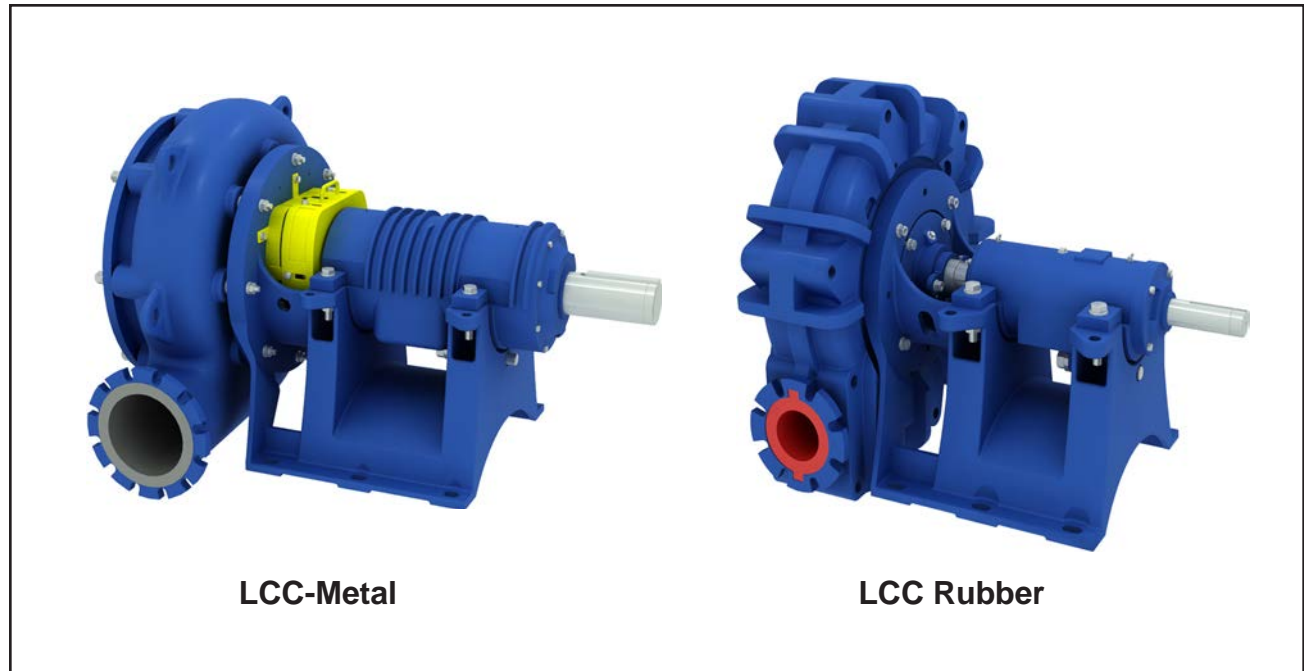


# Product Introduction

# LCC



## Application

High performance abrasion resistant slurry pump for medium and severe services. The LCC offers outstanding efficiencies, wear life and a maintenance friendly design, which translates into the lowest total cost of ownership.

## Design

Horizontal, end suction, modified volute casing pump includes three vane impeller for large solids passage with good suction performance, high efficiency and good wear characteristics over a broad operating range. Interchangeable rubber and metal designs allow best material choice for any application. The single stage, compact arrangement allows easy maintenance of wet end components, and fast mechanical end service.

