



# CUTTING EDGE CANTILEVERS DEC/DC

*Industry leaders in Vertical Cantilever Slurry Pumps*



[www.toyopumps.com](http://www.toyopumps.com)

# Toyo Pumps North America's DEC (recessed impeller) and DC (closed impeller) series

of vertical cantilevers are serious slurry handling machines of true cantilever design, meaning no submerged bearings, bushings or seals. Toyo Cantilevers are built to excel in the toughest applications and for decades have proven that they can pump where most simply cannot.

The shaft/bearing assemblies of a Toyo Cantilever have been designed specifically to handle the worst case axial and radial loads. All Toyo Cantilevers are fitted with a combination of large diameter shafts, up to 7in (178mm), and heavy duty grease lubricated bearings.

Toyo Cantilevers achieve excellent efficiencies and last longer due to their specific design features such as: the DEC's patented axial spiral casing, which ensures solids follow the flow path directly out of the pump's casing reducing recirculation to an absolute minimum and the DC's extra heavy metal sections, agitator and high chrome wear plates.

If you have a tough application and would like our Toyo Team to help you find a solution please do not hesitate to call. You can find a Regional Manager in your area by visiting [www.toyopumps.com](http://www.toyopumps.com) or simply call the number on the back of this brochure.

## Quick Facts

## CUTTING EDGE Cantilevers DEC/DC



- Capacities up to 2150 US gpm @BEP
- Heads up to 225 Ft @ BEP
- Fully recessed impeller
- Agitator, Chopper and suction wet end packages available
- Wet end standard in High Chrome with CD4 and other metal-lurgies available
- Worldwide patented axial spiral casing design for increased efficiency and reduced wear
- Very low energy consumption compared to other recessed impeller pumps (saving just 8 hp could equate to over \$6000 saved in energy costs alone in only 3 years)
- Only approx 15% of pumped liquid is in contact with the impeller
- Able to run to shut off conditions without going critical
- True vertical cantilever design (no submerged bearings, bushings or seals)
- Custom color paint jobs available



- Capacities up to 3200 USgpm @ BEP
- Heads up to 130 Ft @ BEP
- Closed impeller
- Agitator comes as standard
- Heavy metal sections for longer wear life
- Top and bottom replaceable high chrome wear plates
- Adjustable suction wearplates
- Very heavy solids handling ability
- True vertical cantilever design (no submerged bearings, bushings or seals)
- Custom color paint jobs available

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# You'll find Toyo DEC and DC Vertical Cantilevers working in

tough applications in a variety of industries including: pulp & paper, paper recycling, mining, power, municipal, food & beverage, automotive, chemical and forestry to name a few: visit the Cantilever section of [www.toyopumps.com](http://www.toyopumps.com) to see a great selection of case studies and stories for each of these heavy-duty pumps.

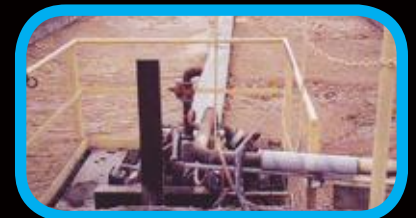
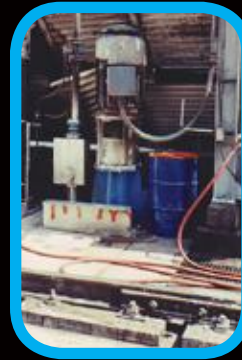
## INDUSTRIES



