Use the following information and the attached editable MRP tableau worksheet to determine a complete material requirements plan for the 5 week planning horizon. A garden equipment manufacturer has a product that it makes which is represented by the following product structure tree along with other pertinent data:



**Inventory Records File**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Item | Lead Time | On Hand | Lot Size | Safety Stock | Sched. Receipt |
| ABC-51 | 1 | 15 | L4L | 0 | --- |
| L | 1 | 12 | L4L | 0 | --- |
| P | 1 | 53 | 100 | 10 | 140 in wk 1 |
| R | 1 | 30 | L4L | 10 | 28 wk 1 |
| W | 1 | 10 | 20 | 0 | --- |
| X | 2 | 25 | 40 | 0 | --- |

**Master Production Schedule (Weeks)**

Product 1 2 3 4 5

ABC-51 0 0 50 0 75

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Horizon Period | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Item: | Lot Size: | | | LT: | | | SS: | | |
| Gross Requirements |  |  |  |  |  |  |  |  |  |
| Scheduled Receipts |  |  |  |  |  |  |  |  |  |
| Projected On Hand |  |  |  |  |  |  |  |  |  |
| Net Requirements |  |  |  |  |  |  |  |  |  |
| Planned-Order Receipts |  |  |  |  |  |  |  |  |  |
| Planned-Order Releases |  |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Item: | Lot Size: | | | LT: | | | SS: | | |
| Gross Requirements |  |  |  |  |  |  |  |  |  |
| Scheduled Receipts |  |  |  |  |  |  |  |  |  |
| Projected On Hand |  |  |  |  |  |  |  |  |  |
| Net Requirements |  |  |  |  |  |  |  |  |  |
| Planned-Order Receipts |  |  |  |  |  |  |  |  |  |
| Planned-Order Releases |  |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Item: | Lot Size: | | | LT: | | | SS: | | |
| Gross Requirements |  |  |  |  |  |  |  |  |  |
| Scheduled Receipts |  |  |  |  |  |  |  |  |  |
| Projected On Hand |  |  |  |  |  |  |  |  |  |
| Net Requirements |  |  |  |  |  |  |  |  |  |
| Planned-Order Receipts |  |  |  |  |  |  |  |  |  |
| Planned-Order Releases |  |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Item: | Lot Size: | | | LT: | | | SS: | | |
| Gross Requirements |  |  |  |  |  |  |  |  |  |
| Scheduled Receipts |  |  |  |  |  |  |  |  |  |
| Projected On Hand |  |  |  |  |  |  |  |  |  |
| Net Requirements |  |  |  |  |  |  |  |  |  |
| Planned-Order Receipts |  |  |  |  |  |  |  |  |  |
| Planned-Order Releases |  |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Horizon Period | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Item: | Lot Size: | | | LT: | | | SS: | | |
| Gross Requirements |  |  |  |  |  |  |  |  |  |
| Scheduled Receipts |  |  |  |  |  |  |  |  |  |
| Projected On Hand |  |  |  |  |  |  |  |  |  |
| Net Requirements |  |  |  |  |  |  |  |  |  |
| Planned-Order Receipts |  |  |  |  |  |  |  |  |  |
| Planned-Order Releases |  |  |  |  |  |  |  |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Item: | Lot Size: | | | LT: | | | SS: | | |
| Gross Requirements |  |  |  |  |  |  |  |  |  |
| Scheduled Receipts |  |  |  |  |  |  |  |  |  |
| Projected On Hand |  |  |  |  |  |  |  |  |  |
| Net Requirements |  |  |  |  |  |  |  |  |  |
| Planned-Order Receipts |  |  |  |  |  |  |  |  |  |
| Planned-Order Releases |  |  |  |  |  |  |  |  |  |