## Mechanical (Frame) Size

1	2	3	4	5
35 mm	50 mm	70 mm	100 mm	125 mm

## Operating Limits

	Metal	Rubber
<b>Pump Sizes</b>	50 - 300 mm 2" - 12"	50 - 300 mm 2" - 12"
<b>Capacity</b>	3,865 m <sup>3</sup> /h 17,000 gpm	2,260 m <sup>3</sup> /h 10,000 gpm
<b>Heads</b>	90 m 300 ft	45 m 150 ft

## Designation

LCC-M 300-710.5M GB M1

Pump Type \_\_\_\_\_  
 Hydraulic Type \_\_\_\_\_  
 Discharge Nozzle DN in mm \_\_\_\_\_  
 Nominal Impeller Diameter in mm \_\_\_\_\_  
 Mechanical Size \_\_\_\_\_  
 Seal Type \_\_\_\_\_  
 Options \_\_\_\_\_  
 Material Code \_\_\_\_\_

Hydraulic Type	
M	Metal
R	Rubber
H	Heavy Construction

Material Code	
M1	Metal
MC2	Metal/Chem.
R1	Rubber

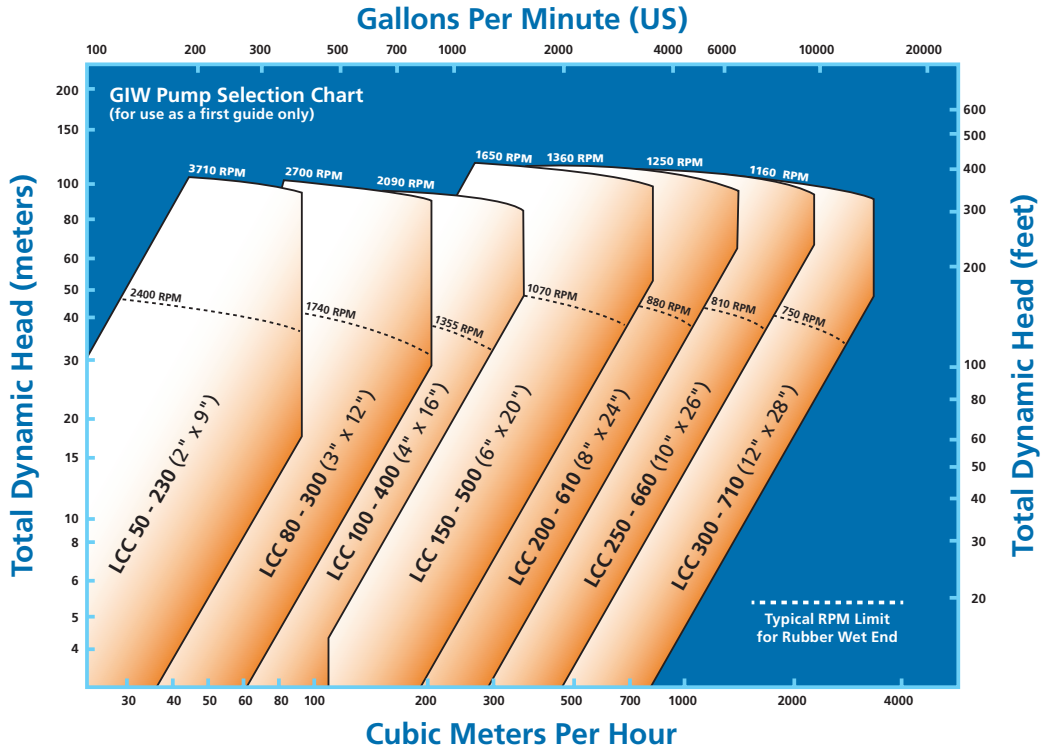
Seal Type	
K	KE
B	Throat Bushing
M	Mechanical Seal
E	Expeller

Options	
O	Open Shroud Impeller
AF	Oil Lubricated Face to Face
AB	Oil Lubricated Back to Back
UF	Underwater Oil Lubricated Face to Face
UB	Underwater Oil Lubricated Back to Back
GF	Grease Lubricated Face to Face
GB	Grease Lubricated Back to Back
T	Turn Down Impeller
C	Elastomer Impeller

