
Petitioners' Exhibits
for
ITC Hearing

Inv. Nos. 731-TA-1174 & 1175 (Final)

Seamless Refined Copper Pipe and Tube
from the People's Republic of China and Mexico

September 23, 2010

SRC TUBE PRODUCT TYPES

STANDARD SPECIFICATIONS

(“Plumbing Tube”)

Hard

Type K

Type L

Type M

DWV

OXY/MED

ACR

Soft

Type K

Type L

RST

Line Sets

OEM SPECIFICATIONS

(“Commercial Tube”)

Soft

Straight Lengths

LWC / Smooth Bore

LWC / Inner Groove

Capillary Tubes

Line Sets

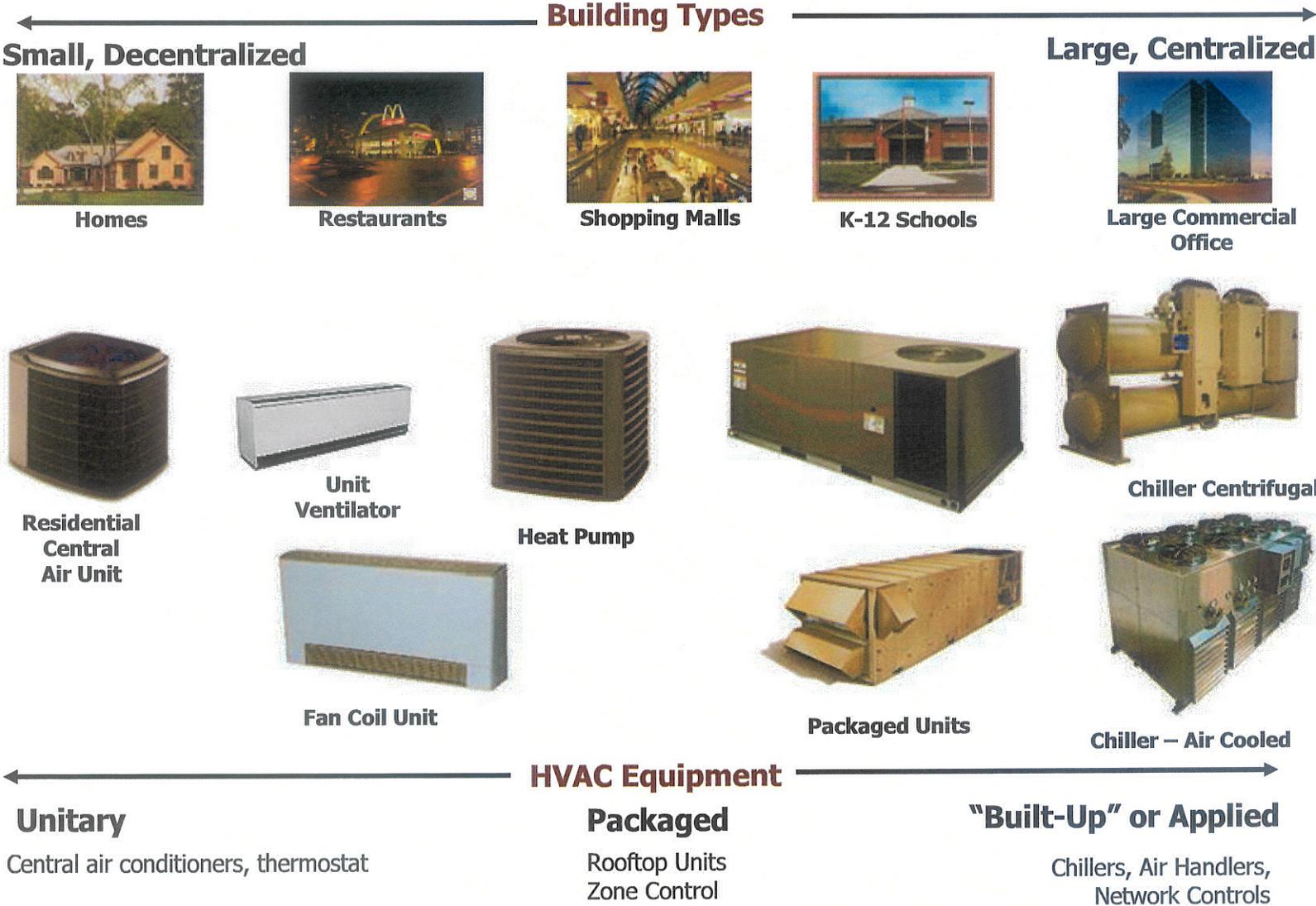
Hard

Straight Lengths

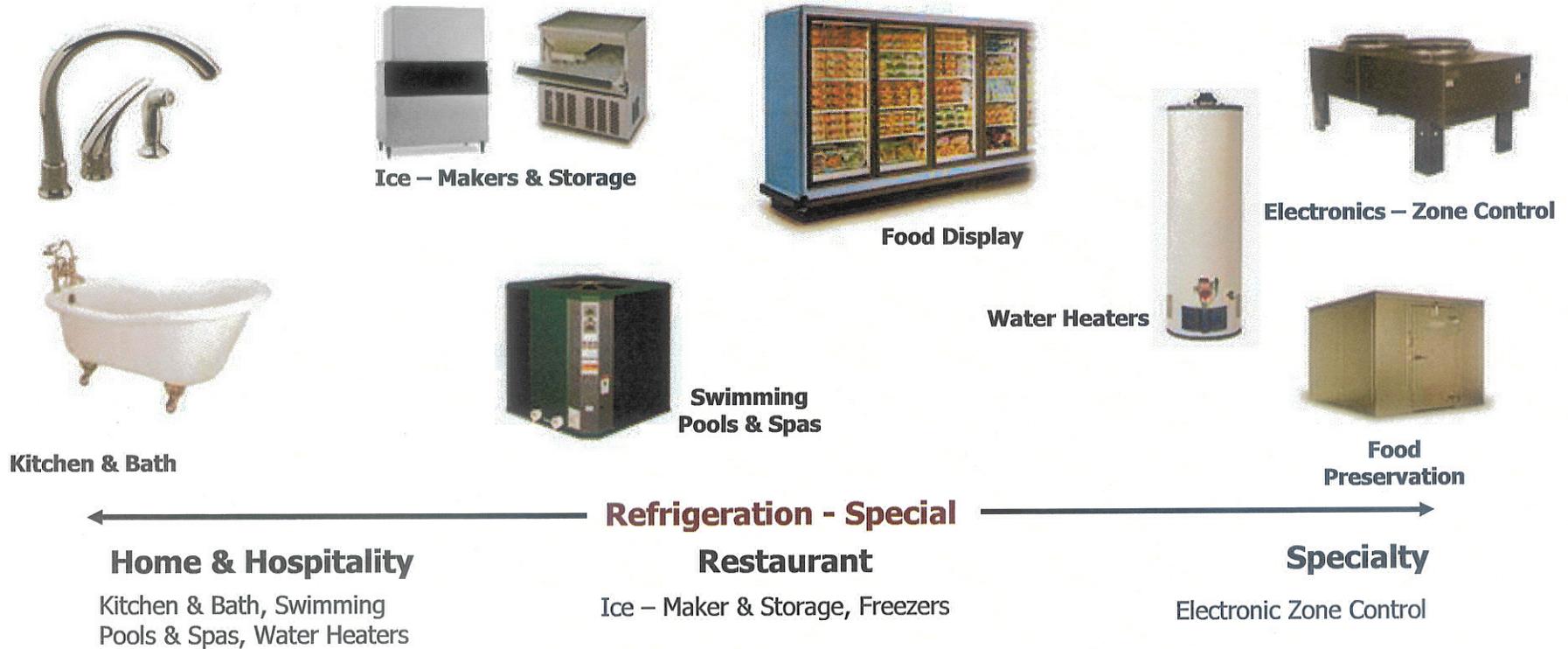
Externally Enhanced

Redraw

Copper Tube Applications



Refrigeration and Other Applications



SAMPLE PRICE SHEET

WATER TUBE / PRICE PER FOOT

Diameter		Type K			Type L			Type M	DWV	Nitrogenized® ACR / MED	
NOM	O.D.	Hard Lengths	Soft Coils	Soft Lengths	Hard Lengths	Soft Coils	Soft Lengths	Hard Lengths	Hard Lengths	Type K	Type L
1/4"	3/8"	2.45	2.48	3.05	2.02	2.07	2.70	–	–	2.78	2.41
3/8"	1/2"	4.17	4.45	5.22	3.09	3.21	4.21	2.38	–	4.75	3.67
1/2"	5/8"	4.99	5.21	6.24	3.41	4.39	5.27	2.39	–	5.39	4.47
5/8"	3/4"	6.22	6.72	7.77	5.42	5.90	7.25	3.93	–	6.92	6.32
3/4"	7/8"	9.27	9.62	11.59	5.54	7.03	8.07	3.93	–	9.84	7.01
1"	1-1/8"	12.14	12.53	15.03	8.75	9.84	11.21	6.71	–	13.03	10.17
1-1/4"	1-3/8"	15.03	15.96	18.47	12.27	14.08	15.70	9.84	10.62	15.91	13.64
1-1/2"	1-5/8"	19.66	20.90	24.77	15.83	18.01	20.29	13.61	13.35	21.37	17.48
2"	2-1/8"	30.27	33.67	38.46	24.72	29.14	31.92	21.47	17.68	33.05	27.49
