

TOWNLEY

Engineering & Manufacturing Co., Inc.

PUMPS

ALLOY PUMP PARTS

**Cast ~ White Iron Alloys & Stainless Steel
wet-end pump parts to fit legacy and
contemporary pumps**

*Unique durable metals providing wear solutions for transport and
mineral beneficiation of solids with high abrasion, corrosion or
erosion characteristics*



**Shells, Volute liners, Impellers, suction doors, throat bush,
gland liners, expellers**

Disclaimer: The information presented herein is a general guide to our products. We make no warranties, expressed or implied, with respect to the accuracy or usefulness of the information contained. Townley reserves the right to change technical specifications from time to time without notice. Use of any or all information in this document is done so at the sole discretion of the user. FIP 5/11



Townley has been upgrading OEM legacy pump parts for almost thirty years. Usually a customer is experiencing unusual wear patterns unresolved by the

OEM or has delivery issues. We have a unique array of metal technology that can be applied to these problems as well as a quick turn-around North American Foundry and high quality CNC machine shop capability.



Townley's foundry is a vertically integrated facility, with design, pattern prep, molding, casting, heat treating, machining and assembly. We can



assure the customer of precise fit when the parts are installed in existing OEM



frames and will operate mechanically and hydraulically as designed by the OEM.



Typically, Townley will examine the wet-end parts in question looking for tell-tale wear patterns and a metal analysis, couple this work with an application



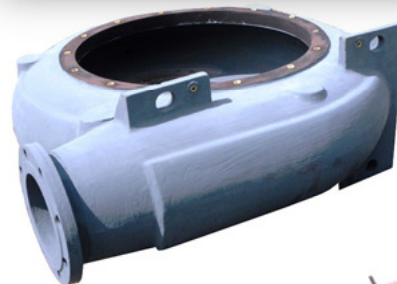
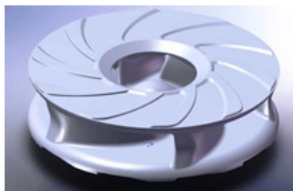
and system review, we can make recommendations to the end-user about upgrades in metallurgy or design modifications to ensure the customer will enjoy a longer service life for each wet-end component.



If the questionable part is not in our pattern inventory, then we start by digitizing an original OEM part, to ensure exact fit and finish. Using our portable ROMER Coordinate measuring machine



(PCMM) or a laser scanning device, we can create a 3D model of the part in order to build patterns.



Partial list of wet-ends available for the contemporary and legacy OEM styles

Warman AH style

(Throat bush/volute liner / Impeller / expeller / expeller ring / frame plate liner for many sizes)

- 3 X 2 X 9
- 4 X 3 X 10 (20)
- 6 x 4 X 16 (29)
- 8 X 6 X 20
- 10 x 8 x 22 (29)
- 10 x 10 x 32
- 12 x 10 x 32
- 12 X 12 X 40
- 14 X 12 X 40
- 16 X 14 X 30 (44)
- 18 X 16
- 20 X 18 X 38 (56)
- 26 X 22 X 48

Thomas Style

(Suction door / suction liner / gland liner / gland door and impeller for many sizes)

- 6 X 4 X 26
- 8 X 6 X 24
- 10 X 8 X 25
- 10 X 8 X 30
- 10 X 8 X 32
- 10 X 10 X 30
- 12 X 10 X 30
- 12 X 10 X 32 (36,40)
- 12 X 12 X 36
- 14 X 12 X 36 (40)
- 16 X 14 X 40
- 18 X 16 X 40 (46)
- 20 X 16 X 36
- 20 X 18 X 41 (46)

Goulds 5500 Style

(Suction cover / suction liner, shell and impeller for many sizes)

- 6 X 4 X 29
- 8 X 6 X 26
- 10 X 8 X 21
- 14 X 12 X 38

GIW LCC, LHD,HDD & LSA Style

(Suction plate / suction liner, shell and impeller for many sizes)

- 4 X 3 X 12 (21)
- 4 X 4 X 21
- 6 X 4 X 16 (25)
- 8 X 6 X 20 (25)
- 8 X 8 X 25
- 10 X 8 X 24 (25,32)
- 10 X 10 X 25 (32)
- 12 X 10 X 26
- 12 X 10 X 32 (36)
- 12 X 12 X 32 (36)
- 14 X 12 X 36
- 16 X 12 X 36
- 16 X 14 X 28
- 16 X 16 X 39 (44)
- 18 X 16 X 40 (44)
- 18 X 18 X 44 (46)
- 20 X 18 X 44
- 20 X 20 X 42
- 22 X 20 X 54
- 24 X 22 X 44
- 24 X 24 X 62
- 26 X 26 X 44

ASH CD6/DG9 Style

(Suction door & liner, volute liner / impeller / inserts / gland liner and door / stuffing box for many sizes)

- 2 X 2 X 7
- 3 X 3 X 10
- 6 X 6 X 14 (17)
- 8 X 6 X 14 (17)
- 8 X 8 X 17 (22)
- 10 X 8
- 10 X 10 X 18 (21)
- 12 X 10
- 14 X 12 X 26 (31)
- 14 X 12 X 31
- 16 X 14 X 32
- 16 X 16 X 39 (41)
- 18 X 16 X 36
- 20 X 20 X 41
- 22 X 20 X 41

Denver SRL/DBCH Style

(Suction door / suction liner / shell / volute / gland liner and impeller for many sizes)

- 2 X 2.5 X 10
- 4 X 5 X 14
- 4 X 6 X 15.5
- 5 X 5
- 6 X 6
- 10 X 8
- 12 X 10 X 25
- 14 X 12
- 16 X 14
- 18 X 16
- 20 X 18
- 32 X 30 X (40) 44

Allis Chalmers Style

(Suction plate / liner / gland liner and impeller for many sizes)

- 5 X 4 X 14
- 6 X 6 X 21
- 8 X 6
- 10 X 8 X 21
- 10 X 10 X 19 (28)
- 12 X 10 X 25
- 14 X 12 X 36
- 16 X 14 X 34
- 20 X 18 X 40

Inquire about additional OEM styles

- Hazelton
- HDMD
- Galigher
- Morris
- Wemco
- Worthington
- Ellicott

Helpful information when inquiring about pump parts

In order to ensure wet-end parts fit exactly into your existing pump installation and to understand the application effects on the pump wear and be able to make recommendation about upgrades available, both in material and design, it would be helpful to gather the following information if available.

OEM information:

- Detailed OEM part numbers
- Original OEM drawing
- General arrangement drawing
- Pump curve
- Alloy(s)
- Impeller thread size
- Rotation
- RPM

Process information:

- Process service (tailings, matrix, mill)
- Description of slurry
 - Specific gravity
 - pH
 - particle size (D50)
 - Max size to pass
 - Solids %
 - Temperature
 - Operating pressure

Pump information:

- Hydraulic requirements
 - NPSH available
 - Total Head
 - Flow

Expectations:

- Current and expected lifetimes

Metallurgy from Townley

| | |
|---|-------------------------------|
| HC28 – High chrome alloy | <i>General abrasion</i> |
| HC 34 – High chrome alloy | <i>pH excursions</i> |
| CM 22 – Chrome-molybdenum | <i>Very abrasive slurry</i> |
| CD4MCu – Duplex stainless | <i>High chloride/fluoride</i> |
| NiHard4 – Nickel chrome alloy | <i>Moderate slurry</i> |
| <i>Other select metals available to match the application</i> | |



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