



Application

**Overhead conveyor system  
(heavy duty)**

Component

**Trolley Body Unit**

Material Grade

**ASTM 850/550/10 (Grade I)**

Weight

**13Kg (6.5Kg each)**

Previous Manufacture

**Steel fabrication.**

Russell Involvement

**Re-design for casting  
production. Machining and  
sub-assembly of components.**

Overall Benefits

**Lighter in weight. Lower unit  
cost. Improved aesthetically.  
Enhanced performance,  
resulting in lower downtime  
and longer service intervals.**



Application

**Hydrostatic Steering Axle -  
Lift Truck**

Component

**Motor Carrier**

Material Grade

**EN-GJS-1000-5 (Grade 2)**

Weight

**15.5Kg**

Previous Manufacture

**New development. Originally specified in standard Ductile Iron (grade 500/7), but FEA dictated much higher strength requirement.**

Russell Involvement

**Assistance with design for casting production within constraints of a finite design envelope.**

Overall Benefits

**Speed to market (limited time to product launch). Achievement of strength requirements within restricted design envelope. Small increase in cost of component, as an alternative to a major re-design.**



Application

**Materials Handling Equipment**

Component

**Tipping Link**

Material Grade

**EN-GJS-1000-5 (Grade 2)**

Weight

**14Kg**

Previous Manufacture

**Standard Ductile Iron,  
grade 500/7.**

Russell Involvement

**Assistance with design for  
casting production within  
constraints of a finite  
design envelope.**

Overall Benefits

**Greatly enhanced properties  
with no increase in weight.  
Able to utilise existing pattern  
equipment. Machine up-rating  
possible without re-designing  
adjacent parts.**