

## Foundry Offerings



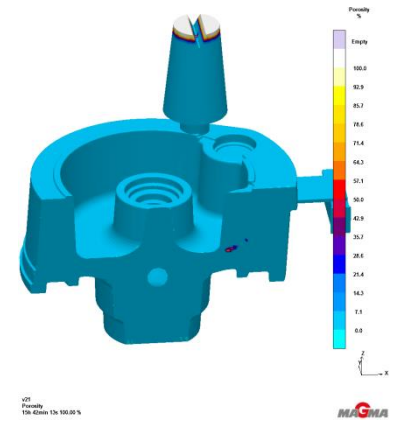
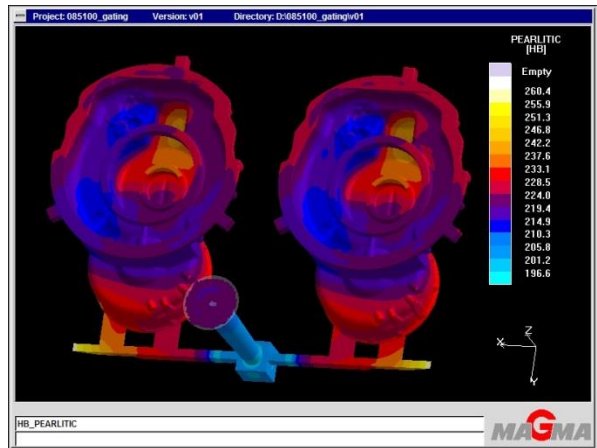
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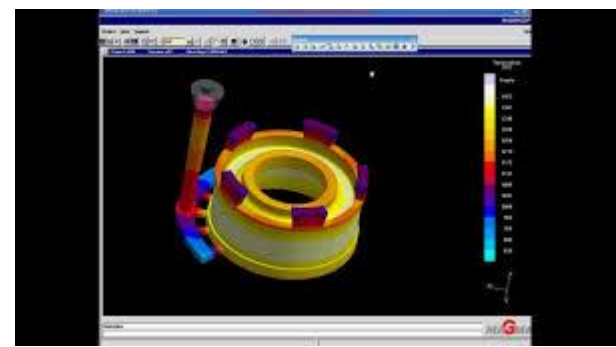
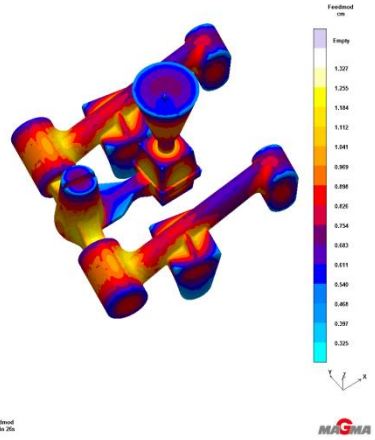
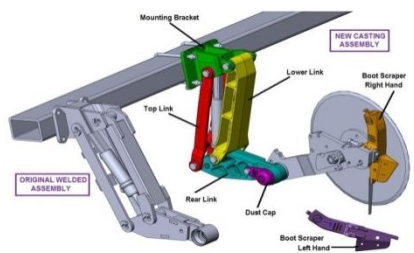




## AFS 2012 Casting of the Year



## AFS 2013 Best in Class



MagmaSoft Solidification Simulation software



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### B&P 16x20 Green Sand Molding Line

- Part Weight Limits: 2 - 50 lbs (1-23 kg)
- Max. Part Size: 12"x16"x9"H (304x406x28mm)
- Target Annual Volumes: 1,000-20,000 pcs/year

### B&P 26x20 Green Sand Molding Line

- Part Weight Limits: 6 – 80 lbs (3-36 kg)
- Max. Part Size: 16"x22"x15"H (381x558x406mm)
- Target Annual Volumes: 500-4,000 pcs/year

### B&P 32x30 Greensand Molding Line

- Part Weight Limits: 50 - 250 lbs (23-113kg)
- Max. Part Size: 24"x26"x17"H (609x660x431mm)
- Target Annual Volumes: 500-2,500 pcs per year

### No-Bake, Cope & Drag Molding Line

- Part Weight Limits: 750 lbs max (340 kg max)
- Min. Net Good Mold Weight: 250# (113 kg)
- Max. Part Size: 40"x60"x30"H (1016x1524x762mm)
- Target Annual Volumes: 100-2,000 molds per year

