## ESTUDIO DE MERCADO Y/O ANALISIS COMPARATIVO DE PRECIOS

**OBJETO: Adquisición de insumos y repuestos para la operación y mantenimiento de los equipos que componen la red de calidad del aire y olores ofensivos de la Corporación Autónoma Regional de Cundinamarca CAR**

**GRUPO 1 - ENVEA**

| ITEM | EQUIPO/SUMINISTRO/SERVICIO | CARACTERSITICAS | OTRAS CONSIDERACIONES (SI APLICA) COMO UNIDADES O CANTIDADES TOTALES U OTRA | TECKEN SAS | K2 SAS | CTO-3238-2023 | SANAMBIENTE | CTO-125-2020 | HIGH TECH | ORGAMBIENTAL | ATITECH | SAMROD | CL INGENIERÍA | VALOR UNITARIO PROMEDIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CONSUMIBLE - ENVEA AC32e -NOX | Box of 25 teflon membranes (F05-11-842) | SAV-K-000042-B | $ 891.713 | $ 943.700 | 908.067 | | | | | | | | $914.493 |
| 2 | CONSUMIBLE - ENVEA AC32e -NOX | filtro de FIBRA DE SILICAotra ref. NA | SAV-K-000266-A | $ 312.100 | $ 330.300 | - | | | | | | | | $321.200 |
| 3 | CONSUMIBLE - ENVEA AC32e -NOX | AC32e ZERO Filter Filling kit (purafill) | SAV-K-000267-A | $ 303.183 | $ 322.500 | - | | | | | | | | $312.842 |
| 4 | CONSUMIBLE - ENVEA AC32e -NOX | In-line dust filter | F05-IDN-10G | $ 478.931 | $ 180.900 | 488.469 | | | | | | | | $483.700 |
| 5 | REPUESTOS - ENVEA AC32e - NOX | Power supply 24V 6.5A - 150W | B05-LRS-150F-24 | $1.547.494 | $ 495.500 | 467.118 | | | | | | | | $481.309 |
| 6 | REPUESTOS - ENVEA AC32e - NOX | CABLE DATA INTERCO / ARM20 | D01-1292-C | $347.768 | $ 369.700 | - | | | | | | | | $358.734 |

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| 7 | REPUESTOS - ENVEA AC32e - NOX | Cable power supply 24 VCC | D01-1303-A | $338.851 | $ 361.800 | - | | | | | | | | **$350.326** |
| 8 | REPUESTOS - ENVEA AC32e - NOX | SCP POWER CABLE | D01-1334-A | $481.525 | $ 511.200 | - | | | | | | | | **$496.363** |
| 9 | REPUESTOS - ENVEA AC32e - NOX | OZONEUR CARD POWER SUPPLY | D01-1339-A | $454.774 | $ 487.600 | - | | | | | | | | **$471.187** |
| 10 | REPUESTOS - ENVEA AC32e - NOX | Pressure sensor card | C06-0446-C | $ 1.043.304 | $ 1.108.900 | 1.060.079 | | | | | | | | **$1.070.761** |
| 11 | REPUESTOS - ENVEA AC32e - NOX | RTP Board | C06-0497-C | $ 2.095.525 | $ 2.217.700 | 2.129.695 | | | | | | | | **$2.147.640** |
| 12 | REPUESTOS - ENVEA AC32e - NOX | KIT Injector with seal (OZONE) | A01-K-C0035-B | $597.448 | $ 637.000 | - | | | | | | | | **$617.224** |
| 13 | REPUESTOS - ENVEA AC32e - NOX | 1, Restrictor OZONO( 0.1mm | F02-0010-A | $490.442 | $ 519.100 | 498.468 | | | | | | | | **$502.670** |
| 14 | REPUESTOS - ENVEA AC32e - NOX | KIT Flow restrictor 0.31 (Sampling) | A01-K-C0036-B | $ 1.203.812 | $ 1.274.000 | - | | | | | | | | **$1.238.906** |
| 15 | REPUESTOS - ENVEA AC32e - NOX | ICB board | C06-0465-A | $668.785 | $ 707.800 | 679.220 | | | | | | | | **$685.268** |
| 16 | REPUESTOS - ENVEA AC32e - NOX | Heating collar diam 25x60 24V 60W | T01-CC-24-60 | $ 1.943.934 | $ 0 | 1.972.624 | | | | | | | | **$1.958.279** |

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| 17 | REPUESTOS - ENVEA AC32e - NOX | Molybdenum converter | F05-0388-C | $ 10.120.938 | $ 10.710.800 | 10.290.291 | | | | | | | | **$10.374.010** |
| 18 | REPUESTOS - ENVEA AC32e - NOX | COLD BLOC EQUIPED TEMPERATURE PROBE | T05-0029-C | $ 1.542.663 | $ 1.635.800 | - | | | | | | | | **$1.589.232** |
| 19 | REPUESTOS - ENVEA AC32e - NOX | 40 x 40 EQUIPED DOUBLE LEVEL PELTIER | T08-0117-C | $ 1.096.807 | $ 1.163.900 | - | | | | | | | | **$1.130.354** |
| 20 | REPUESTOS - ENVEA AC32e - NOX | PHOTOMULTIPLICATOR TUBE ( M02-5225-A ) | M02-T9828 | $ 16.523.434 | $ 8.186.500 | 16.798.402 | | | | | | | | **$16.660.918** |
| 21 | REPUESTOS - ENVEA AC32e - NOX | Oring : Ø40 x 1.5 70 sh | G06-040_0-1_5-V | $ 70.446 | $ 74.800 | - | | | | | | | | **$72.623** |
| 22 | REPUESTOS - ENVEA AC32e - NOX | Chamber window | P08-5021-A | $107.006 | $ 118.000 | - | | | | | | | | **$112.503** |
| 23 | REPUESTOS - ENVEA AC32e - NOX | Optical filter | P08-5023-A | $535.028 | $ 566.300 | 543.646 | | | | | | | | **$548.325** |
| 24 | REPUESTOS - ENVEA AC32e - NOX | Permeation dryer 1.20m | F05-PERM-003-A | $ 3.424.177 | $ 3.625.400 | 3.481.127 | | | | | | | | **$3.510.235** |
| 25 | REPUESTOS - ENVEA AC32e - NOX | AC32e Scrubber ozono FILLING KIT | SAV-K-000269-A | $ 1.417.823 | $ 1.502.100 | 1.438.892 | | | | | | | | **$1.452.938** |
| 26 | REPUESTOS - ENVEA AC32e - NOX | AC32e ozone cleaner replacement filling kit (SAV-K-000268-A) | SAV-K-000268-B | $321.017 | $ 346.100 | 327.565 | | | | | | | | **$331.561** |

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| 27 | REPUESTOS - ENVEA AC32e - NOX | OZONE GENERATOR | F06-0031-C | $ 8.025.414 | $ 8.493.200 | - | | | | | | | | **$8.259.307** |
| 28 | REPUESTOS - ENVEA AC32e - NOX | Timed Fuse TR5 0.500A | S01-FT00_500-A | $ 20.510 | $ 22.100 | - | | | | | | | | **$21.305** |
| 29 | REPUESTOS - ENVEA AC32e - NOX | Maintenance kit for pump | SAV-K-000091-B | $ 1.712.089 | $ 1.816.600 | - | | | | | | | | **$1.764.345** |
| 30 | REPUESTOS - ENVEA AC32e - NOX | Head pump set | V02-N022-5-0343 | $178.343 | $ 188.800 | 181.496 | | | | | | | | **$182.880** |
| 31 | REPUESTOS - ENVEA AC32e - NOX | Set of PTFE diaphragm | V02-N026-11-2-A | $ 1.328.652 | $ 0 | 1.350.007 | | | | | | | | **$1.339.330** |
| 32 | REPUESTOS - ENVEA AC32e - NOX | CARTOUCH VERRE-SILICA | F05-0406-A | $ 1.801.260 | $ 1.911.000 | - | | | | | | | | **$1.856.130** |
| 33 | CONSUMIBLE - ENVEA AF22e -SO2 | FILTRE ZERO SO2 | 05-0128-E-SAV | $ 1.301.901 | $ 1.384.100 | 1.325.189 | | | | | | | | **$1.337.063** |
| 34 | CONSUMIBLE - ENVEA AF22e -SO2 | Inlet filter o25.4 | P07-0008-B | $ 7.624.143 | $ 8.068.500 | - | | | | | | | | **$7.846.322** |
| 35 | CONSUMIBLE - ENVEA AF22e -SO2 | FILTER HOLDER WITH EV | P10-2202-A | $ 11.708.186 | $12.393.700 | - | | | | | | | | **$12.050.943** |

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| 36 | REPUESTOS - ENVEA AF22e-SO2 | AF22e MEASURING MODULE ASSEMBLY | P10-2199-B | $ 74.841.436 | $ 64.052.400 | - | | | | | | | | **$69.446.918** |
| 37 | REPUESTOS - ENVEA AF22e-SO2 | UV SOURCE MODULE | P10-2200-A | $ 12.350.220 | $ 13.070.000 | - | | | | | | | | **$12.710.110** |
| 38 | REPUESTOS - ENVEA AF22e-SO2 | HIGH ENERGY ZINC LAMP (1 Year Warranty) | D01-1146-A | $ 9.416.485 | $ 0 | 9.574.634 | | | | | | | | **$9.495.559** |
| 39 | REPUESTOS - ENVEA AF22e-SO2 | Photomultipicat or tube | M02-R2693 | $ 17.718.329 | $ 0 | 18.010.170 | | | | | | | | **$17.864.250** |
| 40 | REPUESTOS - ENVEA AF22e-SO2 | Power supply set PM | P10-2217-B | $ 8.462.353 | $ 0 | 8.605.065 | | | | | | | | **$8.533.709** |
| 41 | REPUESTOS - ENVEA AF22e-SO2 | Biconvexe lens diam 22, foc 27,5 | P07-0010-B | $ 2.086.608 | $ 2.209.800 | - | | | | | | | | **$2.148.204** |
| 42 | REPUESTOS - ENVEA AF22e-SO2 | flow limiter | P02-1919-C | $222.929 | $ 236.000 | 227.017 | | | | | | | | **$228.649** |
| 43 | REPUESTOS - ENVEA AF22e-SO2 | Outlet optical filter 320 mm | P07-0028-A | $ 2.104.442 | $ 2.233.400 | 2.139.812 | | | | | | | | **$2.159.218** |
| 44 | REPUESTOS - ENVEA AF22e-SO2 | High voltage power supply board | C04-0445-H | $ 5.332.442 | $ 5.646.400 | 5.419.843 | | | | | | | | **$5.466.228** |
| 45 | REPUESTOS - ENVEA AF22e-SO2 | Block zero input / calibration | P06-1051-1 | $ 1.391.072 | $ 1.478.500 | - | | | | | | | | **$1.434.786** |

