

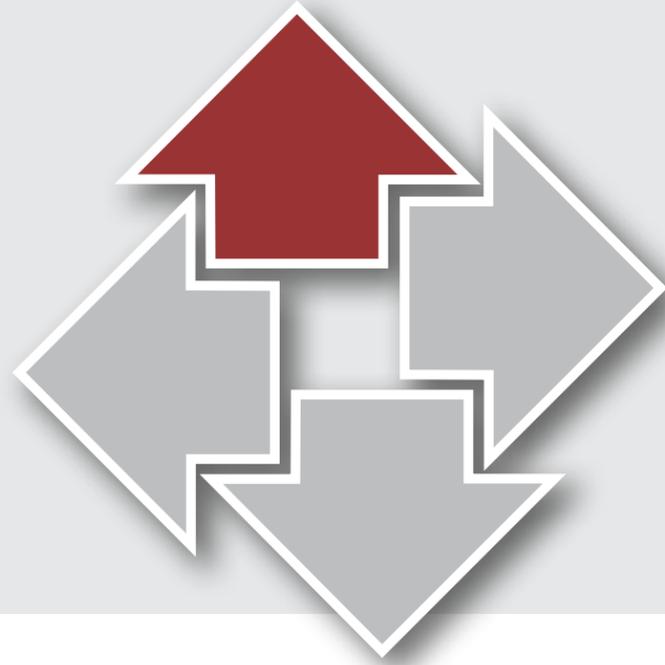
MATERIAL HANDLING AND FABRICATED PRODUCTS



If You Can Produce It, We Can Move It.



Custom engineered products for safe, reliable and efficient material handling.



Avon Engineering is recognized as a leader in heavy duty material handling solutions. Product offerings include custom engineered below-the-hook lifting equipment and floor based material handling equipment.

The combination of mechanical and metallurgical engineering strengths, leveraged with state-of-the-art manufacturing and heat-treating, enables our products to withstand the demand of heavy industry.

We invite you to consider us for your next project.

Avon Engineering: Writing the Standards In Material Movement.

Engineering

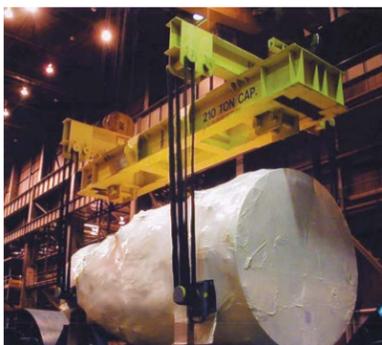
- Engineered and customized products by professional engineers.
- Engineering team involved from concept and design, through manufacturing, to evaluation and the eventual inspection and reconditioning of devices in service.
- This cycle of improvement, ensures each heavy duty, industrial product is optimized for peak performance.

Fabrication & Manufacturing

- Our customized products are designed and manufactured in ISO 9001 and 14001 registered facilities.
- Welders are CWB certified and perform in-house, non-destructive testing.
- Master electrician on staff who performs PLC programming and panel wiring. All electrical controls are in compliance with ESA & CSA standards as required.

Service and Capabilities

- 40 Ton crane capacity with 20 foot by 17 foot overhead doors.
- Utilizing technical resources such as SolidWorks 3D modeling and Finite Element Analysis.
- Design evaluations including reverse engineering and system upgrades in conformance with ASME Specifications B30.20 and BTH-1.
- Experts in safe, automated material movement.



Lifting Equipment

Elevating your peace of mind.

Avon's Custom Engineered Products with Superior Safety Records. All designs are in conformance with ASME Specifications B30.20 and BTH-1.

