#### HEAVY LIFT CAPABILITIES

The Port owns and operates a variety of heavy lift cranes with lifting capacities up to 220 net tons.\* The cranes are rented on an hourly basis to Port terminal operators for handling both dry bulk and general cargoes. Ship owners recognize Milwaukee's heavy lift cranes as being among the most productive on the Great Lakes.

# CRANE EQUIPMENT AND CAPACITIES

			LIFTING C	CAPACITY	MAX-MI	N RADIUS
	CRANE NC	D. MAKE AND TYPE	POUNDS	KG	FEET	METERS
	9	Clyde-Revolving Gantry	140,000	63,500	38	12
	_		44,000	20,000	87	26
M						
	15	Theilacker-Stiff-Leg Derrick	440,000	200,000	52	16
			300,000	136,000	87	26
	<b>A</b>					
	16	Lima-Crawler Crane	128,000	58,000	40	12
	/		37,000	16,800	100	30
	17	P&H-Crawler Crane	193,200	87,600	40	12
			39,100	17,700	130	40
	19	Manitowoc-Crawler Crane	239,700	108,000	26	8
			25,500	11,500	135	41
1	18	Bucyrus-Erie-Truck Crane	49,700	22,500	25	7



Front end loader, 52,000 lb. forklifts, manlift, and other equipment available to tenants upon request

\*Maximum Lift: Crane 15 could be combined with Crane 19 to lift a maximum of 550,000 lbs. (249 kgs) gross at 45 ft. (13.5) radius. Maximum cargo lift is determined by subtracting the weight of the necessary lifting gear from the maxium gross. The Port Operations Department must be contacted to determine the final maximum lift capabilties.

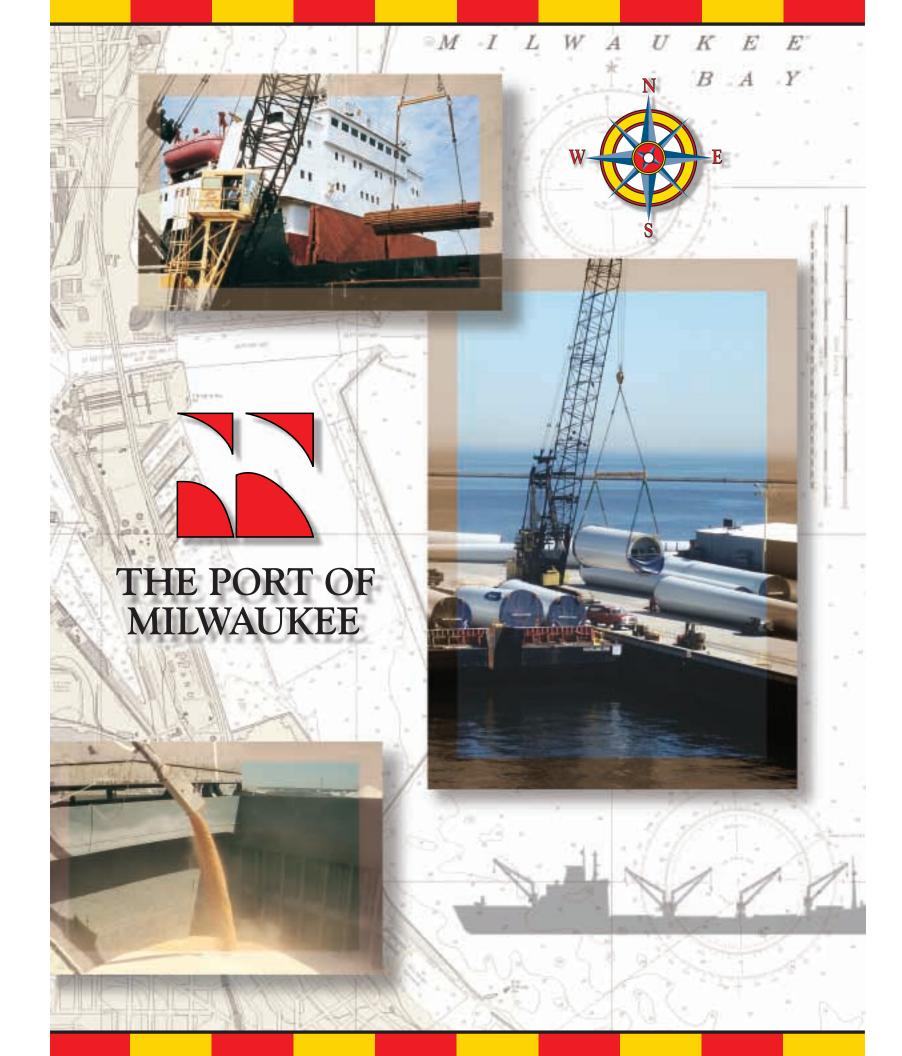
Note: Cranes 9 and 17 are equipped for magnet work. Cranes 17 and 19 are equipped for bucket work. Cranes 9-16-17-19 are equipped for container work. For Cranes 9 and 15 deduct 17 ft. from radius shown for distance from dockside. Crane 18 lifting capacity shown using 104 ft. main boom. All weights are gross, including lifting gear.





