

Cost

Saving

Design

Ideas

Designs in Ductile Iron

CASTING Suspension - Lower Control Arm
APPLICATION Connects chassis and steering knuckle on John Deere 8020 Series tractor

SPECIFICATION Austempered Ductile Iron

REDESIGN New part, originally conceived as a steel forging

COST SAVINGS Casting vs Forging resulted in material and time savings, Machining and weight reduction.

DESIGN Utilizing a casting allowed quick geometry changes during prototyping.

ADVANTAGES Three bores were cored resulting in machining savings.

SIZE & WEIGHT 25 X 30 X 9.4 in, 145 lbs

COMPANY John Deere

FOUNDRY John Deere Foundry, Waterloo, IA



CASTING Wire Rope Clamp
APPLICATION Belt Conveyor
SPECIFICATION ASTM A-536 (80-55-06)

REDESIGN From Steel Forging

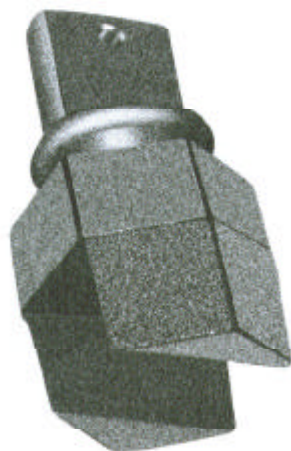
COST SAVINGS Part Cost Reduced 92%; \$42,000 Annual Savings

DESIGN Provided Close Tolerances; Higher Strength; Marketing Advantages

SIZE & WEIGHT Unknown

COMPANY Modern Handling Systems
Birmingham, AL

FOUNDRY Unknown



DUCTILE IRON GROUP