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| 46 | REPUESTOS - ENVEA AF22e-SO2 | SOLENOID VALVE WIRED e SERIES | F01-0300-C | $ 2.675.138 | $ 2.831.100 | 2.720.615 | | | | | | | | **$2.742.284** |
| 47 | REPUESTOS - ENVEA AF22e-SO2 | Pump assembly | P10-2166-A | $ 4.931.171 | $ 5.221.800 | - | | | | | | | | **$5.076.486** |
| 48 | REPUESTOS - ENVEA AF22e-SO2 | Kit for KNF Pump | V04-0005-A | $ 1.649.669 | $ 1.745.900 | 1.677.889 | | | | | | | | **$1.691.153** |
| 49 | REPUESTOS - ENVEA AF22e-SO2 | WIRED INTERNAL TEMPERATURE PROBE | T05-0014-D | $847.127 | $ 896.500 | 861.296 | | | | | | | | **$868.308** |
| 50 | REPUESTOS - ENVEA AF22e-SO2 | SONDE PT1000 FIXATION M3 CABLEE | T05-0023-C | $606.365 | $ 644.900 | 616.035 | | | | | | | | **$622.433** |
| 51 | CONSUMIBLE - ENVEA CO12e -CO | INTERNAL ZERO FILTER - It is an article under development and the price is not available for the moment | SAV-K-000229 | | | | | | | | | | | |
| 52 | REPUESTOS - ENVEA CO12e-CO | MEASURE BOARD of CO12e | C06-0451-H | $ 13.322.186 | $ 14.100.200 | 13.543.270 | | | | | | | | **$13.655.219** |
| 53 | REPUESTOS - ENVEA CO12e-CO | IR DETECTOR | M02-5219-A | $ 16.264.838 | $ 17.214.400 | 16.548.574 | | | | | | | | **$16.675.937** |
| 54 | REPUESTOS - ENVEA CO12e-CO | APPAIRED MIRRORS | P10-2241-C | $ 11.681.435 | $ 12.362.300 | - | | | | | | | | **$12.021.868** |
| 55 | REPUESTOS - ENVEA CO12e-CO | OPTICAL FORK CARD CO12e | C06-0453-A | $802.542 | $ 849.400 | 816.356 | | | | | | | | **$822.766** |

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| 56 | REPUESTOS - ENVEA CO12e-CO | SOURCE TEMPERATURE REGULATOR CABLED | D01-1319-E | $ 2.478.961 | $ 2.626.600 | - | | | | | | | | **$2.552.781** |
| 57 | REPUESTOS - ENVEA CO12e-CO | Pump assembly | P10-2166-A | $ 4.931.171 | $ 5.221.800 | - | | | | | | | | **$5.076.486** |
| 58 | REPUESTOS - ENVEA CO12e-CO | Kit for KNF Pump | V04-0005-A | $ 1.649.669 | $ 1.745.900 | 1.677.889 | | | | | | | | **$1.691.153** |
| 59 | REPUESTOS - ENVEA CO12e-CO | IR SOURCE SUPPORT | P10-2243-B | $ 6.973.193 | $ 7.384.400 | 7.087.860 | | | | | | | | **$7.148.484** |
| 60 | REPUESTOS - ENVEA CO12e-CO | 24V BRUSHLESS MOTOR | V01-0018-B | $963.050 | $ 1.022.400 | 979.735 | | | | | | | | **$988.395** |
| 61 | REPUESTOS - ENVEA O342e - OZONO | O342e MEASURING MODULE EQUIPPED | P10-2140-B | $ 39.279.939 | $ 41.569.200 | - | | | | | | | | **$40.424.570** |
| 62 | REPUESTOS - ENVEA O342e - OZONO | LENS REFERENCE ASSEMBLY | P10-2135-A | $ 1.676.420 | $ 1.777.300 | - | | | | | | | | **$1.726.860** |
| 63 | REPUESTOS - ENVEA O342e - OZONO | SOLENOID VALVE WIRED e SERIES | F01-0300-C | $ 2.675.138 | $ 2.831.100 | 2.720.615 | | | | | | | | **$2.742.284** |
| 64 | REPUESTOS - ENVEA O342e - OZONO | O-ring Viton Øint 45, Rope 2.5 | G06-045_0-2_5-V | $ 40.128 | $ 42.500 | - | | | | | | | | **$41.314** |
| 65 | REPUESTOS - ENVEA O342e - OZONO | Charcoal cartridge kit for O342e generator | F05-K-0078-A | $ 5.742.629 | $ 6.078.900 | - | | | | | | | | **$5.910.765** |

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| 66 | REPUESTOS - ENVEA O342e - OZONO | Cable GENE O3/ measure board | D01-1293-A | $347.768 | $ 369.700 | - | | | | | | | | **$358.734** |
| 67 | REPUESTOS - ENVEA O342e - OZONO | Mercury lamp wired | D01-1322-A | $ 2.461.127 | $ 2.610.900 | - | | | | | | | | **$2.536.014** |
| 68 | CONSUMIBLE - ENVEA MP101M - MATERIAL PARTICULADO | Fuse D1TD/5Ao5x20 | S01-TT03_00-A | $ 60.637 | | - | | | | | | | | **$60.637** |
| 69 | CONSUMIBLE - ENVEA MP101M - MATERIAL PARTICULADO | Roll of filter paper RF100 | M04-370-392 | $ 1.105.724 | $ 1.171.800 | 1.125.445 | | | | | | | | **$1.134.323** |
| 70 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | Zero-Particle filter from MP101M | P10-2195 | $ 3.825.447 | $ 3.373.700 | - | | | | | | | | **$3.599.574** |
| 71 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | SOURCE BLOCK ASSEMBLY MP101 | M01-0045-C-SAV | $ 46.520.645 | $ 49.236.600 | 47.290.364 | | | | | | | | **$47.682.536** |
| 72 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | Valve/Source/pressure motor | D01-0201-B | $ 3.388.508 | $ 3.586.000 | 3.443.839 | | | | | | | | **$3.472.782** |
| 73 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | Source temperature sensor | D01-0203-C | $668.785 | $ 707.800 | - | | | | | | | | **$688.293** |
| 74 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | Notched belt | G05-BM-6T5-B | $321.017 | $ 346.100 | - | | | | | | | | **$333.559** |

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| 75 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | SENSOR KIT MP101M LCD | SAV-K-000237-C | $ 9.996.098 | $ 10.585.000 | - | | | | | | | | **$10.290.549** |
| 76 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | GM Detector without tube V2 (M02-5054-E) | M02-5215 | $ 3.836.629 | $ 1.903.100 | - | | | | | | | | **$1.903.100** |
| 77 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | Water deflector | P02-2180-B | $222.929 | $ 236.000 | - | | | | | | | | **$229.465** |
| 78 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | LND extraction tool | P05-2197-A | $187.260 | $ 204.500 | 191.506 | | | | | | | | **$194.422** |
| 79 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | GEIGER-MULLER Tube *M02-72412-LND* | M02-5224-A | $ 5.778.298 | $ 6.118.300 | 5.869.312 | | | | | | | | **$5.921.970** |
| 80 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | FOIL GAUGE - ANOTHER REF: M04-0004-B-SAV manual 2017 | M04-0004-D-SAV | $ 2.541.381 | $ 2.689.500 | 2.588.086 | | | | | | | | **$2.606.322** |
| 81 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | PICOLINO pump unit 115V 50/60Hz | V02-0097-D-SAV | $ 8.275.093 | $ 8.760.600 | - | | | | | | | | **$8.517.847** |
| 82 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | Kit for pump PICOLINO VTE | SAV-K-000145-A | $ 2.452.210 | $ 2.595.200 | - | | | | | | | | **$2.523.705** |
| 83 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | Maintenance kit for KNF pump | V02-K-0012-A | $ 2.104.442 | $ 2.233.400 | 2.140.200 | | | | | | | | **$2.159.347** |

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| 84 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | Valve/Source/pressure motor | D01-0201-B | $ 3.388.508 | $ 3.586.000 | 3.443.839 | | | | | | | | **$3.472.782** |
| 85 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | Flow limiter N° 6 | F02-0027-A-SAV | $392.354 | $ 416.800 | - | | | | | | | | **$404.577** |
| 86 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | Oring diam 27 cord 2 | G06-027_0-2_0-V | $ 70.446 | $ 74.800 | 71.269 | | | | | | | | **$72.172** |
| 87 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | CPM LASER + DIAPHRAGM | P10-1854-C | $ 4.877.668 | $ 5.166.700 | - | | | | | | | | **$5.022.184** |
| 88 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | CPM V2 LASER + DIAPHRAGM | P10-2147-A | $ 4.877.668 | $ 5.166.700 | - | | | | | | | | **$5.022.184** |
| 89 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | POWER CARD SUPPLY UPGRADE KIT | SAV-K-000193-B | $ 3.031.823 | $ 4.734.200 | - | | | | | | | | **$3.883.012** |
| 90 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | LIAISON CABLE BUS I2C - RS4i CPM | D01-1091-A | $624.199 | $ 550.500 | - | | | | | | | | **$587.350** |
| 91 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | POWER SUPPLY CARD LIAISON CABLE CPM | D01-1092-A | $927.382 | $ 817.900 | - | | | | | | | | **$872.641** |
| 92 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | POWER SUPPLY CARD CPM | C04-0387-B | $ 2.140.111 | $ 1.887.400 | - | | | | | | | | **$2.013.756** |

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| 93 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | KIT (CPM V2 LASER + DIAPHRAGM)+( OPTICAL SENSOR BOARD CPM V2)+(MEASURIN G BOARD CPM V2) | SAV-K-000220-B | $ 11.342.584 | $ 12.008.400 | - | | | | | | | | **$11.675.492** |
| 94 | REPUESTO - ENVEA MP101M - MATERIAL PARTICULADO | PRESSURE SENSOR BOARD | C06-C12-0291B | $838.210 | $ 888.700 | - | | | | | | | | **$863.455** |
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**GRUPO 2 - TAPI**

| ITEM | EQUIPO/SUMINISTRO/SERVICIO | CARACTERSITICAS | OTRAS CONSIDERACIONES (SI APLICA) COMO UNIDADES O CANTIDADES TOTALES U OTRA | TECKEN SAS | K2 SAS | CTO-3238-2023 | SANAMBIENTE | CTO-125-2020 | HIGH TECH | ORGAMBIENTAL | ATITECH | SAMROD | CL INGENIERÍA | VALOR UNITARIO PROMEDIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CONSUMIBLES - TELEDYNE T200 - NOX | CD,FILTER,665NM(KB) | 2730000 | | | | $ 570.398 | $631.317 | | | | | | **$600.858** |
| 2 | REPUESTOS - TELEDYNE T200 - NOX | ORIFICE,3MIL,DILUTION&VACUUMMANIFOLDS&IZS | 940100 | | | | $ 339.812 | $533.696 | | | | | | **$436.754** |
| 3 | REPUESTOS - TELEDYNE T200 - NOX | ORIFICE,4MIL,OZONEFLOW&O2OPTION | 940400 | | | | $ 339.812 | $364.744 | | | | | | **$352.278** |
| 4 | REPUESTOS - TELEDYNE T200 - NOX | ASSY,OZONEDRYERW/FLOWCONTROL | 11310000 | | | | $6.832.646 | $ 7.675.765 | | | | | | **$7.254.206** |

