WRK™

WRK™ Slurry Pump
The Perfect Upgrade to the OEM Wet-End

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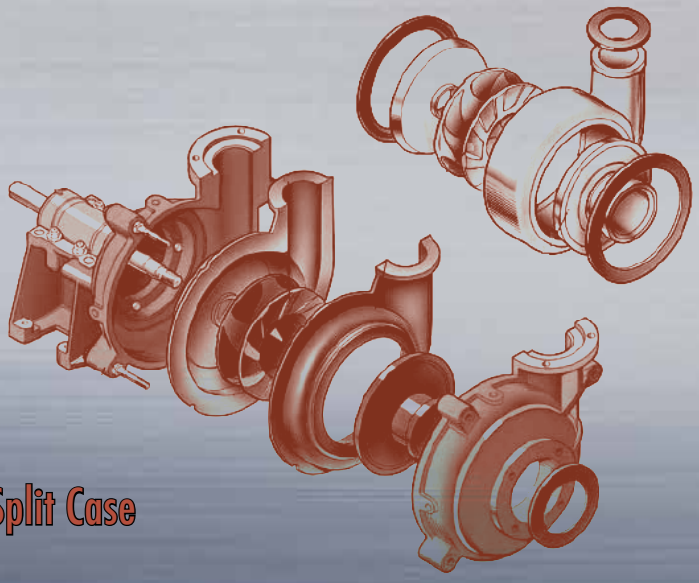
Engineering & Manufacturing Co., Inc.

The WRK™

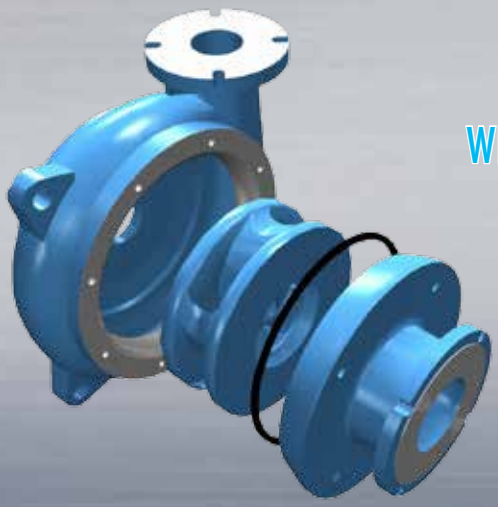
The patented WRK™ or Wet-end Retro-fit Kit, was developed by Townley a decade ago as an effective upgrade from the cumbersome, split case "AH" Style OEM slurry pumps.

Designed with many maintenance friendly and wear resistance features, the WRK™ has been one of the best slurry pump upgrades in years and the new benchmark.

- Simple three part wet-end assembly
- Easy installation
- Exact mechanical fit-up on existing frame and piping centerlines
- Hydraulic characteristics matching OEM performance curves
- Minimum recirculation due to patented internal design
- Excellent output efficiency with longer peak performance times
- One piece shell/volute allows for more robust wall construction 2-3 times thicker than OEM volute liner
- Impeller cast with thicker walls and longer vane overlap
- Impeller can be replaced by removing Suction Liner only
- Customers report significantly longer wear life for shell / volute and impellers
- Broad selection of corrosion and abrasion resistant alloys to match new EPA induced process conditions found in mature power plants and mining



Split Case



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Split cased pumps were a versatile design in the day, having 10 to 12 components, relatively thin volute liners and volute alignment tabs that don't always match. Historically wear life ratios for these style pumps would be 1:2:2 volute / impeller / throat-bush respectively. Just to replace the impeller, requires disassembly of the pump shell.

Applications

Environmental Systems in Coal Fired Power Plants

- Absorber recycle pumps (AR)
- AR feed pumps
- AR bleed pumps
- Limestone cyclone feed pumps
- Gypsum process pumps

Mining

- Cyclone feed pumps
- Process pumps
- Classification transfer pumps
- Coarse tailings pumps
- Fine tailings discharge pumps

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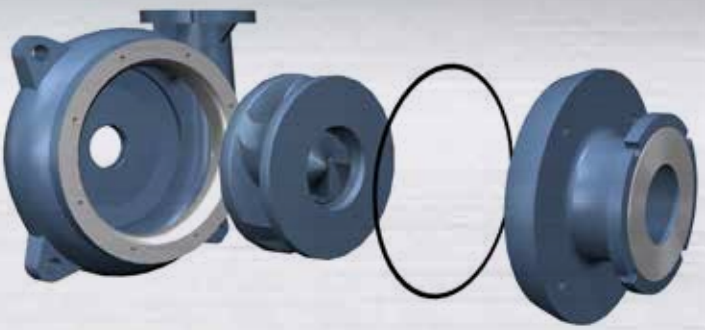
Unique Three Part Wet-End

With this patented design, the shroud face & tip does not see feed recirculation, so the wear is noticeably reduced. In addition, the impeller eye and suction port wear is markedly improved due to the smooth porting. This overall uniform wear improvement, results in less downtime and better peak efficiency, satisfying the output expectations for the pump service. Couple the design with the right selection of alloys and customers will see outstanding service times.

