

ELECTRICAL REQUIREMENTS

DHE INC 1.8004DHEINC

NOBLE 100 Concrete Plant

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10:27 AM

It is very important to keep your electric utility company coordinated with your power requirements. The equipment listed below should be combined with other site loads such as area lighting, charging equipment, office HVAC, mixers, etc. If you are using an on site generator, we would be happy to coordinate a more detailed analysis of voltage stabilization and locked rotor amps with the company you select to supply the generator. Transformer sizes listed below assume a 96% eff., an impedance of .035 to calculate voltage drop, the largest motor is Code G, and show standard available size 3 phase transformers.

Setup for **460 Volt operation.**

Main Feed System	HP	FLA	CB	Str	Heater	Wire Size	
						Min	Normal
1.5 KVA Transformer		3.26					
Cement 1 Feed	40.00	47.60	90	#3	CC74.6	6	6
<i>Cement 2 Feed</i>	<i>40.00</i>	<i>47.60</i>	<i>90</i>	<i>#3</i>	<i>CC74.6</i>	<i>6</i>	<i>6</i>
<i>Cement 3 Feed</i>	<i>40.00</i>	<i>47.60</i>	<i>90</i>	<i>#3</i>	<i>CC74.6</i>	<i>6</i>	<i>6</i>
<i>Cement 4 Feed</i>	<i>40.00</i>	<i>47.60</i>	<i>90</i>	<i>#3</i>	<i>CC74.6</i>	<i>6</i>	<i>6</i>
Batch Transfer 36"	25.00	29.60	70	#2	B56	8	8
L. P. Blower	5.00	6.80	15	#0	B10.2	14	10
Air Compressor	10.00	12.80	30	#1	B22	12	8
Water Pump 450 GPM	15.00	17.90	45	#2	B32	10	4
<i>Feed Conveyor #1</i>	<i>20.00</i>	<i>24.40</i>	<i>60</i>	<i>#2</i>	<i>B40</i>	<i>8</i>	<i>8</i>
<i>Feed Conveyor #2</i>	<i>20.00</i>	<i>24.40</i>	<i>60</i>	<i>#2</i>	<i>B40</i>	<i>8</i>	<i>8</i>
<i>Feed Conveyor #3</i>	<i>20.00</i>	<i>24.40</i>	<i>60</i>	<i>#2</i>	<i>B40</i>	<i>8</i>	<i>8</i>
<i>PJ980 Baghouse Blower</i>	<i>15.00</i>	<i>17.90</i>	<i>45</i>	<i>#2</i>	<i>B32</i>	<i>10</i>	<i>4</i>
<i>Optional Transfer Blower</i>	<i>10.00</i>	<i>12.80</i>	<i>30</i>	<i>#1</i>	<i>B22</i>	<i>12</i>	<i>8</i>
<i>Bulk Cement Offload</i>	<i>50.00</i>	<i>57.70</i>	<i>100</i>	<i>#3</i>	<i>CC94.0</i>	<i>4</i>	<i>4</i>
If not all motors run concurrently, *Amps not included in total.							
Total Connected	350.00	422.36					
+25% of Largest Motor	50.00	14.43				Actual	
Running Design Load		436.79			Running Design	348.00	KVA
+5 x Largest Motor		288.50					
Starting Design Load		725.29			Starting Design	577.85	KVA
500 KVA Transf. Volt Drop=	4.22%	Starting, and			2.54%	when running.	
600 KVA Transf. Volt Drop=	3.51%	Starting, and			2.12%	when running.	