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| 5 | REPUESTOS - TELEDYNE T200 - NOX | MOLY VALVE ASSEMBLY | 59430200 | | | | $2.578.929 | $ - | | | | | | **$2.578.929** |
| 6 | REPUESTOS - TELEDYNE T200 - NOX | PCA PNEUMATIC SENSOR BOARD | 14030000 | | | | $3.149.328 | $ 3.717.260 | | | | | | **$3.433.294** |
| 7 | REPUESTOS - TELEDYNE T200 - NOX | ASSY,MOLYCONVERTER,W/O3DESTRUCTOR | 18720100 | | | | $ 13.816.993 | $ 15.433.270 | | | | | | **$14.625.131** |
| 8 | REPUESTOS - TELEDYNE T200 - NOX | PUMP REMPLACEMENT ASSEMBLY | 83120000 | | | | $9.162.784 | $ 12.527.468 | | | | | | **$10.845.126** |
| 9 | REPUESTOS - TELEDYNE T200 - NOX | PCA,PMTPREAMP,VR | 41800500 | | | | $5.758.597 | $ 6.471.455 | | | | | | **$6.115.026** |
| 10 | REPUESTOS - TELEDYNE T200 - NOX | AKIT,PUMPREBUILD,THOMAS688 SNGLHD | 55290000 | | | | $4.029.198 | $ 1.790.173 | | | | | | **$2.909.685** |
| 11 | REPUESTOS - TELEDYNE T100- SO2 | ORIFICE, 3 MIL, IZS | 940100 | | | | $ 339.812 | $533.696 | | | | | | **$436.754** |
| 12 | REPUESTOS - TELEDYNE T100- SO2 | CD, ORIFICE, .004 BLUE | 940400 | | | | $ 339.812 | $364.744 | | | | | | **$352.278** |
| 13 | REPUESTOS - TELEDYNE T100- SO2 | ORIFICE, 012 MIL, RXCELL | 940800 | | | | $ 339.812 | $371.453 | | | | | | **$355.632** |
| 14 | REPUESTOS - TELEDYNE T100- SO2 | LENS, UV | 2690000 | | | | $1.844.693 | $364.744 | | | | | | **$1.104.719** |
| 15 | REPUESTOS - TELEDYNE T100- SO2 | LENS, PMT | 2700000 | | | | $2.226.981 | $ 2.537.185 | | | | | | **$2.382.083** |
| 16 | REPUESTOS - TELEDYNE T100- SO2 | FILTER, PMT OPTICAL, 330 NM | 2720000 | | | | $1.049.776 | $ 1.155.705 | | | | | | **$1.102.740** |

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| 17 | REPUESTOS - TELEDYNE T100- SO2 | AKIT, TFE FLTR ELEM (FL6 100=1) 47mm | 9690000 | | | | $ - | $ - | | | | | | |
| 18 | REPUESTOS - TELEDYNE T100- SO2 | ASSY, COOLER FAN (NOX/SOX) | 13140000 | | | | $ 242.723 | $264.522 | | | | | | $253.622 |
| 19 | REPUESTOS - TELEDYNE T100- SO2 | ASSY, KICKER | 13390000 | | | | $2.506.113 | $ 2.849.763 | | | | | | $2.677.938 |
| 20 | REPUESTOS - TELEDYNE T100- SO2 | CD, PMT, SO2, (KB) | 13400000 | | | | $8.471.024 | $ 9.460.325 | | | | | | $8.965.674 |
| 21 | REPUESTOS - TELEDYNE T100- SO2 | ASSY, HVPS, SOX/NOX | 14080100 | | | | $9.241.669 | $ 10.445.432 | | | | | | $9.843.551 |
| 22 | REPUESTOS - TELEDYNE T100- SO2 | UV LAMP DRIVER BOAD | 79390000 | | | | $4.890.864 | $ - | | | | | | $4.890.864 |
| 23 | REPUESTOS - TELEDYNE T100- SO2 | ASSY, FAN REAR PANEL | 40010000 | | | | $ 430.833 | $477.630 | | | | | | $454.231 |
| 24 | REPUESTOS - TELEDYNE T100- SO2 | SALED PNEUMATIC SENSOR ASEMBLU | KIT000369 | | | | $3.774.339 | $ - | | | | | | $3.774.339 |
| 25 | REPUESTOS - TELEDYNE T100- SO2 | PCA, PMT PREAMP, VR | 41800400 | | | | $5.892.095 | $ 6.608.918 | | | | | | $6.250.507 |
| 26 | REPUESTOS - TELEDYNE T100- SO2 | ASSY, PUMP, INT, E SERIES | 84830000 | | | | $6.674.876 | $ - | | | | | | $6.674.876 |
| 27 | REPUESTOS - TELEDYNE T100- SO2 | PCA, RELAY CARD W/RELAYS, E SERIES, S/N'S >455 | 45230200 | | | | $6.498.902 | $ 7.302.259 | | | | | | $6.900.581 |

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| 28 | REPUESTOS - TELEDYNE T100- SO2 | PCA, M100E UV REF DETECTOR | 50630100 | | | | $6.426.085 | $ - | | | | | | **$6.426.085** |
| 29 | REPUESTOS - TELEDYNE T100- SO2 | ASSY, VALVE, VA59 W/DIODE, 9" LEADS | 55560100 | | | | $3.610.501 | $ 4.063.382 | | | | | | **$3.836.942** |
| 30 | REPUESTOS - TELEDYNE T100- SO2 | LCD MODULE, W/TOUCHSCREEN | 83500000 | | | | $3.932.108 | $ - | | | | | | **$3.932.108** |
| 31 | REPUESTOS - TELEDYNE T100- SO2 | AKIT, REPLACEMENT COOLER | KIT000095 | | | | $1.086.184 | $ 1.219.782 | | | | | | **$1.152.983** |
| 32 | REPUESTOS - TELEDYNE T100- SO2 | KIT, UV LAMP, w/ADAPTER (BIR) | KIT000236 | | | | $6.784.101 | $ 7.719.580 | | | | | | **$7.251.841** |
| 33 | REPUESTOS - TELEDYNE T100- SO2 | ASSY & TEST, SPARE PS37 | KIT000253 | | | | $1.747.604 | $ 1.974.598 | | | | | | **$1.861.101** |
| 34 | REPUESTOS - TELEDYNE T100- SO2 | ASSY & TEST, SPARE PS38 | KIT000254 | | | | $1.747.604 | $ 1.974.598 | | | | | | **$1.861.101** |
| 35 | REPUESTOS - TELEDYNE T100- SO2 | ORING, FLOW CONTROL/IZS | OR0000001 | | | | $ 84.953 | $50.111 | | | | | | **$67.532** |
| 36 | CONSUMIBLES - TELEDYNE T640- MATERIAL PARTICULADO | SPANDUST 1,28 | 84460000 | | | | $4.672.413 | $ 5.169.281 | | | | | | **$4.920.847** |
| 37 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | ASSY,FLOWMETER 0- 15 LPM | 81750100 | | | | $2.427.228 | $ - | | | | | | **$2.427.228** |
| 38 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | PCA,T640 POWER DISTRIBUTION | 81580000 | | | | $1.213.614 | $ 1.438.177 | | | | | | **$1.325.896** |

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| 39 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | TARJETA DE CONTROL TOUCHSCREEN | 72150000 | | | | $3.428.459 | $ 4.175.677 | | | | | | **$3.802.068** |
| 40 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | EXTERNAL TEMP PROBE | 83830000 | | | | $1.304.635 | $ 1.578.205 | | | | | | **$1.441.420** |
| 41 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | Power Distribution Assembly, T640/T640X | 82170000 | | | | $5.697.917 | $ 6.436.906 | | | | | | **$6.067.411** |
| 42 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | Kit Roof Flange T640X | 83820000 | | | | $1.759.740 | $ - | | | | | | **$1.759.740** |
| 43 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | Assembly, Lower sensor tube slide coupler, T640 | 80350000 | | | | $1.195.410 | $ - | | | | | | **$1.195.410** |
| 44 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | Assembly, SLIDE COUPLER 1.00-IN TUBE, T640 | 84810000 | | | | $ 649.283 | $ - | | | | | | **$649.283** |
| 45 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | Assembly, PROPORTIONAL VALVE AND MANIFOLD, T640X | 81760000 | | | | $ 11.614.284 | $ 13.963.677 | | | | | | **$12.788.980** |
| 46 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | Filter, Disposable Inline | FL0000003 | | | | $ 315.540 | $342.014 | | | | | | **$328.777** |
| 47 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | Pump Assembly for T640/T640x | 81410000 | | | | $6.480.698 | $ 10.353.644 | | | | | | **$8.417.171** |

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| 48 | REPUESTOS - TELEDYNE T640-MATERIAL PARTICULADO | Rebuild Kit for GAST, Single head pump (PU91) | PU0000092 | | | | $1.110.457 | $ - | | | | | | **$1.110.457** |
| 49 | REPUESTOS - TELEDYNE T640-MATERIAL PARTICULADO | ORING, 2-011V FT10 (PA) | OR0000034 | | | | $ 84.953 | $50.310 | | | | | | **$67.631** |
| 50 | REPUESTOS - TELEDYNE T640-MATERIAL PARTICULADO | LCD Interface Board PCA | 66970000 | | | | $3.094.715 | $ 3.466.157 | | | | | | **$3.280.436** |
| 51 | REPUESTOS - TELEDYNE T640-MATERIAL PARTICULADO | Pump Pack Assembly with Filter, 115 VAC | 76510200 | | | | $ 11.565.739 | $ 13.872.274 | | | | | | **$12.719.007** |
| 52 | REPUESTOS - TELEDYNE T640-MATERIAL PARTICULADO | O-Ring replacement for T640, Kit537 | KIT000537 | | | | $ 182.042 | $ - | | | | | | **$182.042** |
| 53 | REPUESTOS - TELEDYNE T640-MATERIAL PARTICULADO | KIT, LEAK CHECK, FLOW ADAPTER, T640 | 84910000 | | | | $1.577.698 | $ - | | | | | | **$1.577.698** |
| 54 | REPUESTOS - TELEDYNE T640-MATERIAL PARTICULADO | Flowmeter Assembly, 0-10 LPM | 81750000 | | | | $3.428.459 | $ 4.227.996 | | | | | | **$3.828.227** |
| 55 | REPUESTOS - TELEDYNE T640-MATERIAL PARTICULADO | Inline Disposable Filter Assembly | 78540000 | | | | $ 631.079 | $ - | | | | | | **$631.079** |
| 56 | REPUESTOS - TELEDYNE T640-MATERIAL PARTICULADO | Auxiliary I/O Board, Ethernet | 67300100 | | | | $ 958.755 | $ - | | | | | | **$958.755** |