2-1/2"	2-5/8"	44.59	–	57.20	36.74	–	45.93	31.40	–	49.46	40.96
3"	3-1/8"	61.98	–	79.95	49.28	–	61.60	41.54	29.26	67.43	54.80
3-1/2"	3-5/8"	80.15	–	–	64.22	–	–	56.23	–	87.62	71.64
	4-1/8"	102.46	–	–	81.43	–	–	73.02	50.02	111.99	91.12
5"	5-1/8"	226.30	–	–	170.42	–	–	170.42	148.53	266.63	235.08
6"	6-1/8"	324.70	–	–	228.05	–	–	228.05	205.96	376.70	286.80
8"	8-1/8"	608.02	–	–	432.15	–	–	432.15	–	716.42	530.09

*(Nitrogenized thru 3-1/8" Only)

REFRIGERATION SERVICE TUBE / PRICE PER COIL

O.D. Sizes	1/8"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1-1/8"	1-3/8"	1-5/8"
50 Foot Coil	50.47	59.02	67.80	91.09	96.63	136.40	185.03	222.57	332.06	477.96	748.60	950.33
100 Foot Coil	105.30	122.94	145.17	189.27	209.57	283.10	383.89	462.89	687.47	1002.71	1497.22	1900.68

OVERVIEW OF PRODUCTION PROCESS

1. Pre-Fabrication:

- Charging, Melting, Casting, Hot-Working, Cold-Working/Drawing

2. Intermediate Fabrication:

- Cold-Drawing

3. Finishing:

- Annealing, grooving, cleaning, cutting, winding, testing, and packaging

Notes:

- Whether a producer uses “extrusion” or “cast-and-roll” production technology affects the first stage only; stages two and three are exactly the same.
- “Redraw mills” purchase mother tube (“redraw”) and begin their manufacturing process at stage 2.

Stage 1: Pre-Fabrication

Pre-Fabrication		
	Extrusion	Cast & Roll
Charging	Cathodes or different grades of scrap depending on purity requirements of finished product	