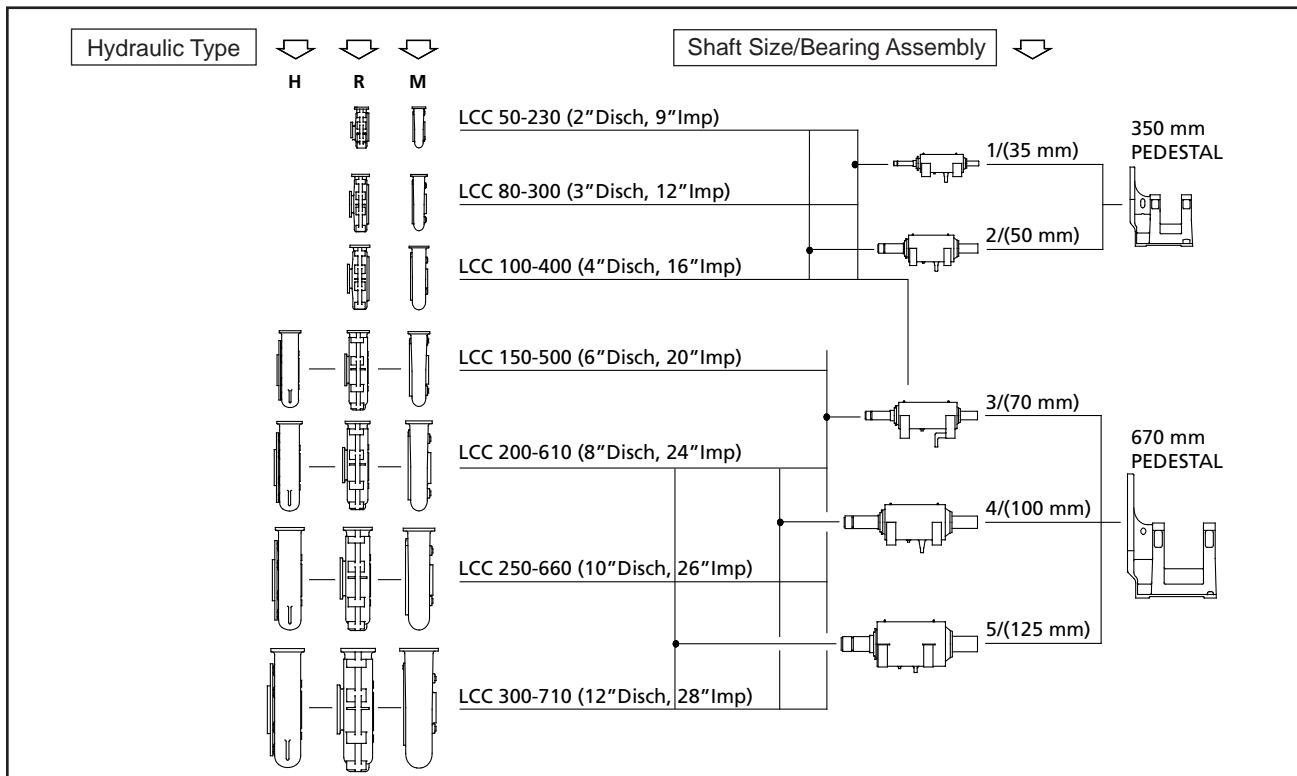


## Selection Chart

For use as a guide only. LCC's are equipped with full-diameter impellers. Actual operating speeds are obtained through V-belt drives, gear reducers, variable frequency drives or other speed-changing drives.



## Interchangeability Chart





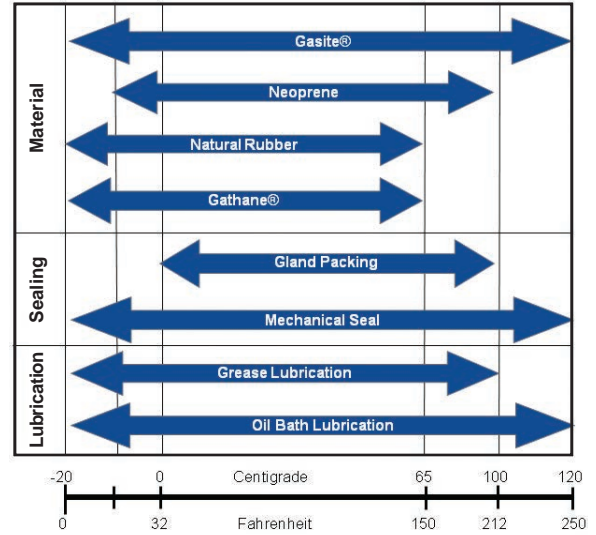
## Pressure, Sphere Passage and Temperature Limits

