

ORANGE PRODUCT CONTRACT

Product Description: Portable, light-weight device for moving and planting trees

Intended Customers:

Primary customers: landscapers and equipment rental companies

Additional customers: home gardeners and non-profit organizations that plant trees

Market: Landscaping equipment

Customer Need	Product Attribute(s)	Engineering Specs
Is easily maneuvered on a variety of surfaces	<ul style="list-style-type: none"> • Curb-friendly • Stable 	<ul style="list-style-type: none"> • Can go over 4" curb • Won't tip while traveling at 3mph
Can be easily lifted and stored in a truck bed	<ul style="list-style-type: none"> • Lightweight • Compact storage configuration 	<ul style="list-style-type: none"> • No component heavier than 50 lbs, total weight less than 150lbs • Fits in full bed of 61"x96"
Can lift a 300lb tree	<ul style="list-style-type: none"> • Strong • Stable • Time-efficient 	<ul style="list-style-type: none"> • Can lift 600lb without failure • Does not tip over with a 600lb load • Secures and lifts tree in less than 1 min
Can lower and position a tree into a hole	<ul style="list-style-type: none"> • Time-efficient vertical positioning 	<ul style="list-style-type: none"> • Lowers and positions tree in less than 5 min
Is safe to use	<ul style="list-style-type: none"> • Braking • Stable 	<ul style="list-style-type: none"> • Able to brake device with 600lb load at up to 15 degree incline while stationary • Able to brake device with 600lb load at up to 3mph • Device stable for 600lb tree while on incline of up to 15 degrees
Is durable	<ul style="list-style-type: none"> • Minimal maintenance 	<ul style="list-style-type: none"> • Device can lift and plant 300-lb trees 1000 times without failure
Is affordable	<ul style="list-style-type: none"> • Low-cost materials and processes 	<ul style="list-style-type: none"> • Selling price less than \$500

Need-Metric Matrix

Need		Metric													
1	Is easily maneuvered on a variety of surfaces														1
2	Can be easily lifted and stored in a truck bed														2
3	Can lift a 300lb tree														3
4	Can lower and position a tree into a hole														4
5	Is safe to use														5
6	Is durable														6
7	Is affordable														7
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