Melting	Melting can be via induction furnaces, electric arc furnaces or gas fired shaft furnaces	
Casting	vertical <ul style="list-style-type: none"> → Semi-continuous → Full-continuous solid billets	Horizontal casting Milling of surface
Hot-Working	Extrusion	Planetary rolling
Cold-Working	Drawing / Cold-Working	
	"Mother Tube" (outgoing size ~2.2" x 0.100" to Intermediate Fabrication)	

Stage 2: Intermediate Fabrication



Intermediate-Fabrication	
Cold Drawing	From " Mother Tube ," drawing down to finished size; approx. 35% OD/Wall reduction per draw
	Coil to coil Coil to straight length (SL)
	to Finish-Fabrication

Stage 3: Finishing

Finish-Fabrication Tubes					
Products:	--> Fabrication steps -->				
Inner-Grooved LWC:	In-line Annealing	Grooving	Level-winding/Testing	Annealing	Packaging
Smooth Bore LWC:			Level-winding/Testing	Annealing	Packaging
Pancake Coils:			Re-coiling/Testing	Annealing	Packaging
Smooth Straight Length			Cutting to length/Testing	*1, *2, *3	Packaging

*1: optional with marking / color coding
 *2: optional with marking / color coding and cleaning / plugging / N₂-charging
 *3: optional annealing for soft straight lengths



U.S. Industry Plant Closures During the POI

Company Name	Plant Location(s)	Est. # of PRWs	Date(s) of Closure
Wolverine Tube, Inc.	Decatur, Alabama & Booneville, Mississippi	440	January 2008 December 2007
Linderme Tube Co.	Euclid, Ohio	85	September 2008
National Copper Products, Inc.	Dowagiac, Michigan	170	November 2008

Source: Petitioners' Prehearing Brief at 1.