Pump Size	Maximum Operating Pressure*			Sphere Passage
	Standard Metal	Mark II Elastomer	Extra Heavy Metal	Standard Metal
LCC	bar/psi	bar/psi	bar/psi	mm/inch
50-230	16/230	16/230	—	23/.91
80-300	11/160	16/230	—	25/1.0
100-400	9.5/140	16/230	—	38/1.5
150-500	9/130	16/230	16/230	76/3.0
200-610	8.5/120	16/230	16/230	102/4.0
250-660	9/130	16/230	16/230	127/5.0
300-710	7.5/110	16/230	16/230	138/5.3

Rotation Direction: Clockwise as seen from drive end

Position of Discharge: Vertical (std) and 45° increments

\*For Standard Packing, Mechanical Seal Pressure may be different.

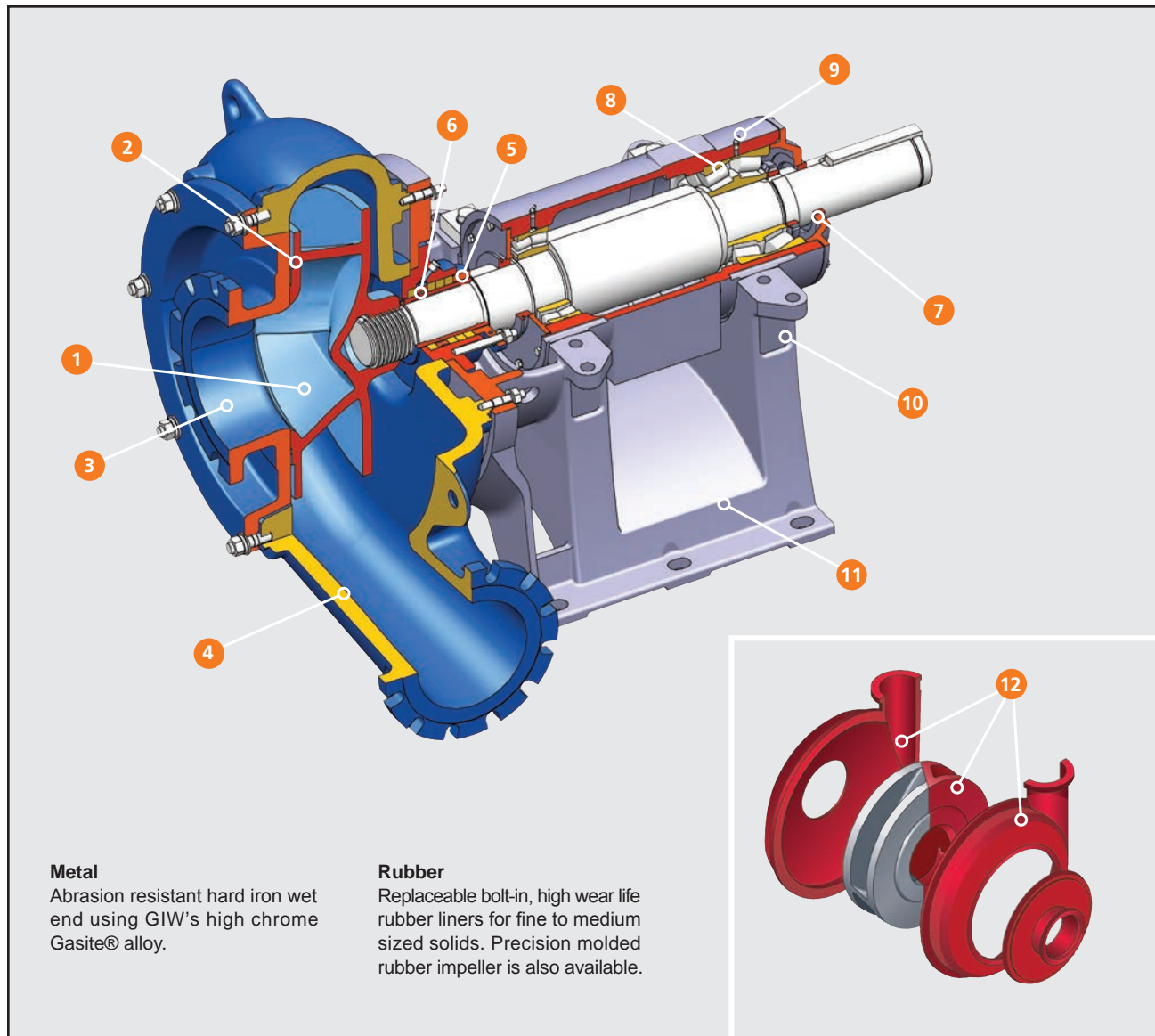


## Standard Materials

Description	Standard		Corrosion Resistant	
	Metal	Rubber Lined	Metal	Rubber Lined
Shell	Gasite® WD28G	—	Gasite® T90G	—
Expeller Casing	Gasite® WD28G	Gasite® WD28G	Mechanical Seal recommended for no dilution/no leakage	Mechanical Seal recommended for no dilution/no leakage
Outer Casings	—	Ductile Iron	—	Ductile Iron
Suction Liner	Gasite® WD28G	Rubber	Gasite® T90G	Rubber
Casing Liners	—	Rubber	—	Rubber
Suction Plate	Steel	—	Steel or Stainless Steel	—
Suction Wear Plate	Gasite® WD28G	—	Gasite® T90G	—
Expeller Plate	Gasite® WD28G	Gasite® WD28G	Mechanical Seal recommended for no dilution/no leakage	Mechanical Seal recommended for no dilution/no leakage
Pedestal	Class 40 Gray Iron	Class 40 Gray Iron	Class 40 Gray Iron	Class 40 Gray Iron
Shaft	4150 Steel	4150 Steel	4150 or Stainless Steel	4150 or Stainless Steel
