25.00	0.00	0.00			86.43	209.77
Campbell, Andy	28.00	33.90	1.35	4.55	27.50	1.45	0.15	1.47	7.00	33.00	0.00	0.00			98.37	231.80
Castillo, George	29.00	28.24	1.05	3.96	23.67	1.01	0.50	1.14	8.00	30.00	0.00	0.00			88.57	212.79
Holland, Steve	27.25	43.28	0.76	1.90	26.39	1.39	0.28	2.76	10.00	44.00	0.00	0.00			104.01	256.94
van Dijk, Bob	28.30	33.00	0.80	1.62	28.00	1.20	0.13	1.25	13.00	31.00	0.00	0.00			94.30	203.07
Hill, Howard	26.78	27.30	0.93	1.22	24.53	1.12	0.28	1.00	10.00	37.00	0.00	0.00			83.16	192.12
Yanchar, Paul	27.50	30.85	0.52	5.14	25.91	0.87	0.22	1.43	10.00	28.00	0.00	0.00			92.44	192.93
Sanchez, Art	30.00	20.85	0.30	2.70	29.05	1.00	0.24	1.83	17.00	23.00	0.00	0.00			85.97	189.13
Rodrigurz, Jesse	35.25	26.02	0.76	0.52	29.85	1.06	0.26	1.12	6.00	13.00	0.00	0.00			94.84	203.18
Langford, Mike	33.00	22.92	0.44	1.30	27.96	0.69	0.26	1.76	6.00	12.00	0.00	0.00			88.33	189.59
Garcia, Pat	26.25	25.00	0.54	1.58	27.49	0.93	0.06	1.02	8.00	17.00	0.00	0.00			82.87	166.10
Kuipers, Jacques	46.75	29.53	0.94	2.26	27.49	1.27	0.10	1.54	22.00	14.00	0.00	0.00			109.88	235.22
Guarda, Waldyr	27.25	23.42	0.58	4.40	25.99	2.35	0.51	3.71	9.00	12.00	0.00	0.00			88.21	279.10
MAXIMUM	46.75	43.28	1.35	5.14	40.50	2.35	0.51	3.71	22.00	44.00	0.00	0.00			114.18	279.10
MINIMUM	26.25	20.85	0.30	0.52	23.67	0.69	0.04	0.75	6.00	12.00	0.00	0.00			82.87	166.10
RANGE (MAX-MIN)	20.50	22.43	1.05	4.62	16.83	1.66	0.47	2.96	16.00	32.00	0.00	0.00			31.31	113.00
MEAN	29.64	29.37	0.67	2.74	27.69	1.25	0.22	1.57	11.06	24.50	0.00	0.00			93.15	209.31
STD	4.86	5.53	0.27	1.36	3.60	0.46	0.14	0.70	4.30	9.43	0.00	0.00			8.85	29.90



yi within 1 80.1%
 yi within 2 95.4%
 yi within 3 98.6%

PART ID = Piston C2 - keystone

YI VALUES

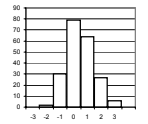
	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Upper Skirt	Under-crown	TGF	2nd GF	TLHC, %	TLFC, %			UWPD	WPD	MEAN	STD
Radonich, Pete	0.23	0.03	-1.19	0.78	0.23	1.61	0.99	0.11	0.22	-1.01	0.00	0.00			0.43	0.75	0.23	0.72
Tschirhart, Garland	-0.44	1.72	-0.09	0.66	3.56	0.32	-0.27	-0.21	-0.71	0.90	0.00	0.00			2.38	0.77	0.61	1.20
May, Marianne	-0.44	0.37	-0.20	-0.76	-0.45	-0.36	-0.86	-1.17	-0.01	-0.27	0.00	0.00			-0.44	-1.02	-0.40	0.43
Viera, Ralph	-0.34	0.13	-0.12	0.78	0.28	-0.89	-0.71	-0.57	0.92	-0.27	0.00	0.00			0.03	-0.77	-0.11	0.54
Kobrinetz, Jack	-0.44	-0.41	-0.42	0.46	-0.81	-0.86	-0.71	-0.46	-0.25	0.58	0.00	0.00			-0.86	-1.10	-0.38	0.50
Foecking, Brian	-0.54	-0.38	-1.27	-0.67	-0.48	1.72	-1.34	0.58	1.38	0.05	0.00	0.00			-0.76	0.02	-0.12	0.88
Campbell, Andy	-0.34	0.82	2.49	1.33	-0.05	0.43	-0.49	-0.14	-0.94	0.90	0.00	0.00			0.59	0.75	0.38	0.87
Castillo, George	-0.13	-0.20	1.39	0.90	-1.11	-0.53	2.10	-0.61	-0.71	0.58	0.00	0.00			-0.52	0.12	0.09	0.88
Holland, Steve	-0.49	2.52	0.32	-0.62	-0.36	0.30	0.46	1.70	-0.25	2.07	0.00	0.00			1.23	1.59	0.60	1.02
van Dijk, Bob	-0.28	0.66	0.47	-0.82	0.09	-0.12	-0.64	-0.46	0.45	0.69	0.00	0.00			0.13	-0.21	0.00	0.46
Hill, Howard	-0.59	-0.37	0.95	-1.11	-0.88	-0.29	0.47	-0.81	-0.25	1.33	0.00	0.00			-1.13	-0.57	-0.23	0.73
Yanchar, Paul	-0.44	0.27	-0.57	1.77	-0.49	-0.84	0.03	-0.20	-0.25	0.37	0.00	0.00			-0.08	-0.55	-0.07	0.63
Sanchez, Art	0.07	-1.54	-1.38	-0.03	0.38	-0.56	0.18	0.37	1.38	-0.16	0.00	0.00			-0.81	-0.67	-0.20	0.75
Rodrigurz, Jesse	1.15	-0.61	0.32	-1.63	0.60	-0.43	0.33	-0.64	-1.17	-1.22	0.00	0.00			0.19	-0.21	-0.24	0.77
Langford, Mike	0.69	-1.17	-0.86	-1.06	0.08	-1.24	0.33	0.27	-1.17	-1.33	0.00	0.00			-0.54	-0.66	-0.48	0.69
Garcia, Pat	-0.70	-0.79	-0.49	-0.85	-0.05	-0.71	-1.16	-0.78	-0.71	-0.80	0.00	0.00			-1.16	-1.45	-0.69	0.44
Kuipers, Jacques	3.52	0.03	0.98	-0.35	-0.05	0.04	-0.86	-0.04	2.54	-1.11	0.00	0.00			1.89	0.87	0.53	1.31
Guarda, Waldyr	-0.49	-1.08	-0.34	1.22	-0.47	2.40	2.14	3.05	-0.48	-1.33	0.00	0.00			-0.56	2.33	0.46	1.46
Yi MAXIMUM	3.52	2.52	2.49	1.77	3.56	2.40	2.14	3.05	2.54	2.07	0.00	0.00			2.38	2.33	-0.69	1.46
Yi MINIMUM	0.07	0.03	-0.09	-0.03	-0.05	0.04	0.03	-0.04	-0.01	0.05	0.00	0.00			0.03	0.02	0.00	0.43
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00			1.00	1.00		
Ratings MEAN	29.64	29.37	0.67	2.74	27.69	1.25	0.22	1.57	11.06	24.50	0.00	0.00			93.15	209.31		
Ratings STD	4.86	5.53	0.27	1.36	3.60	0.46	0.14	0.70	4.30	9.43	0.00	0.00			8.85	29.90		

Heavy Duty Diesel Rating Workshop

PART ID = Piston C3 - two-piece

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %		UWPD	WPD
Tschirhart, Garland	33.75	16.15	2.00	33.85	3.27	1.10	0.57	4.50	7.50	12.00	5.00	15.00	0.00		102.69	264.06
Radonich, Pete	25.00	15.40	2.25	19.00	7.46	1.50	1.36	3.30	6.60	7.00	4.00	2.00	0.00		81.87	300.78
May, Marianne	25.50	15.60	2.18	30.26	9.71	2.25	1.15	4.20	4.50	10.00	3.00	12.00	2.00		95.35	321.24
Kobrinetz, Jack	25.00	13.87	2.22	31.04	8.79	2.00	1.36	1.62	6.00	10.00	3.00	11.00	2.00		91.90	319.64
Viera, Ralph	32.00	13.77	2.52	30.12	6.68	2.45	1.27	7.21	4.33	25.00	2.00	13.00	2.00		100.35	340.45
Holland, Steve	25.00	12.72	2.16	33.53	5.17	2.10	1.62	1.50	1.50	10.00	2.00	19.00	0.00		85.30	321.85
Foecking, Brian	25.00	15.62	2.24	30.99	7.46	2.00	1.68	2.40	4.50	11.00	3.00	17.00	0.00		91.89	340.48
Yanchar, Paul	25.50	14.70	2.00	31.80	10.46	1.82	0.88	5.40	6.75	7.00	3.00	13.00	5.00		99.31	296.26
Rodriguez, Jesse	34.25	15.21	2.09	35.00	8.49	1.76	0.67	2.10	4.50	5.00	2.00	16.00	1.00		104.07	296.15
Hill, Howard	21.11	14.52	1.78	25.04	6.94	1.12	0.65	3.22	2.70	19.00	3.00	8.00	0.00		77.08	233.21
van Dijk, Bob	26.00	13.90	3.18	36.00	9.47	2.38	0.63	4.50	7.50	4.00	0.50	16.00	5.00		103.56	315.36
Langford, Mike	25.00	14.52	1.98	28.69	6.21	1.30	0.65	1.80	3.90	3.00	0.00	9.00	0.00		84.05	249.23
Sanchez, Art	27.75	11.97	2.15	27.64	5.85	1.46	1.05	3.40	6.60	27.00	3.00	2.00	2.00		87.87	278.50
Garcia, Pat	25.50	12.94	1.76	27.15	6.62	1.98	1.24	5.05	3.40	7.00	2.00	5.00	0.00		85.64	292.79
Guarda, Waldyr	27.95	13.70	2.10	24.45	7.52	1.20	1.05	6.00	4.50	18.00	5.00	11.00	0.00		88.47	281.26
Kuipers, Jacques	25.00	13.59	3.16	14.85	3.10	1.48	0.66	6.30	6.61	30.00	1.00	14.00	0.00		74.75	256.93
MAXIMUM	34.25	16.15	3.18	36.00	10.46	2.45	1.68	7.21	7.50	30.00	5.00	19.00	5.00		104.07	340.48
MINIMUM	21.11	11.97	1.76	14.85	3.10	1.10	0.57	1.50	1.50	3.00	0.00	2.00	0.00		74.75	233.21
RANGE (MAX-MIN)	13.14	4.18	1.42	21.15	7.36	1.35	1.11	5.71	6.00	27.00	5.00	17.00	5.00		29.32	107.27
MEAN	26.83	14.26	2.24	28.71	7.08	1.74	1.03	3.91	5.09	12.81	2.59	11.44	1.19		90.88	294.26
STD	3.56	1.17	0.41	5.71	2.10	0.45	0.37	1.78	1.77	8.46	1.40	5.11	1.72		9.34	32.02