Automotive



Chemical



Mining



Paper Recycling



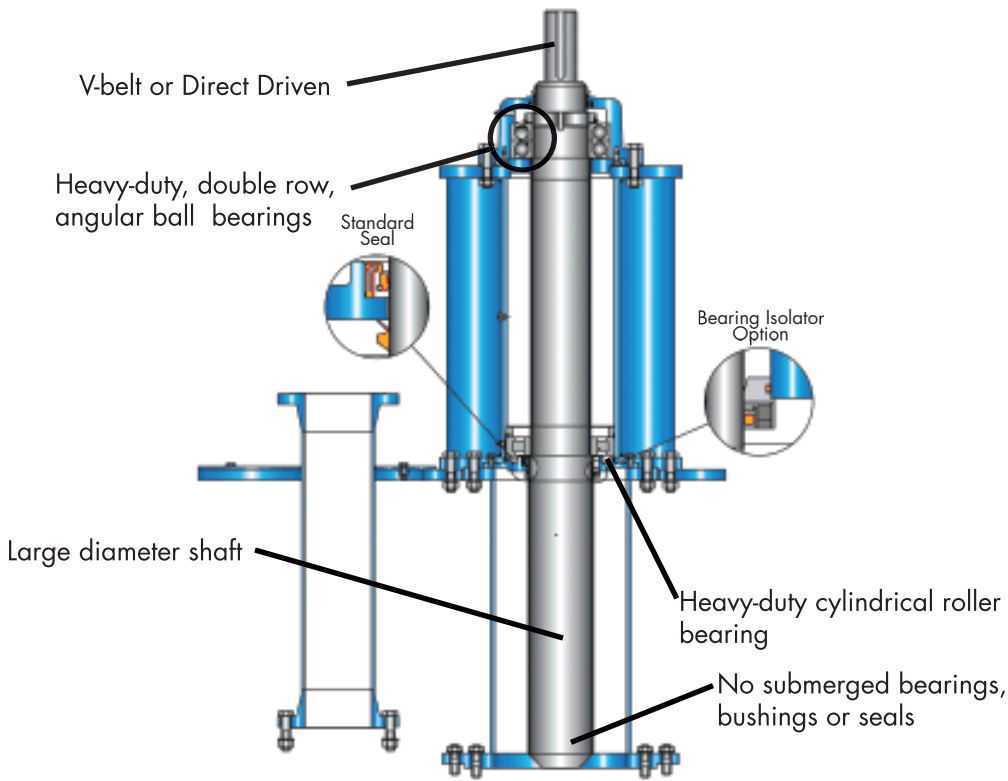
Pulp and Paper

For more case studies on the Toyo Vertical Cantilever DEC and DC series please visit the Cantilever section of [www.toyopumps.com](http://www.toyopumps.com)

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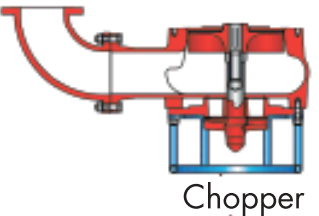
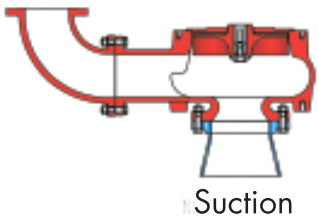
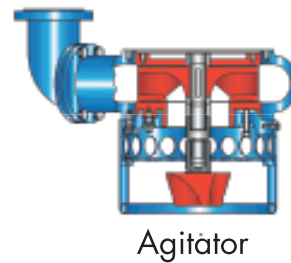
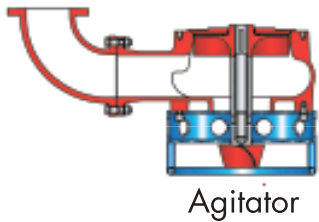


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DEC (Recessed Impeller)

DC (Closed Impeller)



The Toyo patented agitator eliminates solids accumulating on the sump floor and can significantly reduce maintenance costs resulting from digging out sumps and downtime due to solids building up and choking off the suction of conventional pumps. It is because of the Toyo Agitator's patented blade that the highest efficiency in material mixing can be achieved.



Heavy duty blades, situated in front of the pump's suction, agitates, chops, cuts, shreds incoming solids such as metal banding, plastic, wood, rags and bags, prior to them entering the impeller. The 'chopper' eliminates pump and system downtime by preventing the plugging of pump suction and pipelines.