2323 S. Lincoln Memorial Drive Milwaukee, WI 53207-1054 U.S.A.

Phone 414-286-3511 FAX 414-286-8506 Website www.milwaukee.gov/port



This brochure provides descriptive data on Port terminals, equipment and facilities. It is meant to serve as a ready reference to shippers, vessel operators, freight forwarders and other Port users.

#### HIGHWAY ACCESS

The federal Interstate Highway System (I-94/794) leads directly into the Port of Milwaukee, assuring delay-free pickup and delivery. Highway deliveries to cities within a 350-mile radius (Chicago, Minneapolis/St.Paul, Peoria, Des Moines, Moline, Indianapolis) are accomplished in only a few hours.

### RAIL CONNECTIONS

have 115-pound rail.

#### CONTAINER YARD

The Port's intermodal container yard, operated for the Canadian Pacific Railway, is an all asphalt surface equipped with a modern fleet of toplifts to expedite stacking and retrieval. Container handling is also available at both inner and outer harbor docks with direct rail and truck access. Located at the yard are several leasing pools and a container repair and sales service.

# STORAGE

The Port maintains 10 acres of paved, lighted and fenced areas for the storage and marshalling of project, steel and dry bulk cargos. These sites are in close proximity to the general cargo and outer harbor docks.

## TERMINAL BUILDINGS

several general cargo sheds.

### **BULK HANDLING**

# THE PORT OF MILWAUKEE

The Port of Milwaukee offers an operational flexibility unique to the western Great Lakes and inland waterway system. Terminals designed for the efficient handling of steel products, containers, general cargo, dry and liquid bulk, and heavy machinery, plus intermodal connections to all Midwest cities, make the Port of Milwaukee the economic choice for routing all types of cargo, by ship or barge.

Truck scales are located at the Port. High-wide truck access to dock areas is available via East Bay Street by appointment.

The Port of Milwaukee is served by two Class 1 railroads - the Canadian Pacific Railway and the Union Pacific Railroad. Both provide pier delivery and switching services to all Port terminals. Fifteen miles of Port owned and maintained track connect each terminal to the main line railroads. Two classification vards utilizing 90-pound rail provide track for unit train assembly. Terminal lead tracks

A variety of on- and off-water terminals are available to shippers for the receipt, storage and packaging of products. These buildings, both publicly and privately owned, include a temperature controlled warehouse, four storage domes, an insulated steel cargo shed equipped with an overhead crane, liquid cargo tanks, and

Several parcels of Port land totalling 36 acres are dedicated to the handling and storage of dry bulk commodities. Two refurbished docks, Terminal 1 and Terminal 4, offer temporary paved bulk storage and product packaging. Four storage domes with load-out facilities to land conveyance have a total capacity of 50,000 tons.

# DOCK AREAS - OUTER HARBOR

	BULK TRANSFER DOCK	SOUTH PIER 1	SOUTH PIER 2
SIZE FT.	1,300 x 220	965 x 300	1,000 x 520
(M)	(400 x 65)	(290 x 90)	(300 x 160)
ACRES (HECTARES)	5 (2.0)	6.7 (2.7)	11.9 (4.8)
WATER DEPTH FT. (M) $(I.G.L.D. = 0)^*$	27 (8.2)	27 (8.2)	27 (8.2)
FREEBOARD FT (M) $(I.G.L.D. = 0)^*$	10.5 (3.2)	10.5 (3.2)	11.5 (3.5)
FENDER TYPE	Rubber	Rubber	Rubber
open storage Acres (hectares)	5.0 (2.0)	2.2 (0.9)	1.6 (0.6)
CARGO SETBACK	_	—	—
SURFACE MATERIAL	Concrete/Asphalt	Concrete/Asphalt	Concrete/Asphalt
SOIL CAPACITY LBS./SQ. FT	800	600	600
POTABLE WATER	Yes	Yes	Yes
CARGO USE	Dry Bulk	Projects, Generals, Steel	Ro/Ro, Steel, Dry Bulk, Packaging
NO OF BERTHS	2	5	3
CRANES AVAILABLE	Yes	Yes	Yes
dock support capacity lbs./sq. ft.	600	600	600
BUNKERS AVAILABLE	Yes	Yes	Yes
POTABLE WATER AVAILABLE	No	Yes	Yes
NO OF BERTHS	2	5	3