yi within 1 68.8%
 yi within 2 96.2%
 yi within 3 100.0%

PART ID = Piston C3 - two-piece

YI VALUES

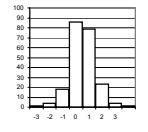
	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %		UWPD	WPD	MEAN	STD
Tschirhart, Garland	1.94	1.62	-0.58	0.90	-1.81	-1.44	-1.24	0.33	1.36	-0.10	1.71	0.70	-0.69		1.26	-0.94	0.20	1.26
Radonich, Pete	-0.51	0.98	0.04	-1.70	0.18	-0.55	0.89	-0.34	0.86	-0.69	1.00	-1.85	-0.69		-0.97	0.20	-0.21	0.92
May, Marianne	-0.37	1.15	-0.14	0.27	1.26	1.13	0.32	0.17	-0.33	-0.33	0.29	0.11	0.47		0.48	0.84	0.35	0.54
Kobrinetz, Jack	-0.51	-0.34	-0.04	0.41	0.82	0.57	0.89	-1.29	0.52	-0.33	0.29	-0.09	0.47		0.11	0.79	0.15	0.60
Viera, Ralph	1.45	-0.42	0.70	0.25	-0.19	1.58	0.65	1.86	-0.43	1.44	-0.42	0.31	0.47		1.01	1.44	0.65	0.79
Holland, Steve	-0.51	-1.32	-0.19	0.84	-0.91	0.80	1.59	-1.35	-2.03	-0.33	-0.42	1.48	-0.69		-0.60	0.86	-0.19	1.08
Foecking, Brian	-0.51	1.17	0.01	0.40	0.18	0.57	1.75	-0.85	-0.33	-0.21	0.29	1.09	-0.69		0.11	1.44	0.29	0.79
Yanchar, Paul	-0.37	0.38	-0.58	0.54	1.61	0.17	-0.41	0.84	0.94	-0.69	0.29	0.31	2.22		0.90	0.06	0.41	0.81
Rodriguez, Jesse	2.08	0.81	-0.36	1.10	0.67	0.04	-0.97	-1.02	-0.33	-0.92	-0.42	0.89	-0.11		1.41	0.06	0.20	0.93
Hill, Howard	-1.61	0.22	-1.12	-0.64	-0.06	-1.40	-1.03	-0.39	-1.35	0.73	0.29	-0.67	-0.69		-1.48	-1.91	-0.74	0.78
van Dijk, Bob	-0.23	-0.31	2.32	1.28	1.14	1.43	-1.08	0.33	1.36	-1.04	-1.49	0.89	2.22		1.36	0.66	0.59	1.19
Langford, Mike	-0.51	0.22	-0.63	0.00	-0.41	-0.99	-1.03	-1.18	-0.67	-1.16	-1.85	-0.48	-0.69		-0.73	-1.41	-0.77	0.53
Sanchez, Art	0.26	-1.97	-0.21	-0.19	-0.58	-0.64	0.05	-0.28	0.86	1.68	0.29	-1.85	0.47		-0.32	-0.49	-0.20	0.92
Garcia, Pat	-0.37	-1.13	-1.17	-0.27	-0.22	0.53	0.57	0.64	-0.95	-0.69	-0.42	-1.26	-0.69		-0.56	-0.05	-0.40	0.62
Guarda, Waldyr	0.31	-0.48	-0.33	-0.75	0.21	-1.22	0.05	1.18	-0.33	0.61	1.71	-0.09	-0.69		-0.26	-0.41	-0.03	0.76
Kuipers, Jacques	-0.51	-0.58	2.27	-2.43	-1.89	-0.59	-1.00	1.35	0.86	2.03	-1.13	0.50	-0.69		-1.73	-1.17	-0.31	1.42
Yi MAXIMUM	2.08	-1.97	2.32	-2.43	-1.89	1.58	1.75	1.86	-2.03	2.03	-1.85	-1.85	2.22		-1.73	-1.91	-0.77	1.42
Yi MINIMUM	-0.23	0.22	0.01	0.00	-0.06	0.04	0.05	0.17	-0.33	-0.10	0.29	-0.09	-0.11		0.11	-0.05	-0.03	0.53
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		
Ratings MEAN	26.83	14.26	2.24	28.71	7.08	1.74	1.03	3.91	5.09	12.81	2.59	11.44	1.19		90.88	294.26		
Ratings STD	3.56	1.17	0.41	5.71	2.10	0.45	0.37	1.78	1.77	8.46	1.40	5.11	1.72		9.34	32.02		

Heavy Duty Diesel Rating Workshop

PART ID = Piston C4 - two-piece

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %		UWPD	WPD
Radonich, Pete	52.31	20.00	1.60	26.75	23.39	1.78	0.50	21.20		54.00	5.00	6.00	0.00		147.53	380.34
Tschirhart, Garland	46.53	18.35	2.00	26.35	20.23	1.85	1.50	7.50		40.00	5.00	5.00	0.00		124.31	409.65
Kobrinetz, Jack	44.04	16.83	2.50	24.19	23.23	2.93	2.00	7.20		46.00	6.00	3.00	1.00		122.92	468.25
May, Marianne	44.25	18.69	3.31	23.61	23.46	2.43	2.15	3.90		41.00	4.00	2.00	1.00		121.80	486.26
Viera, Ralph	48.27	19.83	2.48	24.40	23.43	2.14	2.13	1.50		47.00	5.00	3.00	1.00		124.18	472.42
Holland, Steve	44.75	17.52	2.26	21.31	21.74	2.42	1.88	5.70		36.00	8.00	1.00	0.00		117.58	440.69
Castillo, George	46.56	16.61	2.57	23.46	22.86	2.46	2.12	6.90		48.00	8.00	2.00	0.00		123.54	469.69
Yanchar, Paul	47.80	20.30	1.90	24.60	23.70	1.99	0.70	7.35		48.00	6.00	2.00	1.00		128.34	379.35
Guarda, Waldyr	45.66	16.80	3.57	15.27	22.05	3.65	2.48	6.36		45.00	10.00	1.00	0.00		115.84	522.70
Hills, Barry	39.56	19.05	1.98	25.36	22.42	2.28	1.59	7.36		50.00	11.00	4.00	0.00		119.60	416.85
Lopez, Frank	33.06	19.80	1.80	23.65	22.60	1.78	2.08	2.50		27.00	4.00	0.00	0.00		107.26	415.54
Seiz, Ray	47.53	17.17	4.20	24.60	22.72	1.97	0.40	6.74		48.00	1.00	2.00	0.00		125.33	393.47
Barrera, Tony	44.10	16.67	2.38	21.93	24.21	2.41	1.48	2.10		44.00	6.00	1.00	0.00		115.27	419.14
Narasaki, Keith	49.80	21.30	2.00	27.40	24.70	2.40	1.90	11.90		59.00	6.00	4.00	0.00		141.40	478.90
Sanchez, Art	49.00	16.86	1.70	29.00	25.03	1.68	0.80	3.90		44.00	4.00	8.00	0.00		127.97	372.17
Garcia, Pat	49.77	19.07	1.93	25.68	22.88	1.85	1.24	4.00		44.00	5.00	2.00	0.00		126.41	405.05
Rodriguez, Jesse	49.57	17.24	1.80	25.20	23.23	1.80	1.00	6.30		27.00	6.00	3.00	0.00		126.14	384.05
van Dijk, Bob	49.70	21.30	2.35	27.80	25.40	2.03	1.80	4.20		41.00	1.50	3.00	0.00		134.58	467.10
MAXIMUM	52.31	21.30	4.20	29.00	25.40	3.65	2.48	21.20		59.00	11.00	8.00	1.00		147.53	522.70
MINIMUM	33.06	16.61	1.60	15.27	20.23	1.68	0.40	1.50		27.00	1.00	0.00	0.00		107.26	372.17
RANGE (MAX-MIN)	19.25	4.69	2.60	13.73	5.17	1.97	2.08	19.70		32.00	10.00	8.00	1.00		40.28	150.53
MEAN	46.24	18.52	2.35	24.48	23.18	2.21	1.54	6.48		43.83	5.64	2.89	0.22		125.00	432.31
STD	4.44	1.63	0.70	3.02	1.23	0.49	0.63	4.44		8.04	2.52	1.97	0.43		9.35	44.55