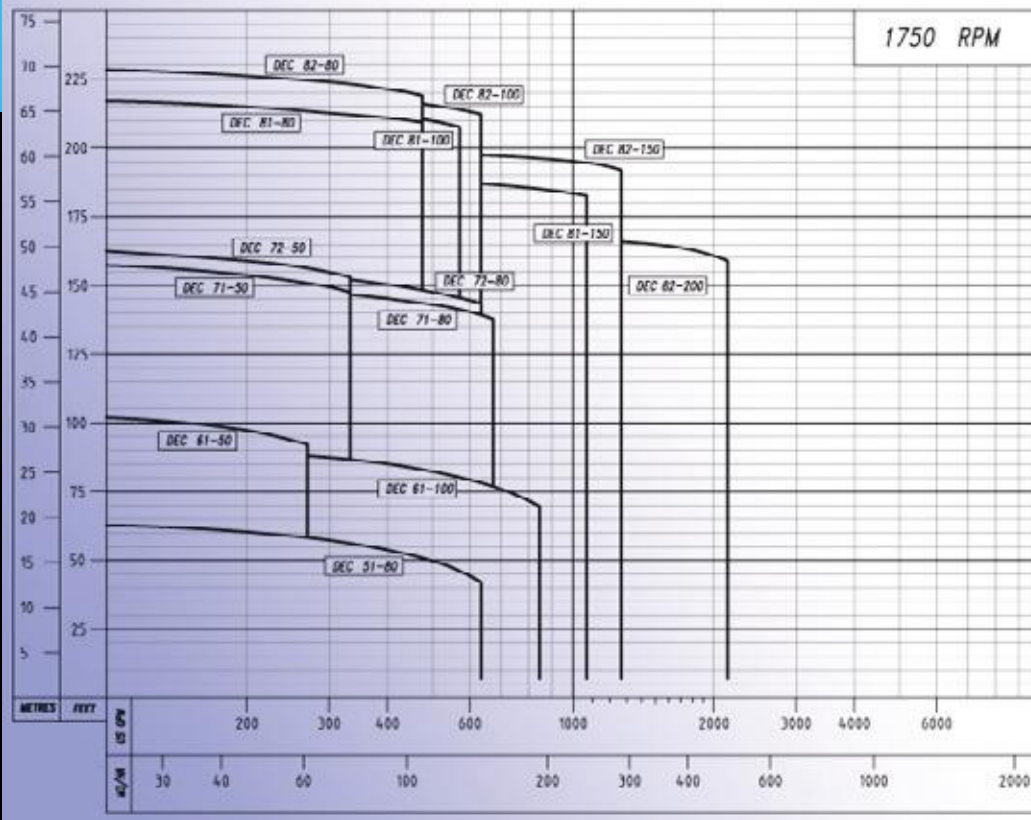
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**DEC**  
(recessed impeller)



**TOYO PUMPS**  
WWW.TOYOPUMPS.COM

TOYO PUMPS NORTH AMERICA CORPORATION  
BURNABY, BRITISH COLUMBIA  
CANADA V5C 6H7  
TEL : (804)298-1215 FAX : (804)298-7773

**PUMP MODEL** DEC 51-80 to 82-200  
**CURVE NUMBER** A3178 **REV.** 4

**CAPACITIES TO:** U.S. GPM 275 @ BEP  
METRES FEET 68.6 @ BEP

**HEAD TO:** METRES FEET 225 @ BEP

PUMP MODEL	DISCHARGE		IMPELLER	
	MM	IN	MM	IN
DEC 51-80	80	3	200	7.9
DEC 61-100	100	4	237	9.3
DEC 71-150	150	6	277	10.9
DEC 81-200	200	8	318	12.5
DEC 91-250	250	10	360	14.2
DEC 101-300	300	12	403	15.8
DEC 111-350	350	14	447	17.6
DEC 121-400	400	16	492	19.4
DEC 131-450	450	18	538	21.1
DEC 141-500	500	20	585	22.9
DEC 151-550	550	22	633	24.8
DEC 161-600	600	24	682	26.8
DEC 171-650	650	26	732	28.8
DEC 181-700	700	28	783	30.8
DEC 191-750	750	30	835	32.8
DEC 201-800	800	32	888	34.9
DEC 211-850	850	34	942	37.0
DEC 221-900	900	36	997	39.2
DEC 231-950	950	38	1053	41.4
DEC 241-1000	1000	40	1110	43.7
DEC 251-1050	1050	42	1168	46.0
DEC 261-1100	1100	44	1227	48.4
DEC 271-1150	1150	46	1287	50.8
DEC 281-1200	1200	48	1348	53.3
DEC 291-1250	1250	50	1410	55.9
DEC 301-1300	1300	52	1473	58.5
DEC 311-1350	1350	54	1537	61.2
DEC 321-1400	1400	56	1602	64.0
DEC 331-1450	1450	58	1668	66.8
DEC 341-1500	1500	60	1735	69.7
DEC 351-1550	1550	62	1803	72.6
DEC 361-1600	1600	64	1872	75.6
DEC 371-1650	1650	66	1942	78.6
DEC 381-1700	1700	68	2013	81.7
DEC 391-1750	1750	70	2085	84.8
DEC 401-1800	1800	72	2158	88.0
DEC 411-1850	1850	74	2232	91.3
DEC 421-1900	1900	76	2307	94.7
DEC 431-1950	1950	78	2383	98.1
DEC 441-2000	2000	80	2460	101.6