- C-Hooks
- Coil Grabs
- Ladle hooks
- Pallet Lifters
- Hook Blocks
- Sheet and Plate Lifters
- Spreader Beams
- Lifting Tongs



Coil Grabs:



Includes ID Coil Lifter, Low Head Room Coil Grab, Vertical Rim and Double Rim Coil Grabs with capacities up to 50 Ton. Custom features include:

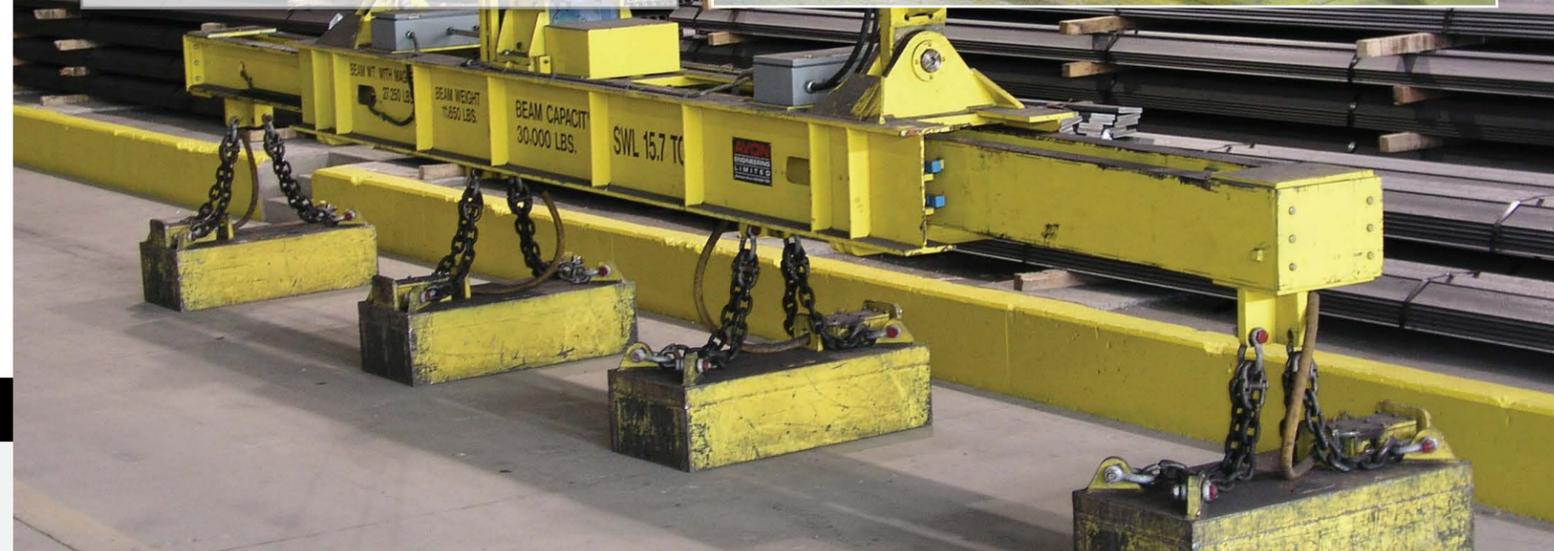
- Adjustable designs to support various rim sizes and travel heights
- Gripping force 3 times the total load weight
- Designs with automatic latch for safe and efficient engagement and disengagement
- Adjustable, Double rim coil grab to distribute clamping force over twice the area as a Single rim coil grab
- Adjustable lifting pads that can be lined with various materials to safely grip the loads
- Fully automated and motorized designs



Sheet and Plate Lifters:

Capacities up to 50 Ton that support loads from the end or side. Custom features include:

- To straighten multiple sheet stacks
- Lift palletized or non-palletized sheet stacks
- Telescoping or pin-on angle extensions
- Adjustable lifting pads that can be lined with various materials to securely grip the loads
- Fully automated and motorized designs



Spreader Beam & Hook Block Assemblies:

Complete solutions from a single source provider

- Range in size from stand beside to mill duty service
- Designs include multiple sheave configurations
- Special hooks and pin-type bail designs
- Built-in weigh scales including scoreboards and printers
- Variable frequency or DC drives with remote controls



Floor Based Equipment

Providing safe and efficient movement.

