

**QUOTATION FOR HAYWARD GORDON SOLIDS HANDLING PUMPS**

<b>Date:</b>	3/23/2020	<b>Project Reference:</b>	Taunton WWTF - Primary Scum Pump
<b>Quotation No.:</b>	Q1-56248 Rev. 0	<b>Equipment Tag:</b>	

<b>Customer:</b>	THE MAHER CORPORATION 192 Pleasant Street  Rockland MA	<b>Delivery:</b>	16 - 18 Weeks After Approval
		<b>Incoterms:</b>	EXW
		<b>Freight:</b>	Internal Choice - Prepaid
		<b>Terms of Payment:</b>	0 {Net 30 Days}
		<b>Taxes:</b>	Not Included
		<b>Price Validity</b>	60 days
		<b>Currency:</b>	US \$
<b>Attention:</b>	Croy, Fred	<b>Salesperson:</b>	Caton, David
		<b>Submitted By:</b>	Wu, Gavin

**PRODUCT:**

HAYWARD GORDON XR2(7) TORUS RECESSED IMPELLER PUMP

**CONSTRUCTION DETAILS:**

<b>Wet End:</b>	ASTM A532 Super Ni-Hard (650BHN) Casing, Impeller and Wearplate
<b>Seal:</b>	John Crane Type 1 Single Seal (SC/SC) - Clean Water Flush Required
<b>Ports/Flanges:</b>	3" suction x 2" discharge - 125#RF
<b>Motor Details:</b>	5HP ,1800RPM, 460V/3/60, 184T, TEFC
<b>Drive:</b>	Fixed Speed V-Belt
<b>Guard:</b>	OSHA - V-Belt Guard
<b>Base/Coverplate:</b>	Steel Baseplate (Side by Side - Right Hand)
<b>Pump Setting:</b>	Horizontal

**APPLICATION DETAILS:**

<b>Fluid:</b>	Scum	<b>Impeller Diameter:</b>	Full	<b>Solids:</b>	
<b>Capacity:</b>	50 GPM	<b>Viscosity:</b>	Waterlike	<b>NPSHR:</b>	Flooded
<b>Head:</b>	40 ft	<b>Temperature:</b>	Ambient		
<b>Pump RPM:</b>	1599 RPM	<b>Specific Gravity:</b>	1.00		

**REMARKS:**

Replacement Pump - pump quoted on the duty point. We can only quote the same pump after we have the serial number of the existing pump.  
 Hayward Gordon's standard epoxy paint is included  
 Hayward Gordon's Basic Non-certified Run Test is included  
 All VFDs, starters and control equipment are not within Hayward Gordon ULC scope of supply and are to be supplied by others  
 Anchor Bolts are not included

**GENERAL COMMENTS:**

- Price validity is based on receipt of complete approval and release for production no more than eight weeks after drawings have been submitted by Hayward Gordon ULC.
- Hayward Gordon ULC's standard Terms and Conditions of Sale apply and are an integral part of this quotation unless specifically noted otherwise in this proposal.
- All start-up and instructional services not included unless specifically noted otherwise in this proposal.
- All starters and control equipment are not within Hayward Gordon ULC's scope of supply and are to be supplied by others unless specifically noted otherwise in this proposal.
- This proposal does not include installation, wiring, field painting or any other items except as specifically described above.

Pump Data Sheet - Hayward Gordon

Company:  
Name:  
Date: 03/23/2020



Pump:			
Size:	XR2(7)	Dimensions:	Suction: 3 in
Type:	Torus Rec. Impeller		Discharge: 2 in
Synch Speed:	Adjustable	Eye Area:	7.67 in <sup>2</sup>
Dia:	7.125 in		
Curve:	095-10110		

Fluid:			
Name:	Water		
SG:	1	Vapor Pressure:	0.256 psi a
Density:	62.4 lb/ft <sup>3</sup>	Atm Pressure:	14.7 psi a
Viscosity:	1.1 cP		
Temperature:	60 °F		