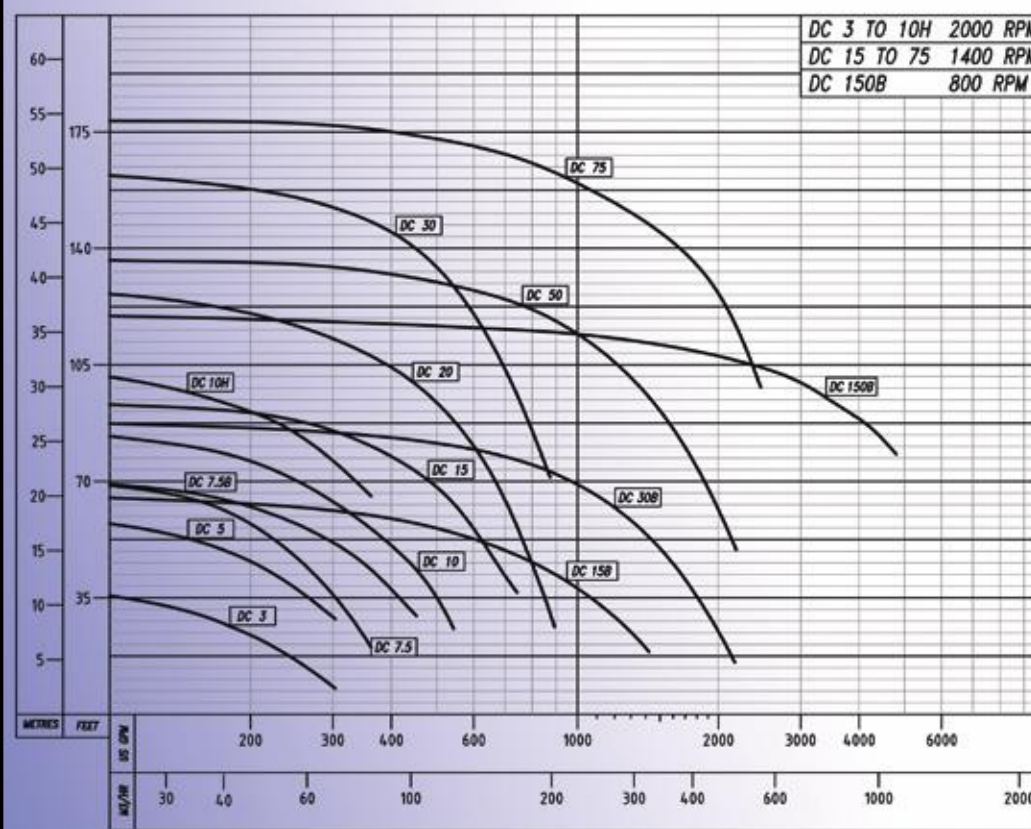
**MAX SOLIDS**

PUMP MODEL	MM		IN	
	MM	IN	MM	IN
DEC 31-80	72	2.8	30	1.2
DEC 41-100	80	3.1	32	1.3
DEC 51-150	100	4.0	40	1.6
DEC 61-200	150	6.0	60	2.4
DEC 71-250	200	8.0	80	3.1
DEC 81-300	250	10.0	100	4.0
DEC 91-350	300	12.0	120	4.7
DEC 101-400	350	14.0	140	5.5
DEC 111-450	400	16.0	160	6.3
DEC 121-500	450	18.0	180	7.1
DEC 131-550	500	20.0	200	7.9
DEC 141-600	550	22.0	220	8.7
DEC 151-650	600	24.0	240	9.5
DEC 161-700	650	26.0	260	10.3
DEC 171-750	700	28.0	280	11.1
DEC 181-800	750	30.0	300	11.9
DEC 191-850	800	32.0	320	12.7
DEC 201-900	850	34.0	340	13.5
DEC 211-950	900	36.0	360	14.3
DEC 221-1000	950	38.0	380	15.1
DEC 231-1050	1000	40.0	400	15.9
DEC 241-1100	1050	42.0	420	16.7
DEC 251-1150	1100	44.0	440	17.5
DEC 261-1200	1150	46.0	460	18.3
DEC 271-1250	1200	48.0	480	19.1
DEC 281-1300	1250	50.0	500	20.0
DEC 291-1350	1300	52.0	520	20.8
DEC 301-1400	1350	54.0	540	21.6
DEC 311-1450	1400	56.0	560	22.4
DEC 321-1500	1450	58.0	580	23.2
DEC 331-1550	1500	60.0	600	24.0
DEC 341-1600	1550	62.0	620	24.8
DEC 351-1650	1600	64.0	640	25.6
DEC 361-1700	1650	66.0	660	26.4
DEC 371-1750	1700	68.0	680	27.2
DEC 381-1800	1750	70.0	700	28.0
DEC 391-1850	1800	72.0	720	28.8
DEC 401-1900	1850	74.0	740	29.6
DEC 411-1950	1900	76.0	760	30.4
DEC 421-2000	1950	78.0	780	31.2