yi within 1 76.4%
 yi within 2 95.4%
 yi within 3 99.1%

PART ID = Piston C4 - two-piece

YI VALUES

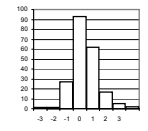
	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %		UWPD	WPD	MEAN	STD
Radonich, Pete	1.37	0.91	-1.08	0.75	0.17	-0.89	-1.65	3.32		1.26	-0.25	1.58	-0.52		2.41	-1.17	0.44	1.46
Tschirhart, Garland	0.07	-0.11	-0.50	0.62	-2.41	-0.75	-0.07	0.23		-0.48	-0.25	1.07	-0.52		-0.07	-0.51	-0.26	0.79
Kobrinetz, Jack	-0.49	-1.04	0.21	-0.09	0.04	1.47	0.73	0.16		0.27	0.14	0.06	1.82		-0.22	0.81	0.28	0.74
May, Marianne	-0.45	0.10	1.37	-0.29	0.23	0.44	0.96	-0.58		-0.35	-0.65	-0.45	1.82		-0.34	1.21	0.22	0.82
Viera, Ralph	0.46	0.81	0.18	-0.02	0.20	-0.15	0.93	-1.12		0.39	-0.25	0.06	1.82		-0.09	0.90	0.29	0.69
Holland, Steve	-0.33	-0.62	-0.13	-1.05	-1.18	0.42	0.54	-0.18		-0.97	0.94	-0.96	-0.52		-0.79	0.19	-0.33	0.66
Castillo, George	0.07	-1.18	0.31	-0.34	-0.26	0.50	0.92	0.10		0.52	0.94	-0.45	-0.52		-0.16	0.84	0.09	0.62
Yanchar, Paul	0.35	1.09	-0.65	0.04	0.42	-0.46	-1.33	0.20		0.52	0.14	-0.45	1.82		0.36	-1.19	0.06	0.84
Guarda, Waldyr	-0.13	-1.06	1.75	-3.05	-0.92	2.94	1.49	-0.03		0.15	1.73	-0.96	-0.52		-0.98	2.03	0.17	1.62
Hills, Barry	-1.50	0.33	-0.53	0.29	-0.62	0.14	0.08	0.20		0.77	2.13	0.56	-0.52		-0.58	-0.35	0.03	0.85
Lopez, Frank	-2.97	0.78	-0.79	-0.27	-0.48	-0.89	0.85	-0.90		-2.09	-0.65	-1.47	-0.52		-1.90	-0.38	-0.83	1.03
Seiz, Ray	0.29	-0.83	2.65	0.04	-0.38	-0.50	-1.81	0.06		0.52	-1.84	-0.45	-0.52		0.04	-0.87	-0.26	1.09
Barrera, Tony	-0.48	-1.14	0.04	-0.84	0.83	0.40	-0.10	-0.99		0.02	0.14	-0.96	-0.52		-1.04	-0.30	-0.35	0.60
Narasaki, Keith	0.80	1.71	-0.50	0.97	1.24	0.38	0.57	1.22		1.89	0.14	0.56	-0.52		1.75	1.05	0.80	0.76
Sanchez, Art	0.62	-1.02	-0.93	1.50	1.51	-1.09	-1.17	-0.58		0.02	-0.65	2.60	-0.52		0.32	-1.35	-0.05	1.21
Garcia, Pat	0.80	0.34	-0.60	0.40	-0.25	-0.75	-0.48	-0.56		0.02	-0.25	-0.45	-0.52		0.15	-0.61	-0.20	0.47
Rodriguez, Jesse	0.75	-0.79	-0.79	0.24	0.04	-0.85	-0.86	-0.04		-2.09	0.14	0.06	-0.52		0.12	-1.08	-0.40	0.73
van Dijk, Bob	0.78	1.71	0.00	1.10	1.81	-0.38	0.41	-0.51		-0.35	-1.64	0.06	-0.52		1.02	0.78	0.30	0.96
Yi MAXIMUM	-2.97	1.71	2.65	-3.05	-2.41	2.94	-1.81	3.32		-2.09	2.13	2.60	1.82		2.41	2.03	-0.83	1.62
Yi MINIMUM	0.07	0.10	0.00	-0.02	0.04	0.14	-0.07	-0.03		0.02	0.14	0.06	-0.52		0.04	0.19	0.03	0.47
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00		0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00		
Ratings MEAN	46.24	18.52	2.35	24.48	23.18	2.21	1.54	6.48		43.83	5.64	2.89	0.22		125.00	432.31		
Ratings STD	4.44	1.63	0.70	3.02	1.23	0.49	0.63	4.44		8.04	2.52	1.97	0.43		9.35	44.55		

Heavy Duty Diesel Rating Workshop

PART ID = Piston C5 - two-piece

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %		UWPD	WPD
Viera, Ralph	61.00	31.00	0.65	19.72	27.51	6.94	0.56	3.61	7.20	64.00	35.00	0.00	0.00		158.19	509.86
Tschirhart, Garland	52.75	27.25	0.80	21.80	19.20	7.40	0.50	4.50	2.24	42.00	28.00	0.00	0.00		136.44	466.27
May, Marianne	53.75	34.75	1.46	22.12	28.45	8.67	0.30	8.95	6.15	63.00	58.00	0.00	0.00		164.60	551.85
Radonich, Pete	52.75	31.00	0.50	20.41	20.15	8.66	0.20	9.00	2.25	52.00	15.00	0.00	0.00		144.92	484.69
Kobrinetz, Jack	51.96	37.00	1.04	18.73	20.85	7.75	0.59	11.22	1.60	57.00	61.00	0.00	0.00		150.74	519.42
Holland, Steve	72.00	41.50	1.44	19.40	39.93	5.88	1.00	8.30	1.50	70.00	58.00	0.00	0.00		190.95	623.04
Guarda, Waldyr	63.00	46.00	0.90	12.85	20.64	8.15	1.08	5.40	2.70	64.00	41.00	0.00	0.00		160.72	591.32
Sanchez, Art	58.75	34.00	1.18	20.24	15.41	7.82	0.50	9.20	4.20	60.00	60.00	0.00	0.00		151.30	507.27
Rodriguez, Jesse	60.00	32.50	0.56	20.70	37.55	10.10	0.10	18.55	3.75	40.00	26.00	0.00	0.00		183.81	590.48
Yanchar, Paul	54.50	32.50	0.94	19.71	27.13	9.14	0.40	9.52	2.25	59.00	58.00	0.00	0.00		156.09	543.85
Narasaki, Keith	56.50	41.50	1.90	19.50	34.00	8.50	1.00	3.60	2.90	54.00	50.00	1.00	1.00		169.40	632.05
Hills, Barry	57.00	28.00	0.96	20.84	17.22	8.64	0.44	3.46	2.93	63.00	47.00	0.00	0.00		139.49	493.83
van Dijk, Bob	48.00	37.00	1.80	22.40	24.00	8.85	0.10	9.75	3.80	56.00	61.00	0.00	0.00		155.70	532.05
Lopez, Frank	34.00	32.50	1.38	22.12	20.89	9.18	0.60	11.80	6.10	40.00	31.00	0.00	0.00		138.57	512.34
Garcia, Pat	53.50	32.50	1.48	21.80	22.35	6.44	0.64	4.83	5.24	50.00	40.00	0.00	0.00		148.76	497.41
Seiz, Ray	52.50	25.00	0.95	17.52	21.22	6.97	0.50	2.70	1.50	65.00	22.00	0.00	0.00		128.86	453.03
MAXIMUM	72.00	46.00	1.90	22.40	39.93	10.10	1.08	18.55	7.20	70.00	61.00	1.00	1.00		190.95	632.05
MINIMUM	34.00	25.00	0.50	12.85	15.41	5.88	0.10	2.70	1.50	40.00	15.00	0.00	0.00		128.86	453.03
RANGE (MAX-MIN)	38.00	21.00	1.40	9.55	24.52	4.23	0.98	15.85	5.70	30.00	46.00	1.00	1.00		62.09	179.02
MEAN	55.12	34.00	1.12	19.99	24.78	8.07	0.53	7.77	3.52	56.19	43.19	0.06	0.06		154.91	531.80
STD	7.97	5.57	0.42	2.34	7.16	1.12	0.30	4.17	1.80	9.28	15.57	0.25	0.25		16.69	53.46



yi within 1 74.5%
 yi within 2 95.7%
 yi within 3 98.6%

PART ID = Piston C5 - two-piece

YI VALUES

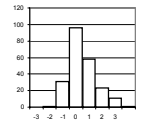
	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %		UWPD	WPD	MEAN	STD
Viera, Ralph	0.74	-0.54	-1.12	-0.12	0.38	-1.00	0.09	-1.00	2.04	0.84	-0.53	-0.25	-0.25		0.20	-0.41	-0.06	0.83
Tschirhart, Garland	-0.30	-1.21	-0.76	0.77	-0.78	-0.59	-0.11	-0.79	-0.71	-1.53	-0.98	-0.25	-0.25		-1.11	-1.23	-0.65	0.57
May, Marianne	-0.17	0.13	0.81	0.91	0.51	0.54	-0.78	0.28	1.46	0.73	0.95	-0.25	-0.25		0.58	0.38	0.39	0.58
Radonich, Pete	-0.30	-0.54	-1.48	0.18	-0.65	0.53	-1.12	0.29	-0.70	-0.45	-1.81	-0.25	-0.25		-0.60	-0.88	-0.53	0.63
Kobrinetz, Jack	-0.40	0.54	-0.19	-0.54	-0.55	-0.28	0.20	0.83	-1.06	0.09	1.14	-0.25	-0.25		-0.25	-0.23	-0.08	0.57
Holland, Steve	2.12	1.35	0.76	-0.25	2.12	-1.95	1.58	0.13	-1.12	1.49	0.95	-0.25	-0.25		2.16	1.71	0.70	1.27
Guarda, Waldyr	0.99	2.16	-0.53	-3.05	-0.58	0.07	1.84	-0.57	-0.45	0.84	-0.14	-0.25	-0.25		0.35	1.11	0.10	1.24
Sanchez, Art	0.45	0.00	0.14	0.11	-1.31	-0.22	-0.11	0.34	0.38	0.41	1.08	-0.25	-0.25		-0.22	-0.46	0.01	0.53
Rodriguez, Jesse	0.61	-0.27	-1.33	0.30	1.78	1.81	-1.45	2.59	0.13	-1.74	-1.10	-0.25	-0.25		1.73	1.10	0.24	1.34
Yanchar, Paul	-0.08	-0.27	-0.43	-0.12	0.33	0.95	-0.44	0.42	-0.70	0.30	0.95	-0.25	-0.25		0.07	0.23	0.05	0.49
Narasaki, Keith	0.17	1.35	1.85	-0.21	1.29	0.39	1.58	-1.00	-0.34	-0.24	0.44	3.75	3.75		0.87	1.88	1.03	1.40
Hills, Barry	0.24	-1.08	-0.38	0.36	-1.06	0.51	-0.31	-1.04	-0.33	0.73	0.24	-0.25	-0.25		-0.92	-0.71	-0.28	0.60
van Dijk, Bob	-0.89	0.54	1.62	1.03	-0.11	0.70	-1.45	0.47	0.16	-0.02	1.14	-0.25	-0.25		0.05	0.00	0.18	0.78
Lopez, Frank	-2.65	-0.27	0.62	0.91	-0.54	0.99	0.23	0.97	1.43	-1.74	-0.78	-0.25	-0.25		-0.98	-0.36	-0.18	1.10
Garcia, Pat	-0.20	-0.27	0.84	0.77	-0.34	-1.45	0.36	-0.71	0.95	-0.67	-0.20	-0.25	-0.25		-0.37	-0.64	-0.16	0.65
Seiz, Ray	-0.33	-1.62	-0.41	-1.05	-0.50	-0.98	-0.11	-1.22	-1.12	0.95	-1.36	-0.25	-0.25		-1.56	-1.47	-0.75	0.71
Yi MAXIMUM	-2.65	2.16	1.85	-3.05	2.12	-1.95	1.84	2.59	2.04	-1.74	-1.81	3.75	3.75		2.16	1.88	1.03	1.40
Yi MINIMUM	-0.08	0.00	0.14	0.11	-0.11	0.07	0.09	0.13	0.13	-0.02	-0.14	-0.25	-0.25		0.05	0.00	0.01	0.49
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		
Ratings MEAN	55.12	34.00	1.12	19.99	24.78	8.07	0.53	7.77	3.52	56.19	43.19	0.06	0.06		154.91	531.80		
Ratings STD	7.97	5.57	0.42	2.34	7.16	1.12	0.30	4.17	1.80	9.28	15.57	0.25	0.25		16.69	53.46		