Mechanical & Hydraulic Upenders:

Uses:

- Transformers and Gas Compressors
- Steel Coils
- Paper Rolls and Dry Wall
- Molds and Dies
- Vehicle Tilt Test Tables

Capabilities & Features:

- Capacities up to 120 Tons (109,090 kg)
- Safely upend 200,000 lbs in 45 seconds
- Rotates and positions steel coils through 90 degrees
- Wired to operate on your available power supply
- Complete with electronic switches
- Heavy duty track wheels for rail uses



Transfer Cars:

Steerable, On-Rail, Towable, and Manual Designs

- Steel Coils
- Stamping Die Carts
- Injection/Blow Molding Carts

Capabilities & Features that Improve Productivity and Safety

- Towable and Fully Automated Designs
- Battery Or Propane Powered
- Adjustable V-Block Supports
- Anti-Collision Sensors and Auto Shut-Down



Coil Packaging Lines:

From coil car to packaging, we have you covered.

Solutions range from economical, manually operated designs to automated, PC controlled high volume configurations.

Typical Examples:

- Automatic Coil Stackers
- Automatic Spacer Placer
- Automatic Steel and Coil Banding Systems

Solutions Customized to:

- Increase material flow
- Reduce product damage
- Reduce maintenance, labor and downtime costs
- Increase revenue and profitability



Fabrication Expertise

Structurally sound for heavy industrial applications.

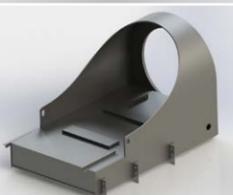


Custom Construction for Precision Performance

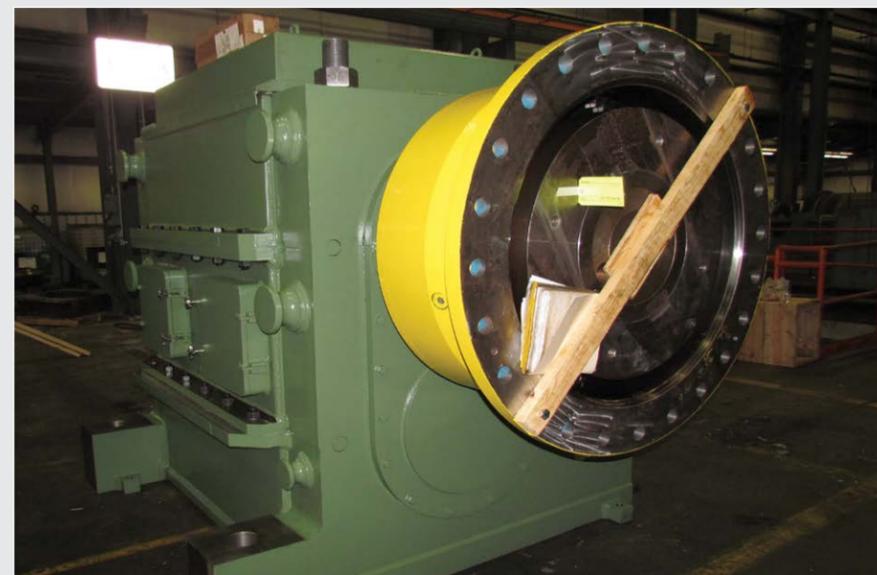
- Staffed with Professional Engineers to ensure safe and reliable designs
- Certified welders comply with Canadian Welding Bureau (CWB) W47.1 and W59 standards
- Fabrications range from thin wall chemical tanks to rigid steel mill drive gearboxes
- All welds are verified by a certified, level 2 NDT inspector
- Large assembly bay with 25 feet below the hook clearance and 20 foot by 17 foot shipping doors



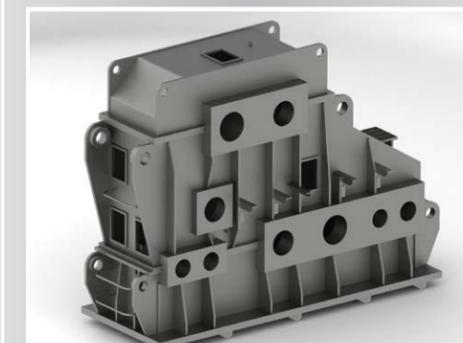
Designed for precision applications.



