VOLVO CONSTRUCTION EQUIPMENT

# MATRIS REPORT

| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |

| Company name | Dealer | Report Issuer |
|---|---|---|
| ascendum | | |
| **Contact name** | **Technician** | **Primary Application** |
| | Boback | Site Preparation |
| **Site** | **Workorder** | **Ground Condition** |
| | | |

MATRIS Reading, Summary / Recommendation

| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |

| Main equipment | Type | Equipment |
|---|---|---|
| | Track chain | |
| | Hydraulic Fluid | |
| | X1 Piping | |
| | X3 piping | |
| | Main Attachment | |
| | Attachment Interface | |
| | Hose Rupture Valve on Boom | |
| | Hose Rupture Valve on Arm | |
| | X1 return filter | |

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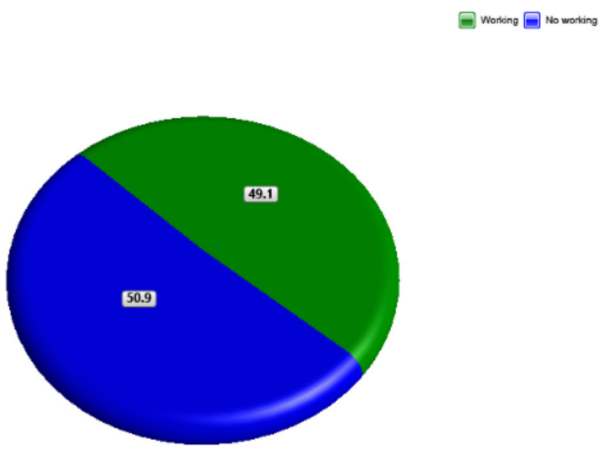
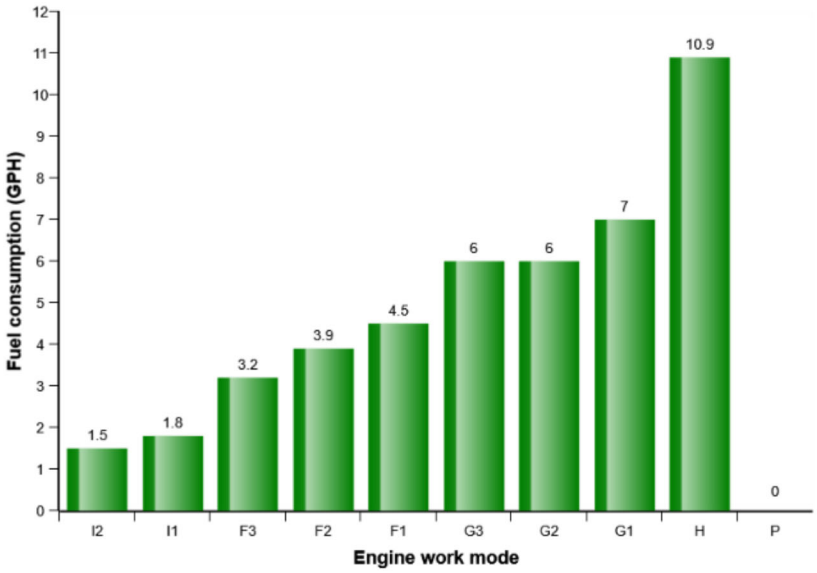
## Machine utilization (%)




**Total logged time (h) = 4545.0**

## Fuel consumption distribution on work mode




**Fuel consumption (GPH) = 6.4**
**Fuel used (US-Gallons) = 29137.5**

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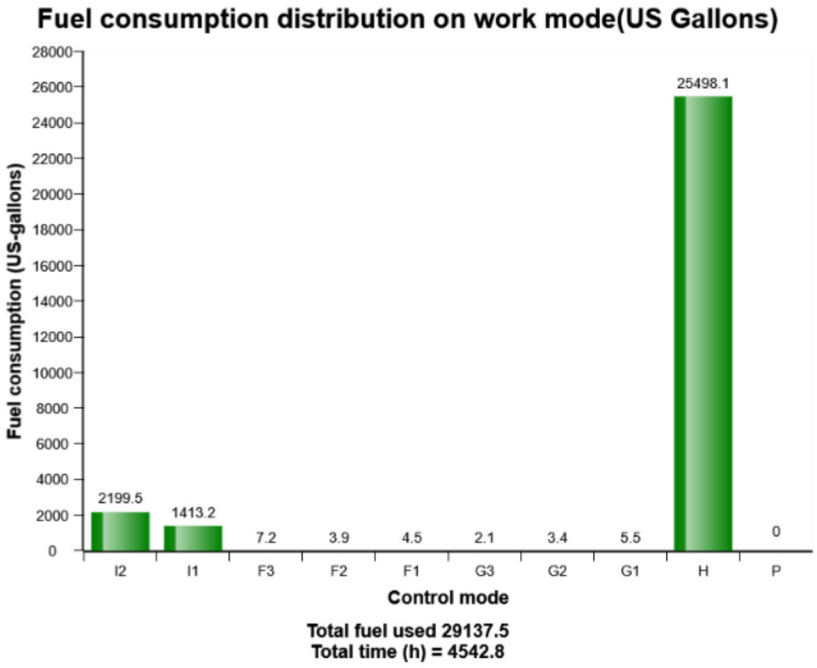


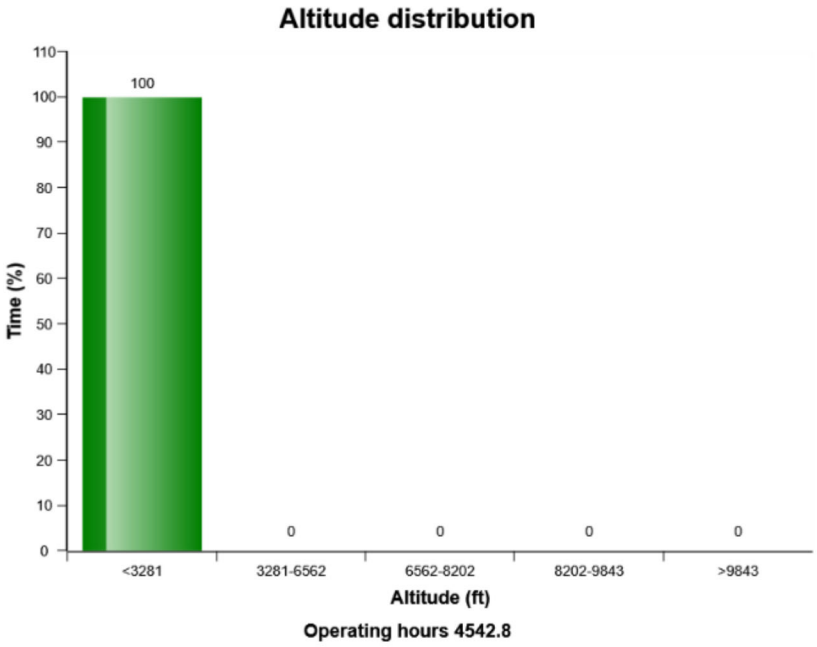

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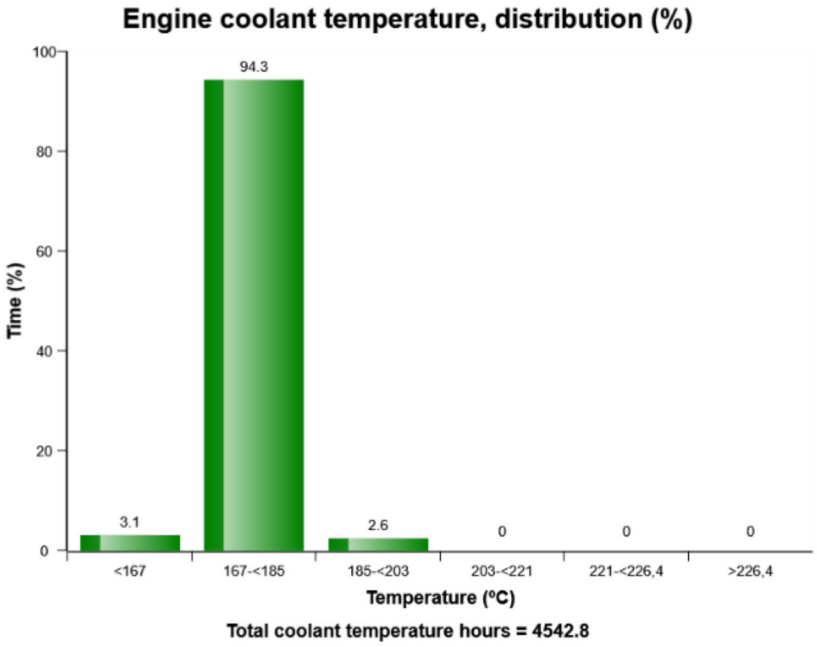