Heavy Duty Diesel Rating Workshop

PART ID = Piston C6 - two-piece

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %		UWPD	WPD
Viera, Ralph	40.25	14.86	1.80	35.67	22.85	3.82	1.33	13.63	7.50	25.00	5.00	17.00	0.00		141.71	438.88
Tschirhart, Garland	34.00	11.50	2.35	37.60	19.90	3.18	0.50	6.00	16.25	26.00	5.00	20.00	0.00		131.28	354.53
May, Marianne	29.75	13.20	1.31	32.59	25.76	3.23	0.49	8.38	11.00	14.00	3.00	13.00	2.00		125.71	343.05
Radonich, Pete	36.30	12.80	1.40	30.25	18.56	2.48	0.20	7.50	18.00	26.00	3.00	7.00	0.00		127.49	303.03
Kobrinetz, Jack	34.25	13.05	1.82	25.84	22.36	2.80	1.39	11.69	11.55	25.00	5.00	4.00	1.00		124.75	393.84
Holland, Steve	32.75	11.71	1.76	39.23	35.31	2.50	0.57	6.90	6.60	24.00	3.00	25.00	0.00		137.33	375.39
Avis, Steve	27.50	10.75	1.30	27.02	25.69	2.01	0.56	7.20	18.00	20.00	3.00	5.00	0.00		120.03	307.34
Guarda, Waldyr	27.25	11.14	2.32	26.33	23.04	3.62	0.46	6.60	8.38	19.00	4.00	12.00	0.00		109.14	340.56
Sanchez, Art	39.75	10.76	1.40	27.85	19.69	2.14	0.60	6.90	9.25	14.00	3.00	5.00	2.00		118.34	317.03
Rodriguez, Jesse	50.00	13.09	1.12	33.33	24.86	2.79	0.14	7.20	16.25	23.00	4.00	14.00	0.00		148.78	349.11
Yanchar, Paul	31.00	12.42	1.38	37.76	25.40	2.68	0.54	7.50	14.35	28.00	10.00	18.00	0.00		133.03	341.50
van Dijk, Bob	26.60	13.53	1.91	35.60	23.00	2.82	0.85	6.90	7.50	32.00	2.00	15.00	1.00		118.71	354.64
Narasaki, Keith	30.50	11.40	2.60	30.70	26.30	4.50	1.20	9.00	11.70	19.00	5.00	11.00	0.00		127.90	433.65
Hills, Barry	30.25	13.48	1.36	31.09	23.17	2.85	0.20	7.50	8.23	22.00	10.00	9.00	0.00		118.13	309.36
Garcia, Pat	32.50	11.26	1.35	31.00	25.08	1.92	0.62	6.90	12.75	17.00	5.00	8.00	0.00		123.38	320.90
Seiz, Ray	33.25	11.69	1.82	40.75	25.28	2.64	0.65	6.75	7.25	20.00	4.00	25.00	0.00		130.08	356.74
Lopez, Frank	25.50	12.55	1.58	32.88	23.45	1.92	0.75	2.50	11.50	16.00	2.00	12.00	0.00		112.62	315.02
MAXIMUM	50.00	14.86	2.60	40.75	35.31	4.50	1.39	13.63	18.00	32.00	10.00	25.00	2.00		148.78	438.88
MINIMUM	25.50	10.75	1.12	25.84	18.56	1.92	0.14	2.50	6.60	14.00	2.00	4.00	0.00		109.14	303.03
RANGE (MAX-MIN)	24.50	4.11	1.48	14.91	16.75	2.58	1.25	11.13	11.40	18.00	8.00	21.00	2.00		39.64	135.85
MEAN	33.02	12.31	1.68	32.68	24.10	2.82	0.65	7.59	11.53	21.76	4.47	12.94	0.35		126.38	350.27
STD	6.07	1.15	0.42	4.57	3.68	0.70	0.37	2.35	3.87	5.03	2.32	6.49	0.70		10.22	40.77



yi within 1 69.7%
 yi within 2 94.1%
 yi within 3 99.5%

PART ID = Piston C6 - two-piece

YI VALUES

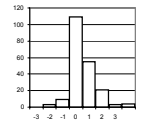
	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %		UWPD	WPD	MEAN	STD
Viera, Ralph	1.19	2.22	0.28	0.66	-0.34	1.44	1.86	2.57	-1.04	0.64	0.23	0.62	-0.50		1.50	2.17	0.90	1.07
Tschirhart, Garland	0.16	-0.70	1.58	1.08	-1.14	0.52	-0.41	-0.68	1.22	0.84	0.23	1.09	-0.50		0.48	0.10	0.26	0.81
May, Marianne	-0.54	0.78	-0.87	-0.02	0.45	0.59	-0.44	0.34	-0.14	-1.54	-0.63	0.01	2.35		-0.07	-0.18	0.01	0.88
Radonich, Pete	0.54	0.43	-0.66	-0.53	-1.51	-0.48	-1.23	-0.04	1.67	0.84	-0.63	-0.91	-0.50		0.11	-1.16	-0.27	0.86
Kobrinetz, Jack	0.20	0.65	0.33	-1.50	-0.47	-0.03	2.02	1.75	0.00	0.64	0.23	-1.38	0.92		-0.16	1.07	0.29	0.98
Holland, Steve	-0.05	-0.52	0.19	1.44	3.05	-0.46	-0.22	-0.29	-1.28	0.44	-0.63	1.86	-0.50		1.07	0.62	0.31	1.13
Avis, Steve	-0.91	-1.35	-0.90	-1.24	0.43	-1.16	-0.25	-0.17	1.67	-0.35	-0.63	-1.22	-0.50		-0.62	-1.05	-0.55	0.79
Guarda, Waldyr	-0.95	-1.01	1.51	-1.39	-0.29	1.15	-0.52	-0.42	-0.82	-0.55	-0.20	-0.14	-0.50		-1.69	-0.24	-0.40	0.83
Sanchez, Art	1.11	-1.34	-0.66	-1.06	-1.20	-0.97	-0.14	-0.29	-0.59	-1.54	-0.63	-1.22	2.35		-0.79	-0.82	-0.52	1.02
Rodriguez, Jesse	2.80	0.68	-1.32	0.14	0.21	-0.04	-1.39	-0.17	1.22	0.25	-0.20	0.16	-0.50		2.19	-0.03	0.27	1.12
Yanchar, Paul	-0.33	0.10	-0.71	1.11	0.35	-0.20	-0.30	-0.04	0.73	1.24	2.38	0.78	-0.50		0.65	-0.22	0.34	0.82
van Dijk, Bob	-1.06	1.07	0.54	0.64	-0.30	0.00	0.55	-0.29	-1.04	2.03	-1.06	0.32	0.92		-0.75	0.11	0.11	0.89
Narasaki, Keith	-0.42	-0.79	2.17	-0.43	0.60	2.41	1.50	0.60	0.04	-0.55	0.23	-0.30	-0.50		0.15	2.05	0.45	1.08
Hills, Barry	-0.46	1.02	-0.76	-0.35	-0.25	0.05	-1.23	-0.04	-0.85	0.05	2.38	-0.61	-0.50		-0.81	-1.00	-0.22	0.90
Garcia, Pat	-0.09	-0.91	-0.78	-0.37	0.27	-1.29	-0.08	-0.29	0.31	-0.95	0.23	-0.76	-0.50		-0.29	-0.72	-0.41	0.49
Seiz, Ray	0.04	-0.54	0.33	1.77	0.32	-0.25	0.00	-0.36	-1.11	-0.35	-0.20	1.86	-0.50		0.36	0.16	0.10	0.80
Lopez, Frank	-1.24	0.21	-0.25	0.04	-0.18	-1.29	0.27	-2.17	-0.01	-1.15	-1.06	-0.14	-0.50		-1.35	-0.86	-0.64	0.71
Yi MAXIMUM	2.80	2.22	2.17	1.77	3.05	2.41	2.02	2.57	1.67	2.03	2.38	1.86	2.35		2.19	2.17	0.90	1.13
Yi MINIMUM	0.04	0.10	0.19	-0.02	-0.18	0.00	0.00	-0.04	0.00	0.05	-0.20	0.01	-0.50		-0.07	-0.03	0.01	0.49
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		
Ratings MEAN	33.02	12.31	1.68	32.68	24.10	2.82	0.65	7.59	11.53	21.76	4.47	12.94	0.35		126.38	350.27		
Ratings STD	6.07	1.15	0.42	4.57	3.68	0.70	0.37	2.35	3.87	5.03	2.32	6.49	0.70		10.22	40.77		