Imports from Golden Dragon Caused Injury

Keith Weil

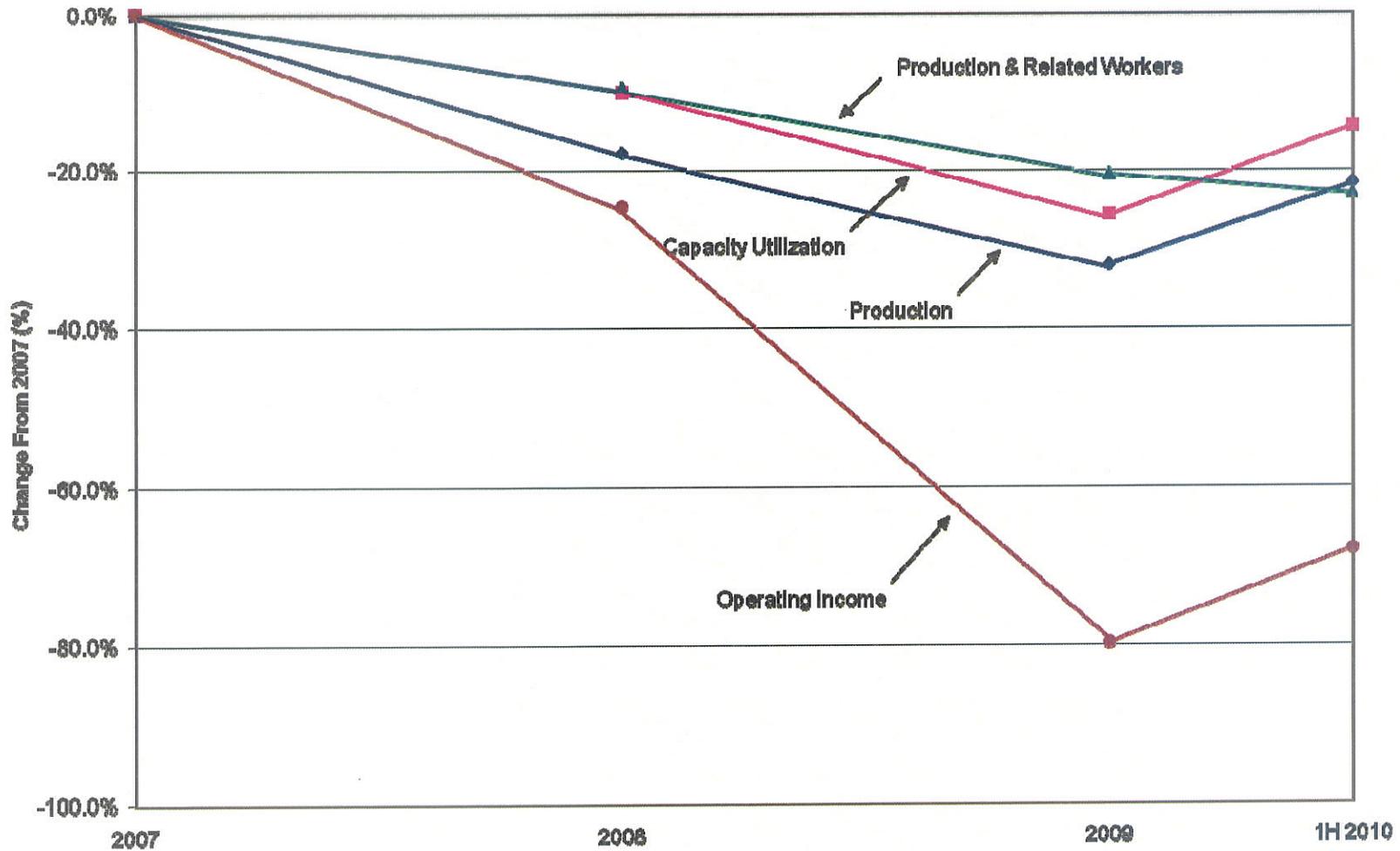
Former Senior V.P. of Wolverine Tube, Inc.