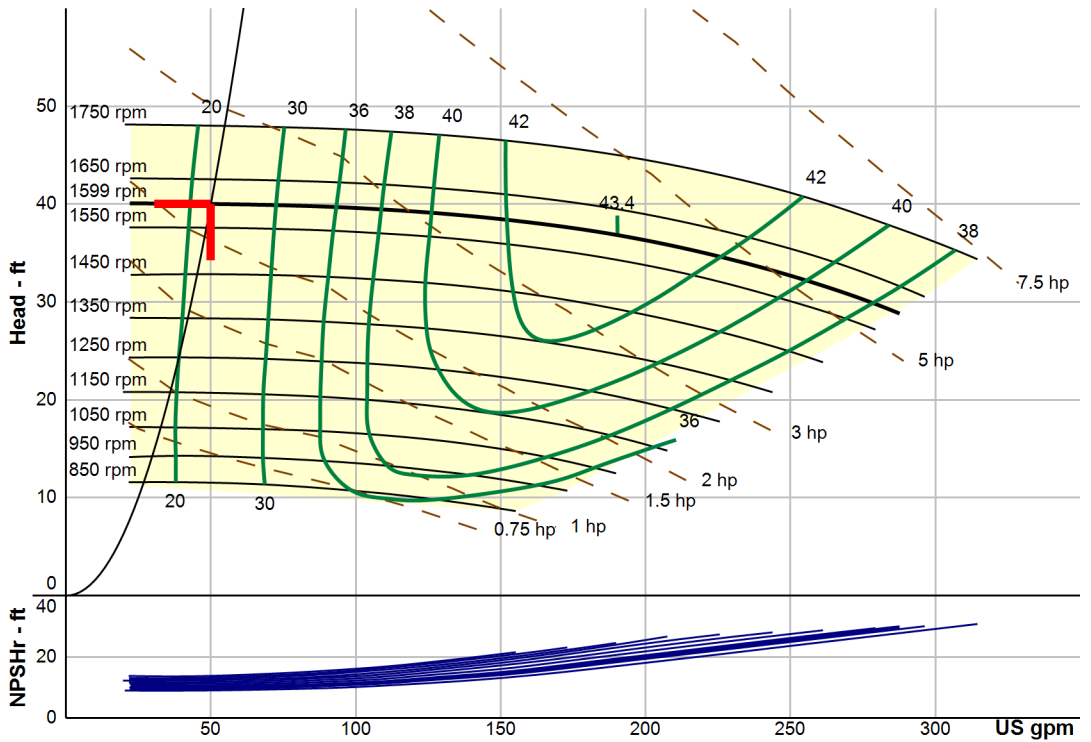
Search Criteria:			
Flow:	50 US gpm	Near Miss:	---
Head:	40 ft	Static Head:	0 ft

Pump Limits:			
Temperature:	---	Sphere Size:	2 in
Wkg Pressure:	---		

**Motor:**  
Consult Hayward Gordon to select a motor for this pump.

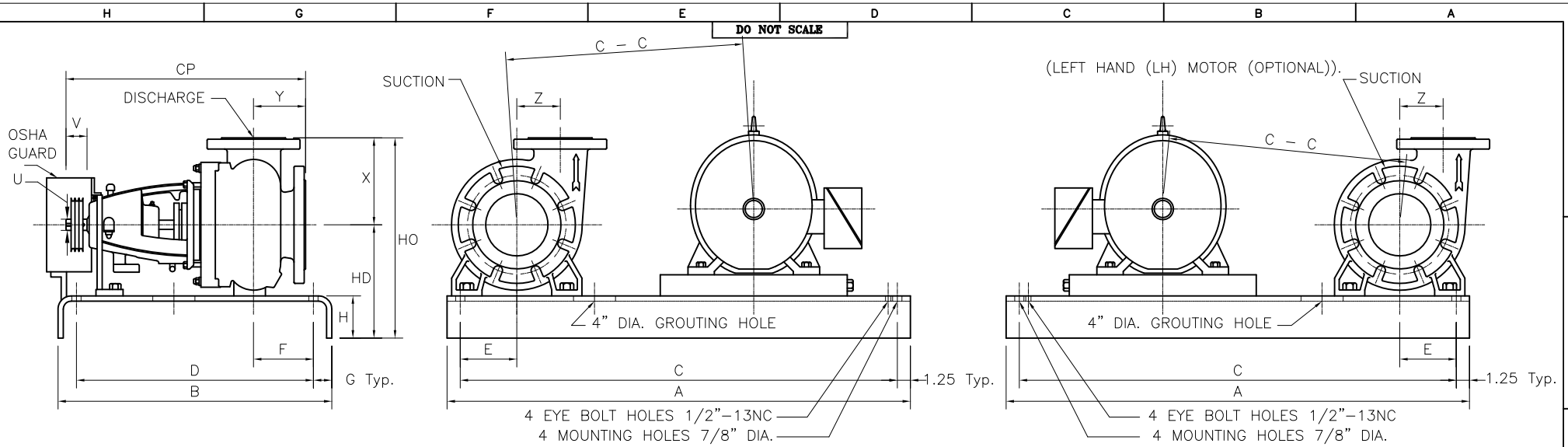
**Pump Selection Warnings:**  
None

--- Duty Point ---	
Flow:	50 US gpm
Head:	40 ft
Eff:	22.4%
Power:	2.23 hp
NPSHr:	9.91 ft
Speed:	1599 rpm
--- Design Curve ---	
Shutoff Head:	40.1 ft
Shutoff dP:	17.4 psi
Min Flow:	--- US gpm
BEP:	43.4% @ 190 US gpm
NOL Power:	5.65 hp @ 288 US gpm
--- Max Curve ---	
Max Power:	7.34 hp @ 315 US gpm