Heavy Duty Diesel Rating Workshop

PART ID = Piston D1 - ISM

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %			UWPD	WPD
Foecking, Brian	92.50	25.75	0.00	25.50	20.00	0.00	0.00	0.00	0.00	93.00	8.00	4.00			163.75	163.75
Kobrinetz, Jack	84.25	22.75	22.50	27.75	17.25	22.75	0.00	10.00	0.00	93.00	10.00	4.00			207.25	207.25
Campbell, Andy	82.50	25.00	0.00	25.75	21.00	15.75	0.00	0.00	0.00	94.00	5.00	1.00			170.00	170.00
Avis, Steve	93.50	24.00	0.00	27.75	12.50	10.00	10.00	12.50	0.00	90.00	0.00	7.00			190.25	190.25
Holland, Steve	97.50	24.00	0.00	28.75	26.00	1.50	0.00	0.00	0.00	96.00	4.00	8.00			177.75	177.75
Barrera, Tony	89.00	21.25	10.00	28.75	23.00	6.25	0.00	0.00	0.00	85.00	2.00	5.00			178.25	178.25
Viera, Ralph	79.50	24.25	3.00	22.75	17.75	10.00	3.75	10.00	5.00	91.00	13.00	9.00			176.00	176.00
Caproni, David	92.50	37.00	0.00	40.00	19.25	8.25	0.00	0.00	0.00	91.00	0.00	20.00			197.00	197.00
Castillo, George	96.50	23.50	10.00	28.00	11.25	5.00	2.50	0.00	0.00	95.00	8.00	5.00			176.75	176.75
May, Marianne	95.25	20.75	0.00	28.25	22.00	3.75	0.75	0.00	0.00	95.00	9.00	5.00			170.75	170.75
Pansza, Mike	94.00	27.00	25.00	30.50	24.25	22.00	6.00	0.00	0.00	96.00	0.00	8.00			228.75	228.75
Hill, Howard	94.00	21.75	0.00	28.00	17.75	8.25	0.00	10.00	16.25	92.00	18.00	4.00			196.00	196.00
Hills, Barry	94.50	24.04	25.00	26.13	15.50	25.00	25.00	7.50	7.50	95.00	18.00	3.00			250.17	250.17
Seiz, Ray	97.75	22.50	25.00	25.50	21.75	2.50	0.00	0.00	0.00	99.10	1.00	3.00			195.00	195.00
Guarda, Waldyr	95.00	16.25	0.00	28.00	8.00	0.75	0.00	0.00	0.00	95.00	0.00	11.00			148.00	148.00
Yanchar, Paul	90.50	27.25	0.00	26.76	19.50	0.00	0.00	0.00	0.00	94.00	0.00	3.00			164.01	164.01
Sanchez, Art	97.50	27.25	25.00	29.50	17.75	6.25	10.00	0.00	0.00	90.00	7.00	7.00			213.25	213.25
MAXIMUM	97.75	37.00	25.00	40.00	26.00	25.00	25.00	12.50	16.25	99.10	18.00	20.00			250.17	250.17
MINIMUM	79.50	16.25	0.00	22.75	8.00	0.00	0.00	0.00	0.00	85.00	0.00	1.00			148.00	148.00
RANGE (MAX-MIN)	18.25	20.75	25.00	17.25	18.00	25.00	25.00	12.50	16.25	14.10	18.00	19.00			102.17	102.17
MEAN	92.13	24.37	8.56	28.10	18.50	8.71	3.41	2.94	1.69	93.18	6.06	6.29			188.41	188.41
STD	5.41	4.24	11.10	3.57	4.70	8.10	6.54	4.78	4.31	3.20	6.11	4.37			25.72	25.72



yi within 1 80.4%
 yi within 2 95.1%
 yi within 3 98.0%

PART ID = Piston D1 - ISM

YI VALUES

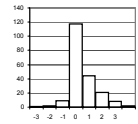
	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %			UWPD	WPD	MEAN	STD
Foecking, Brian	0.07	0.33	-0.77	-0.73	0.32	-1.08	-0.52	-0.62	-0.39	-0.06	0.32	-0.52			-0.96	-0.96	-0.40	0.50
Kobrinetz, Jack	-1.46	-0.38	1.26	-0.10	-0.27	1.73	-0.52	1.48	-0.39	-0.06	0.65	-0.52			0.73	0.73	0.21	0.91
Campbell, Andy	-1.78	0.15	-0.77	-0.66	0.53	0.87	-0.52	-0.62	-0.39	0.26	-0.17	-1.21			-0.72	-0.72	-0.41	0.70
Avis, Steve	0.25	-0.09	-0.77	-0.10	-1.28	0.16	1.01	2.00	-0.39	-1.00	-0.99	0.16			0.07	0.07	-0.06	0.85
Holland, Steve	0.99	-0.09	-0.77	0.18	1.60	-0.89	-0.52	-0.62	-0.39	0.88	-0.34	0.39			-0.41	-0.41	-0.03	0.74
Barrera, Tony	-0.58	-0.74	0.13	0.18	0.96	-0.30	-0.52	-0.62	-0.39	-2.56	-0.66	-0.30			-0.39	-0.39	-0.44	0.75
Viera, Ralph	-2.34	-0.03	-0.50	-1.50	-0.16	0.16	0.05	1.48	0.77	-0.68	1.14	0.62			-0.48	-0.48	-0.14	1.00
Caproni, David	0.07	2.98	-0.77	3.34	0.16	-0.06	-0.52	-0.62	-0.39	-0.68	-0.99	3.14			0.33	0.33	0.45	1.52
Castillo, George	0.81	-0.20	0.13	-0.03	-1.54	-0.46	-0.14	-0.62	-0.39	0.57	0.32	-0.30			-0.45	-0.45	-0.20	0.57
May, Marianne	0.58	-0.85	-0.77	0.04	0.74	-0.61	-0.41	-0.62	-0.39	0.57	0.48	-0.30			-0.69	-0.69	-0.21	0.57
Pansza, Mike	0.35	0.62	1.48	0.67	1.22	1.64	0.40	-0.62	-0.39	0.88	-0.99	0.39			1.57	1.57	0.63	0.85
Hill, Howard	0.35	-0.62	-0.77	-0.03	-0.16	-0.06	-0.52	1.48	3.38	-0.37	1.95	-0.52			0.30	0.30	0.34	1.17
Hills, Barry	0.44	-0.08	1.48	-0.55	-0.64	2.01	3.30	0.95	1.35	0.57	1.95	-0.75			2.40	2.40	1.06	1.28
Seiz, Ray	1.04	-0.44	1.48	-0.73	0.69	-0.77	-0.52	-0.62	-0.39	1.85	-0.83	-0.75			0.26	0.26	0.04	0.91
Guarda, Waldyr	0.53	-1.91	-0.77	-0.03	-2.23	-0.98	-0.52	-0.62	-0.39	0.57	-0.99	1.08			-1.57	-1.57	-0.67	0.98
Yanchar, Paul	-0.30	0.68	-0.77	-0.37	0.21	-1.08	-0.52	-0.62	-0.39	0.26	-0.99	-0.75			-0.95	-0.95	-0.47	0.53
Sanchez, Art	0.99	0.68	1.48	0.39	-0.16	-0.30	1.01	-0.62	-0.39	-1.00	0.15	0.16			0.97	0.97	0.31	0.74
Yi MAXIMUM	-2.34	2.98	1.48	3.34	-2.23	2.01	3.30	2.00	3.38	-2.56	1.95	3.14			2.40	2.40	1.06	1.52
Yi MINIMUM	0.07	-0.03	0.13	-0.03	0.16	-0.06	0.05	-0.62	-0.39	-0.06	0.15	0.16			0.07	0.07	-0.03	0.50
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00		
Ratings MEAN	92.13	24.37	8.56	28.10	18.50	8.71	3.41	2.94	1.69	93.18	6.06	6.29			188.41	188.41		
Ratings STD	5.41	4.24	11.10	3.57	4.70	8.10	6.54	4.78	4.31	3.20	6.11	4.37			25.72	25.72		

Heavy Duty Diesel Rating Workshop

PART ID = Piston D2 - ISM

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %			UWPD	WPD
Caproni, David	46.75	5.50	0.00	35.50	3.75	3.75	0.00	7.50	4.50	32.00	3.00	0.00			107.25	107.25
Kobrinetz, Jack	72.75	23.75	21.50	24.50	10.50	23.00	0.00	12.50	0.00	89.00	8.00	0.00			188.50	188.50
Campbell, Andy	80.00	20.00	0.00	24.80	5.50	3.75	0.00	0.00	0.00	93.00	2.00	0.00			134.05	134.05
Foecking, Brian	67.50	24.50	0.00	23.25	3.75	5.00	0.00	0.00	0.00	86.00	9.00	0.00			124.00	124.00
Avis, Steve	64.75	22.50	8.75	25.00	6.25	15.00	3.75	17.50	0.00	76.00	0.00	0.00			163.50	163.50
Barrera, Tony	70.25	17.25	0.00	22.50	9.75	0.00	0.00	0.00	0.00	76.00	2.00	0.00			119.75	119.75
Castillo, George	96.00	11.25	0.00	24.25	1.75	1.25	0.00	0.00	0.00	93.00	3.00	0.00			134.50	134.50
Holland, Steve	96.00	16.25	0.00	31.50	4.75	0.00	0.00	0.00	0.00	96.00	2.00	0.00			148.50	148.50
Radonich, Pete	67.50	16.50	0.00	20.00	3.50	0.00	0.00	0.00	0.00	80.00	5.00	0.00			107.50	107.50
May, Marianne	89.25	15.75	0.00	24.25	9.50	0.00	0.00	0.00	0.00	95.00	6.00	0.00			138.75	138.75
Viera, Ralph	65.50	23.75	1.25	25.75	5.00	11.25	1.25	3.75	2.50	78.00	5.00	1.00			140.00	140.00
Pansza, Mike	95.00	25.00	25.00	28.00	6.50	5.50	0.00	0.00	0.00	91.00	0.00	0.00			185.00	185.00
Hill, Howard	76.75	25.00	0.00	25.00	10.50	10.75	0.00	12.50	16.25	90.00	4.00	0.00			176.75	176.75
Hills, Barry	95.00	25.00	25.00	34.22	14.25	25.00	25.00	7.50	7.50	90.00	11.00	14.00			258.47	258.47
Seiz, Ray	62.25	8.75	0.00	35.00	11.50	0.75	0.00	0.00	0.00	90.00	1.00	20.00			118.25	118.25
Yanchar, Paul	87.25	17.50	0.00	25.75	7.25	0.00	0.00	0.00	0.00	92.00	3.00	1.00			137.75	137.75
Sanchez, Art	87.50	25.00	25.00	29.50	1.75	6.25	21.25	0.00	0.00	85.00	8.00	6.00			196.25	196.25
MAXIMUM	96.00	25.00	25.00	35.50	14.25	25.00	25.00	17.50	16.25	96.00	11.00	20.00			258.47	258.47
MINIMUM	46.75	5.50	0.00	20.00	1.75	0.00	0.00	0.00	0.00	32.00	0.00	0.00			107.25	107.25
RANGE (MAX-MIN)	49.25	19.50	25.00	15.50	12.50	25.00	25.00	17.50	16.25	64.00	11.00	20.00			151.22	151.22
MEAN	77.65	19.01	6.26	26.99	6.81	6.54	3.01	3.60	1.81	84.24	4.24	2.47			151.69	151.69
STD	14.57	6.17	10.45	4.59	3.63	7.98	7.66	5.73	4.27	14.92	3.23	5.76			39.19	39.19