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| 57 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | KIT, O-RING, RH SENSOR, T640 | 86410000 | | | | $ 922.347 | $ - | | | | | | **$922.347** |
| 58 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | ORING, 2-117V (PA) | OR0000015 | | | | $ 242.723 | $50.310 | | | | | | **$146.516** |
| 59 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | Assembly, COUPLER F-1.25 to M-1.00, T640 | 84800000 | | | | $ 582.535 | $ - | | | | | | **$582.535** |
| 60 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | CPU Replacement, T Series (NVS) w/out DOM | 81730000 | | | | $9.041.423 | $ 11.260.398 | | | | | | **$10.150.911** |
| 61 | REPUESTOS - TELEDYNE T640- MATERIAL PARTICULADO | Sensor Control Board for T640 | 80150000 | | | | $6.341.132 | $ 7.620.512 | | | | | | **$6.980.822** |
| 62 | REPUESTOS - TELEDYNE T101- H2S | ORIFICIO DE FLUJO CRITICO 0,012 KB | 940800 | | | | $ 339.812 | $ - | | | | | | **$339.812** |
| 63 | REPUESTOS - TELEDYNE T101- H2S | KIT DE REPPUESTO PARA DEPURADOR DE SO2 | KIT000621 | | | | $ 922.347 | $ - | | | | | | **$922.347** |
| 64 | REPUESTOS - TELEDYNE T101- H2S | RECONSTRUCCION RXCELL, FILTRO CD 330 NM | KIT000136 | | | | $4.690.617 | $ - | | | | | | **$4.690.617** |
| 65 | REPUESTOS - TELEDYNE T101- H2S | CONJUNTO DE FILTRO DE REMPLAZO OPTICO 214 NM (BF) | KIT000093 | | | | $3.264.621 | $ - | | | | | | **$3.264.621** |

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| 66 | REPUESTOS - TELEDYNE T101- H2S | CALENTADOR CERAMICO DE 400w, DOBLE REBOBINADO | HE0000037 | | | | $ - | $ - | | | | | | |
| 67 | REPUESTOS - TELEDYNE T101- H2S | KIT DE MANTENIMIENTO ANUAL | 93580100 | | | | $ 697.828 | $ - | | | | | | $697.828 |
| 68 | REPUESTOS - TELEDYNE T101- H2S | PCA, CONTROLADOR DE LAMPARA UV, CORRIENTE CONSTANTE | 79390000 | | | | $4.890.863 | $ - | | | | | | $4.890.863 |
| 69 | REPUESTOS - TELEDYNE T101- H2S | CONJUNTO DE DEPURADOR SO2 | 46880000 | | | | $8.913.993 | $ - | | | | | | $8.913.993 |
| 70 | REPUESTOS - TELEDYNE T101- H2S | VALVULAS ZERO/SPAN | 46670000 | | | | $5.673.645 | $ - | | | | | | $5.673.645 |
| 71 | REPUESTOS - TELEDYNE T101- H2S | CONJUNTO DE CONVERTIDOR DE MOLYBDENO, CON DESESTIMADO DE O3, CON TUBERIA DE ESCAPE | 18720100 | | | | $ 13.816.993 | $ 15.433.270 | | | | | | $14.625.132 |
| 72 | REPUESTOS - TELEDYNE T101- H2S | CONJUNT DE KICKER DE HIDROCARBURO | 13390000 | | | | $2.506.113 | $ 2.849.763 | | | | | | $2.677.938 |
| 73 | REPUESTOS - TELEDYNE T101- H2S | CD, FILTRO , 330 NM | 2720000 | | | | $1.049.776 | $ 1.148.995 | | | | | | $1.099.386 |
| 74 | REPUESTOS - TELEDYNE T101- H2S | CD, LENTE BICON | 2700000 | | | | $2.226.981 | $ 2.543.893 | | | | | | $2.385.437 |

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| 75 | REPUESTOS - TELEDYNE T101- H2S | CD,LENTE,PL-CON | 2690000 | | | | $1.844.693 | $364.744 | | | | | | **$1.104.719** |
| 76 | REPUESTOS - TELEDYNE T101- H2S | ORIFICIO DE FLUJO CRITIVO AZUL 04 KB | 940400 | | | | $ 339.812 | $364.744 | | | | | | **$352.278** |
| 77 | REPUESTOS - TELEDYNE T101- H2S | ORIFICIO DE FLUJO CRITICO 03 KB VERDE | 940100 | | | | $ 339.812 | $533.696 | | | | | | **$436.754** |
| 78 | REPUESTOS - TELEDYNE T102- TRS | KIT DE REPUESTO PARA DEPURADOR SO2,OZ | KIT000261 | | | | $ 922.347 | $ - | | | | | | **$922.347** |
| 79 | REPUESTOS - TELEDYNE T102- TRS | PCA,DETECTOR UV, CON OP20 DOBLE SALIDA 100 | 50630100 | | | | $6.426.085 | $ - | | | | | | **$6.426.085** |
| 80 | REPUESTOS - TELEDYNE T102- TRS | TUBO CONVERTIDOR (PA) | 37100000 | | | | $5.267.084 | $ - | | | | | | **$5.267.084** |
| 81 | REPUESTOS - TELEDYNE T201- NH3 | KIT RTRFT, VA59 NO/NOX AMB // JUEGO DE VALVULAS | KIT000529 | | | | $6.838.714 | $ - | | | | | | **$6.838.714** |
| 82 | REPUESTOS - TELEDYNE T201- NH3 | KIT DE MANTENIMIENTO ANUAL SERIE 200/200P/201/N/T/E | 93580200 | | | | $1.711.195 | $ - | | | | | | **$1.711.195** |
| 83 | REPUESTOS - TELEDYNE T201- NH3 | PCA, PLACA DE SENSOR NEUMATICO 15 PA 1 LPM | 78210800 | | | | $5.534.079 | $ - | | | | | | **$5.534.079** |
| 84 | REPUESTOS - TELEDYNE T201- NH3 | CONJUNTO GENERADOR DE OZONO FRENO PULSO 10HZ | 72280000 | | | | $ 16.219.948 | $ - | | | | | | **$16.219.948** |

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| 85 | REPUESTOS - TELEDYNE T201- NH3 | CONJUNTO DE VALVULA MOLY | 59430200 | | | | $2.578.929 | $ - | | | | | | **$2.578.929** |
| 86 | REPUESTOS - TELEDYNE T201- NH3 | KIT DE RECAMBIO LIMPIADOR DE OZONO , 3 RECAMBIOS | 46030000 | | | | $ 182.042 | $193.737 | | | | | | **$187.889** |
| 87 | REPUESTOS - TELEDYNE T201- NH3 | CONJUNTO MOLICOLA CON DESTIONO O3 - ESCAPE | 18720200 | | | | $ 12.014.776 | $ - | | | | | | **$12.014.776** |
| 88 | REPUESTOS - TELEDYNE T201- NH3 | CD, FILTRO 665 NM (KB) | 2730000 | | | | $ 570.398 | $631.317 | | | | | | **$600.858** |
| 89 | REPUESTOS - TELEDYNE T201- NH3 | RETROFIT M501, NH3; INNER TUBE W/SCREEN CATALIST ELEMENT | KIT000193 | | | | $6.165.158 | $ 11.547.741 | | | | | | **$8.856.449** |
| 90 | REPUESTOS - TELEDYNE T201- NH3 | REBUILD CERAMIC BUSCHINGS M501 NH3 | KIT000139 | | | | $ - | $ 4.418.268 | | | | | | **$4.418.268** |
| 91 | REPUESTOS - TELEDYNE T201- NH3 | CERAMIC HEATER 220 w @60 M501 NH3 TERMOCUPLA TIPO K | HE0000007 | | | | $ - | $ 5.431.993 | | | | | | **$5.431.993** |
| 92 | REPUESTOS - TELEDYNE T201- NH3 | BLOCK VALVES ( VALVE ZERO/SPAN EQUIPO M501 DE NH3, SAMPLE GAS VALVE 3/2; ZERO GAS VALVE | BLOCK VALVES - M501 NH3 | | | | $ - | $ - | | | | | | |

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| | | 2/2 ; SPAN GAS VALVE 2/2) | | | | | | | | | | | | |
| 93 | REPUESTOS - TELEDYNE T201- NH3 | ORIFICIO DE FLUJO CRITICO 0,01 KB CAFE | 9406000 | | | | $ 339.812 | $378.161 | | | | | | **$358.986** |
| 94 | REPUESTOS - TELEDYNE T201- NH3 | CONJUNTO DE TRIPAS DE MOLY CON CALENTADOR | 62390000 | | | | $7.415.180 | $ - | | | | | | **$7.415.180** |
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| **GRUPO 3 - MET ONE** | | | | | | | | | | | | | | |
| **ITEM** | **EQUIPO/SUMINISTRO/SERVICIO** | **CARACTERSITICAS** | **OTRAS CONSIDERACIONES (SI APLICA) COMO UNIDADES O CANTIDADES TOTALES U OTRA** | **TECKEN SAS** | **K2 SAS** | **CTO-3238-2023** | **SANAMBIENTE** | **CTO-125-2020** | **HIGH TECH** | **ORGAMBIENTAL** | **ATITECH** | **SAMROD** | **CL INGENIERÍA** | **VALOR UNITARIO PROMEDIO** |
| 1 | CONSUMIBLES - BAM1020 | Filter Tape Roll, Glass Fiber, 70+ days per roll 30mm x 25m | 460180 | | $ 785.400 | | $ 682.535 | | | | | | | **$733.967** |
| 2 | CONSUMIBLES - BAM1020 | Cotton-Tipped Applicators, nozzle cleaning, 100 pack Solon #362 | 995217 | | $ 137.800 | | $ 119.743 | | | | | | | **$128.771** |
| 3 | CONSUMIBLES - BAM1020 | Silicone O-Ring Grease, mini packets | 995712 | | $31.800 | | $ 27.633 | | | | | | | **$29.716** |