Fabricated for functionality and reliability.



Designed for rigidity and durability.



Fabricated for performance and long life.



Versatility is our specialty

- From end truck and wheel assemblies to chemical tanks – ***We can fabricate it all!***

Service, Repairs & Upgrades

Avon is dedicated to service and beyond.
Value that pays dividends.

Mechanical Systems Experts Manufacturer of Complimentary Parts

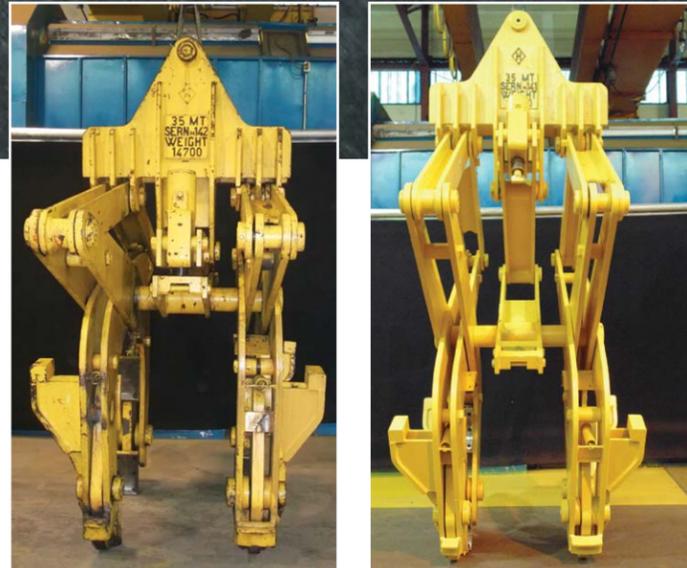
- Gearing and gearboxes
- Sheave nest assemblies
- Crane and track wheel assemblies

Leveraging the Latest Technology

- Finite Element Analysis (FEA)
- Portable 3-D Scanner
- Coordinate Measuring machines (CMM)

Comprehensive Results

- Each part is photographed, mechanical and non-destructive tested by onsite certified inspectors as required, and reverse engineered as necessary
- Customers are provided with a comprehensive, itemized inspection report with failure analysis and photos
- Certification of below-the-hook lifting devices can also be provided



Reconditioning of Double Roll Tong - Before and After

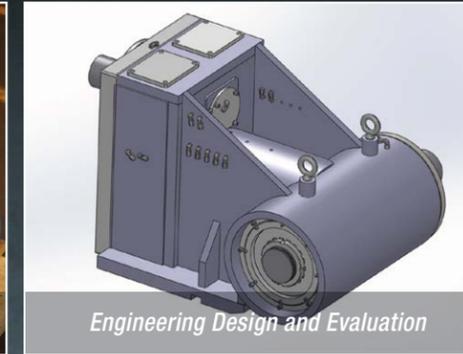
Material Handling Equipment - Repairs and Upgrades

- Rewire electrical designs to meet ESA and CSA requirements
- NDT inspection and repair of all indications
- Upgrade capacity or modify designs for custom lifts

Gearbox Assemblies - Repairs, Upgrades, and Run test



Incoming Inspection



Engineering Design and Evaluation



After Repairs and Upgrades
Prepared for Shipment



No-Load Run Test
Monitor Bearing Temperatures, Vibrations, and Gear Noise

Concept to Reality - Design and Manufacture of a Lifter

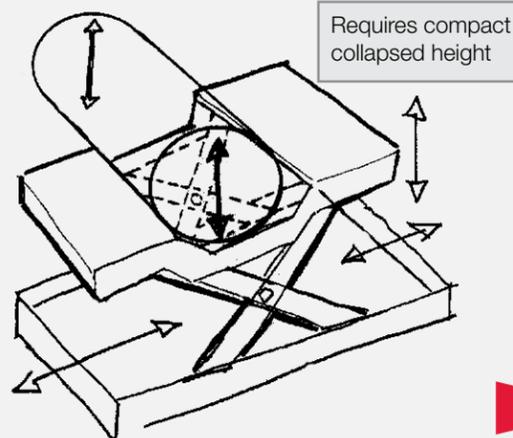
1

Initial Concept

Telehandler manufacturer required device to improve efficiency of production line across various model types