yi within 1 78.9%
 yi within 2 93.6%
 yi within 3 98.5%

PART ID = Piston D2 - ISM

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 1	Land 2	Land 3	Land 4	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %			UWPD	WPD	MEAN	STD
Caproni, David	-2.12	-2.19	-0.60	1.86	-0.84	-0.35	-0.39	0.68	0.63	-3.50	-0.38	-0.43			-1.13	-1.13	-0.71	1.33
Kobrinetz, Jack	-0.34	0.77	1.46	-0.54	1.02	2.06	-0.39	1.55	-0.42	0.32	1.17	-0.43			0.94	0.94	0.58	0.87
Campbell, Andy	0.16	0.16	-0.60	-0.48	-0.36	-0.35	-0.39	-0.63	-0.42	0.59	-0.69	-0.43			-0.45	-0.45	-0.31	0.36
Foecking, Brian	-0.70	0.89	-0.60	-0.81	-0.84	-0.19	-0.39	-0.63	-0.42	0.12	1.47	-0.43			-0.71	-0.71	-0.28	0.68
Avis, Steve	-0.89	0.56	0.24	-0.43	-0.15	1.06	0.10	2.43	-0.42	-0.55	-1.31	-0.43			0.30	0.30	0.06	0.92
Barrera, Tony	-0.51	-0.29	-0.60	-0.98	0.81	-0.82	-0.39	-0.63	-0.42	-0.55	-0.69	-0.43			-0.82	-0.82	-0.51	0.43
Castillo, George	1.26	-1.26	-0.60	-0.60	-1.39	-0.66	-0.39	-0.63	-0.42	0.59	-0.38	-0.43			-0.44	-0.44	-0.41	0.66
Holland, Steve	1.26	-0.45	-0.60	0.98	-0.57	-0.82	-0.39	-0.63	-0.42	0.79	-0.69	-0.43			-0.08	-0.08	-0.15	0.67
Radonich, Pete	-0.70	-0.41	-0.60	-1.52	-0.91	-0.82	-0.39	-0.63	-0.42	-0.28	0.24	-0.43			-1.13	-1.13	-0.65	0.44
May, Marianne	0.80	-0.53	-0.60	-0.60	0.74	-0.82	-0.39	-0.63	-0.42	0.74	0.55	-0.43			-0.33	-0.33	-0.16	0.58
Viera, Ralph	-0.83	0.77	-0.48	-0.27	-0.50	0.59	-0.23	0.03	0.16	-0.42	0.24	-0.26			-0.30	-0.30	-0.13	0.44
Pansza, Mike	1.19	0.97	1.79	0.22	-0.09	-0.13	-0.39	-0.63	-0.42	0.45	-1.31	-0.43			0.85	0.85	0.21	0.85
Hill, Howard	-0.06	0.97	-0.60	-0.43	1.02	0.53	-0.39	1.55	3.39	0.39	-0.07	-0.43			0.64	0.64	0.51	1.05
Hills, Barry	1.19	0.97	1.79	1.58	2.05	2.31	2.87	0.68	1.33	0.39	2.09	2.00			2.72	2.72	1.77	0.78
Seiz, Ray	-1.06	-1.66	-0.60	1.75	1.29	-0.73	-0.39	-0.63	-0.42	0.39	-1.00	3.05			-0.85	-0.85	-0.12	1.30
Yanchar, Paul	0.66	-0.25	-0.60	-0.27	0.12	-0.82	-0.39	-0.63	-0.42	0.52	-0.38	-0.26			-0.36	-0.36	-0.25	0.42
Sanchez, Art	0.68	0.97	1.79	0.55	-1.39	-0.04	2.38	-0.63	-0.42	0.05	1.17	0.61			1.14	1.14	0.57	0.99
Yi MAXIMUM	-2.12	-2.19	1.79	1.86	2.05	2.31	2.87	2.43	3.39	-3.50	2.09	3.05			2.72	2.72	1.77	1.33
Yi MINIMUM	-0.06	0.16	0.24	0.22	-0.09	-0.04	0.10	0.03	0.16	0.05	-0.07	-0.26			-0.08	-0.08	0.06	0.36
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00		
Ratings MEAN	77.65	19.01	6.26	26.99	6.81	6.54	3.01	3.60	1.81	84.24	4.24	2.47			151.69	151.69		
Ratings STD	14.57	6.17	10.45	4.59	3.63	7.98	7.66	5.73	4.27	14.92	3.23	5.76			39.19	39.19		

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Heavy Duty Rating Workshop

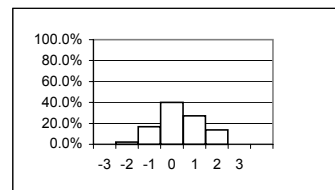
Rater = Sanchez, Art

Yi VALUES

	Groove 1	Groove 2	Groove 3	Groove 4	Land 1	Land 2	Land 3	Land 4	Upper Skirt	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %	UWPD	WPD	MEAN	STD
A1_square	-2.39	0.59	1.85	0.30		-0.03	1.34	-0.11				-2.42				-2.27	0.55	-0.26	1.56
A2_keystone	-0.48	-0.76	0.45		1.04	-0.02	1.22		0.56	1.43		-0.30	-1.37	3.47	-0.67	-0.23	0.78	0.36	1.22
A3_two-piece	-0.06	0.62	-0.50		-1.28	0.98	-0.85	-0.76		-0.43	-1.00	0.25	-0.91	-1.69	-0.43	-1.05	-0.71	-0.52	0.72
A4_two-piece																			
A5_two-piece																			
A6_two-piece																			
B1_square																			
B2_keystone																			
B3_two-piece																			
B4_two-piece																			
B5_two-piece																			
B6_two-piece																			
C1_square	-0.16	-0.36	1.37	-0.18		-0.59	-0.06	-0.38				-1.90				-0.54	-0.53	-0.33	0.79
C2_keystone	0.07	-1.54	-1.38		-0.03	0.38	-0.56		0.18	0.37		1.38	-0.16	0.00	0.00	-0.81	-0.67	-0.20	0.75
C3_two-piece	0.26	-1.97	-0.21		-0.19	-0.58	-0.64	0.05		-0.28	0.86	1.68	0.29	-1.85	0.47	-0.32	-0.49	-0.20	0.92
C4_two-piece	0.62	-1.02	-0.93		1.50	1.51	-1.09	-1.17		-0.58		0.02	-0.65	2.60	-0.52	0.32	-1.35	-0.05	1.21
C5_two-piece	0.45	0.00	0.14		0.11	-1.31	-0.22	-0.11		0.34	0.38	0.41	1.08	-0.25	-0.25	-0.22	-0.46	0.01	0.53
C6_two-piece	1.11	-1.34	-0.66		-1.06	-1.20	-0.97	-0.14		-0.29	-0.59	-1.54	-0.63	-1.22	2.35	-0.79	-0.82	-0.52	1.02
calibration_piston_1	0.40	-1.22	1.03			0.66	-0.19					0.75				0.32	0.32	0.26	0.70
calibration_piston_2	-1.59	-0.49	-0.18			0.40	-0.39					1.31				-0.46	-0.46	-0.23	0.83
Yi MAXIMUM	-2.39	-1.97	1.85	0.30	1.50	1.51	1.34	-1.17	0.56	1.43	-1.00	-2.42	-1.37	3.47	2.35	-2.27	-1.35	-0.52	1.56
Yi MINIMUM	-0.06	0.00	0.14	-0.18	-0.03	-0.02	-0.06	0.05	0.18	-0.28	0.38	0.02	-0.16	0.00	0.00	-0.22	0.32	0.01	0.53
Yi MEAN	-0.16	-0.68	0.09	0.06	0.01	0.02	-0.22	-0.37	0.37	0.08	-0.09	-0.03	-0.34	0.15	0.14	-0.55	-0.35		
Yi STD	1.01	0.85	1.00	0.34	1.01	0.88	0.81	0.44	0.27	0.70	0.86	1.38	0.82	2.10	1.05	0.71	0.64		

bins		count	percent		
-3	yi ≤ -3	0	0.0%	-1 < yi ≤ 1	67.4%
-2	-3 lt yi ≤ -2	2	2.1%	-2 < yi ≤ 2	97.9%
-1	-2 lt yi ≤ -1	16	16.8%	-3 < yi ≤ 3	100.0%
0	-1 lt yi ≤ 0	38	40.0%	> 3	0.0%
1	0 lt yi ≤ 1	26	27.4%	Average STD	0.87
2	1 lt yi ≤ 2	13	13.7%	Parts Rated	11
3	2 lt yi ≤ 3	0	0.0%		
	3 lt yi	0	0.0%		
	total	95	100.0%		

Yi distribution (excluding shaded columns)



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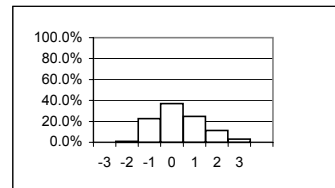
Rater = Seiz, Ray