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| 4 | CONSUMIBLES - BAM1020 | BAM Inlet Cleaning Kit Includes pull-rope, tube brush, microfiber rags, cleaning brushes, O-ring grease, cotton applicators. For cleaning inlet tube and PM10, PM2.5 inlets | BX-344 | | $ 956.500 | | $ 831.292 | | | | | | | **$893.896** |
| 5 | CONSUMIBLES - BAM1020 | Muffler, Medo/Gast Pump, Replacement | 580293 | | $74.200 | | $ 64.477 | | | | | | | **$69.338** |
| 6 | CONSUMIBLES - BAM1020 | Gast Pump Rebuild Kit. Vanes, filters. | 680828 | | $ 1.852.600 | | $1.694.823 | | | | | | | **$1.773.711** |
| 7 | CONSUMIBLES - BAM1020 | Pump Service Kit, Filter Replacement, Medo | 8588 | | $ 372.600 | | $ 340.807 | | | | | | | **$356.703** |
| 8 | CONSUMIBLES - BAM1020 | Filter Element Only, Pisco In-line | 580292 | | $ 181.300 | | $ 165.798 | | | | | | | **$173.549** |
| 9 | REPUESTOS-BAM1020 | BAM 1020 Distributor Service Tool Kit: Includes all (Includes nozzle shims, reel spacer, filter sensor removal tool, darkst shim, rubber | BX-308-1 | | $ 3.121.300 | | $2.712.637 | | | | | | | **$2.916.969** |

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| | | leak check tool, hex wrenches.) of the above plus two spring scales. | | | | | | | | | | | | |
| 10 | REPUESTOS-BAM1020 | Nozzle Adjustment Shim Kit. 8235/8236 Shims Only. | BX-310 | | $ 784.300 | | $ 681.613 | | | | | | | **$732.957** |
| 11 | REPUESTOS-BAM1020 | Rubber Leak Test Nozzle Seal Tool | 7440 | | $ 159.000 | | $ 138.165 | | | | | | | **$148.582** |
| 12 | REPUESTOS-BAM1020 | Flow Inlet Adapter Kit (Leak Test Valve) Includes short inlet tube adapter. | BX-305 | | $ 1.006.900 | | $ 831.292 | | | | | | | **$919.096** |
| 13 | REPUESTOS-BAM1020 | Zero Filter Calibration Kit, with leak check valve. Required for PM2.5 FEM monitoring. Same as BX-305 but with 0.2 micron filter. | BX-302 | | $ 4.581.200 | | $3.981.451 | | | | | | | **$4.281.326** |
| 14 | REPUESTOS-BAM1020 | Pump, Gast, Rotary Vane, 100/115 VAC, 50/60 Hz | BX-121 | | $ 9.882.500 | | $8.588.790 | | | | | | | **$9.235.645** |

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| 15 | REPUESTOS-BAM1020 | Medo Pump Rebuild Kit, Piston, filters | 680839 | | $ 2.119.700 | | $1.750.089 | | | | | | | **$1.934.894** |
| 16 | REPUESTOS-BAM1020 | Pump Controller (Relay Module Only) Medo/GAST | BX-839 | | $ - | | $2.528.878 | | | | | | | **$2.528.878** |
| 17 | REPUESTOS-BAM1020 | Automatic Flow Controller | BX-961 | | $ 7.098.800 | | $6.169.523 | | | | | | | **$6.634.161** |
| 18 | REPUESTOS-BAM1020 | Filter Temperature and RH sensor KIT | BX-962 | | $ 2.207.200 | | $3.327.471 | | | | | | | **$2.767.335** |
| 19 | REPUESTOS-BAM1020 | Filter RH Sensor Replacement Only | 9278 | | $ 1.329.100 | | $1.155.059 | | | | | | | **$1.242.079** |
| 20 | REPUESTOS-BAM1020 | Filter Temperature Sensor Replacement Only | 9279 | | $ 1.329.100 | | $1.155.059 | | | | | | | **$1.242.079** |
| 21 | REPUESTOS-BAM1020 | O-Ring, Nozzle | 720066 | | $13.300 | | $ 11.514 | | | | | | | **$12.407** |
| 22 | REPUESTOS-BAM1020 | Nozzle Rebuild Kit, with parts and tools | 80355 | | $ 1.752.000 | | $1.522.577 | | | | | | | **$1.637.289** |
| 23 | REPUESTOS-BAM1020 | O-Ring, Inlet Tube Receiver, 2 required. | 720069 | | $31.800 | | $ 27.633 | | | | | | | **$29.716** |
| 24 | REPUESTOS-BAM1020 | O-Ring Kit, Inlet Tube Receiver and Nozzle. | 9122 | | $ 190.800 | | $ 165.798 | | | | | | | **$178.299** |
| 25 | REPUESTOS-BAM1020 | Pump Tubing, Clear, 10mm O.D., 6.5mm I.D. | 960025 | | $ 397.500 | | $ 328.142 | | | | | | | **$362.821** |

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| | | Polyurethane, 25 foot roll standard | | | | | | | | | | | | |
| 26 | REPUESTOS-BAM1020 | Fuse, 3.15A, 250V, 5x20mm, 2 Required | 590811 | | $31.800 | | $ 27.633 | | | | | | | **$29.716** |
| 27 | REPUESTOS-BAM1020 | Motor, with gear box, 4 RPM. 4 per unit. | 8105-1 | | $ 1.641.200 | | $1.501.392 | | | | | | | **$1.571.296** |
| 28 | REPUESTOS-BAM1020 | PM2.5 Very Sharp Cut Cyclone, BGI Inc. VSCC™ Valid for PM2.5 FEM monitoring | BX-808 | | $15.261.600 | | $1.299.671 | | | | | | | **$8.280.635** |
| 29 | REPUESTOS-BAM1020 | Waterproof Inlet Tube Sealing Gland Only | 8119 | | $ 604.200 | | $ 525.027 | | | | | | | **$564.613** |
| 30 | REPUESTOS-BAM1020 | Roof Top Flange Weldment Only | 8120 | | $ 837.300 | | $ 727.668 | | | | | | | **$782.484** |
| 31 | REPUESTOS-BAM1020 | Smart Heater UPGRADE KIT 115 VAC | 9307 | | $ - | | $ - | | | | | | | |
| 32 | REPUESTOS-BAM1020 | O-Rings, BX-807 SCC Cyclone, set of 6 | 720097 | | $ 339.200 | | $ 294.752 | | | | | | | **$316.976** |
| 33 | REPUESTOS-BAM1020 | O-Rings, PM10 Head, set of 3 | 8965 | | $ 190.800 | | $ 165.798 | | | | | | | **$178.299** |
| 34 | REPUESTOS-BAM1020 | 592 Ambient Temperature Sensor, Auto ID | BX-592 | | $ 6.114.200 | | $5.313.821 | | | | | | | **$5.714.011** |
| 35 | REPUESTOS-BAM1020 | 593 Ambient Relative Humidity Sensor, Auto ID | BX-593 | | $ 9.013.900 | | $7.833.949 | | | | | | | **$8.423.924** |

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| 36 | REPUESTOS-BAM1020 | 594 Ambient Barometric Pressure Sensor, Auto ID | BX-594 | | $ 7.869.300 | | $6.839.162 | | | | | | | **$7.354.231** |
| 37 | REPUESTOS-BAM1020 | 596 AT/BP Combo Sensor, -40 +55C.; 596-1 AT/BP/RH Combo Sensor, -50 +50C.;596+ AT/BP/RH Combo Sensor, -50 +70C. | BX-596; BX-596-1 ;BX/596+ | | $14.527.200 | | $ 12.625.507 | | | | | | | **$13.576.354** |
| 38 | REPUESTOS-BAM1020 | MOTHER BOARD PARA EQUIPO MET ONE, BAM 1020; Serial: R19663 | 3230-8 | | $ - | | $ - | | | | | | | |
| 39 | REPUESTOS-BAM1020 | MOTHER BOARD PARA EQUIPO MET ONE, BAM 1020; Serial: 44911 | 3230-8 | | $ - | | $ - | | | | | | | |
| 40 | REPUESTOS-BAM1020 | MOTHER BOARD PARA EQUIPO MET ONE INSTRUMENTS/ Modelo: BAM1020/Serial: P20233 | 3230-8 | | $ - | | $ - | | | | | | | |
| 41 | REPUESTOS-BAM1020 | Ciclón VSCC-A para PM2.5 (PM2.5 Very Sharp Cut Cyclone, BGI Inc. VSCC™ Valid for | BX-808 | | $15.261.600 | | $ 12.526.950 | | | | | | | **$13.894.275** |

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| | | PM2.5 FEM monitoring) | | | | | | | | | | | | |
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| **GRUPO 4 - FIDAS** | | | | | | | | | | | | | | |
| **ITEM** | **EQUIPO/SUMINISTRO/SERVICIO** | **CARACTERSITICAS** | **OTRAS CONSIDERACIONES (SI APLICA) COMO UNIDADES O CANTIDADES TOTALES U OTRA** | **TECKEN SAS** | **K2 SAS** | **CTO-3238-2023** | **SANAMBIENTE** | **CTO-125-2020** | **HIGH TECH** | **ORGAMBIENTAL** | **ATITECH** | **SAMROD** | **CL INGENIERÍA** | **VALOR UNITARIO PROMEDIO** |
| 1 | CONSUMIBLE - FIDAS PALAS 200 | Aerosol filter kit | 3688 | | $ 926.900 | | | | | | | | | **$926.900** |
| 2 | CONSUMIBLE - FIDAS PALAS 200 | Zero filter (HEPA) | 1154 | | $ 2.106.500 | | | | | | | | | **$2.106.500** |
| 3 | CONSUMIBLE - FIDAS PALAS 200 | Sealing ring set | 1380 | | $ 337.100 | | | | | | | | | **$337.100** |
| 4 | CONSUMIBLE - FIDAS PALAS 200 | MonoDust 1500 | 2046-001 | | $ 2.612.000 | | | | | | | | | **$2.612.000** |
| 5 | REPUESTO- FIDAS PALAS 200 | Spare assembly MMS-MIO | 5407 | | $10.785.000 | | | | | | | | | **$10.785.000** |
| 6 | REPUESTO- FIDAS PALAS 200 | Spare assembly MMS-Pt100 | 4708 | | $ 6.572.100 | | | | | | | | | **$6.572.100** |
| 7 | REPUESTO- FIDAS PALAS 200 | Polyurethane tube ID 4 mm, OD 6 mm (1 m) | 4700 | | $ 252.800 | | | | | | | | | **$252.800** |
| 8 | REPUESTO- FIDAS PALAS 200 | Gravimetric filter holder | 1306 | | $ 2.949.100 | | | | | | | | | **$2.949.100** |

