

 **GOULDS PUMPS**

Goulds CW/CWX

Pumps for Abrasive Slurries



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ENGINEERED FOR LIFE

Goulds CW/CWX

Single-Stage, Enclosed-Impeller, Back Pull-Out Process Pumps for Abrasive Slurries

The Model CW/CWX horizontal pumps are designed to efficiently pump liquids with abrasive solids in suspension. With wear parts made of HC600 chrome iron, the CW/CWX pumps give long life and superior performance in all types of slurry applications. The Model CWX with Shearpeller has air- and solids-handling capabilities significantly superior to conventional designs.

Design Features

Standardized Design — Only three power ends for maximum interchangeability of parts and reduced spare parts inventory.

Back Pull-Out Design — Single craft maintenance.

Shearpeller Option (Model CWX) — Enables pumping of stringy solids and entrained air.

Rugged Casing — Casings are made of abrasion-resistant HC600 with extra-thick metal sections for maximum operating life.

Enclosed Impeller — For long life and trouble-free service.

Renewable Front and Rear Wear Plates — To protect casing and provide easy removal and replacement.

Long-Wearing Shaft Sleeve — XH-800 hook-type shaft sleeve protects the carbon steel shaft for the full-length of the stuff box and extends through the packing gland.

Heavy-Duty Shaft — Shaft is heavy-duty SAE 1045 steel, designed with minimum overhang to reduce deflection.

Bearing Protection — Taconite with grease barrier for maximum protection.

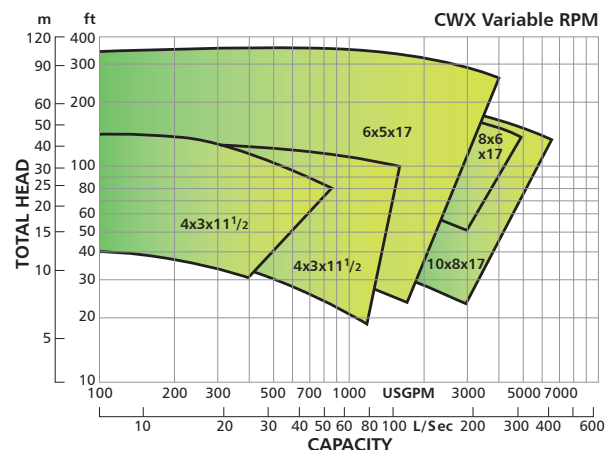
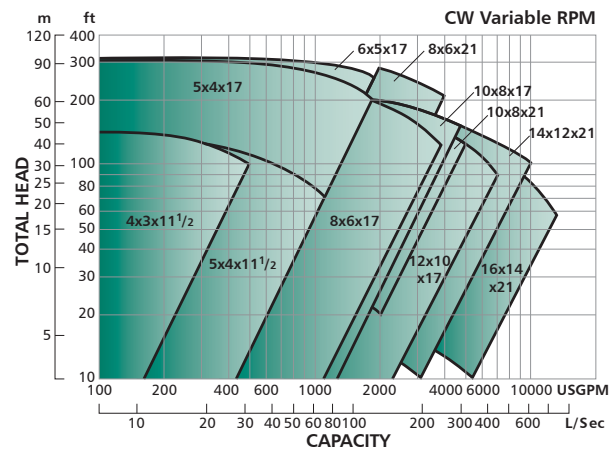
Dynamic Seal Option — Eliminates packing and associated maintenance.