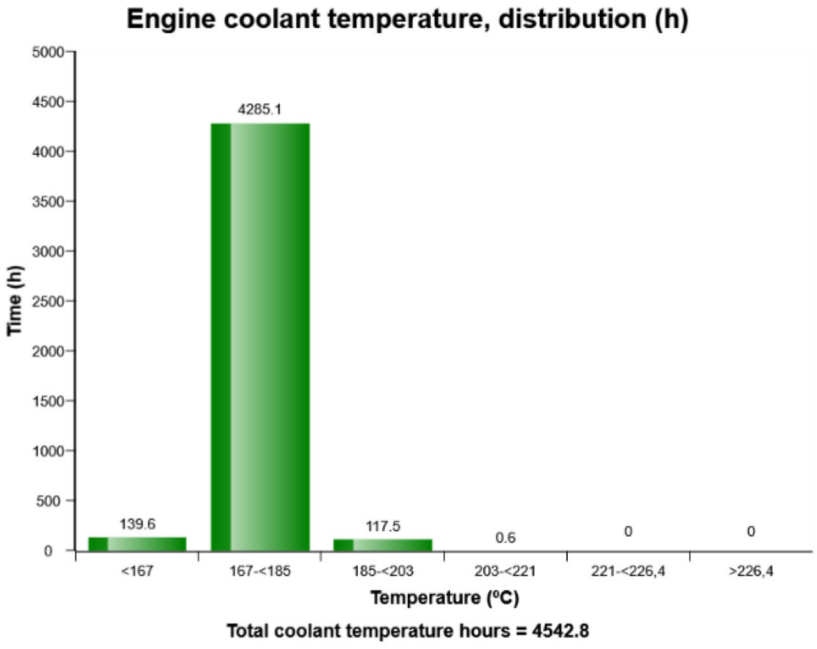

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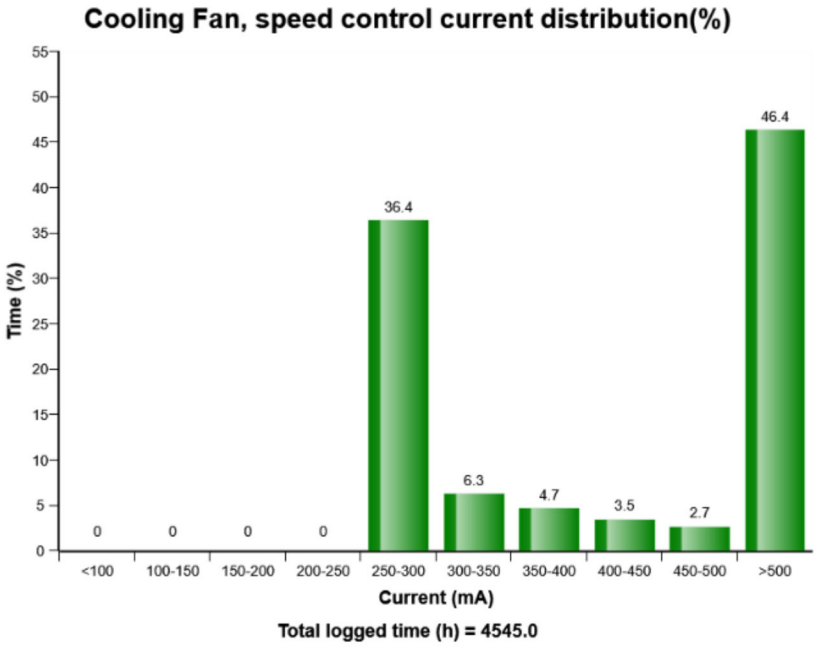
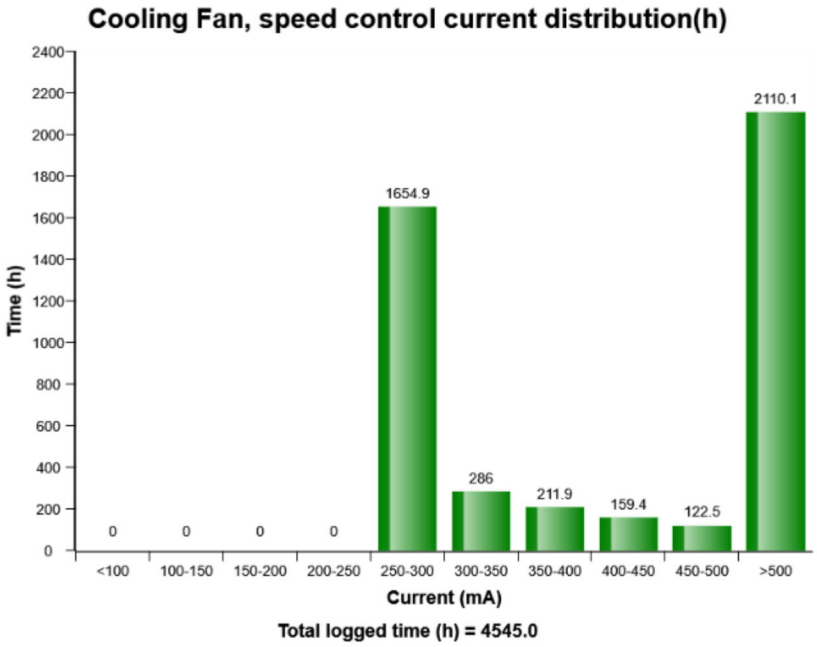
| EC380E | 311222 | 4545.2 | 27/01/2020 |



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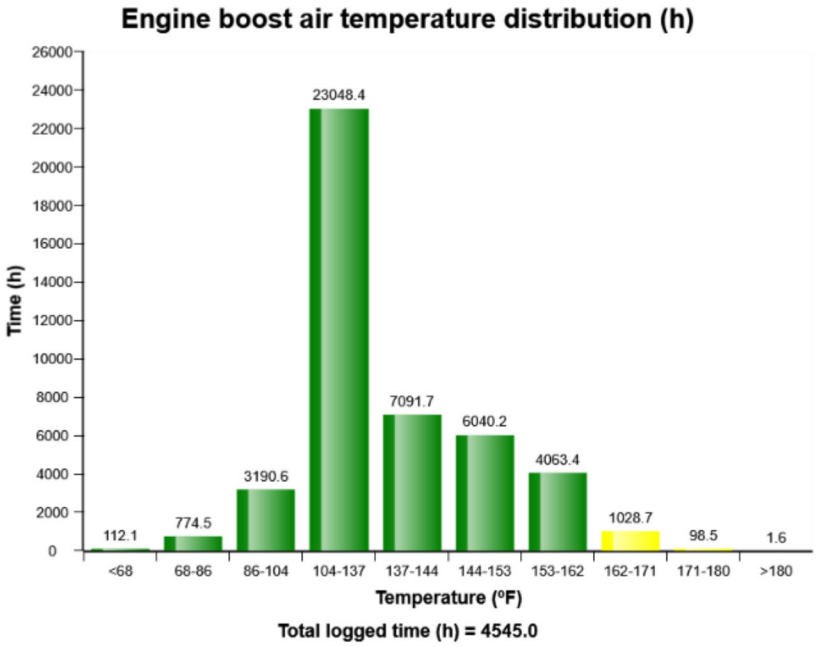


