Riley Campbell

Simulation 1

Belt Lengths: 26”

Belt widths: A – 10”, B– 25”, C – 15”

Box 1 arrives, it has dimensions 10x53x53. It will fit on conveyor belt A. Place it using 53” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 10** | Box# | 1 |  |  |  |  |  |  | 53 |
| Inches” | 53 |  |  |  |  |  |  |
| **B– 25** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **C – 15** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |

Box 1 fell off conveyor A

Box 2 arrives, it has dimensions 25x52x52. It will fit on conveyor belt B. Place it using 52” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 10** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **B– 25** | Box# | 2 |  |  |  |  |  |  |  |
| Inches” | 52 |  |  |  |  |  |  |
| **C – 15** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |

Box 3 arrives, it has dimensions 53x1x1. It will fit on conveyor belt A. Place it using 1” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 10** | Box# | 3 |  |  |  |  |  |  | 1 |
| Inches” | 1 |  |  |  |  |  |  |
| **B– 25** | Box# | 2 |  |  |  |  |  |  | 52 |
| Inches” | 52 |  |  |  |  |  |  |
| **C – 15** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |

Box 4 arrives, it has dimensions 25x24x16. It will fit on conveyor belt B. Place it using 16” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 10** | Box# | 3 |  |  |  |  |  |  | 1 |
| Inches” | 1 |  |  |  |  |  |  |
| **B– 25** | Box# | 2 | 4 |  |  |  |  |  | 68 |
| Inches” | 52 | 16 |  |  |  |  |  |
| **C – 15** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |

Box 2 fell off conveyor B

Box 5 arrives, it has dimensions 6x19x18. It will fit on conveyor belt C. Place it using 18 of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 10** | Box# | 3 | 5 |  |  |  |  |  | 19 |
| Inches” | 1 | 18 |  |  |  |  |  |
| **B– 25** | Box# | 4 |  |  |  |  |  |  | 16 |
| Inches” | 16 |  |  |  |  |  |  |
| **C – 15** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |

Box 6 arrives, it has dimensions 10x10x10. It will fit on conveyor belt C. Place it using 10 of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 10** | Box# | 3 | 5 | 6 |  |  |  |  | 29 |
| Inches” | 1 | 18 | 10 |  |  |  |  |
| **B– 25** | Box# | 4 |  |  |  |  |  |  | 16 |
| Inches” | 16 |  |  |  |  |  |  |
| **C – 15** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |

Box 3 fell off conveyor A

Box 7 arrives, it has dimensions 25x25x25. It will fit on conveyor belt B. Place it using 25” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 10** | Box# | 5 | 6 |  |  |  |  |  | 28 |
| Inches” | 18 | 10 |  |  |  |  |  |
| **B– 25** | Box# | 4 | 7 |  |  |  |  |  | 41 |
| Inches” | 16 | 25 |  |  |  |  |  |
| **C – 15** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |

Box 4 fell off conveyor B

Box 8 arrives, it has dimensions 15x15x15. It will fit on conveyor belt C. Place it using 15” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 10** | Box# | 5 | 6 |  |  |  |  |  | 28 |
| Inches” | 18 | 10 |  |  |  |  |  |
| **B– 25** | Box# | 7 |  |  |  |  |  |  | 25 |
| Inches” | 25 |  |  |  |  |  |  |
| **C – 15** | Box# | 8 |  |  |  |  |  |  | 15 |
| Inches” | 15 |  |  |  |  |  |  |

Box 9 arrives, it has dimensions 12x24x3. It will fit on conveyor belt C. Place it using 3” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 10** | Box# | 5 | 6 |  |  |  |  |  | 28 |
| Inches” | 18 | 10 |  |  |  |  |  |
| **B– 25** | Box# | 7 |  |  |  |  |  |  | 25 |
| Inches” | 25 |  |  |  |  |  |  |
| **C – 15** | Box# | 8 | 9 |  |  |  |  |  | 18 |
| Inches” | 15 | 3 |  |  |  |  |  |

Box 10 arrives, it has dimensions 50x13x19. It will fit on conveyor belt C. Place it using 19” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 10** | Box# | 5 | 6 |  |  |  |  |  | 28 |
| Inches” | 18 | 10 |  |  |  |  |  |
| **B– 25** | Box# | 7 |  |  |  |  |  |  | 25 |
| Inches” | 25 |  |  |  |  |  |  |
| **C – 15** | Box# | 8 | 9 | 10 |  |  |  |  | 37 |
| Inches” | 15 | 3 | 19 |  |  |  |  |

Box 8 fell off conveyor C

Box 11 arrives, it has dimensions 5x13x6. It will fit on conveyor belt A. Place it using 5” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 10** | Box# | 5 | 6 | 11 |  |  |  |  | 33 |
| Inches” | 18 | 10 | 5 |  |  |  |  |
| **B– 25** | Box# | 7 |  |  |  |  |  |  | 25 |
| Inches” | 25 |  |  |  |  |  |  |
| **C – 15** | Box# | 9 | 10 |  |  |  |  |  | 22 |
| Inches” | 3 | 19 |  |  |  |  |  |