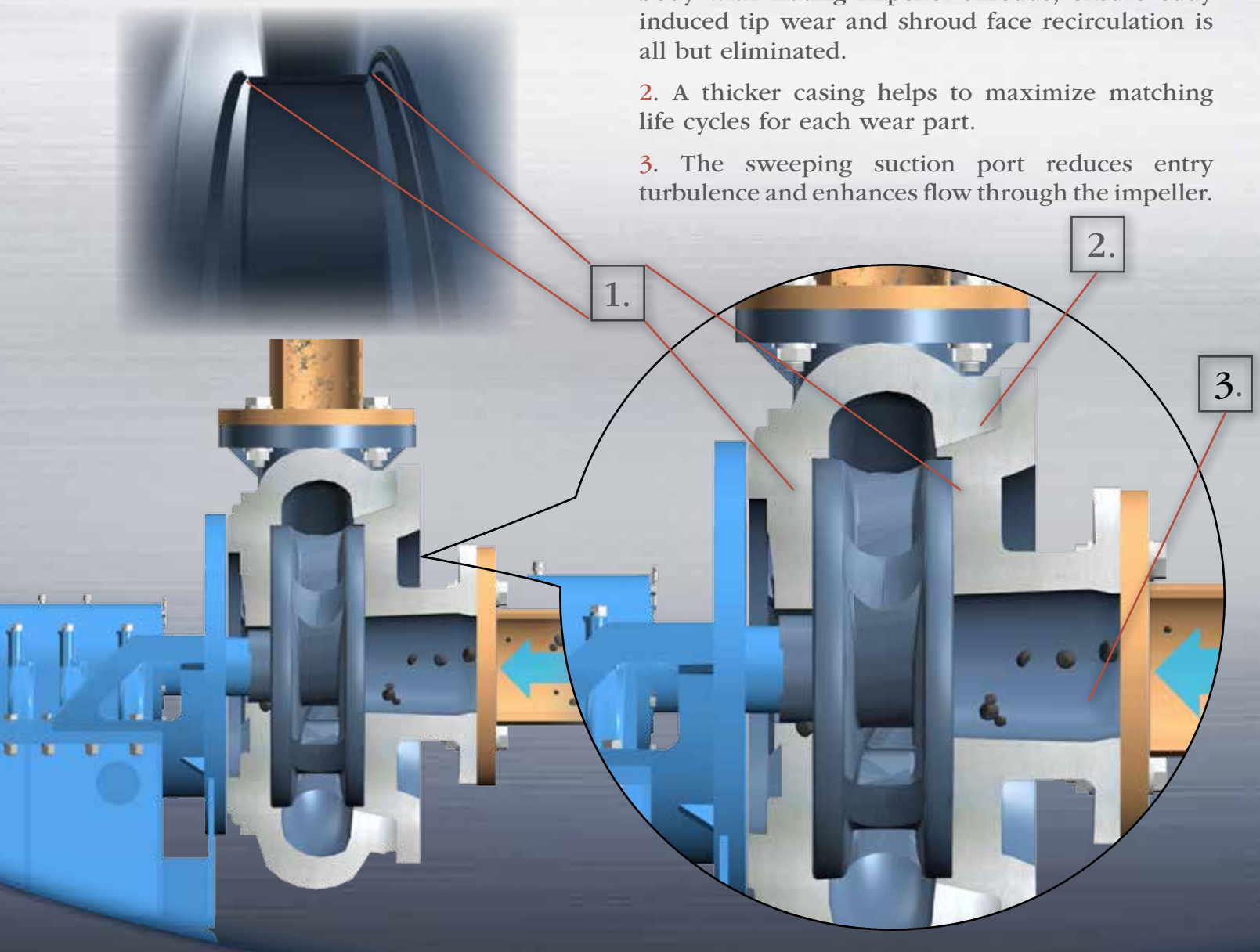


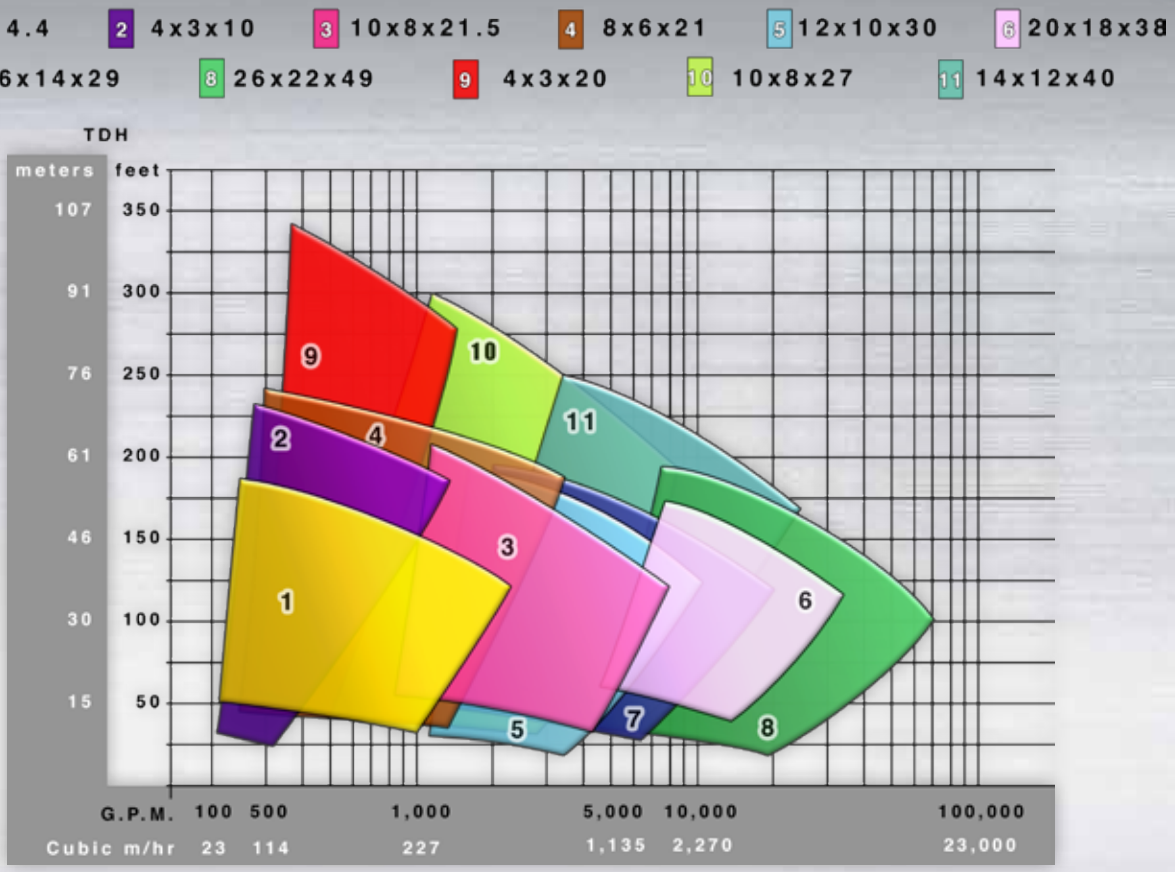
The three part WRK™ wet-end assembly greatly reduces installation time:

1. The patented parallel pockets cast into the volute body with mating impeller shrouds, ensure eddy induced tip wear and shroud face recirculation is all but eliminated.

2. A thicker casing helps to maximize matching life cycles for each wear part.

3. The sweeping suction port reduces entry turbulence and enhances flow through the impeller.





* A large variety of optional impellers are available

Features

WRK™ wet-ends are available to fit most OEM styles like: DAH, EAH, HP, FHH, STAH, SL, GSL

Flows

500 GPM to 13,000 GPM

114 m3/hr. to 3,000 m3/hr.