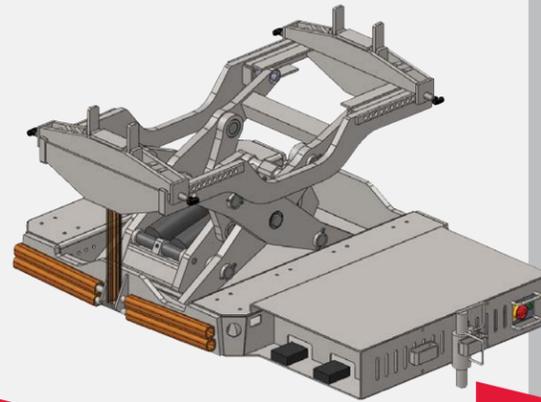
Device must lift 15,000 lbs, 16" high, in 35 seconds

Electric and hydraulic systems, with indoor and outdoor capabilities



2

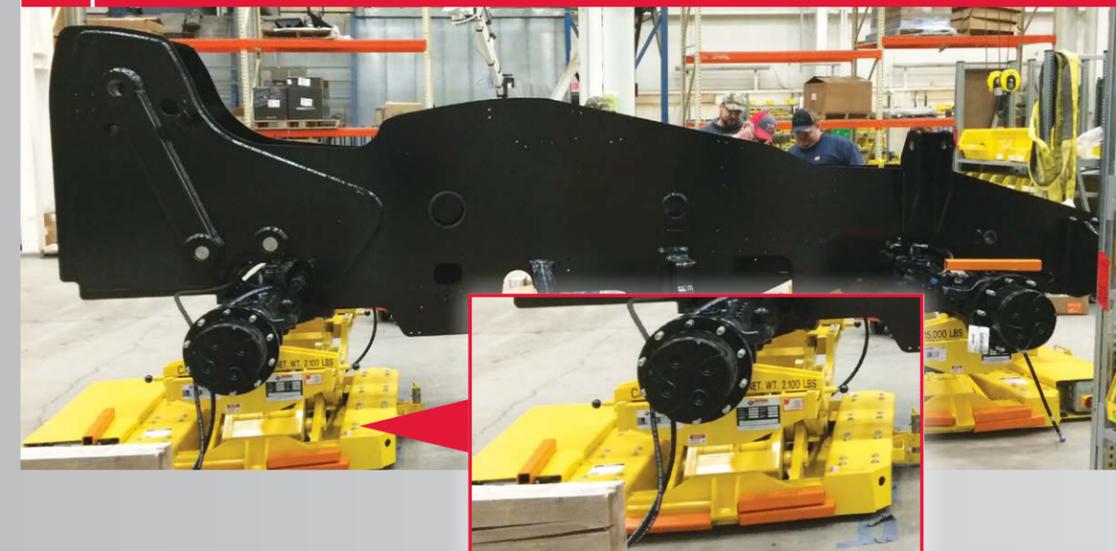
Design and Analysis



Engineering tools are utilized for the design, modeling and analysis.

3

Completed Solution



This engineered lift supported our customer's efforts to improve productivity, efficiency and work flow.

Many custom projects start with a simple idea that our engineers, in collaboration with our customers, develop from concept to completion.



Avon Engineering, a wholly owned subsidiary of Xtek, Inc. headquartered in Cincinnati, Ohio, USA.

Together we are driven to serve our customers' standard, rush, emergency and breakdown needs.

For more details, please contact your Xtek/Avon Engineering sales representative.

You may also call us at **905.689.7994** or email sales@avonengineering.com.



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All Xtek manufacturing facilities are ISO certified.
 ISO 9001:2008 and ISO 14001:2004