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| 9 | REPUESTO- FIDAS PALAS 200 | Plastic cap for air filter | 5674 | | $ 589.900 | | | | | | | | | $589.900 |
| 10 | REPUESTO- FIDAS PALAS 200 | Polyurethane tube ID 6 mm, OD 8 mm (1 m) | 1203 | | $ 210.700 | | | | | | | | | $210.700 |
| 11 | REPUESTO- FIDAS PALAS 200 | Inline sensor for T, RH with connectors* | 4706 | | $10.448.000 | | | | | | | | | $10.448.000 |
| 12 | REPUESTO- FIDAS PALAS 200 | Suction pump assembly | 987 | | $10.953.500 | | | | | | | | | $10.953.500 |
| 13 | REPUESTO- FIDAS PALAS 200 | MFM 10 Mass flow meter | 2020 | | $ 4.339.300 | | | | | | | | | $4.339.300 |
| 14 | REPUESTO- FIDAS PALAS 200 | Power supply 300W, 24V | 1449 | | $ 4.044.400 | | | | | | | | | $4.044.400 |
| 15 | REPUESTO- FIDAS PALAS 200 | Inlet estandar con calentador | 989 | | $23.128.700 | | | | | | | | | $23.128.700 |
| 16 | REPUESTO- FIDAS PALAS 200 | Touchscreen Computer | 985-001 | | $ - | | | | | | | | | |
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**GRUPO V: CHROMATOTEC**

| ITEM | EQUIPO/SUMINISTRO/SERVICIO | CARACTERSITICAS | OTRAS CONSIDERACIONES (SI APLICA) COMO UNIDADES O CANTIDADES TOTALES U OTRA | TECKEN SAS | K2 SAS | CTO-3238-2023 | SANAMBIENTE | CTO-125-2020 | HIGH TECH | ORGAMBIENTAL | ATITECH | SAMROD | CL INGENIERÍA | VALOR UNITARIO PROMEDIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | REPUESTOS CHROMATOTEC | Rotor 10 puertos 1/8" | CS_PN_00005-0110 | | | | | | $ 2.971.364 | | | | | $2.971.363,70 |

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| 2 | REPUESTOS CHROMATOTEC | Encendedor para chromaS | CS_EL_05019-0001 | | | | | | $ 306.428 | | | | | **$306.427,97** |
| 3 | REPUESTOS CHROMATOTEC | Junta tórica 1,5 x 0,75 mm Nitrilo | AR_TU_09002-0000 | | | | | | $24.216 | | | | | **$24.216,19** |
| 4 | REPUESTOS CHROMATOTEC | Junta tórica OR 22,5 x 1,5 | CS_TU_09000-0000 | | | | | | $16.486 | | | | | **$16.485,64** |
| 5 | REPUESTOS CHROMATOTEC | Tubo de permeación DMS - alrededor de 60 ng/min - 45°C (certificado por airmotec a ± 10%) | CS_CL_00108-0001 | | | | | | $ 7.920.852 | | | | | **$7.920.852,29** |
| 6 | REPUESTOS CHROMATOTEC | Actuador neumático 10 puertos | CS_PN_00005-0012 | | | | | | $ 9.700.677 | | | | | **$9.700.677,42** |
| 7 | REPUESTOS CHROMATOTEC | Distribuidor 24V | CS_PN_00004-0024 | | | | | | $ 1.487.806 | | | | | **$1.487.805,58** |
| 8 | REPUESTOS CHROMATOTEC | Electroválvula de 3 vías acero inoxidable (1/8") | CS_PN_06331-0341 | | | | | | $ 2.858.442 | | | | | **$2.858.442,05** |
| 9 | REPUESTOS CHROMATOTEC | Selección kit racores electroválvula | CS_TU_00000-FRAC | | | | | | $ 806.306 | | | | | **$806.306,05** |
| 10 | REPUESTOS CHROMATOTEC | Placa AIRMOSUP probada | CS_CT_PROGR-OSUP | | | | | | $27.016.027 | | | | | **$27.016.026,88** |
| 11 | REPUESTOS CHROMATOTEC | TUBO SILICONA 1.6 x 4.8 | GC_EL_00200-TUBS | | | | | | $ 1.482.217 | | | | | **$1.482.217,23** |
| 12 | REPUESTOS CHROMATOTEC | TUBO NORPRENE 3,2 x 6,4 | GC_EL_00200-TUBN | | | | | | $ 2.470.331 | | | | | **$2.470.331** |

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| 13 | REPUESTOS CHROMATOTEC | TUBO TYGON 1,6 x 4,8 | GC_EL_00200-TUBT | | | | | | $ 1.482.217 | | | | | **$1.482.217,23** |
| 14 | REPUESTOS CHROMATOTEC | Tubo de permeación Amoníaco - alrededor de 900 ng/min a 45°C (certificado) | CS_CH_90045-NH3C | | | | | | $ 9.560.229 | | | | | **$9.560.228,62** |
| 15 | REPUESTOS CHROMATOTEC | VÁLVULA ELÉCTRICA DE GAS | GC_EL_00200-GASE | | | | | | $ 6.251.910 | | | | | **$6.251.910,09** |
| 16 | REPUESTOS CHROMATOTEC | Electroválvula de entrada | GC_EL_00200-ELVA | | | | | | $ 9.274.966 | | | | | **$9.274.966,17** |
| 17 | REPUESTOS CHROMATOTEC | SONDA PRESIÓN GAS | GC_EL_00200-PGAS | | | | | | $ 1.646.887 | | | | | **$1.646.887,33** |
| 18 | REPUESTOS CHROMATOTEC | CELDA DE FLUJO DE GAS | GC_EL_00200-CUVE | | | | | | $14.373.814 | | | | | **$14.373.814,16** |
| 19 | REPUESTOS CHROMATOTEC | Kit Nitroxychrom (Filtros + Silenciador + kit válvulas compresor) | CS_PN_00001-SP01 | | | | | | $ 2.680.042 | | | | | **$2.680.042,34** |
| 20 | REPUESTOS CHROMATOTEC | Reemplazo de compresor y filtros en Nitroxychrom (230V) | CS_PN_00230-SP05 | | | | | | $ 2.680.042 | | | | | **$2.680.042,34** |
| 21 | REPUESTOS CHROMATOTEC | Purificador catalítico para generador de aire cero | CS_PN_07539-ASSY | | | | | | $14.962.086 | | | | | **$14.962.086** |

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| 22 | REPUESTOS CHROMATOTEC | Kit Anual de filtros | CS_MA_01080-HYDR | | | | | | $ 1.310.469 | | | | | **$1.310.468,54** |
| 23 | REPUESTOS CHROMATOTEC | Bolsa de Deionizacion | CS_FI_00101-0000 | | | | | | $ 2.157.262 | | | | | **$2.157.262,03** |
| 24 | REPUESTOS CHROMATOTEC | Kit membranas y válvulas para airmoPUMP exterior e interior | EP_SA_00004-0001 | | | | | | $ 2.705.621 | | | | | **$2.705.621,47** |
| 25 | REPUESTOS CHROMATOTEC | Nylon 1/8 silencer | CS_FI_01048-ECHP | | | | | | $48.246 | | | | | **$48.246,11** |
| 25 | REPUESTOS CHROMATOTEC | cartridge filter 5 um | CS_FI_00002-0000 | | | | | | $ 1.197.990 | | | | | **$1.197.990,07** |
| 27 | REPUESTOS CHROMATOTEC | Tubo de permeación H2S - alrededor de 100 ng/min a 45°C (certificado) | CS_SE_03040-H2SB | | | | | | $ 5.719.336 | | | | | **$5.719.336** |
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**GRUPO VI: MANUALES**

| ITEM | EQUIPO/SUMINISTRO/SERVICIO | CARACTERSITICAS | OTRAS CONSIDERACIONES (SI APLICA) COMO UNIDADES O CANTIDADES TOTALES U OTRA | TECKEN SAS | K2 SAS | CTO-3238-2023 | SANAMBIENTE | CTO-125-2020 | HIGH TECH | ORGAMBIENTAL | ATITECH | SAMROD | CL INGENIERÍA | VALOR UNITARIO PROMEDIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | REPUESTOS MANUALES | Filtros de fibra de cuarzo TE-QMA (TE-QMA, 8” x | 203mm*254mm(25 sheets) CAT No.1851-865 | | $ 4.572.700 | | | | $ 4.391.283 | | | | | **$4.481.992** |

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| | | 10” Quartz Filters for PM10 Sampling 25 per box9 | | | | | | | | | | | | |
| 2 | REPUESTOS MANUALES | GRASA DE SILICONA NUMERO 7 DE 150 GRAMOS (COMPUESTO DC 7 / TUBO X 150 GR - SC) | Dow Corning 7 Compuesto dieléctrico de silicona - 5.3oz (150 gm) | | $ 0 | | | | $ 623.084 | | | | | **$623.084** |
| 3 | REPUESTOS MANUALES | Conjunto de motor de soplador controlado por flujo volumétrico(Carcasa del Motor HIVOL ). | TISCH TE-5070-BL-Modelo GMB2360 | | $ 25.841.200 | | | | $ 1.356.124 | | | | | **$13.598.662** |
| 4 | REPUESTOS MANUALES | NEVERA PARA MUESTRAS | N.A | | $ 0 | | | | $ - | | | | | |
| 5 | REPUESTOS MANUALES | Manometro de agua | DWYER 1211-12 1211-12 MANOM 6--06 INWC/HG | | $ 0 | | | | $ 1.356.124 | | | | | **$1.356.124** |
| 6 | REPUESTOS MANUALES | Filtros registradores | SER AS FRAGIL | | $ 0 | | | | $ 351.859 | | | | | **$351.859** |
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| **GRUPO VII: INDICATIVAS** | | | | | | | | | | | | | | |

| ITEM | EQUIPO/SUMINISTRO/SERVICIO | CARACTERSITICAS | OTRAS CONSIDERACIONES (SI APLICA) COMO UNIDADES O CANTIDADES TOTALES U OTRA | TECKEN SAS | K2 SAS | CTO-3238-2023 | SANAMBIENTE | CTO-125-2020 | HIGH TECH | ORGAMBIENTAL | ATITECH | SAMROD | CL INGENIERÍA | VALOR UNITARIO PROMEDIO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CONSUMIBLES INDICATIVAS | SENSORES CAIRSENSE ENVEA VOC (5 ESTACIONES) | A40-0410 | $ 23.479.207 | $ 20.367.800 | | | | | | | | | **$21.923.504** |
| 2 | CONSUMIBLES INDICATIVAS | SENSORES CAIRSENSE ENVEA CH4S (5 ESTACIONES) | A40-0402 | $ 7.660.205 | $ 6.645.100 | | | | | | | | | **$7.152.653** |
| 3 | CONSUMIBLES INDICATIVAS | SENSORES CAIRSENSE ENVEA NH3 (5 ESTACIONES) | A40-0408 | $ 9.500.467 | $ 8.241.500 | | | | | | | | | **$8.870.984** |
| 4 | CONSUMIBLES INDICATIVAS | SENSORES CAIRSENSE ENVEA H2S (5 ESTACIONES) | A40-0402 | $ 7.660.205 | $ 6.645.100 | | | | | | | | | **$7.152.653** |
| 5 | CONSUMIBLES INDICATIVAS | SENSORES CAIRSENSE ENVEA NO2 (10 ESTACIONES) | A40-0405 | $ 7.778.054 | $ 6.747.400 | | | | | | | | | **$7.262.727** |
| 6 | CONSUMIBLES INDICATIVAS | SENSORES CAIRSENSE ENVEA SO2 (5 ESTACIONES) | A40-0407 | $ 9.328.226 | $ 8.092.100 | | | | | | | | | **$8.710.163** |
| 7 | CONSUMIBLES INDICATIVAS | SENSORES CAIRSENSE ENVEA CO (5 ESTACIONES) | A40-0404 | $ 7.651.140 | $ 6.637.300 | | | | | | | | | **$7.144.220** |
| 8 | CONSUMIBLES INDICATIVAS | SENSORES CAIRSENSE | A40-0406 | $ 8.050.014 | $ 6.983.300 | | | | | | | | | **$7.516.657** |