**Performance Evaluation:**

Flow	Speed	Head	Efficiency	Power	NPSHr
US gpm	rpm	ft	%	hp	ft
60	1599	40	25.8	2.32	10.1
50	1599	40	22.4	2.23	9.91
40	1599	40	18.9	2.12	9.8
30	1599	40.1	15.1	1.97	9.8
20	1599	---	---	---	---



1. SUCTION AND DISCHARGE FLANGES: C.I. AND NI-HARD - 125 lbs R.F. ALLOYS - 150 lbs R.F. ALL FLANGES MATE WITH STD. ASA FLANGES
2. PUMP ROTATION - C.W. VIEWED FROM SHAFT END.
3. TORUS PUMPS SERIES "XR" ARE DIMENSIONALLY INTERCHANGEABLE WITH THE APPLICABLE MODELS SERIES "R".
4. ALL DIMENSIONS ARE IN INCHES. USE FOR INSTALLATION ONLY IF CERTIFIED.
5. FOR NI-HARD AND SUPER NI-HARD CASINGS, FLANGES ARE SUPPLIED AS CAST. SUCTION & DISCHARGE PIPING SHOULD BE FITTED TO THE PUMP FLANGES AFTER THE PUMP IS INSTALLED AND LEVELED. USE 1/8" THICK NEOPRENE GASKETS OF 50 - 60 DUROMETER.

CERTIFIED FOR CONSTRUCTION

DATE \_\_\_\_\_ SIGNED \_\_\_\_\_  
HAYWARD GORDON LTD.

PUMP MODEL	SUCTION	DISCHARGE	MOTOR FRAME	A	B	C	D	E	F	G	H	C-C	U	SQR. KEY.	V	X	Y	Z	CP	HD	HO	R.H. BASE DRAWING No.	L.H. BASE DRAWING No.
R2-7	3	2	182T TO 215T	34.0	23.0	31.5	19.5	5.4	4.2	1.75	4.0	15.5-18	1.06	1/4	2.0	7.5	3.8	3.8	20.6	10.8	18.3	022-20527	022-20536
R4-7	6	4	182T TO 215T	34.0	23.0	31.5	19.5	5.4	4.4	1.75	4.0	15.5-18	1.06	1/4	2.0	8.25	5.0	4.2	22.8	10.8	19.0	022-20525	022-20530
			254T TO 286T	44.0	26.0	41.5	22.5	5.7	20-25			022-20528										022-20533	
R3-8	4	3	182T TO 215T	34.0	23.0	31.5	19.5	5.4	3.4	1.75	4.0	15.5-18	1.06	1/4	2.0	8.9	4.8	3.9	22.3	11.5	20.4	022-20517	022-20537
			254T TO 286T	44.0	26.0	41.5	22.5	5.9	21-24			022-20531										022-20534	
R4-8	6	4	182T TO 215T	34.0	23.0	31.5	19.5	5.4	3.0	1.75	4.0	16-18	1.06	1/4	2.0	9.1	5.3	4.5	23.3	11.5	20.6	022-20526	022-20529
			254T TO 286T	44.0	26.0	41.5	22.5	5.7	20-23.5			022-20532										022-20535	

NO.	DATE:	REVISION	BY	CHK.
△	JAN 04.02	HD REVISED - WAS 10.9 * ECR 00380		LF
△	APR.6.01	REVISED "U" DIM. TO 2 DECIMAL PLACES ECR 01206		E.R.
△	MAR.26.01	REVISED TITLE BLOCK AS NOTED ECR 01108		E.R.
△	DEC15.00	REVISED AS NOTE ECR 00434		E.R.

**Hayward Gordon**  
Process Pumps and Mixers.  
www.haywardgordon.com

THIS DRAWING IS THE PROPERTY OF HAYWARD GORDON AND MAY NOT BE USED OR COPIED EXCEPT AS EXPRESSLY AUTHORIZED BY IT. THIS DRAWING IS SUBJECT TO RECALL.

TITLE  
**STANDARD DIMENSIONAL DRAWING FOR V-BELT DRIVEN 7" & 8" TORUS PUMP**

DESIGN BY:	DRAWN BY:	CHECKED BY:	DATE:
	J.F.		August 31, 1998
SCALE:	SIZE:	DWG.#	SHEET
N.T.S.	B	02122206	1 of 1