PERFORMANCE FOR WATER @ 68°F / 20°C AND 1.0 S.G. CORRECT FOR OTHER CONDITIONS AND/OR SOLIDS EFFECT



**DC**  
(closed impeller)



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**PUMP MODEL** DC 3 TO 150B  
**CURVE NUMBER** A7779 **REV.** 0

**CAPACITIES TO:** M<sup>3</sup>/HR 727 @ BEP  
U.S. GPM 3200 @ BEP

**HEAD TO:** METRES FEET 39.6 @ BEP  
130 @ BEP

PUMP MODEL	DISCHARGE		MAX SOLIDS #		IMPELLER #	
	MM	IN	MM	IN	MM	IN
DC3	80	3	20	0.8	185	7.3
DC5	80	3	20	0.8	209	8.2
DC7.5	80	3	25	1.0	232	9.1
DC10	100	4	25	1.0	252	9.9
DC15	100	4	35	1.4	320	12.6
DC20	150	6	60	2.4	290	11.5
DC30	100	4	35	1.4	353	13.9
DC50	100	4	35	1.4	420	16.6
DC75	150	6	60	2.4	358	14
DC100	150	6	60	2.4	380	15.0
DC150	150	6	60	2.4	430	16.9
DC30B	250	10	120	4.7	635	25

PERFORMANCE FOR WATER @ 68°F / 20°C AND 1.0 S.G. CORRECT FOR OTHER CONDITIONS AND/OR SOLIDS EFFECT

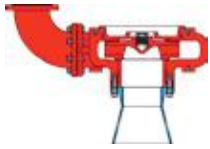


For the most up to date dimensional information for the Toyo Vertical Cantilever DEC and DC series please visit the Cantilever section of [www.toyopumps.com](http://www.toyopumps.com)

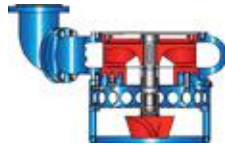


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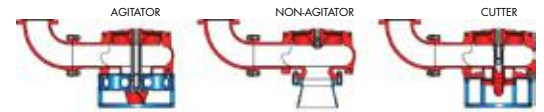
**The Toyo Modular Program** allows you the flexibility of using the wet ends below on various drive configurations. This advantage of the Toyo Product Line can significantly reduce spare parts inventory to an absolute minimum.



- Heavy solid handling capability
- Closed impeller
- Heavy metal sections for longer wear life
- Increased efficiencies in state of the art slurry pump design



- Heavy solid handling capability
- Closed and semi-open impellers available
- Patented Agitator Option
- Heavy metal sections for longer wear life



- Spiral casing design for increased efficiency and reduced wear
- Fully recessed impeller allows for large solids passage
- Only approx 15% of pumped liquid is in contact with impeller
- Wet end standard in High Chrome and CD4
- Patented Agitator and Chopper options available



HORIZONTAL



SUBMERSIBLE



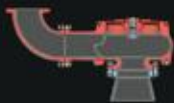
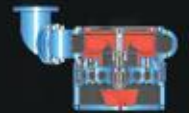
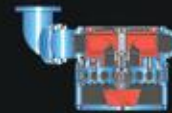
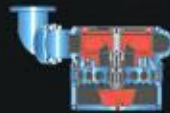
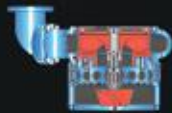
VERTICAL  
CANTILEVER



LINE-SHAFT  
STANDARD



LINE-SHAFT  
'O' SERIES



Toyo Pumps North America  
Corporate Head Office  
2853 Douglas Rd  
Burnaby, B.C.  
Canada V5C 6H2



For more information please visit  
[www.toyopumps.com](http://www.toyopumps.com)

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