Yi VALUES

	Groove 1	Groove 2	Groove 3	Groove 4	Land 1	Land 2	Land 3	Land 4	Upper Skirt	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %	UWPD	WPD	MEAN	STD	
A1_square																				
A2_keystone																				
A3_two-piece																				
A4_two-piece																				
A5_two-piece																				
A6_two-piece																				
B1_square	0.13	-0.42	1.00	1.31		0.70	1.84	1.80				1.35				0.43	0.54	0.87	0.73	
B2_keystone	-0.17	-0.32	-1.42		0.53	-0.50	0.78		0.89	0.25		-1.59	1.32	0.00	-0.42	-0.22	0.15	-0.05	0.81	
B3_two-piece	-1.36	-1.69	-0.41		-0.82	-1.38	-2.05	-0.60		-1.22	-1.16	-1.55	-0.85	-0.76	-0.77	-1.98	-1.50	-1.21	0.50	
B4_two-piece	0.82	-0.13	-0.50		-1.99	0.31	0.62	-0.76		-0.20		1.22	-1.28	-0.39	-0.47	0.05	-0.17	-0.21	0.83	
B5_two-piece	-0.60	-0.92	-0.72		-0.69	-0.07	-0.70	0.39		0.48	1.08	-1.35	0.75	-0.14	-0.54	-0.57	-0.83	-0.30	0.69	
B6_two-piece	0.10	-1.88	-1.23		-1.02	-1.39	-1.85	-0.54		-0.24	-0.83	0.09	-0.52	-1.09	-0.26	-1.40	-1.80	-0.92	0.68	
C1_square																				
C2_keystone																				
C3_two-piece																				
C4_two-piece	0.29	-0.83	2.65		0.04	-0.38	-0.50	-1.81		0.06		0.52	-1.84	-0.45	-0.52	0.04	-0.87	-0.26	1.09	
C5_two-piece	-0.33	-1.62	-0.41		-1.05	-0.50	-0.98	-0.11		-1.22	-1.12	0.95	-1.36	-0.25	-0.25	-1.56	-1.47	-0.75	0.71	
C6_two-piece	0.04	-0.54	0.33		1.77	0.32	-0.25	0.00		-0.36	-1.11	-0.35	-0.20	1.86	-0.50	0.36	0.16	0.10	0.80	
calibration_piston_1	1.82	1.11	1.54			2.34	-0.47					-0.55				2.28	2.28	1.29	1.19	
calibration_piston_2	0.43	0.84	-0.12			2.56	-1.34					-0.35				2.18	2.18	0.80	1.40	
Yi MAXIMUM	1.82	-1.88	2.65	1.31	-1.99	2.56	-2.05	-1.81	0.89	-1.22	-1.16	-1.59	-1.84	1.86	-0.77	2.28	2.28	1.29	1.40	
Yi MINIMUM	0.04	-0.13	-0.12	1.31	0.04	-0.07	-0.25	0.00	0.89	0.06	-0.83	0.09	-0.20	0.00	-0.25	0.04	0.15	-0.05	0.50	
Yi MEAN	0.11	-0.58	0.06	1.31	-0.40	0.18	-0.45	-0.21	0.89	-0.31	-0.63	-0.15	-0.50	-0.15	-0.46	-0.04	-0.12			
Yi STD	0.81	0.97	1.23		1.16	1.30	1.16	1.04		0.63	0.96	1.08	1.08	0.88	0.17	1.38	1.39			

bins	count	percent		
-3	0	0.0%		
-2	1	1.0%	-1 < yi ≤ 1	61.9%
-1	22	22.7%	-2 < yi ≤ 2	95.9%
0	36	37.1%	-3 < yi ≤ 3	100.0%
1	24	24.7%	>3	0.0%
2	11	11.3%		
3	3	3.1%	Average STD	1.02
3 lt yi	0	0.0%		
total	97	100.0%	Parts Rated	11

Yi distribution (excluding shaded columns)



Heavy Duty Rating Workshop

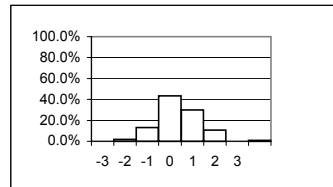
Rater = Tschirhart, Garland

Yi VALUES

	Groove 1	Groove 2	Groove 3	Groove 4	Land 1	Land 2	Land 3	Land 4	Upper Skirt	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %	UWPD	WPD	MEAN	STD
A1_square	0.83	-2.96	-0.46	0.30		-1.56	1.13	-0.11				-0.59				0.25	-1.04	-0.42	1.21
A2_keystone																			
A3_two-piece																			
A4_two-piece	0.82	-0.72	1.38		0.96	1.12	-0.93	-0.89		-1.17		0.66	-0.23	1.46	-0.41	0.85	-0.07	0.20	0.93
A5_two-piece	1.52	0.05	-0.61		0.26	-1.14	-0.10	-0.28		-1.56	-1.30	0.91	0.46	-0.27	-0.38	-0.40	-0.29	-0.21	0.81
A6_two-piece	-0.79	-0.76	0.09		0.49	0.39	0.20	-0.75		0.00	-1.58	0.56	0.15	0.90	-0.28	-0.33	-0.18	-0.12	0.65
B1_square	-0.55	-0.77	-0.37	-0.54		-0.65	0.27	-0.15				-1.51				-0.85	-0.83	-0.60	0.47
B2_keystone																			
B3_two-piece																			
B4_two-piece																			
B5_two-piece																			
B6_two-piece																			
C1_square	0.50	0.02	-0.49	-0.18		1.86	-0.81	-1.14				0.06				1.32	0.82	0.20	0.94
C2_keystone	-0.44	1.72	-0.09		0.66	3.56	0.32		-0.27	-0.21		-0.71	0.90	0.00	0.00	2.38	0.77	0.61	1.20
C3_two-piece	1.94	1.62	-0.58		0.90	-1.81	-1.44	-1.24		0.33	1.36	-0.10	1.71	0.70	-0.69	1.26	-0.94	0.20	1.26
C4_two-piece	0.07	-0.11	-0.50		0.62	-2.41	-0.75	-0.07		0.23		-0.48	-0.25	1.07	-0.52	-0.07	-0.51	-0.26	0.79
C5_two-piece	-0.30	-1.21	-0.76		0.77	-0.78	-0.59	-0.11		-0.79	-0.71	-1.53	-0.98	-0.25	-0.25	-1.11	-1.23	-0.65	0.57
C6_two-piece	0.16	-0.70	1.58		1.08	-1.14	0.52	-0.41		-0.68	1.22	0.84	0.23	1.09	-0.50	0.48	0.10	0.26	0.81
calibration_piston_1	-0.26	-0.82	-0.01			0.72	-0.01					0.31				0.13	0.13	0.02	0.44
calibration_piston_2	0.48	-1.15	-0.64			0.34	-0.12					0.12				0.10	0.10	-0.10	0.54
Yi MAXIMUM	1.94	-2.96	1.58	-0.54	1.08	3.56	-1.44	-1.24	-0.27	-1.56	-1.58	-1.53	1.71	1.46	-0.69	2.38	-1.23	-0.65	1.26
Yi MINIMUM	0.07	0.02	-0.01	-0.18	0.26	0.34	-0.01	-0.07	-0.27	0.00	-0.71	0.06	0.15	0.00	0.00	-0.07	-0.07	0.02	0.44
Yi MEAN	0.31	-0.44	-0.11	-0.14	0.72	-0.12	-0.18	-0.51	-0.27	-0.48	-0.20	-0.11	0.25	0.59	-0.38	0.31	-0.24		
Yi STD	0.82	1.21	0.75	0.42	0.27	1.66	0.70	0.45		0.68	1.40	0.81	0.81	0.67	0.21	0.96	0.65		

bins		count	percent		
-3	yi le -3	0	0.0%		
-2	-3 lt yi le -2	2	1.8%	-1 < yi ≤ 1	73.5%
-1	-2 lt yi le -1	15	13.3%	-2 < yi ≤ 2	97.3%
0	-1 lt yi le 0	49	43.4%	-3 < yi ≤ 3	99.1%
1	0 lt yi le 1	34	30.1%	>3	0.9%
2	1 lt yi le 2	12	10.6%		
3	2 lt yi le 3	0	0.0%	Average STD	0.78
	3 lt yi	1	0.9%		
	total	113	100.0%	Parts Rated	13

Yi distribution (excluding shaded columns)



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Heavy Duty Rating Workshop

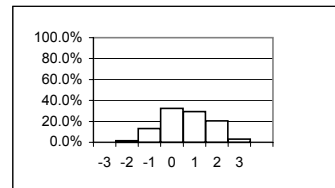
Rater = van Dijk, Bob

Yi VALUES

	Groove 1	Groove 2	Groove 3	Groove 4	Land 1	Land 2	Land 3	Land 4	Upper Skirt	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %	UWPD	WPD	MEAN	STD
A1_square																			
A2_keystone																			
A3_two-piece																			
A4_two-piece																			
A5_two-piece																			
A6_two-piece																			
B1_square																			
B2_keystone																			
B3_two-piece																			
B4_two-piece																			
B5_two-piece																			
B6_two-piece																			
C1_square	0.22	-0.30	-0.86	-0.90		0.64	0.51	0.37				-0.07				0.38	-0.05	-0.01	0.54
C2_keystone	-0.28	0.66	0.47		-0.82	0.09	-0.12		-0.64	-0.46		0.45	0.69	0.00	0.00	0.13	-0.21	0.00	0.46
C3_two-piece	-0.23	-0.31	2.32		1.28	1.14	1.43	-1.08		0.33	1.36	-1.04	-1.49	0.89	2.22	1.36	0.66	0.59	1.19
C4_two-piece	0.78	1.71	0.00		1.10	1.81	-0.38	0.41		-0.51		-0.35	-1.64	0.06	-0.52	1.02	0.78	0.30	0.96
C5_two-piece	-0.89	0.54	1.62		1.03	-0.11	0.70	-1.45		0.47	0.16	-0.02	1.14	-0.25	-0.25	0.05	0.00	0.18	0.78
C6_two-piece	-1.06	1.07	0.54		0.64	-0.30	0.00	0.55		-0.29	-1.04	2.03	-1.06	0.32	0.92	-0.75	0.11	0.11	0.89
calibration_piston_1	0.70	-1.06	-1.49			1.80	1.49					1.04				1.16	1.16	0.60	1.21
calibration_piston_2	-1.40	-2.01	-0.24			1.02	-1.40					-0.11				-0.39	-0.39	-0.62	0.95
Yi MAXIMUM	-1.40	-2.01	2.32	-0.90	1.28	1.81	1.49	-1.45	-0.64	-0.51	1.36	2.03	-1.64	0.89	2.22	1.36	1.16	-0.62	1.21
Yi MINIMUM	0.22	-0.30	0.00	-0.90	0.64	0.09	0.00	0.37	-0.64	-0.29	0.16	-0.02	0.69	0.00	0.00	0.05	0.00	0.00	0.46
Yi MEAN	-0.27	0.04	0.29	-0.90	0.64	0.76	0.28	-0.24	-0.64	-0.09	0.16	0.24	-0.47	0.20	0.47	0.37	0.26		
Yi STD	0.81	1.20	1.24		0.85	0.82	0.96	0.95		0.46	1.20	0.94	1.30	0.43	1.11	0.76	0.54		

bins	count	percent		
-3	0	0.0%		
-2	1	1.5%	-1 < yi ≤ 1	61.8%
-1	9	13.2%	-2 < yi ≤ 2	95.6%
0	22	32.4%	-3 < yi ≤ 3	100.0%
1	20	29.4%	>3	0.0%
2	14	20.6%		
3	2	2.9%	Average STD	0.91
	0	0.0%		
	0	0.0%	Parts Rated	8
total	68	100.0%		