Services

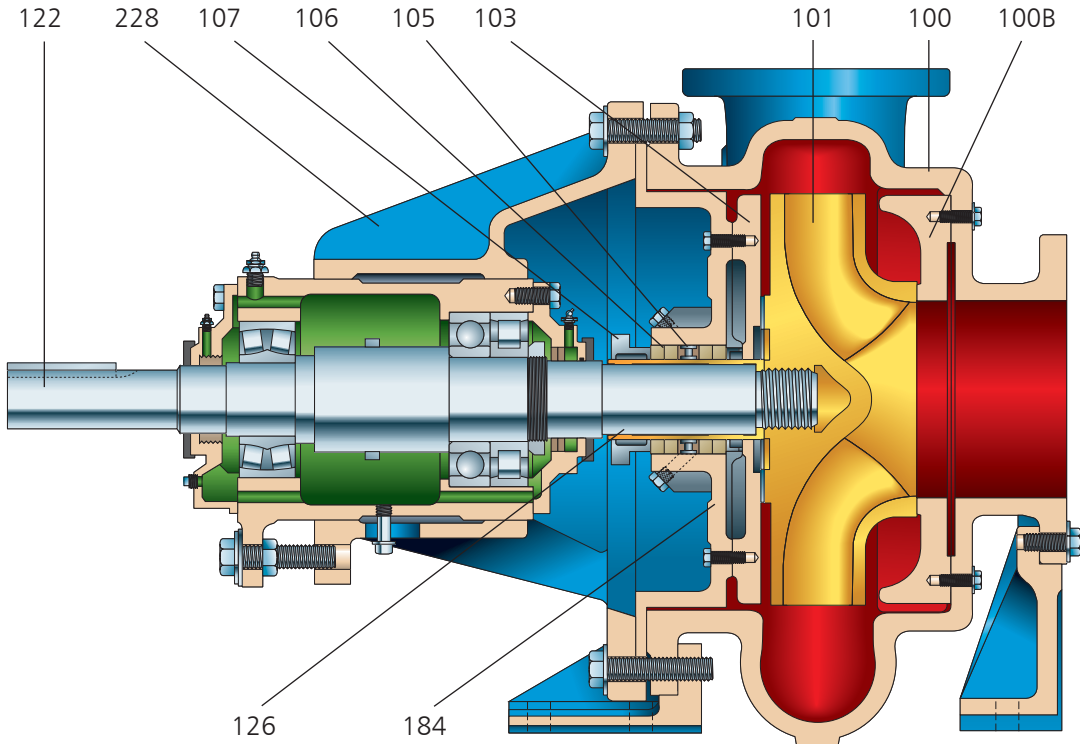
- Coal Preparation
- Kaolin
- Sugar Mills
- Steel Mills
- Cement Plants
- Aggregates
- Power Generation
- Coal Slurry
- Clay Slip
- Raw Juice
- Scale Pit
- Cyclone Feed
- Sand and Gravel
- Ash Handling Systems

Hydraulic Coverage



Goulds CW/CWX

Sectional View



Parts List & Materials of Construction

| Part Number | Part Name | Material |
|-------------|--------------------|--------------------|
| 100 | Casing | HC600 |
| 100B | Suction Liner | HC600 |
| 101 | Impeller | HC600 |
| 103 | Rear Liner | HC600 |
| 105 | Lantern Ring | Teflon® |
| 106 | Packing | Graphite Synthetic |
| 107 | Gland | Cast Iron |
| 122 | Shaft | 1045 Steel |
| 126 | Shaft Sleeve | XH800 |
| 184 | Stuffing Box Cover | Cast Iron |
| 228 | Frame | Cast Iron |

| Description | Specification |
|-------------|---|
| HC600 | ASTM A532, Class III Type A Hardened |
| Cast Iron | ASTM A48 |
| XH800 | Hard-Coated, Stainless Steel |
| 1045 Steel | ASTM A576-90b |

TEFLON® is a registered trademark for fluoropolymer resins, films and fibers made by DuPont.

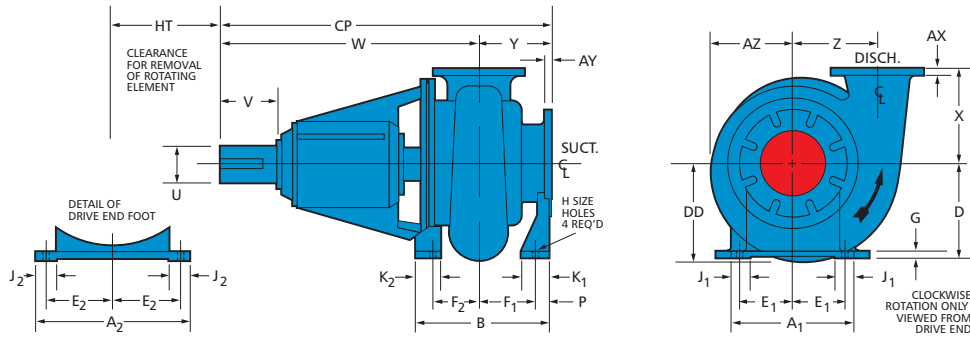
CWX Non-Clogging Pumps

CWX Pumps embody an innovative, yet time — proven concept in pump design. The unique, patented Shearpeller successfully handles large, stringy or fibrous solids in suspension, entrained air in water, viscous materials plus many other hard-to-pump slurries.

The Shearpeller's radial vanes narrow as they approach the eye to allow large or stringy solids to enter. This way, almost anything that enters the impeller can be pumped. The vanes widen toward the OD of the impeller to provide a positive pumping action and higher heads than fully recessed impeller pumps.