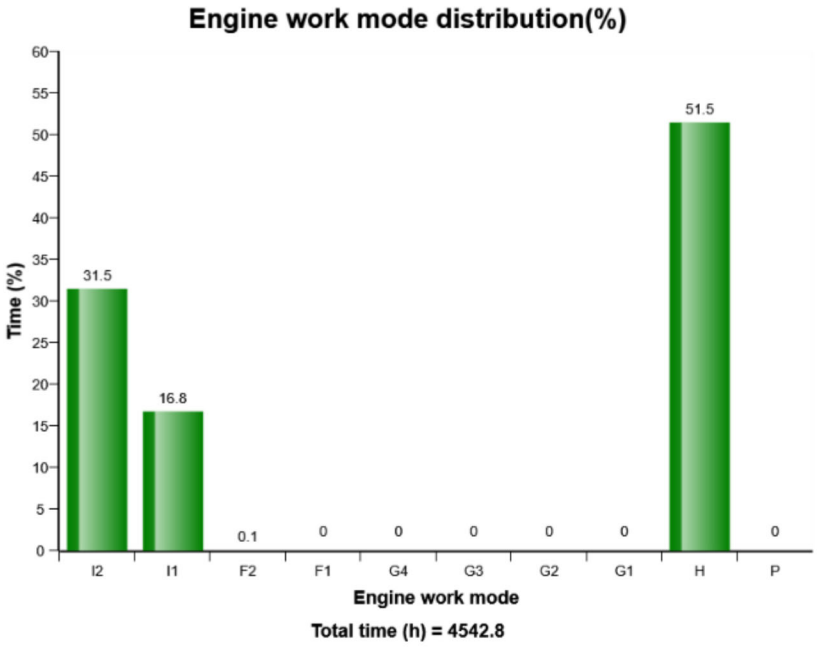

| Machine model | SerialNo | Operating Hours | Reading Date |
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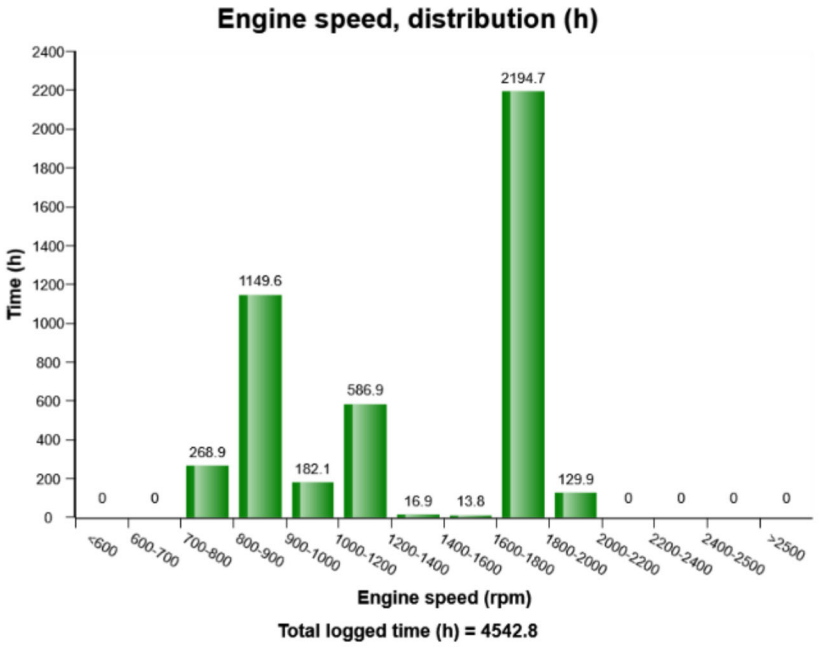
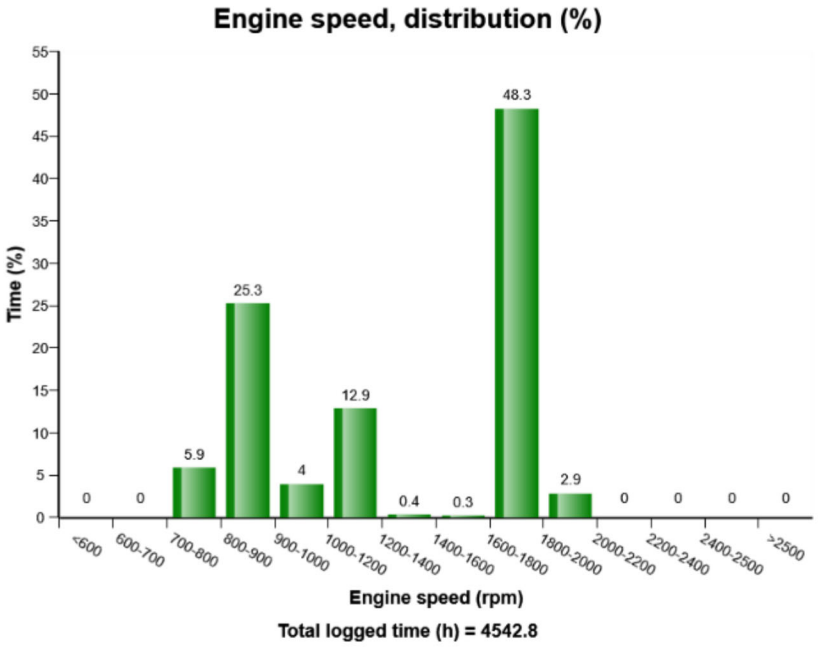
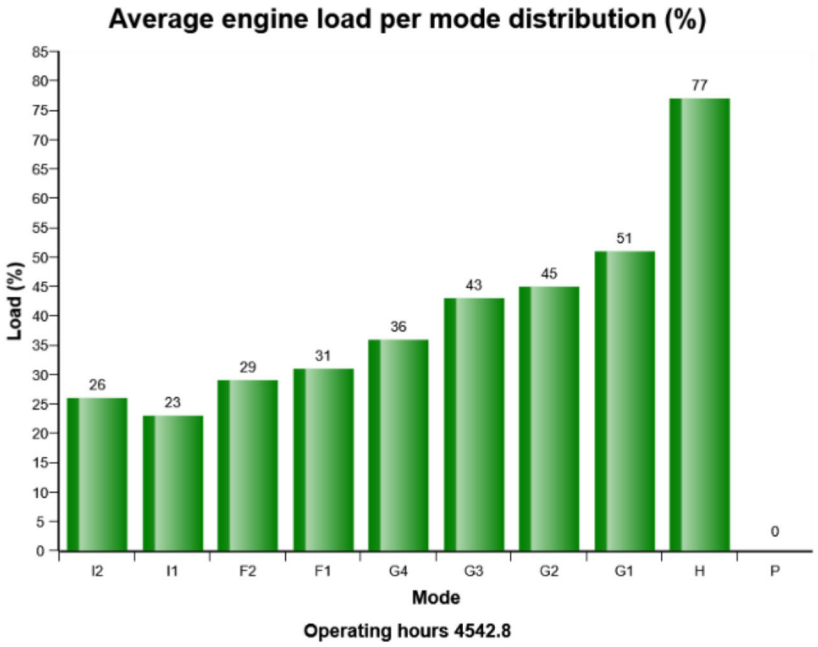
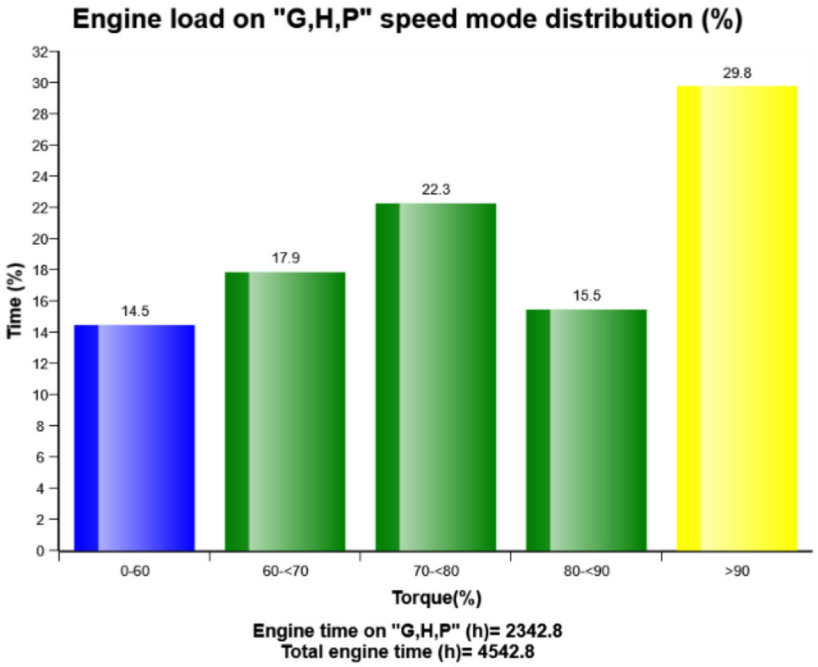


