



EQUIPMENT LIST

Watertown, South Dakota

DIE CASTING EQUIPMENT

All die cast cells are fully automated with ABB Robots, as well as auto-ladles and reciprocators.

9	Aluminum Die Casting Machines	Commission Date(s)
	(5) 600 Ton HPM die casting machines	1996; 1997; 2013; 2014R;
	(1) 750 Ton Buhler Ecoline die casting machine	2012
	(3) 1050 Ton Buhler die casting machine	2002, 2004, 2009

Trimming Equipment

(11) Presses ranging from 4 Tons to 75 Tons

Furnace

Striko Westofen Stack furnace

Schaeffer Furnace (alloys: 380 and 383)

Schaeffer Furnace (Special alloy)

CNC EQUIPMENT

6	Vertical Machining Centers	Commission Date(s)
	(2) Brothers TC324 / TC229	2000; 1997
	(2) Mori Seiki Mill Tap 700	2014
	(1) Brothers TC-32B	2005
	(1) Haas VF-3	2015

7	Turning Centers	Commission Date(s)
	(7) Robotic Twin Spindle – Okuma	2005 (x7)

CNC Support Equipment

(2) Fanuc Robots

(2) Adept Robots

Secondary Operation Equipment

(13) Various drilling and tapping machines

(5) Dedicated Specialty built machines

INSPECTION EQUIPMENT

- IMS Merlin CMM with Vertical DMIS
- Zeiss Prismo/Vast HT
- Profilometer
- Kodak Optical Comparator
- In-process inspection: Leak testing and Vision systems