Dimensions



| DIMENSIONS | | | | | | | | | | | | | | | | | |
|------------|-------------|-------------|----------------|----------------|-------------|-------------|----------------|----------------|----------------|----------------|-----------|-----------|----------------|----------------|----------------|----------------|-----------|
| Pump Size | Suct. | Disch. | A ₁ | A ₂ | B | D | E ₁ | E ₂ | F ₁ | F ₂ | G | H | J ₁ | J ₂ | K ₁ | K ₂ | P |
| 4x3x11-1/2 | 4.00 (102) | 3.00 (76) | 15.00 (381) | 15.00 (381) | 16.25 (413) | 10.50 (267) | 6.63 (168) | 6.63 (168) | 5.38 (137) | 7.38 (187) | 1.00 (25) | 1.00 (25) | 2.50 (64) | 2.50 (64) | 3.50 (89) | 5.50 (140) | 2.00 (51) |
| 5x4x11-1/2 | 5.00 (127) | 4.00 (102) | 15.00 (381) | 15.00 (381) | 16.25 (413) | 10.50 (267) | 6.63 (168) | 6.63 (168) | 5.38 (137) | 7.38 (187) | 1.00 (25) | 1.00 (25) | 2.50 (64) | 2.50 (64) | 3.50 (89) | 5.50 (140) | 2.00 (51) |
| 5x4x17 | 5.00 (127) | 4.00 (102) | 19.00 (483) | 24.00 (610) | 17.69 (449) | 13.63 (346) | 8.50 (216) | 11.00 (279) | 6.63 (168) | 6.31 (160) | 1.25 (32) | 1.00 (25) | 3.00 (76) | 3.00 (76) | 4.25 (108) | 5.00 (127) | 2.25 (57) |
| 6x5x17 | 6.00 (152) | 5.00 (127) | 19.00 (483) | 24.00 (610) | 19.31 (491) | 13.63 (346) | 8.50 (216) | 11.00 (279) | 7.56 (192) | 7.00 (178) | 1.25 (32) | 1.00 (25) | 3.00 (76) | 3.00 (76) | 4.25 (108) | 5.00 (127) | 2.25 (57) |
| 8x6x17 | 8.00 (203) | 6.00 (152) | 19.00 (483) | 24.00 (610) | 19.75 (502) | 13.63 (346) | 8.50 (216) | 11.00 (279) | 7.75 (197) | 7.25 (184) | 1.25 (32) | 1.00 (25) | 3.00 (76) | 3.00 (76) | 4.25 (108) | 5.00 (127) | 2.25 (57) |
| 10x8x17 | 10.00 (254) | 8.00 (203) | 19.00 (483) | 24.00 (610) | 20.56 (522) | 13.63 (346) | 8.50 (216) | 11.00 (279) | 8.13 (206) | 7.69 (195) | 1.25 (32) | 1.00 (25) | 3.00 (76) | 3.00 (76) | 4.25 (108) | 5.00 (127) | 2.25 (57) |
| 12x10x17 | 12.00 (305) | 10.00 (254) | 19.00 (483) | 24.00 (610) | 23.81 (605) | 13.63 (346) | 8.50 (216) | 11.00 (279) | 10.81 (275) | 8.56 (217) | 1.25 (32) | 1.00 (25) | 3.00 (76) | 3.00 (76) | 3.88 (98) | 5.00 (127) | 1.94 (49) |
| 8x6x21 | 8.00 (203) | 6.00 (152) | 27.50 (699) | 31.50 (800) | 24.25 (617) | 18.63 (473) | 12.00 (305) | 14.00 (356) | 7.75 (197) | 11.50 (292) | 1.50 (38) | 1.50 (38) | 4.50 (114) | 4.50 (114) | 4.50 (114) | 5.00 (127) | 2.25 (57) |
| 10x8x21 | 10.00 (254) | 8.00 (203) | 27.50 (699) | 31.50 (800) | 25.75 (654) | 18.63 (473) | 12.00 (305) | 14.00 (356) | 9.69 (246) | 10.81 (275) | 1.50 (38) | 1.50 (38) | 4.50 (114) | 4.50 (114) | 5.00 (127) | 5.00 (127) | 2.50 (64) |
| 14x12x21 | 14.00 (356) | 12.00 (305) | 27.50 (699) | 31.50 (800) | 28.25 (718) | 18.63 (473) | 12.00 (305) | 14.00 (356) | 12.50 (318) | 10.75 (273) | 1.50 (38) | 1.50 (38) | 4.50 (114) | 4.50 (114) | 4.50 (114) | 5.00 (127) | 2.25 (57) |
| 16x14x21 | 16.00 (406) | 14.00 (356) | 27.50 (699) | 31.50 (800) | 30.00 (762) | 18.63 (473) | 12.00 (305) | 14.00 (356) | 14.00 (356) | 10.75 (273) | 1.50 (38) | 1.50 (38) | 4.50 (114) | 4.50 (114) | 5.00 (127) | 5.00 (127) | 2.50 (64) |