TDH

100 feet to 300 feet

30 meters to 90 meters

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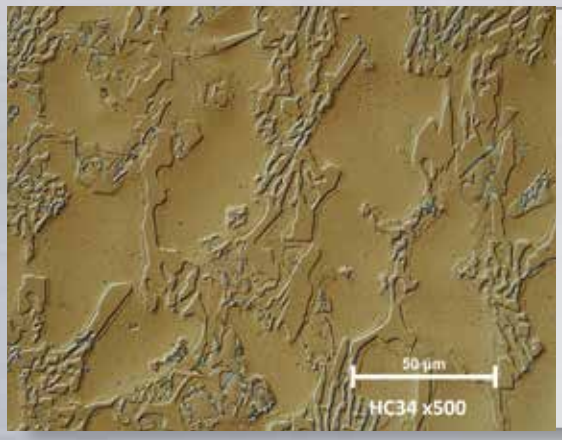
Wear Materials

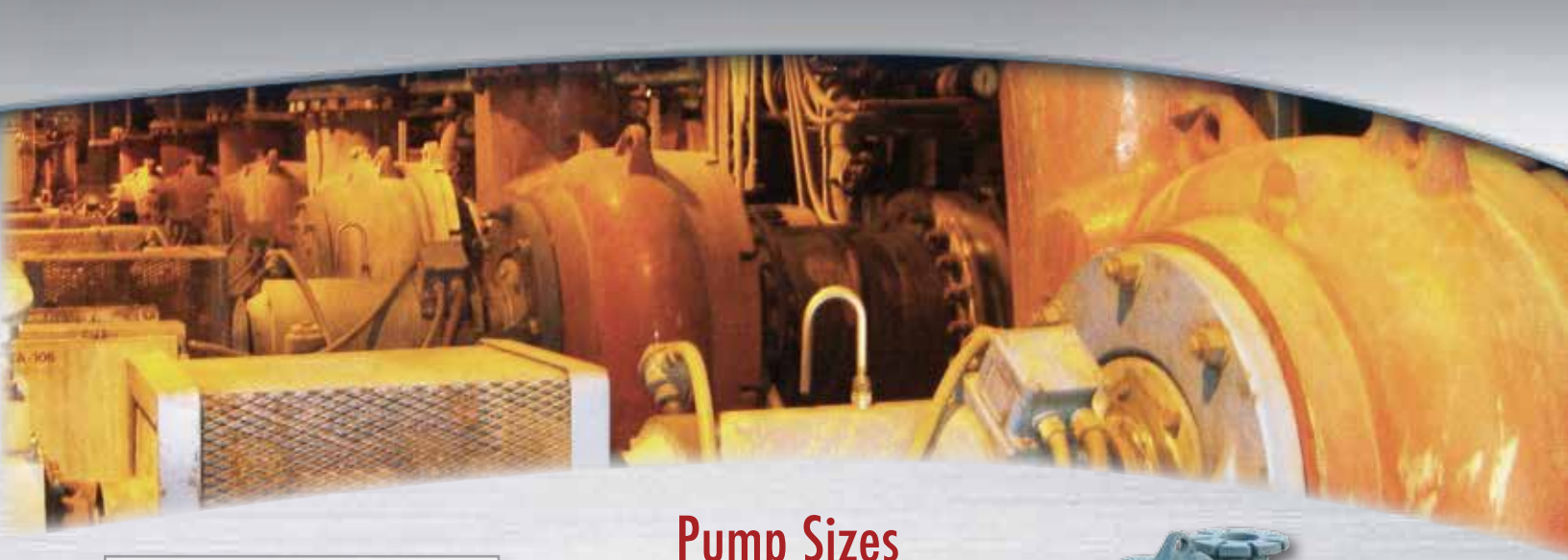
WRK™'s are very well suited for abrasive slurry or fine feed applications. Additionally, we find that many coal fired power plants and some mine process circuits with tight water conservation requirements, find themselves fighting high chloride and fluoride levels along with low pH excursions in the media being pumped.

Many customers experience high pump failure rates due to corrosion and erosion coupled with the abrasion. This common situation can raise havoc with the OEM centrifugal pumps that originated at the time of construction, as the feed conditions may have changed over time. Townley has many options for these severe problems in industry, both with metallurgy and creative design.