Impeller	Gasite® WD28G	Gasite® WD28G, Gathane® or Rubber	Gasite® T90G	Gasite® WD28G, Gathane® or Rubber
Expeller	Gasite® WD28G	Gasite® WD28G	Mechanical Seal recommended for no dilution/no leakage	Mechanical Seal recommended for no dilution/no leakage
Bearing Housing	Class 40 Gray Iron	Class 40 Gray Iron	Class 40 Gray Iron	Class 40 Gray Iron
Stuffing Box Housing	Class 40 Gray Iron	Class 40 Gray Iron	Stainless Steel	Stainless Steel
Shaft Sleeve	Carbide Coated Steel	Carbide Coated Steel	Carbide Coated or Stainless Steel	Carbide Coated or Stainless Steel



## GIW Model LCC Pumps - Lowest Life Cycle Cost in Metal or Rubber



- 1 High efficiency impeller with large sphere passage.
- 2 Impeller suction side clearing vanes minimize wear.
- 3 One piece suction plate/ liner simplifies maintenance.
- 4 Casing designed for optimal wear life and efficiency.
- 5 Fused carbide coated shaft sleeve for extended packing life.
- 6 Minimum dilution stuffing box assembly for reduced water usage.
- 7 Inpro/Seal™ isolators for bearing protection.
- 8 Heavy-duty, double-row tapered roller bearing for high thrust capacity.
- 9 Concentric design cartridge bearing housing for easy assembly and excellent packing life.
- 10 Adjusting screw for accurate and easy impeller clearance adjustment.
- 11 Solid piece pedestal for rigid installation & easy field maintenance.
- 12 Rubber or metal wet end options for optimal wear life.

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