### Other Offerings:

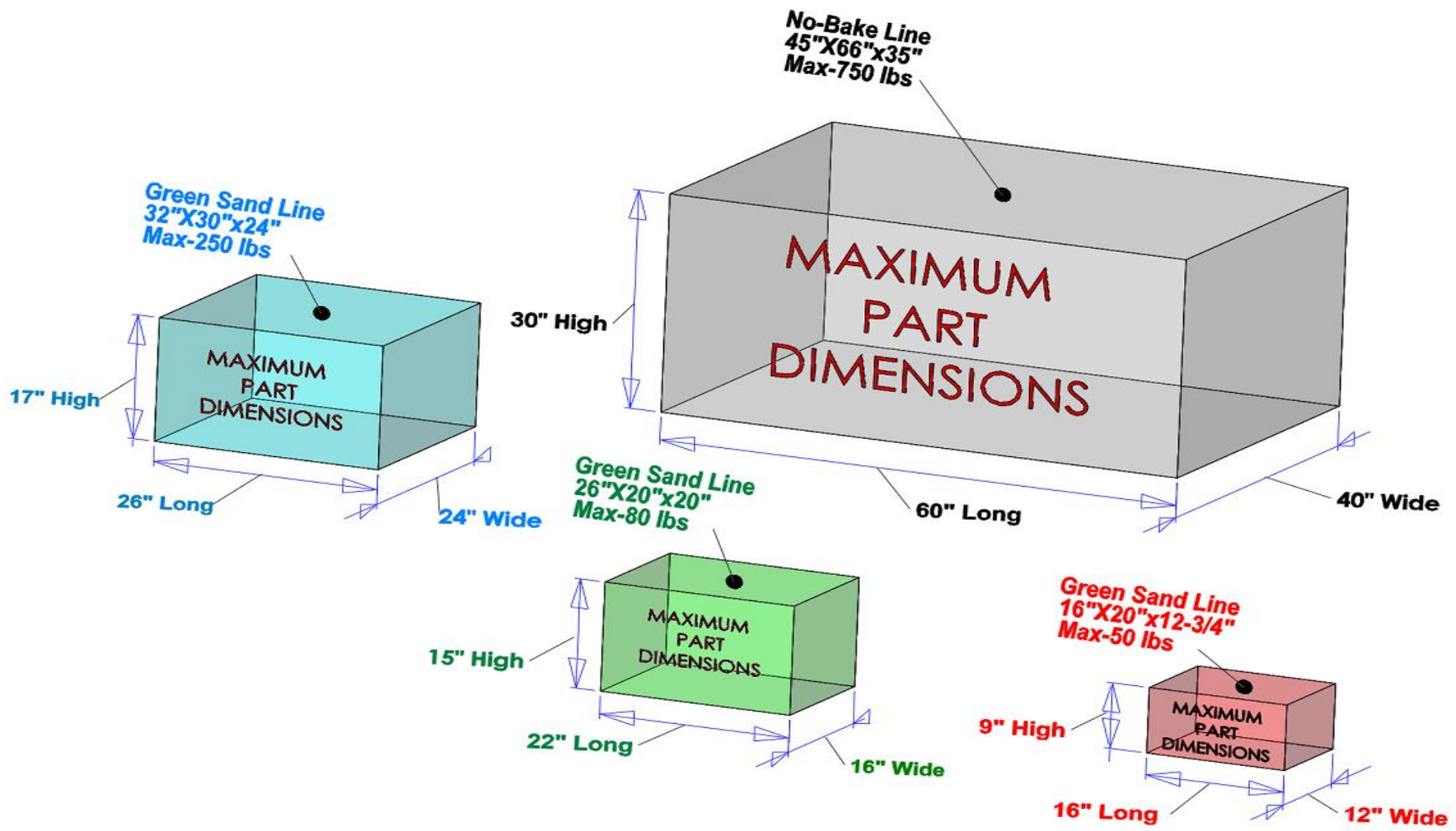
- In-house and outsourced machining
- In-house and outsourced painting
- In-house pattern shop
- In-house tool & die shop
- Weld-to-Cast conversion services
- Sub-assemblies



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Grade	Tensile Strength (psi)	Yield Strength (psi)	Elongation (%)
<b>Grey Iron Grades</b>			
G2000	20,000	n/a	n/a
G2500	25,000	n/a	n/a
G3000	30,000	n/a	n/a
G3500	35,000	n/a	n/a
G4000	40,000	n/a	n/a
<b>Ductile Iron Grades</b>			
D65-45-12	65,000	45,000	12%
D80-55-06	80,000	55,000	6%
D100-70-03	100,000	70,000	3%
<b>ADI Grades</b>			
750-500-11	110,000 (750 Mpa)	70,000 (500 Mpa)	11%
900-650-09	130,000 (900 Mpa)	90,000 (650 Mpa)	9%
1050-750-07	150,000 (1050 Mpa)	110,000 (750 Mpa)	7%
1200-850-04	175,000 (1200 Mpa)	125,000 (850 Mpa)	4%
1400-1100-02	200,000 (1400 Mpa)	155,000 (1100 Mpa)	2%
1600-1300-01	230,000 (1600 Mpa)	185,000 (1300 Mpa)	1%



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### Steel Investment Castings

- Part Weight Limits: ½ # minimum, 40 # maximum (0.25 kg – 18 kg)
- Minimum Annual Volumes: 800 pcs or 4,500 pounds per year (2,041 kgs)
- Material Grades:
  - A148 90-60 steel
  - 8620 Q&T steel
  - A216 WCB steel
- Machining and painting available

### Offshore Iron Castings

- Part Weight Limits: 1 # minimum, 500 # maximum (½ kg – 226 kg)
- Minimum Annual Volumes: 15,000 pounds per year
- Material Grades:
  - Grey Iron: G2500, G3000, G3500, G4000
  - Ductile Iron: D65-45-12, D80-55-06, D100-70-03
- Machining and painting available



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