Box 12 arrives, it has dimensions 8x7x6. It will fit on conveyor belt A. Place it using 6” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 10** | Box# | 5 | 6 | 11 | 12 |  |  |  | 39 |
| Inches” | 18 | 10 | 5 | 6 |  |  |  |
| **B– 25** | Box# | 7 |  |  |  |  |  |  | 25 |
| Inches” | 25 |  |  |  |  |  |  |
| **C – 15** | Box# | 9 | 10 |  |  |  |  |  | 22 |
| Inches” | 3 | 19 |  |  |  |  |  |

Box 5 fell off conveyor A

Box 13 arrives, it has dimensions 15x26x26. It will fit on conveyor belt C. Place it using 26” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 10** | Box# | 6 | 11 | 12 |  |  |  |  | 21 |
| Inches” | 10 | 5 | 6 |  |  |  |  |
| **B– 25** | Box# | 7 |  |  |  |  |  |  | 25 |
| Inches” | 25 |  |  |  |  |  |  |
| **C – 15** | Box# | 9 | 10 | 13 |  |  |  |  | 48 |
| Inches” | 3 | 19 | 26 |  |  |  |  |

Box 9 fell off conveyor C

Box 10 fell off conveyor C

Box 14 arrives, it has dimensions 25x26x26. It will fit on conveyor belt B. Place it using 26” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 10** | Box# | 6 | 11 | 12 |  |  |  |  | 21 |
| Inches” | 10 | 5 | 6 |  |  |  |  |
| **B– 25** | Box# | 7 | 14 |  |  |  |  |  | 51 |
| Inches” | 25 | 26 |  |  |  |  |  |
| **C – 15** | Box# | 13 |  |  |  |  |  |  | 26 |
| Inches” | 26 |  |  |  |  |  |  |

Box 7 fell off conveyor B

Box 15 arrives, it has dimensions 10x26x26. It will fit on conveyor belt X. Place it using \_ of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 10** | Box# | 6 | 11 | 12 | 15 |  |  |  | 27 |
| Inches” | 10 | 5 | 6 | 26 |  |  |  |
| **B– 25** | Box# | 14 |  |  |  |  |  |  | 26 |
| Inches” | 26 |  |  |  |  |  |  |
| **C – 15** | Box# | 13 |  |  |  |  |  |  | 26 |
| Inches” | 26 |  |  |  |  |  |  |

Box 6 fell off conveyor A

Box 11 fell off conveyor A

Box 12 fell off conveyor A

END SIMULATION

Riley Campbell

Simulation 2

Belt Lengths: 26”

Belt widths: A – 13”, B– 20”, C – 8”

Box 1 arrives, it has dimensions 16x9x12. It will fit on conveyor belt A. Place it using 9” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 13** | Box# | 1 |  |  |  |  |  |  | 9 |
| Inches” | 9 |  |  |  |  |  |  |
| **B– 20** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **C – 8** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |

Box 2 arrives, it has dimensions 17x5x2. It will fit on conveyor belt C. Place it using 2” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 13** | Box# | 1 |  |  |  |  |  |  | 9 |
| Inches” | 9 |  |  |  |  |  |  |
| **B– 20** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **C – 8** | Box# | 2 |  |  |  |  |  |  | 2 |
| Inches” | 2 |  |  |  |  |  |  |

Box 3 arrives, it has dimensions 6x18x2. It will fit on conveyor belt C. Place it using 2” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 13** | Box# | 1 |  |  |  |  |  |  | 9 |
| Inches” | 9 |  |  |  |  |  |  |
| **B– 20** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **C – 8** | Box# | 2 | 3 |  |  |  |  |  | 4 |
| Inches” | 2 | 2 |  |  |  |  |  |

Box 4 arrives, it has dimensions 17x15x10. It will fit on conveyor belt A. Place it using 15” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 13** | Box# | 1 | 4 |  |  |  |  |  | 24 |
| Inches” | 9 | 15 |  |  |  |  |  |
| **B– 20** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **C – 8** | Box# | 2 | 3 |  |  |  |  |  | 4 |
| Inches” | 2 | 2 |  |  |  |  |  |

Box 5 arrives, it has dimensions 10x12x8. It will fit on conveyor belt A. Place it using 8” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 13** | Box# | 1 | 4 | 5 |  |  |  |  | 32 |
| Inches” | 9 | 15 | 8 |  |  |  |  |
| **B– 20** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **C – 8** | Box# | 2 | 3 |  |  |  |  |  | 4 |
| Inches” | 2 | 2 |  |  |  |  |  |