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| | | ENVEA O3 (5 ESTACIONES) | | | | | | | | | | | | |
| 9 | CONSUMIBLES INDICATIVAS | SENSORES CAIRSENSE ENVEA PM2.5 Y PM1 (5 ESTACIONES) | A40-0414 | $ 9.509.675 | $ 8.721.200 | | | | | | | | | **$9.115.438** |
| 10 | CONSUMIBLES INDICATIVAS | PANEL SOLAR POLICRISTALINO - POTENCIA 150Wp *18.1V*8.29A*DIMESIONES 1480X680X35MM*PESO 10.8KG * CON IP67 Modelo: SZYL-P150-18 | SZYL-P150-18 | $585.715 | $ 1.080.000 | | | | | | | | | **$832.858** |
| 11 | CONSUMIBLES INDICATIVAS | BATERÍAS MTEK 12V-55AH-MT12550HR | MT12550HR | $657.143 | $ 1.109.520 | | | | | | | | | **$883.332** |
| 12 | CONSUMIBLES INDICATIVAS | EPSOLAR VIEWSTAR VS2024BN 20A PWM CHARGE CONTROLLER – 12/24V-20A | VS2024BN | $ 1.142.858 | $ 986.400 | | | | | | | | | **$1.064.629** |
| 13 | CONSUMIBLES INDICATIVAS | Panel Solar 100W Policristalino RESTAR. modelo RTM10P Dimensiones : 1020X670x30mm | RTM100P | $428.572 | $ 619.200 | | | | | | | | | **$523.886** |

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| | | Voc: 21.58 y A: 5.75 A | | | | | | | | | | | | |
| 14 | CONSUMIBLES INDICATIVAS | BATERÍAS 12 V - 9 A POWEST Modelo :58022F28 | 58022F28 | $121.430 | $ 228.000 | | | | | | | | | **$174.715** |
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| **GRUPO VIII: MAGEE** | | | | | | | | | | | | | | |
| **ITEM** | **EQUIPO/SUMINISTRO/SERVICIO** | **CARACTERSITICAS** | **OTRAS CONSIDERACIONES (SI APLICA) COMO UNIDADES O CANTIDADES TOTALES U OTRA** | **TECKEN SAS** | **K2 SAS** | **CTO-3238-2023** | **SANAMBIENTE** | **CTO-125-2020** | **HIGH TECH** | **ORGAMBIENTAL** | **ATITECH** | **SAMROD** | **CL INGENIERÍA** | **VALOR UNITARIO PROMEDIO** |
| 1 | CONSUMIBLE | 3/8" OD Sample Inlet Tubing, static dissipative - 3 m | M4997 | | | | | | | $175.000 | | | | **$175.000** |
| 2 | REPUESTO | Flow calibration pad | AE33 0 02 057 | | | | | | | $215.000 | | | | **$215.000** |
| 3 | REPUESTO | Insect screen / water trap | M9556 | | | | | | | $585.000 | | | | **$585.000** |
| 4 | CONSUMIBLE | Cartridge filter – bypass | M8072 | | | | | | | $365.000 | | | | **$365.000** |
| 5 | CONSUMIBLE | Filter tape – 10 m roll | M8050 | | | | | | | $ 2.125.000 | | | | **$2.125.000** |
| 6 | CONSUMIBLE | Cal (0.1 - 30 LPM) | M7950 | | | | | | | $ 40.190.000 | | | | **$40.190.000** |
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| GRUPO IX: FUENTES FIJAS | | | | | | | | | | | | | | |
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| **ITEM** | **EQUIPO/SUMINISTRO/SERVICIO** | **CARACTERSITICAS** | **OTRAS CONSIDERACIONES (SI APLICA) COMO UNIDADES O CANTIDADES TOTALES U OTRA** | **TECKEN SAS** | **K2 SAS** | **CTO-3238-2023** | **SANAMBIENTE** | **CTO-125-2020** | **HIGH TECH** | **ORGAMBIENTAL** | **ATITECH** | **SAMROD** | **CL INGENIERÍA** | **VALOR UNITARIO PROMEDIO** |
| 1 | Particulate filter located on top of water trap assembly / Filtro de partículas ubicado en la parte superior conjunto de trampa de agua. | Wáter Trap Filter / Filtro trampa de agua. | 3015840G | | | | | | | | $481.000 | $456.950 | $ 550.000 | **$495.983** |
| 2 | 1 Each - standard 3/4" in-line filter in clear plastic casing / 1 cada uno: filtro en línea estándar de 3/4" en transparente carcasa de plástico | In-line Smoke Filter Standard / Filtro de humo en línea Estándar In-line Smoke Filter Standard / Filtro de humo en línea Estándar | 7118501H | | | | | | | | $ 87.000 | $ 83.520 | $ 98.000 | **$89.507** |
| 3 | Round smoke test filters for smoke dot test /filtros de prueba de humo redondos para humo prueba de punto | Soot Test Paper / Papel de prueba de hollín | 3003168G | | | | | | | | $308.000 | $320.320 | $ 350.000 | **$326.107** |
| 4 | Refill container (purple beads) / container | NOx/SOx Filter Media / Componente | 3014457G | | | | | | | | $604.000 | $579.840 | $ 690.000 | **$624.613** |

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| | permanganato de potasio | separador entre Nox y Sox paquet x 1000 gramos | | | | | | | | | | | | |
| 5 | Tubo recargable para separador entre Nox y Sox | Refillable NOx/SOx Media Tube | 7128601H | | | | | | | | $432.000 | $414.720 | $ 490.000 | **$445.573** |
| 6 | Acople adaptador | 9mm Male Gas Adapter / Adaptador manguera | 3022968G | | | | | | | | $358.000 | $372.320 | $ 410.000 | **$380.107** |
| 7 | Acople adaptador | 8 mm Male Draft Adapter / Adaptador manguera toma de muestra. | 3022770G | | | | | | | | $358.000 | $340.100 | $ 410.000 | **$369.367** |
| 8 | Fuse located under power supply / Fusible ubicado debajo de la fuente de alimentación. | Fusible / 1 Amperio Fuse | 3023365G | | | | | | | | $124.000 | $130.200 | $ 140.000 | **$131.400** |
| 9 | Empaque tapa filtro peltier de retención de agua. | O-Ring for Wáter Trap Bowl O-Ring for Wáter Trap Bowl | 3014259G | | | | | | | | $ 37.000 | $ 35.150 | $ 42.000 | **$38.050** |
| 10 | Filtro de placa | Large Filter Plate / filtro de placa | 6979142H | | | | | | | | $7.627.000 | $7.932.080 | $8.700.000 | **$8.086.360** |
| 11 | O-Ring for Gas Adapter *Please specify which end of the sample line it is needed for*/ Junta tórica para adaptador de gas *Especifique cuál final de la línea de | 9mm O-Ring for Gas Adapter (71353) / Oring adaptador | 3013665G | | | | | | | | $ 37.000 | $ 35.150 | $ 42.000 | **$38.050** |

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| | muestra para la que se necesita* | | | | | | | | | | | | | |
| 12 | O-Ring for draft adapter / Junta tórica para adaptador de tiro | 8 mm O-Ring for Draft Adapter (71354) / Oring adaptador | 3013863G | | | | | | | | $ 37.000 | $ 35.520 | $ 42.000 | **$38.173** |
| 13 | Conector indicador de temperatura. | Ambient Air Temperature Stick / Conector indicador de Temperatura. | 3000595G | | | | | | | | $924.000 | $960.960 | $1.050.000 | **$978.320** |
| 14 | OO/105 / Sensor Interno para medición de Oxigeno | Sensor de Oxigeno | 7529701H | | | | | | | | $3.684.000 | $3.868.200 | $4.200.000 | **$3.917.400** |
| 15 | A5F PLUS / Sensor interno para medición de Monóxido de Carbono. | Sensor de CO | 7529281H | | | | | | | | $6.148.000 | $6.393.920 | $6.990.000 | **$6.510.640** |
| 16 | 5MF / Sensor interno de medición de Monóxido de Carbono. | Sensor CO (High) | 7529301H | | | | | | | | $7.380.000 | $7.675.200 | $8.390.000 | **$7.815.067** |
| 17 | 5NF / Sensor Interno de medición de Óxidos de nitrógeno | Sensor NO | 7529801H | | | | | | | | $6.148.000 | $6.455.400 | $6.990.000 | **$6.531.133** |
| 18 | 5ND / Sensor interno de medición de NO2 | Sensor NO2 | 7529601H | | | | | | | | $6.148.000 | $6.455.400 | $6.990.000 | **$6.531.133** |

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| 19 | 5SF/ sensor interno de medición de SO2 | Sensor SO2 | 7530101H | | | | | | | | $6.148.000 | $5.902.080 | $6.990.000 | **$6.346.693** |
| 20 | Extención electrica 110 v | Conexión para los equipos en sitios de monitoreo. | Tipo pesado, calibre 14, longitud 30 m | | | | | | | | $924.000 | $877.800 | $1.040.000 | **$947.267** |
| 21 | Transformador Elevador De 3kva Entrada 110v Salida 220v | Para conexión de punto de corriente(plantas) a conexión de trailer o estacion movil de monitoreo | Transformador Elevador De 3kva Entrada 110v Salida 220v | | | | | | | | $1.231.000 | $1.292.550 | $1.380.000 | **$1.301.183** |
| 22 | Bombillos lamparas internas estacion de monitoreo | Alumbrado interno estación de monitoreo | Tubo Led 18w 6500k Luz Blanca | | | | | | | | $ 15.000 | $ 15.600 | $ 20.000 | **$16.867** |
| 23 | Cinta aislante | Cubrimiento de conexiones | 3M Super33+ cinta aisladora 19mmx20.1mx0.177mm preto | | | | | | | | $ 62.000 | $ 58.900 | $ 70.000 | **$63.633** |
| 24 | Taladro percutor | Limpieza de sondas,Tubos Pitot, Boquillas, con cepillo metalico. | Taladro De Impacto 3/8 600w + 9 Brocas Mad/mur/metal Discove | | | | | | | | $1.231.000 | $1.181.760 | $1.380.000 | **$1.264.253** |
| 25 | Set Cepillos metalicos | Limpieza de sondas,Tubos Pitot, Boquillas, con cepillo metalico. | Grata Metalica Juego X 5 Unidades Para Taladro | | | | | | | | $ 37.000 | $ 35.150 | $ 42.000 | **$38.050** |
| 26 | Cinta de Alta Temperatura | Cubrimiento de Resistencias en sondas de muestreo, | Cinta fibra de vidrio para alta temperatura | | | | | | | | $154.000 | $161.700 | $ 175.000 | **$163.567** |