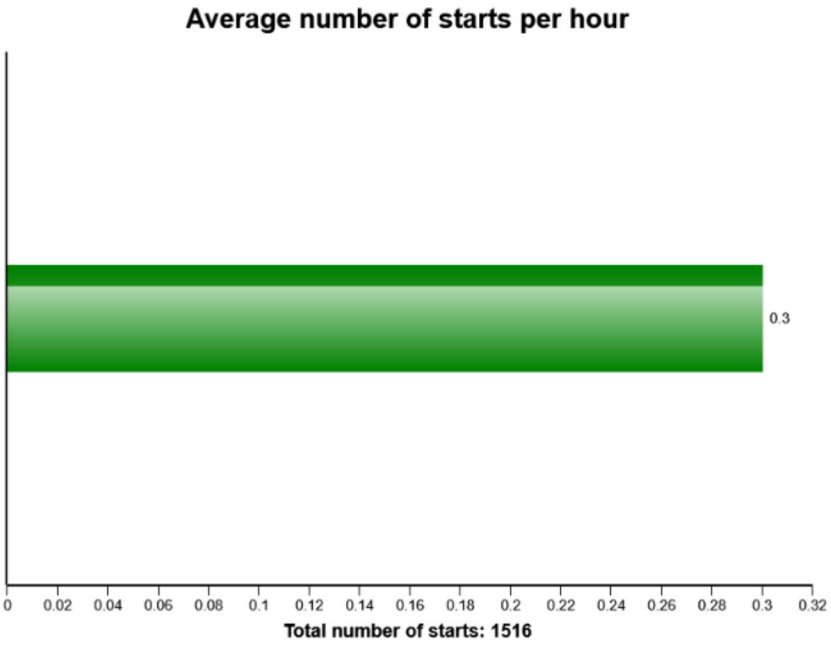



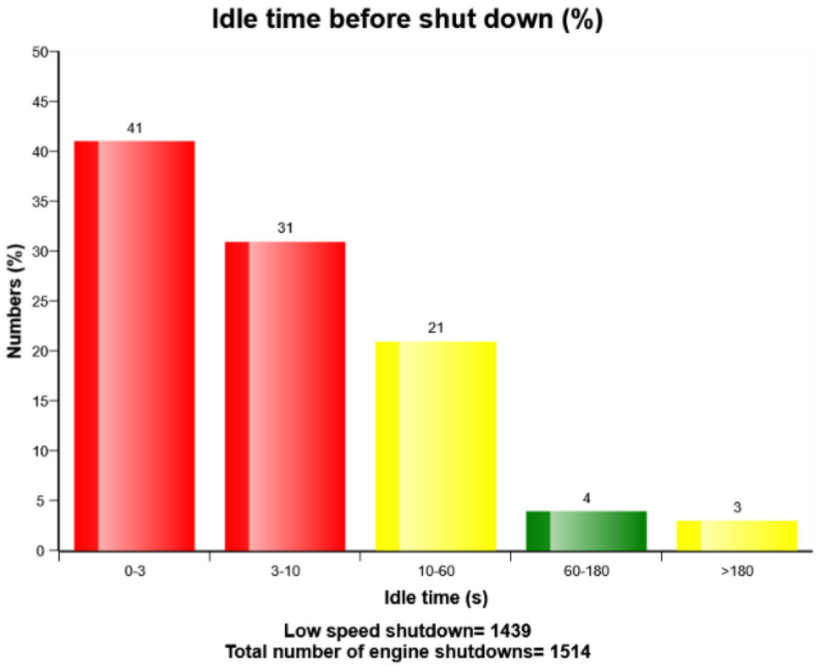
| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |



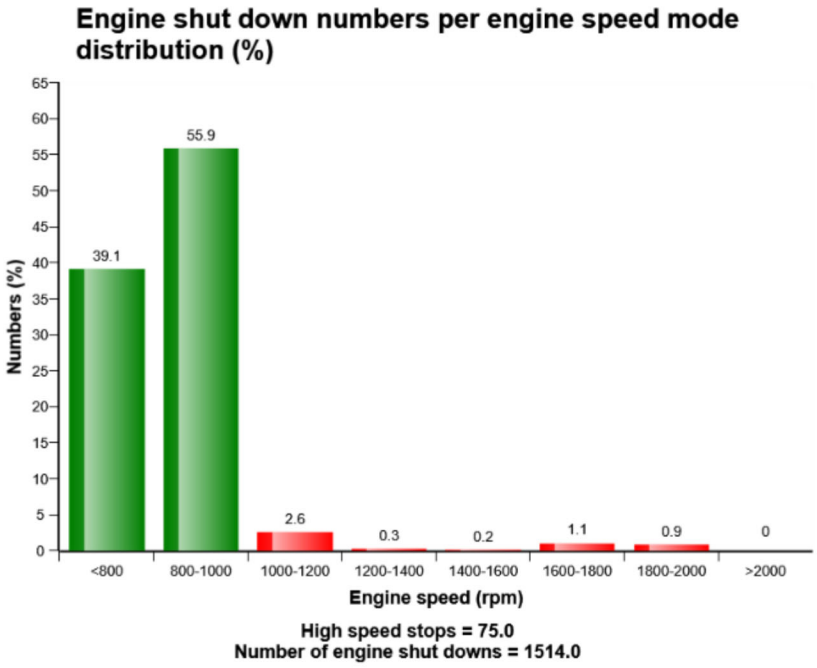



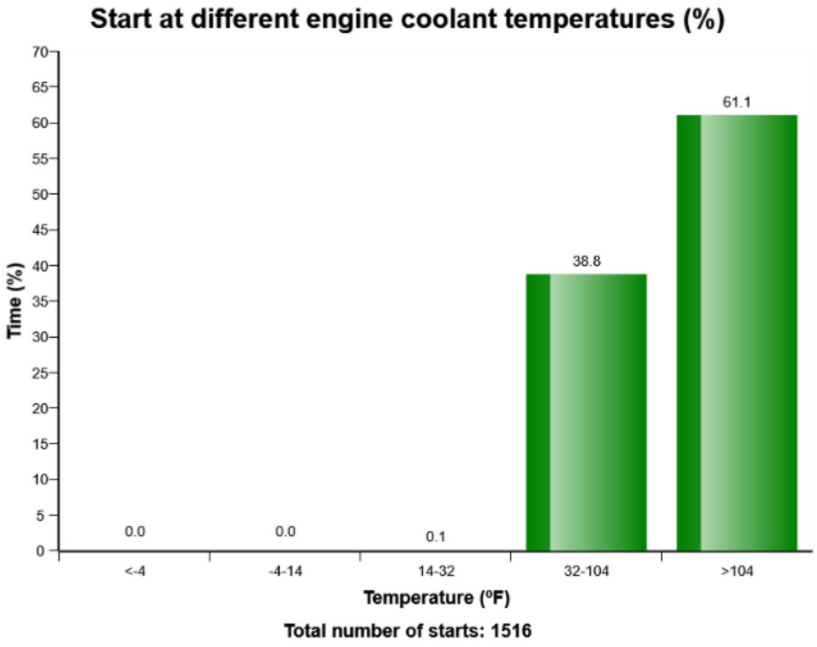
| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |



| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |



| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |

## Low coolant level
## Total number of occurences = 17

| | Op hours | Year | Month | Day | Hour | Minute | Duration (minutes) |
|---|---|---|---|---|---|---|---|
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 114 | 2018 | 2 | 17 | 6 | 33 | 2 |
| * | 122 | 2018 | 2 | 19 | 8 | 45 | 0 |
| * | 123 | 2018 | 2 | 19 | 9 | 24 | 1 |
| * | 123 | 2018 | 2 | 19 | 9 | 31 | 2 |
| * | 123 | 2018 | 2 | 19 | 9 | 36 | 1 |
| * | 123 | 2018 | 2 | 19 | 9 | 44 | 0 |
| * | 123 | 2018 | 2 | 19 | 9 | 20 | 0 |
| * | 123 | 2018 | 2 | 19 | 9 | 21 | 0 |
| * | 277 | 2018 | 3 | 13 | 6 | 29 | 0 |
| * | 332 | 2018 | 3 | 19 | 13 | 35 | 1 |
| * | 332 | 2018 | 3 | 19 | 13 | 33 | 1 |
| * | 365 | 2018 | 3 | 23 | 7 | 16 | 1 |
| * | 403 | 2018 | 3 | 29 | 10 | 37 | 3 |
| * | 404 | 2018 | 3 | 29 | 10 | 48 | 0 |
| * | 436 | 2018 | 4 | 4 | 6 | 32 | 0 |
| * | 1631 | 2018 | 9 | 27 | 7 | 40 | 0 |
| * | 3231 | 2019 | 6 | 13 | 7 | 34 | 0 |

| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |

## Low engine oil level at start
## Total number of occurences = 2

| | Op hours | Year | Month | Day | Hour | Minute |
|---|---|---|---|---|---|---|
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 |
| * | 4536 | 2020 | 1 | 13 | 13 | 27 |
| * | 4536 | 2020 | 1 | 13 | 13 | 11 |