Yi distribution (excluding shaded columns)



Heavy Duty Rating Workshop

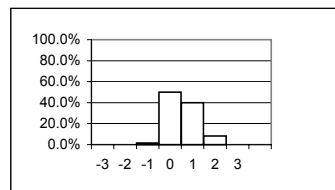
Rater = Yanchar, Paul

Yi VALUES

	Groove 1	Groove 2	Groove 3	Groove 4	Land 1	Land 2	Land 3	Land 4	Upper Skirt	Under-crown	Oil Gallery	TGF	2nd GF	TLHC, %	TLFC, %	UWPD	WPD	MEAN	STD
A1_square	-0.80	-1.18	-0.75	-0.73		-0.12	-0.99	-0.86				0.33				-1.03	-1.75	-0.79	0.57
A2_keystone	-0.48	-0.51	0.37		0.62	-0.48	0.31		0.00	-0.29		-0.48	0.75	-0.27	0.50	-0.46	-0.28	-0.05	0.46
A3_two-piece	-0.40	-0.19	-0.13		-0.19	0.47	0.59	-0.72		0.48	0.23	-1.64	0.76	0.49	-0.43	-0.06	-0.36	-0.07	0.62
A4_two-piece	-0.35	1.22	0.10		0.20	0.01	1.53	0.09		0.94		0.66	0.71	-0.44	2.25	0.23	0.47	0.54	0.74
A5_two-piece	0.10	1.45	0.03		0.58	1.91	1.18	-0.50		-0.13	-0.55	0.75	0.69	-0.27	-0.38	1.31	1.39	0.50	0.81
A6_two-piece	0.43	0.73	-0.41		-0.22	-0.01	0.61	-0.49		-0.14	1.74	0.56	0.80	-0.30	-0.28	0.50	-0.16	0.22	0.61
B1_square	-0.35	0.19	-0.72	-0.08		0.00	-0.54	-0.41				0.42				-0.17	-0.07	-0.17	0.34
B2_keystone	0.81	-0.45	0.03		0.36	-0.12	-0.19		0.14	0.30		-0.42	-0.70	0.00	1.36	-0.05	0.02	0.08	0.53
B3_two-piece	1.19	0.95	-0.62		0.27	0.81	0.22	-0.63		0.79	-0.53	0.87	0.75	0.05	0.32	0.73	-0.10	0.34	0.60
B4_two-piece	-0.09	0.65	0.76		-0.09	-0.27	-0.21	0.67		0.58		-0.13	0.53	-0.39	2.02	0.15	0.43	0.33	0.63
B5_two-piece	0.55	1.44	-0.55		0.62	0.21	-0.29	-0.43		0.66	0.39	0.27	1.33	-0.14	-0.54	1.15	0.23	0.33	0.65
B6_two-piece	-0.36	0.71	-0.42		1.10	0.68	0.51	-0.30		-0.03	1.05	-0.17	-0.06	1.07	3.61	0.88	0.19	0.56	1.01
C1_square	-0.39	-0.17	-0.72	-0.75		0.09	-1.00	-0.98				0.32				-0.22	-0.49	-0.43	0.44
C2_keystone	-0.44	0.27	-0.57		1.77	-0.49	-0.84		0.03	-0.20		-0.25	0.37	0.00	0.00	-0.08	-0.55	-0.07	0.63
C3_two-piece	-0.37	0.38	-0.58		0.54	1.61	0.17	-0.41		0.84	0.94	-0.69	0.29	0.31	2.22	0.90	0.06	0.41	0.81
C4_two-piece	0.35	1.09	-0.65		0.04	0.42	-0.46	-1.33		0.20		0.52	0.14	-0.45	1.82	0.36	-1.19	0.06	0.84
C5_two-piece	-0.08	-0.27	-0.43		-0.12	0.33	0.95	-0.44		0.42	-0.70	0.30	0.95	-0.25	-0.25	0.07	0.23	0.05	0.49
C6_two-piece	-0.33	0.10	-0.71		1.11	0.35	-0.20	-0.30		-0.04	0.73	1.24	2.38	0.78	-0.50	0.65	-0.22	0.34	0.82
calibration_piston_1	-0.38	0.32	-0.82			-0.01	-0.61					-0.41				-0.16	-0.16	-0.28	0.35
calibration_piston_2	-0.46	0.48	-0.47			-0.41	-0.66					-0.35				-0.42	-0.42	-0.34	0.34
Yi MAXIMUM	1.19	1.45	-0.82	-0.75	1.77	1.91	1.53	-1.33	0.14	0.94	1.74	-1.64	2.38	1.07	3.61	1.31	-1.75	-0.79	1.01
Yi MINIMUM	-0.08	0.10	0.03	-0.08	0.04	0.00	0.17	0.09	0.00	-0.03	0.23	-0.13	-0.06	0.00	0.00	-0.05	0.02	0.05	0.34
Yi MEAN	-0.09	0.36	-0.36	-0.52	0.44	0.25	0.01	-0.47	0.06	0.29	0.37	0.09	0.65	0.01	0.78	0.21	-0.14		
Yi STD	0.51	0.70	0.42	0.38	0.56	0.63	0.72	0.46	0.07	0.41	0.84	0.66	0.68	0.46	1.32	0.59	0.63		

bins	count	percent		
-3	yi le -3	0	0.0%	
-2	-3 lt yi le -2	0	0.0%	-1 < yi ≤ 1 90.0%
-1	-2 lt yi le -1	3	1.7%	-2 < yi ≤ 2 100.0%
0	-1 lt yi le 0	90	50.0%	-3 < yi ≤ 3 100.0%
1	0 lt yi le 1	72	40.0%	> 3 0.0%
2	1 lt yi le 2	15	8.3%	
3	2 lt yi le 3	0	0.0%	Average STD 0.59
3	lt yi	0	0.0%	
total	180	100.0%	Parts Rated	20

Yi distribution (excluding shaded columns)



October 3-7, 2004

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	Number of Parts Rated	-1 < yi = 1	-2 < yi = 2	-3 < yi = 3	>3	AVG Yi STD	Group	
Avis, Steve	15	71.6%	99.3%	100.0%	0.0%	0.60	White	
Barrera, Tony	13	79.5%	99.1%	100.0%	0.0%	0.66	White	
Campbell, Andy	10	81.2%	98.8%	100.0%	0.0%	0.60	Red	
Caproni, David	11	56.7%	91.8%	100.0%	0.0%	1.09	Yellow	
Castillo, George	14	77.2%	95.9%	99.2%	0.8%	0.69	White	
Clapperty, Leon	8	61.8%	95.6%	100.0%	0.0%	0.77	White	
Engelskirchen, Jim	11	63.2%	92.6%	100.0%	0.0%	1.00	White	
Foecking, Brian	13	67.0%	100.0%	100.0%	0.0%	0.82	White	
Garcia, Pat	8	79.4%	97.1%	100.0%	0.0%	0.62	White	
Greenland, Paul	10	80.5%	98.9%	100.0%	0.0%	0.71	Red	
Guarda, Waldyr	14	57.3%	90.3%	97.6%	2.4%	0.91	Yellow	
Gutzwiller, Jim	4	50.0%	86.7%	96.7%	3.3%	1.29	Yellow	
Hill, Howard	11	66.3%	96.8%	100.0%	0.0%	0.79	White	
Hills, Barry	12	83.2%	99.1%	100.0%	0.0%	0.70	Red	
Holland, Steve	14	72.6%	95.2%	99.2%	0.8%	0.86	White	
Kobrinetz, Jack	9	86.8%	98.7%	100.0%	0.0%	0.63	Blue	
Kuipers, Jacques	11	49.5%	87.4%	95.8%	4.2%	1.01	Yellow	
Langford, Mike	12	53.4%	91.3%	99.0%	1.0%	1.04	Yellow	
Lopez, Frank	11	73.2%	91.8%	100.0%	0.0%	0.74	White	
May, Marianne	16	83.7%	98.6%	100.0%	0.0%	0.71	Red	
Narasaki, Keith	11	49.5%	88.7%	100.0%	0.0%	1.05	Yellow	
Pansza, Mike	13	74.3%	99.1%	100.0%	0.0%	0.79	White	
Radonich, Pete	13	71.7%	99.1%	99.1%	0.9%	0.84	White	
Rodriguez, Jesse	9	64.5%	90.8%	100.0%	0.0%	0.70	White	
Sanchez, Art	11	67.4%	97.9%	100.0%	0.0%	0.87	White	
Seiz, Ray	11	61.9%	95.9%	100.0%	0.0%	1.02	Yellow	
Tschirhart, Garland	13	73.5%	97.3%	99.1%	0.9%	0.78	White	
van Dijk, Bob	8	61.8%	95.6%	100.0%	0.0%	0.91	White	
Viera, Ralph	14	72.6%	97.6%	100.0%	0.0%	0.74	White	
Yanchar, Paul	20	90.0%	100.0%	100.0%	0.0%	0.59	Blue	

	Minimum Number of Parts Rated	Minimum Yi's within 1 STD of mean	Minimum Yi's within 2 STD of mean	Maximum AVG Yi STD	Group Total	
White	6	60%	90%	1.00	17	57%
Red	6	80%	95%	0.75	4	13%
Blue	6	85%	98%	0.65	2	7%
Yellow	-	-	-	-	7	23%