Townley Standard Metallurgy:

HC 28	High-Chrome Alloy	General Abrasion
CM 22	Chrome-Molybdenum	Very Abrasive Media
Ni-Hard	Nickel-Chrome Alloy	Moderate Slurry
CD4-MCu	Duplex Stainless	High Chloride / Fluoride
HC 34	High Chrome	pH Excursions



Pump Sizes

Sizes Include:

- 4 X 3 X 10 DAH*
- 4 X 3 X 20 DAH*
- 6 X 4 X 16 DAH, EAH*
- 6 X 4 X 29 FHH*
- 8 X 6 X 21 EAH, STAH*
- 10 X 8 X 22 200M*
- 10 X 8 X 27 FAH, STAH*
- 12 X 10 X 32 FAH, STAH*
- 14 X 16 X 29 FAH, STAH*
- 20 X 18 X 38 350 SL*
- 26 X 22 X 48 450 SL*
- 26 X 22 X 49 550 SL*
- GSL* 700
- GSL* 800
- GSL* 1000

} NEW! See separate info sheets

* DAH, EAH, FHH, STAH, M, SL, GSL may be trademarks of Weir Minerals

* Townley Engineering and Manufacturing , does not represent nor is it in any way affiliated with Weir

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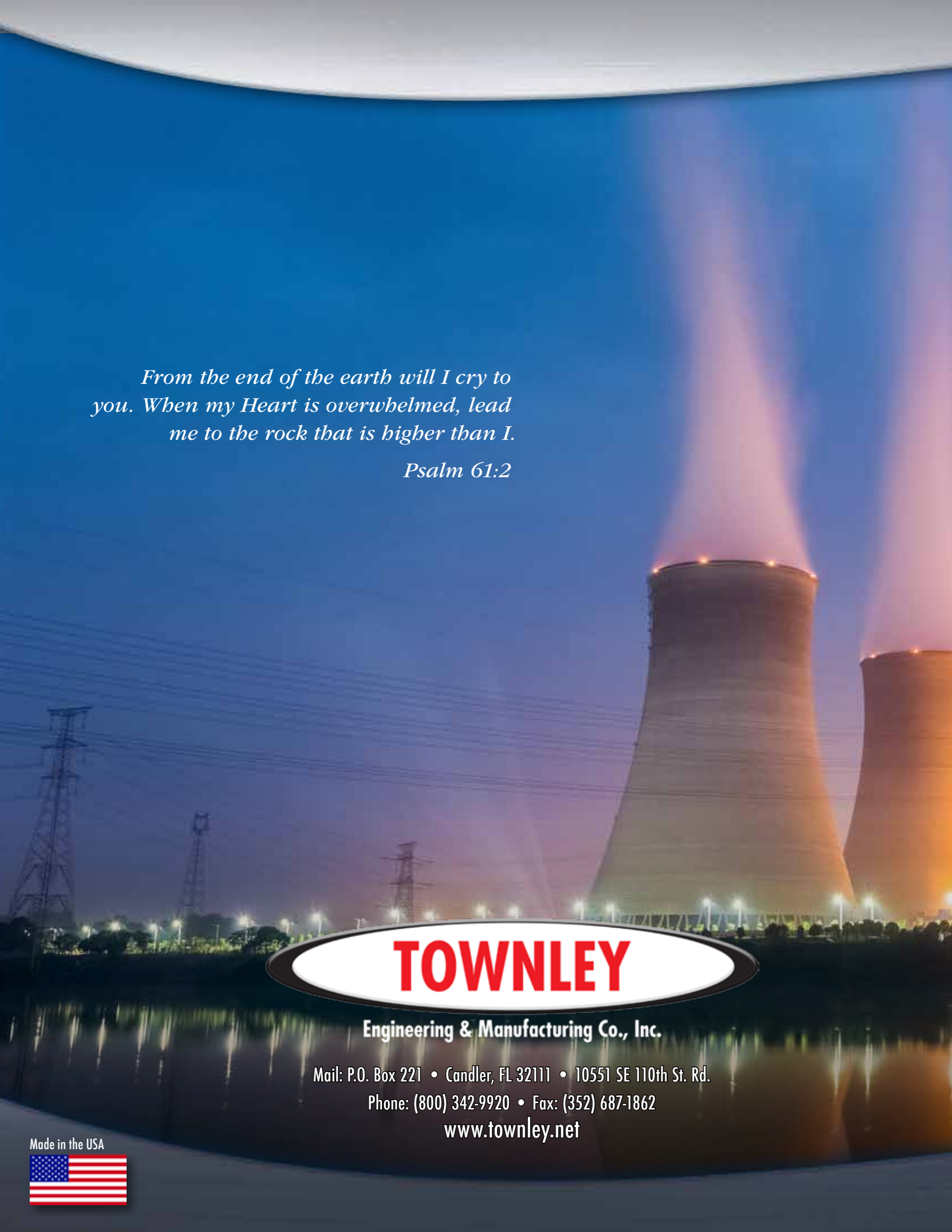
From the end of the earth will I cry to you. When my Heart is overwhelmed, lead me to the rock that is higher than I.
Psalm 61:2
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