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| 27 | Alambre para resistencia | Fabricación de resistencias | Alambre resistivo plano para resistencia | | | | | | | | $ 62.000 | $ 64.480 | $ 69.000 | **$65.160** |
| 28 | Cable indicador de temperatura | fabricación y reparación de termocuplas | Cable Tipo K, Cromel Alumel, 24 AWG, Fibra de Vidrio y malla de acero inoxidable | | | | | | | | $ 39.000 | $ 40.560 | $ 44.000 | **$41.187** |
| 29 | Cable indicador de temperatura | Reparacion de termocuplas y puntos de trasmision de señal Ej: termocuplas del equipo | 30 metros de cable termocupla K Teflón + Malla 20awg | | | | | | | | $1.154.000 | $1.211.700 | $1.300.000 | **$1.221.900** |
| 30 | Conector macho | Conexion de termopares para consola, caja caliente y termopares auxiliares. | Conector Termocupla Tipo K | | | | | | | | $ 47.000 | $ 48.880 | $ 52.000 | **$49.293** |
| 31 | Conector hembra | Conexion de termopares para consola, caja caliente y termopares auxiliares. | Conector Termocupla Tipo K | | | | | | | | $ 47.000 | $ 49.350 | $ 52.000 | **$49.450** |
| 32 | Conector | Conexion de termopares para consola, caja caliente y termopares auxiliares. | Conector Termocupla Tipo K | | | | | | | | $ 62.000 | $ 58.900 | $ 69.000 | **$63.300** |
| 33 | Brida Plastica | Abrazadera para ajuste y aseguramiento de partes del equipo | Grande, mediana , pequeña, un paquete de cada uno. | | | | | | | | $124.000 | $128.960 | $ 140.000 | **$130.987** |

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| 34 | Manguera | Linea toma de muestra de gases desde la chimenea a equipo instrumental | 100 metros de manguera Teflonada de ¼ | | | | | | | | $3.847.000 | $4.039.350 | $4.350.000 | **$4.078.783** |
| 35 | Equipo soplador de aire | Limpieza y mantenimiento de equipos | BLOWER SOPLADOR VV 0/16000 RPM MAKITA UB1103 | | | | | | | | $631.000 | $656.240 | $ 710.000 | **$665.747** |
| 36 | Cautin | Soldar piezas sueltas o empate de cables expuestos | Conexión a 110v | | | | | | | | $177.000 | $184.080 | $ 199.000 | **$186.693** |
| 37 | Crema para soldar estaño | Soldar piezas sueltas o empate de cables expuestos | Crema para soldar | | | | | | | | $ 28.000 | $ 26.600 | $ 32.000 | **$28.867** |
| 38 | soldadura Estaño | Soldar piezas. | Rollo de 450 gramos de soldadura con aleación estaño/plomo (60/40) | | | | | | | | $431.000 | $452.550 | $ 485.000 | **$456.183** |
| 39 | Malla fibra de vidrio | Aislamiento de contacto | 30 metros de malla de fibra de vidrio tubular de 3/4 de diámetro | | | | | | | | $1.385.000 | $1.315.750 | $1.560.000 | **$1.420.250** |
| 40 | Medidor de flujo | Verificación de equipos instrumentales | Regulador de flujo L/M-O2,CO2,CO,NOX,SO2 | | | | | | | | $308.000 | $295.680 | $ 345.000 | **$316.227** |
| 41 | Llave cadena | Soltar tapas de puertos de muestreo | Llave de cadena ajustable | | | | | | | | $3.693.000 | $3.877.650 | $4.140.000 | **$3.903.550** |
| 42 | Tula de lona resistente | Ascenso de equipos en alturas | Capacidad de soporte de 30kg | | | | | | | | $770.000 | $739.200 | $ 865.000 | **$791.400** |
| 43 | Liquido lubricante Wd40 | Lubricación de partes oxidadas | Wd - 40 | | | | | | | | $ 62.000 | $ 59.520 | $ 69.000 | **$63.507** |

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| 44 | Termocupla con recubrimiento en acero | Reporte de temperatura | Tipo K en acero con recubrimiento en acero de longitud de 1 metro. | | | | | | | | $924.000 | $877.800 | $1.035.000 | **$945.600** |
| 45 | Aceite para bomba | Lubricación de bomba | 20w40 | | | | | | | | $231.000 | $240.240 | $ 260.000 | **$243.747** |
| 46 | Estuche rígido de aluminio para almacenamiento de equipo instrumental | Transporte seguro de equipos | (L x H x W): approx. 450 x 315 x 250 mm resp. 510 x 330 x 250 mm | | | | | | | | $770.000 | $808.500 | $ 865.000 | **$814.500** |
| 47 | Liquido manométrico | Nivel de manómetro inclinado | 500 ml - A 102 | | | | | | | | $1.154.000 | $1.200.160 | $1.295.000 | **$1.216.387** |
| 48 | Grasas siliconada | Sello hermetico de partes de vidrio | Grasa Siliconada O'rings 55 – Molykote –100 g - JOMSMX | | | | | | | | $385.000 | $400.400 | $ 435.000 | **$406.800** |
| 49 | Teflón Cinta Teflón | Sello hermetico de partes de vidrio y aceradas en sonda y partes de conexxiones especiales. | Cinta Teflón Industrial 13m X 3/4" Truper 12517 | | | | | | | | $ 31.000 | $ 32.240 | $ 35.000 | **$32.747** |
| 50 | Plastico | Resguardar equipos de la lluvia en chimenea y piso. | 5 metros de plastico invernadero calibre 6 X 72 m x 6 m ancho | | | | | | | | $385.000 | $369.600 | $ 435.000 | **$396.533** |
| 51 | Cono retráctil reflectivo | Delimitación de áreas | Cono reflectivo retractil de facil armado | | | | | | | | $154.000 | $160.160 | $ 175.000 | **$163.053** |
| 52 | Manguera flexible | Montaje de equipos en chimenea | Conector cónico en L para conector flexible | | | | | | | | $924.000 | $960.960 | $1.035.000 | **$973.320** |

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| 53 | Radios de comunicación para campo | Intercomunicación del equipo de muestreo (Estación vs plataforma de muestreo) | Two Way Radio T400 | | | | | | | | $770.000 | $731.500 | $ 865.000 | **$788.833** |
| 54 | Orings para impactadores en material de viton | Unión de vidriería para sellos hermético | Paquete de 20 unidades de Viton | | | | | | | | $154.000 | $146.300 | $ 175.000 | **$158.433** |
| 55 | Conectores internos en grafico o teflón | Conexión inetermedia entre nucleo y boquilla | Paquete de 3 uniones de 12F-G R y paquete de 3 uniones de 12F- N | | | | | | | | $370.000 | $384.800 | $ 504.000 | **$419.600** |
| 56 | Resistencias para sonda 2 ft | Calentamiento interno para garantizar condensación de humedad temperaturas entre 0 - 600 °C | Manto calefactor de sonda de 120 V de longitud efectiva de 2 pies con recubrimiento en fibra de vidrio, | | | | | | | | $616.000 | $585.200 | $ 690.000 | **$630.400** |
| 57 | Resistencias para sonda 3 ft | Calentamiento interno para garantizar condensación de humedad temperaturas entre 0 - 600 °C | Manto calefactor de sonda de 120 V de longitud efectiva de 3 pies con recubrimiento en fibra de vidrio, | | | | | | | | $770.000 | $808.500 | $ 865.000 | **$814.500** |
| 58 | Resistencias para sonda 4 ft | Calentamiento interno para garantizar condensación de humedad temperaturas entre 0 - 600 °C | Manto calefactor de sonda de 120 V de longitud efectiva de 4 pies con recubrimiento en fibra de vidrio, | | | | | | | | $1.077.000 | $1.120.080 | $1.210.000 | **$1.135.693** |

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| 59 | Resistencias para sonda 7 ft | Calentamiento interno para garantizar condensación de humedad temperaturas entre 0 - 600 °C | Manto calefactor de sonda de 120 V de longitud efectiva de 7 pies con recubrimiento en fibra de vidrio, | | | | | | | | $1.539.000 | $1.600.560 | $1.730.000 | **$1.623.187** |
| 60 | Resistencias para sonda 6 ft | Calentamiento interno para garantizar condensación de humedad temperaturas entre 0 - 600 °C | Manto calefactor de sonda de 120 V de longitud efectiva de 6 pies con recubrimiento en fibra de vidrio, | | | | | | | | $1.385.000 | $1.440.400 | $1.555.000 | **$1.460.133** |
| 61 | Resistencias para sonda 9 ft | Calentamiento interno para garantizar condensación de humedad temperaturas entre 0 - 600 °C | Manto calefactor de sonda de 120 V de longitud efectiva de 9 pies con recubrimiento en fibra de vidrio, | | | | | | | | $1.847.000 | $1.920.880 | $2.070.000 | **$1.945.960** |
| 62 | funda para linea de vidrio Liner de vidrio para sonda de 2FT | Transporte de muestra (Gas), material de vidrio o cuarzo para garantizar resitencia en altas temperaturas. | fundas de sonda de 1”. Una bola # 28 es estándar con una junta tórica de Viton recubierta de silicona y teflón incluida. | | | | | | | | $ 93.000 | $ 96.720 | $ 105.000 | **$98.240** |
| 63 | Mangera siliconada | Conexión de puertos auxiliares para transporte de muestra | 4 metros de mangera silicona de 1/4 de diematro | | | | | | | | $ 93.000 | $ 88.350 | $ 105.000 | **$95.450** |

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| 64 | Racord de sonda boquilla | Conector entre sonda y Boquilla | Juego de 3 Racores con Felula de 5/8 conector en acero y 3 Racores con Contrafelula de 5/8 conector en acero. | | | | | | | | $924.000 | $877.800 | $1.050.000 | **$950.600** |
| 65 | Racord de pitot | Conexión de puertos auxiliares para transporte de muestra | Referencia 1/4 - 1/16 | | | | | | | | $385.000 | $404.250 | $ 435.000 | **$408.083** |
| 66 | Tubo PVC | transporte y almacenamiento de sondas de vidrio | Tubo PVC 1 1/2 pulgada | | | | | | | | $ 57.000 | $ 59.850 | $ 65.000 | **$60.617** |
| 67 | Tapones de PVC | Sellamiento de tubos PVC | Tapones de 1 1/2 pulgada | | | | | | | | $8.000 | $7.680 | $ 9.000 | **$8.227** |

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**Reviso**: Sebastián Cuestas Cano – Contratista DIA/CAR