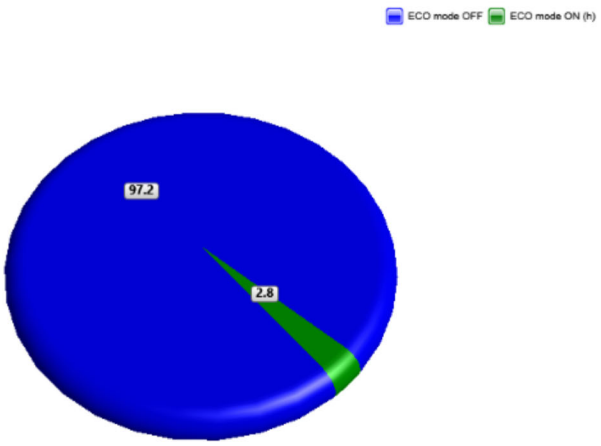
| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |

## High Charge air temperature
## Total number of occurences = 0

| Op hours | Year | Month | Day | Hour | Minute | Duration (seconds) | Extreme (° F) |
|---|---|---|---|---|---|---|---|
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 321 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |

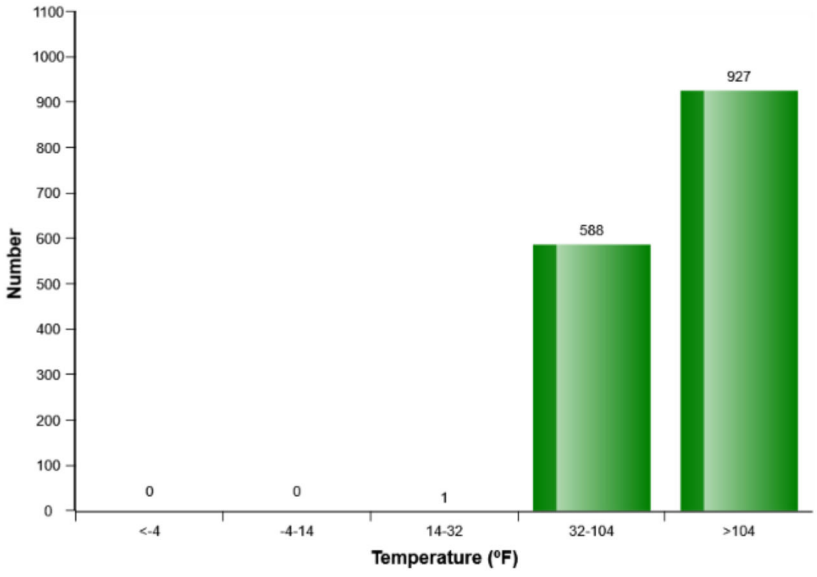
| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |

## ECO mode distribution (%)




**Total engine time (h)= 4545.0**

## Start at different engine coolant temperatures




**Total number of starts: 1516**

| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |

## Regeneration ignored
## Total number of occurences = 8

| | Op hours | Year | Month | Day | Hour | Minute | Duration (min) |
|---|---|---|---|---|---|---|---|
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 1173 | 2018 | 7 | 18 | 11 | 31 | 1 |
| * | 2267 | 2019 | 1 | 17 | 8 | 14 | 227 |
| * | 2274 | 2019 | 1 | 17 | 15 | 59 | 52 |
| * | 2275 | 2019 | 1 | 18 | 6 | 54 | 28 |
| * | 2276 | 2019 | 1 | 18 | 7 | 24 | 266 |
| * | 2286 | 2019 | 1 | 22 | 13 | 26 | 176 |
| * | 3577 | 2019 | 8 | 3 | 11 | 50 | 89 |
| * | 4295 | 2019 | 11 | 21 | 10 | 46 | 58 |

| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
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## Regeneration duration
## Total number of occurences = 5

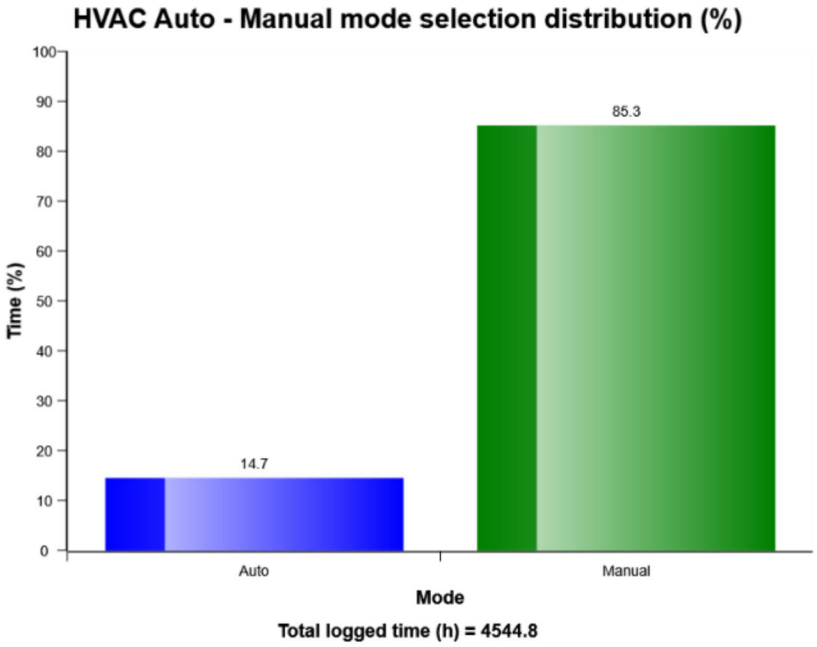
| | Op hours | Year | Month | Day | Hour | Minute | Duration (min) |
|---|---|---|---|---|---|---|---|
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 0 | 2000 | 0 | 0 | 0 | 0 | 0 |
| * | 1173 | 2018 | 7 | 18 | 11 | 32 | 53 |
| * | 2270 | 2019 | 1 | 17 | 12 | 1 | 51 |
| * | 2280 | 2019 | 1 | 18 | 11 | 50 | 51 |
| * | 3579 | 2019 | 8 | 3 | 13 | 19 | 52 |
| * | 4296 | 2019 | 11 | 21 | 11 | 43 | 52 |

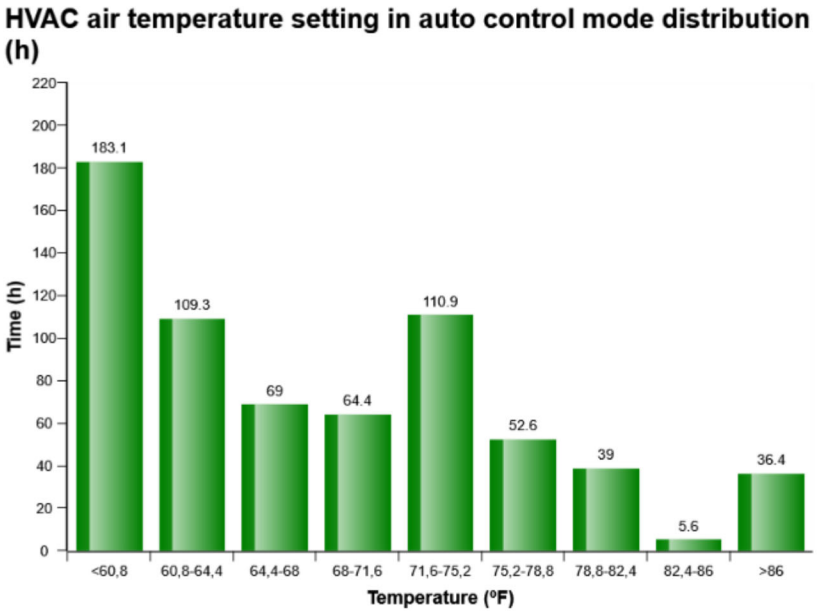
| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |

## High engine coolant temperature
## Total number of occurences = 0

| Op hours | Year | Month | Day | Hour | Minute | Duration (seconds) | Extreme (° F) |
|---|---|---|---|---|---|---|---|
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |

| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |



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|---|---|---|---|
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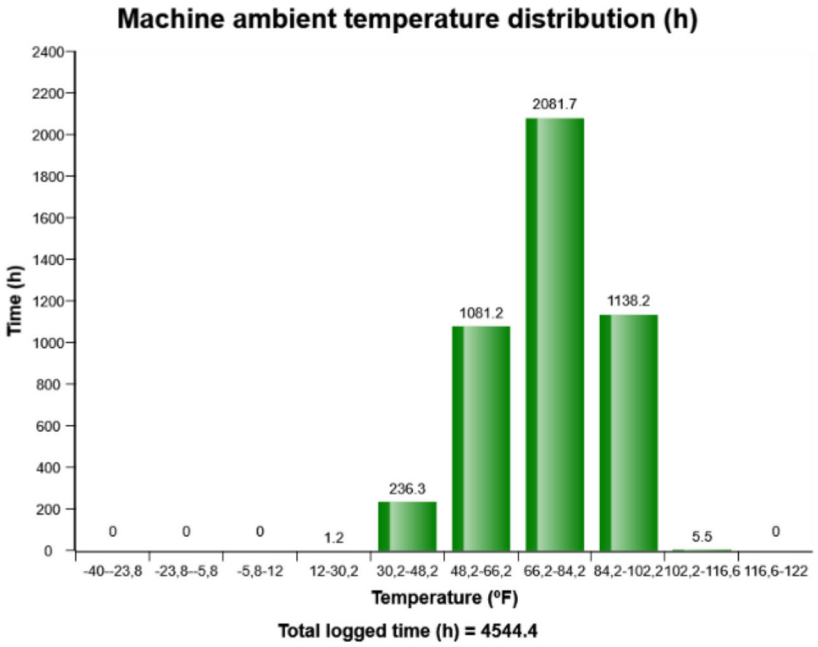
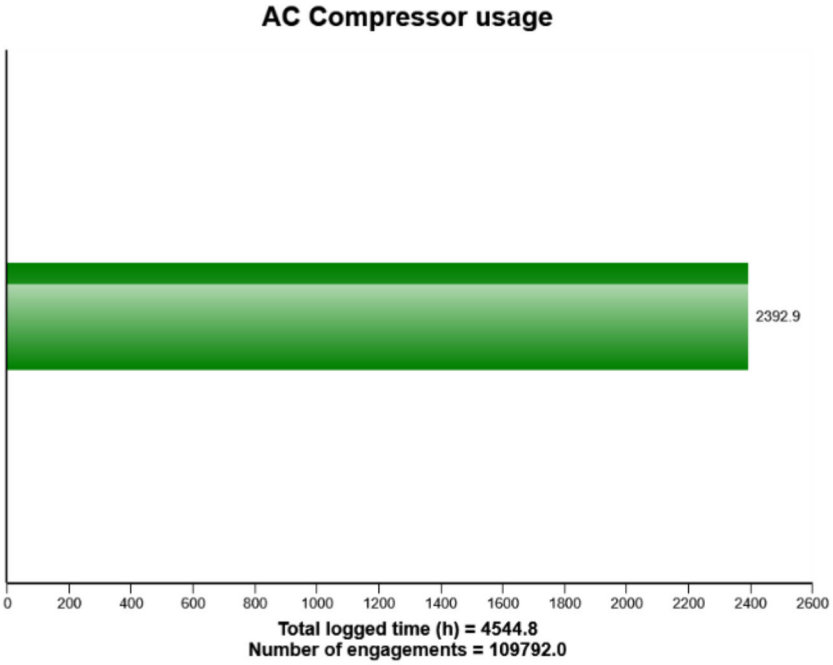


| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |

## AC High Pressure
## Total number of occurences = 0

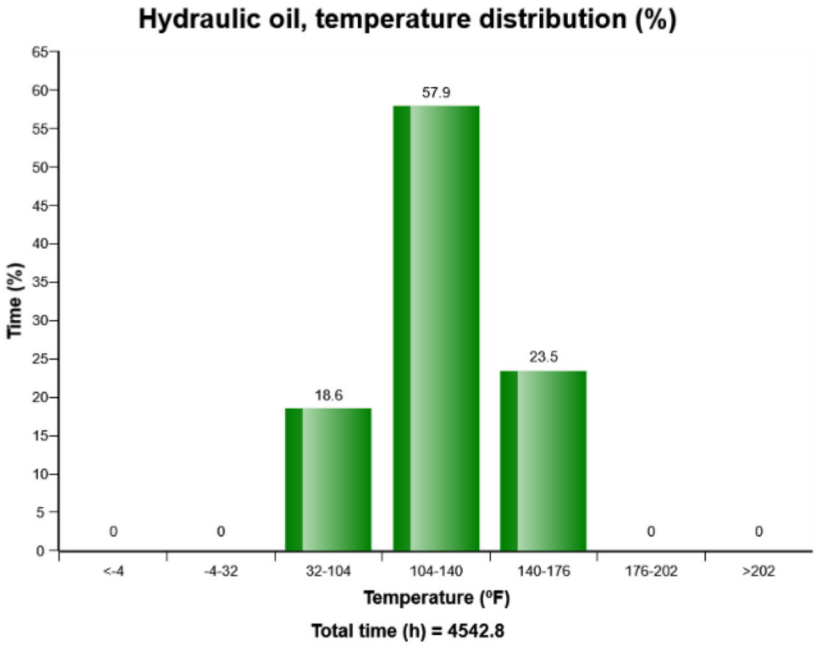
| Op hours | Year | Month | Day | Hour | Minute | Duration (seconds) | Ambient temperature (°F) |
|---|---|---|---|---|---|---|---|
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |

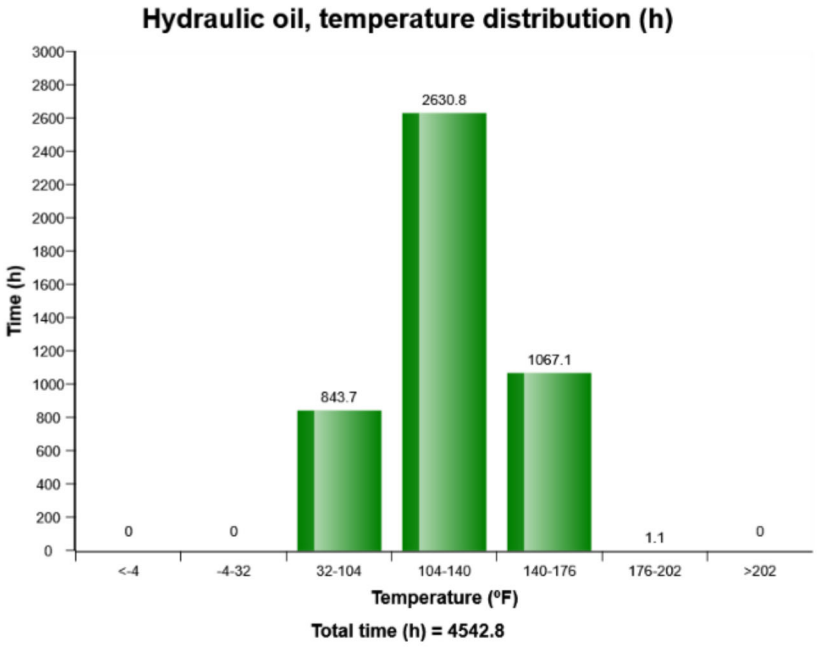
| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |

## AC System Cut Out Pressure
## Total number of occurences = 0

| Op hours | Year | Month | Day | 0 | Minute | Duration (sec) | Extreme (° F) |
|---|---|---|---|---|---|---|---|
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |

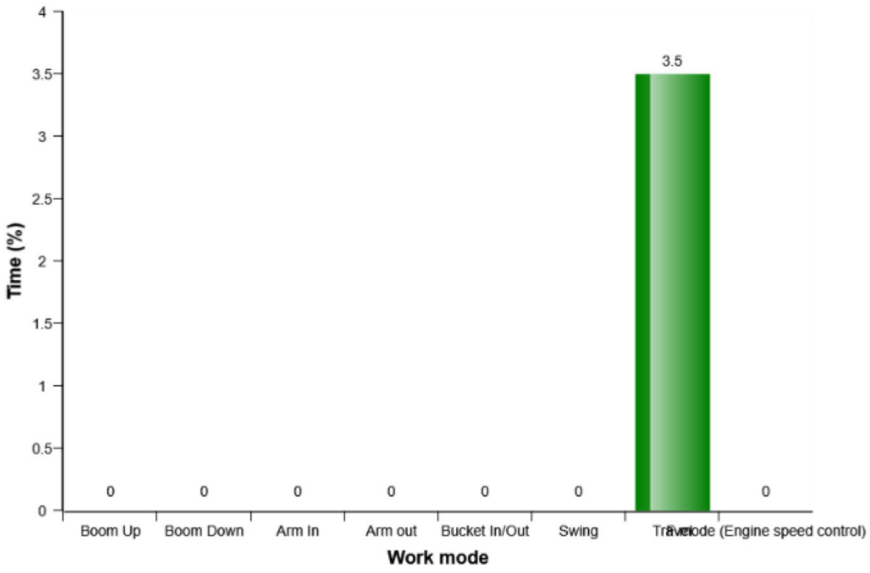
| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |



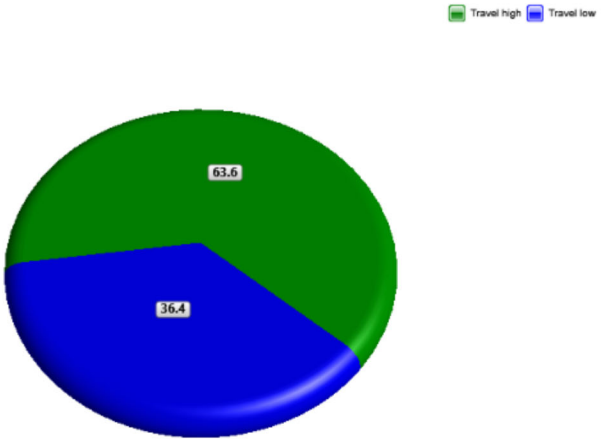
| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |

## Hydraulic Power boosted working operation distribution (%)




**Boost and solenoid ON (h) = 2.5**
**Boost solenoid ON, F mode (h) = 3.4**

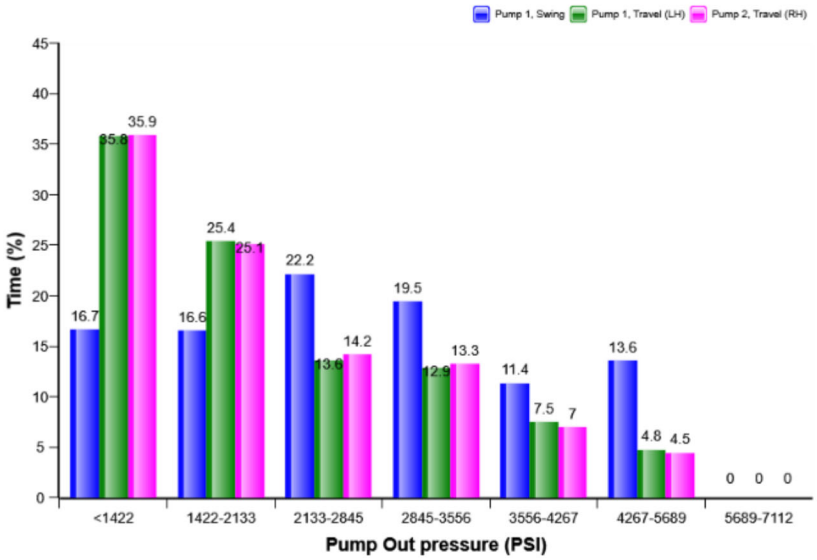
## Travel speed, high/low (%)




**Total travel time (h) = 255.8**
**Travel time / Operating hours (%)= 5.6**

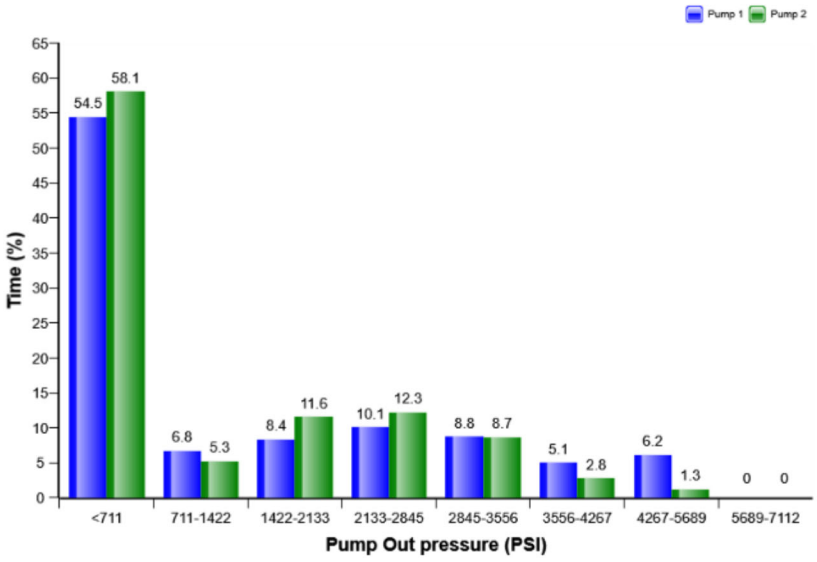
| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |

## Pump pressure on travel and swing distribution (%)




**Swing time (h) = 1687.7**
**Travel (RH) time (h) = 246.8**

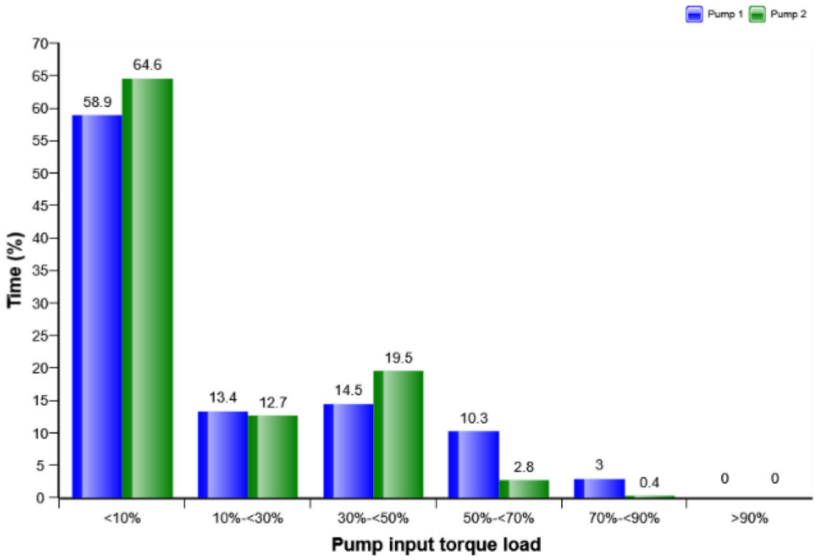
## Pump pressure overall distribution (%)




**Pump 1 time (h) = 4545.0**
**Pump 2 time (h) = 4545.0**

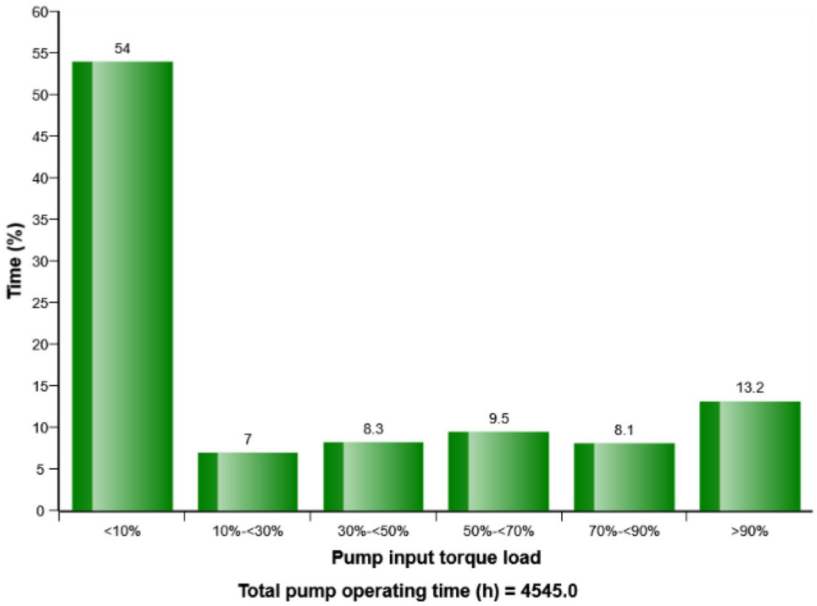
| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |

## Pump input torque overall distribution (%)




**Pump 1 time (h) = 4545.0**
**Pump 2 time (h) = 4545.0**

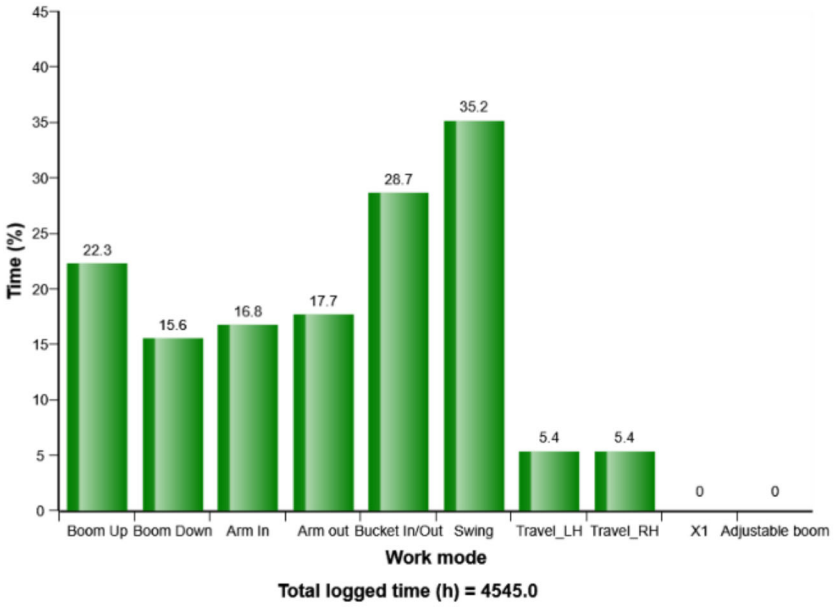
## Pump torque load for 2 pump interaction distribution (%)




**Total pump operating time (h) = 4545.0**

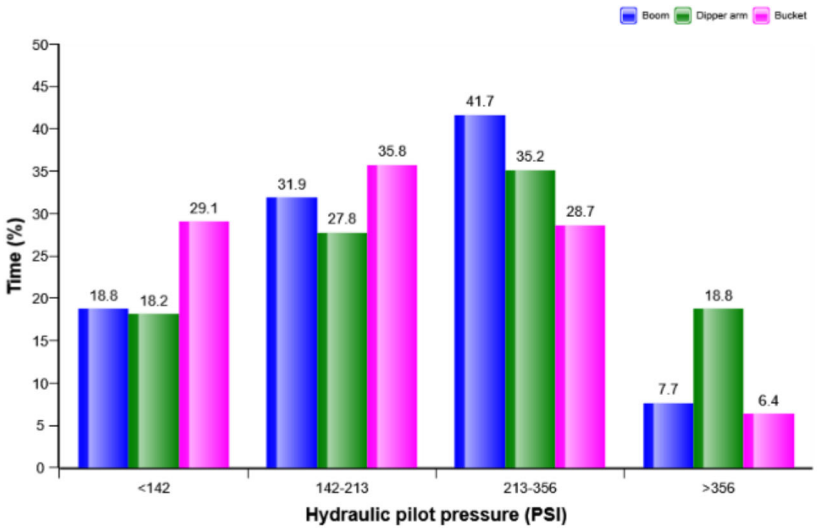
| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |

## Hydraulic working mode distribution (%)



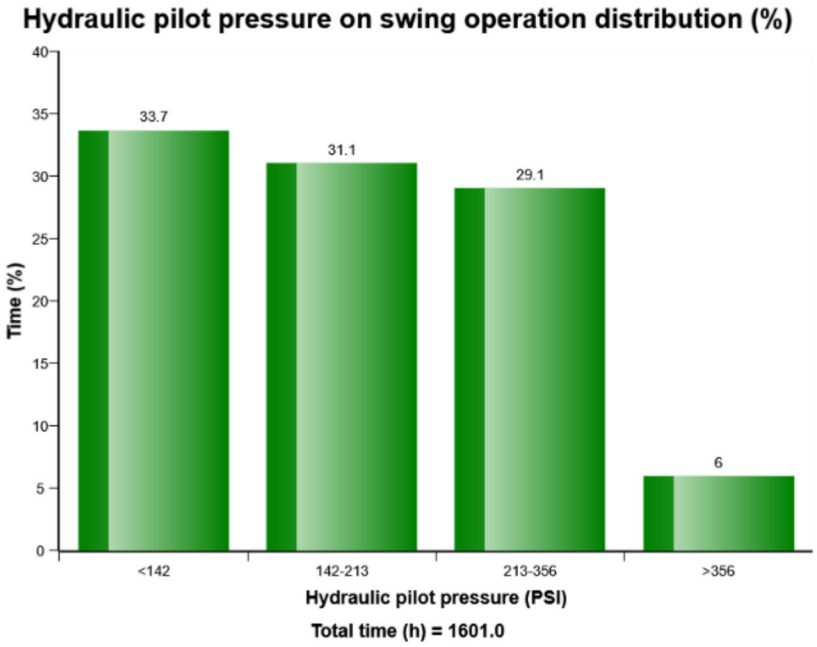

Total logged time (h) = 4545.0

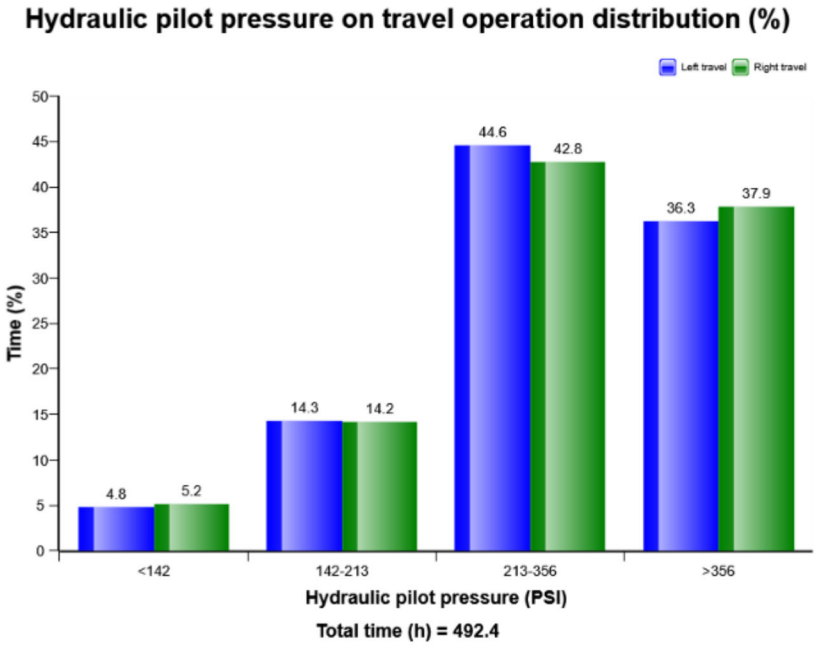
## Hydraulic pilot pressure on bucket, boom and arm operation distribution (%)




Total logged time (h) = 4545.0

| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |



| Machine model | SerialNo | Operating Hours | Reading Date |
|---|---|---|---|
| EC380E | 311222 | 4545.2 | 27/01/2020 |

## High hydraulic oil temperature
## Total number of occurences = 0

| Op hours | Year | Month | Day | Hour | Minute | Duration (seconds) | Extreme (° F) |
|---|---|---|---|---|---|---|---|
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |
| 0 | 2000 | 0 | 0 | 0 | 0 | 0 | 32 |