| Pump Size | Keyway | | | | | | | | | | | | | | |
|------------|--------------|-----------|-----------|------------|-------------|--------------|-------------|-------------|-------------|-----------|-----------|-------------|--------------|-------------|-------------|
| | U | Depth | Width | Length | V | W | X | Y | Z | AX | AY | AZ | CP | DD | HT |
| 4x3x11-1/2 | 1.625 (41.2) | 0.19 (5) | 0.38 (10) | 3.75 (95) | 5.00 (127) | 26.50 (673) | 10.25 (260) | 7.50 (191) | 8.13 (206) | 0.75 (19) | 1.00 (25) | 8.50 (216) | 34.00 (864) | 9.06 (230) | 7.50 (191) |
| 5x4x11-1/2 | 1.625 (41.2) | 0.19 (5) | 0.38 (10) | 3.75 (95) | 5.00 (127) | 26.50 (673) | 10.25 (260) | 7.50 (191) | 8.63 (219) | 1.00 (25) | 1.00 (25) | 9.13 (232) | 34.00 (864) | 9.88 (251) | 7.50 (191) |
| 5x4x17 | 2.375 (60.3) | 0.31 (8) | 0.63 (16) | 4.50 (114) | 7.00 (178) | 32.50 (826) | 15.00 (381) | 9.00 (229) | 12.25 (311) | 1.00 (25) | 1.13 (29) | 13.25 (337) | 41.50 (1054) | 14.50 (368) | 11.50 (292) |
| 6x5x17 | 2.375 (60.3) | 0.31 (8) | 0.63 (16) | 4.50 (114) | 7.00 (178) | 33.06 (840) | 13.38 (340) | 10.00 (254) | 11.50 (292) | 1.00 (25) | 1.13 (29) | 12.06 (306) | 43.06 (1094) | 13.00 (330) | 11.50 (292) |
| 8x6x17 | 2.375 (60.3) | 0.31 (8) | 0.63 (16) | 4.50 (114) | 7.00 (178) | 33.19 (843) | 13.38 (340) | 10.25 (260) | 12.25 (311) | 1.13 (29) | 1.13 (29) | 12.06 (306) | 43.44 (1103) | 14.13 (359) | 11.50 (292) |
| 10x8x17 | 2.375 (60.3) | 0.31 (8) | 0.63 (16) | 4.50 (114) | 7.00 (178) | 33.63 (854) | 14.00 (356) | 10.75 (273) | 13.00 (330) | 1.13 (29) | 1.25 (32) | 13.75 (349) | 44.38 (1127) | 15.50 (394) | 11.50 (292) |
| 12x10x17 | 2.375 (60.3) | 0.31 (8) | 0.63 (16) | 4.50 (114) | 7.00 (178) | 34.50 (876) | 16.00 (406) | 13.00 (330) | 14.38 (365) | 1.19 (30) | 1.25 (32) | 15.25 (387) | 47.50 (1207) | 17.88 (454) | 11.50 (292) |
| 8x6x21 | 3.500 (89) | 0.44 (11) | 0.88 (22) | 9.00 (229) | 11.00 (279) | 54.50 (1384) | 16.00 (406) | 10.25 (260) | 14.75 (375) | 1.13 (29) | 1.13 (29) | 15.38 (391) | 64.75 (1645) | 16.63 (422) | 17.50 (445) |
| 10x8x21 | 3.500 (89) | 0.44 (11) | 0.88 (22) | 9.00 (229) | 11.00 (279) | 54.06 (1373) | 21.00 (533) | 12.44 (316) | 15.38 (391) | 1.13 (29) | 1.25 (32) | 16.38 (416) | 66.50 (1689) | 17.75 (451) | 17.50 (445) |
| 14x12x21 | 3.500 (89) | 0.44 (11) | 0.88 (22) | 9.00 (229) | 11.00 (279) | 53.75 (1365) | 21.00 (533) | 15.00 (381) | 17.38 (441) | 1.25 (32) | 1.44 (37) | 18.50 (470) | 68.75 (1746) | 22.13 (562) | 17.50 (445) |
| 16x14x21 | 3.500 (89) | 0.44 (11) | 0.88 (22) | 9.00 (229) | 11.00 (279) | 53.75 (1365) | 21.00 (533) | 16.75 (425) | 18.63 (473) | 1.38 (35) | 1.44 (37) | 20.13 (511) | 70.50 (1791) | 24.88 (632) | 17.50 (445) |

All dimensions in inches and millimeters. Not to be used for construction.



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