Box 1 fell off conveyor A

Box 6 arrives, it has dimensions 1x10x11. It will fit on conveyor belt A. Place it using 1” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 13** | Box# | 4 | 5 | 6 |  |  |  |  | 24 |
| Inches” | 15 | 8 | 1 |  |  |  |  |
| **B– 20** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **C – 8** | Box# | 2 | 3 |  |  |  |  |  | 4 |
| Inches” | 2 | 2 |  |  |  |  |  |

Box 7 arrives, it has dimensions 19x14x5. It will fit on conveyor belt C. Place it using 14” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 13** | Box# | 4 | 5 | 6 |  |  |  |  | 24 |
| Inches” | 15 | 8 | 1 |  |  |  |  |
| **B– 20** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **C – 8** | Box# | 2 | 3 | 7 |  |  |  |  | 18 |
| Inches” | 2 | 2 | 14 |  |  |  |  |

Box 8 arrives, it has dimensions 8x8x8. It will fit on conveyor belt C. Place it using 8” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 13** | Box# | 4 | 5 | 6 |  |  |  |  | 24 |
| Inches” | 15 | 8 | 1 |  |  |  |  |
| **B– 20** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **C – 8** | Box# | 2 | 3 | 7 | 8 |  |  |  | 26 |
| Inches” | 2 | 2 | 14 | 8 |  |  |  |

Box 9 arrives, it has dimensions 3x3x3. It will fit on conveyor belt C. Place it using 3” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 13** | Box# | 4 | 5 | 6 |  |  |  |  | 24 |
| Inches” | 15 | 8 | 1 |  |  |  |  |
| **B– 20** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **C – 8** | Box# | 2 | 3 | 7 | 8 | 9 |  |  | 29 |
| Inches” | 2 | 2 | 14 | 8 | 3 |  |  |

Box 2 fell off conveyor C

Box 10 arrives, it has dimensions 1x2x3. It will fit on conveyor belt C. Place it using 1” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 13** | Box# | 4 | 5 | 6 |  |  |  |  | 24 |
| Inches” | 15 | 8 | 1 |  |  |  |  |
| **B– 20** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **C – 8** | Box# | 3 | 7 | 8 | 9 | 10 |  |  | 28 |
| Inches” | 2 | 14 | 8 | 3 | 1 |  |  |

Box 3 fell off conveyor C

Box 11 arrives, it has dimensions 6x3x2. It will fit on conveyor belt C. Place it using 2” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 13** | Box# | 4 | 5 | 6 |  |  |  |  | 24 |
| Inches” | 15 | 8 | 1 |  |  |  |  |
| **B– 20** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **C – 8** | Box# | 7 | 8 | 9 | 10 | 11 |  |  | 28 |
| Inches” | 14 | 8 | 3 | 1 | 2 |  |  |

Box 12 arrives, it has dimensions 13x16x20. It will fit on conveyor belt A. Place it using 13” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 13** | Box# | 4 | 5 | 6 | 12 |  |  |  | 37 |
| Inches” | 15 | 8 | 1 | 13 |  |  |  |
| **B– 20** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **C – 8** | Box# | 7 | 8 | 9 | 10 | 11 |  |  | 28 |
| Inches” | 14 | 8 | 3 | 1 | 2 |  |  |

Box 4 fell off conveyor A

Box 13 arrives, it has dimensions 13x60x60. It will fit on conveyor belt B. Place it using 60” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 13** | Box# | 4 | 5 | 6 | 12 | 13 |  |  | 97 |
| Inches” | 15 | 8 | 1 | 13 | 60 |  |  |
| **B– 20** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **C – 8** | Box# | 7 | 8 | 9 | 10 | 11 |  |  | 28 |
| Inches” | 14 | 8 | 3 | 1 | 2 |  |  |

Box 5 fell off conveyor A

Box 6 fell off conveyor A

Box 12 fell off conveyor A

Box 13 fell off conveyor A

Box 14 arrives, it has dimensions 20x60x60. It will fit on conveyor belt B . Place it using 60” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 13** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **B– 20** | Box# | 14 |  |  |  |  |  |  | 60 |
| Inches” | 60 |  |  |  |  |  |  |
| **C – 8** | Box# | 7 | 8 | 9 | 10 | 11 |  |  | 28 |
| Inches” | 14 | 8 | 3 | 1 | 2 |  |  |

Box 14 fell off conveyor B

Box 15 arrives, it has dimensions 8x60x60. It will fit on conveyor belt A. Place it using 60” of space to minimize belt usage.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A – 13** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **B– 20** | Box# |  |  |  |  |  |  |  |  |
| Inches” |  |  |  |  |  |  |  |
| **C – 8** | Box# | 7 | 8 | 9 | 10 | 11 | 15 |  | 88 |
| Inches” | 14 | 8 | 3 | 1 | 2 | 60 |  |

Box 7 fell off conveyor C

Box 8 fell off conveyor C

Box 9 fell off conveyor C

Box 10 fell off conveyor C

Box 11 fell off conveyor C

Box 15 fell off conveyor C

END SIMULATION