\* International Great Lakes Datum

# CARGO TERMINALS

	T 2	Т3	T 4	T 4A	T 5	HEATED WAREHOUSE
SIZE SQ.FT. (M <sup>2</sup> )	51,000 (4,800)	76,000 (7,100)	76,000 (7,100)	28,000 (2,600)	50,000 ft. (4,600 cu. m)	2@15,000 ea (2,800)
CONSTRUCTION	Steel Frame, Asphalt Floor	Steel Frame, Brick, Asphalt Floor	Steel Frame, Brick, Asphalt Floor	Steel Frame, Asphalt Floor	Steel Frame, Asphalt Floor	Steel Frame, Asphalt Floor
RAIL SIDING	1,100 ft. 330 m	1,700 ft. 500 m	1,700 ft. 500 m	1,100 ft. 330 m	500 ft. 100 m	_
TRUCK DOCKS	6	12	12	4	10	2
SHORE CRANES AVAILABLE	Yes	Yes	Yes	Yes	Overhead 30-Ton	No
SHED TO Dockwall	36 ft. 11 m	33 ft. 10 m	33 ft. 10 m	75 ft. 22 m	900 ft. 270 m	600 ft. 180 m
FIRE SPRINKLER	Yes	Yes	Yes	Yes	Yes	No



CARGO TERMINALS FUTURE DEVELOPMENT

TERMINALS

LAKE EXPRESS

COAL DOCK

RAILROAD TRACK



	NUMBER OF PIPES AND SIZES
,	water depth ft. (
,	$(I.G.L.D. = 0)^*$
	FREEBOARD FT. (M) (I.G.L.D. = 0)*
	FENDER TYPE
	TANK CAPACITY
	SURFACE MATERIAL
	DISTANCE DOCK T
	RAIL /TRUCK RACK
	POTABLE WATER
	CARGO USE
	STEAM-COILED TAN
	STEAM TO SHIPS
	tank sizes bbls (N
,	VALVE CONNECTIC
	* International Great

	HEAVY LIFT DOCK	GREENFIELD AVE. COAL DOCK	GRAND TRUNK SITE	DRY BULK Docks	GRAIN Elevator
SIZE FT. (M)	,	825 x 330 x 1,000 (250 x 100 x 300)	1,475 x Various (450 x Various)	,	,
ACRES (HECTARES)	7.0 (2.8)	13.8 (5.6)	30.7 (12.4)	10.5 (4.2)	4.8 (1.9)
WATER DEPTH FT. (M) (I.G.L.D.=0)	* 27 (8.2)	27 (8.2)	21 (6.4)	27 (8.2)	27 (8.2)
FREEBOARD FT. (M) (I.G.L.D.=0)*	5.5 (1.6)	8.2 (2.5)	7.0 (2.1)	7.5 (2.3)	7.5 (2.3)
FENDER TYPE	Timber	Timber	Wood Pile	Fiberglass	Timber
OPEN STORAGE ACRES (HECTARES)	5.0 (2.0)	13.8 (5.6)	28.0 (11.3)	14.5 (5.9)	—
CARGO SETBACK FT. (M)	25 (7.5)	125 (38)	100 (30)	50 (15)	_
SURFACE MATERIAL	Asphalt	Gravel	Earth	Earth	_
SOIL CAPACITY (LBS./SQ. FT.)	300-600	800	600	300	—
POTABLE WATER	Yes	Yes	No	Yes	No
load spouts	_	—	—	_	(6) 50 ft.
load speed	—	—	—	—	30,000 bus. per h
UNLOAD LEGS	—	_	—	—	1
UNLOAD SPEED	_		_	— 1	10,000 bus. per
STORAGE CAPACITY	_		_		3,250,000 bus
CARGO USE He	eavy Lifts Projects Containers	s, Coal	Open for Development	Dry Bulk	Bulk Grain
CRANES AVAILABLE	Yes	No	No	Yes	No

\*International Great Lakes Datum

# LIQUID CARGO PIER

2		
	SOUTH PIER 5	
	1,040 (315)	
	One 10" Line	
	27 (8.2)	
	10.5 (3.2)	
	Bollards and Timber Clusters	
	583,000 Barrels	
	Concrete	
Anks ft. (M)	400-2,150 (120-650)	
	Yes	
	Yes	
	Liquid Bulk	
5	Yes	
	No	
ric tons)	28,000-62,000 (300-10,000)	
	At 10" Lines, 6" (15 cm)	

akes Datum

# DOCK AREAS-INNER HARBOR