Current Executive V.P. of Golden Dragon USA

“Wolverine began acting as Golden Dragon’s exclusive U.S. representative shortly after Golden Dragon began selling in the U.S. *This arrangement in fact meshed very well with Wolverine’s decision to take capacity offline because Golden Dragon produced a line of tubing for the industrial market that was similar to the tubes Wolverine produced.*”

Source: Staff Conference Transcript at 101 (Oct. 21, 2009) (Mr. Weil).

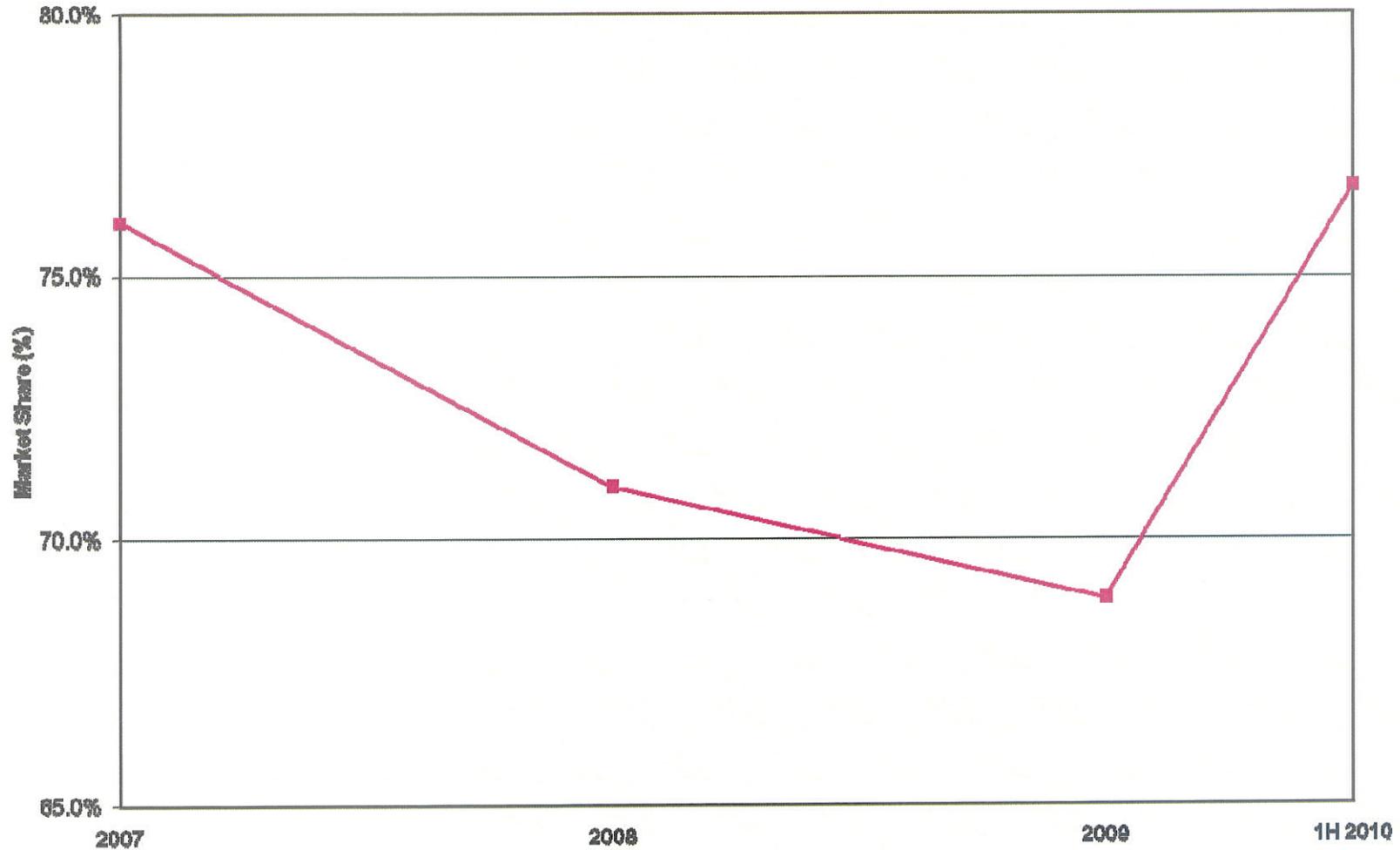
Indicia of Injury During the POI



Source: ITC Prehearing Report at Tables III-2, III-8, and VI-1.

Petitioners' Exhibit 11

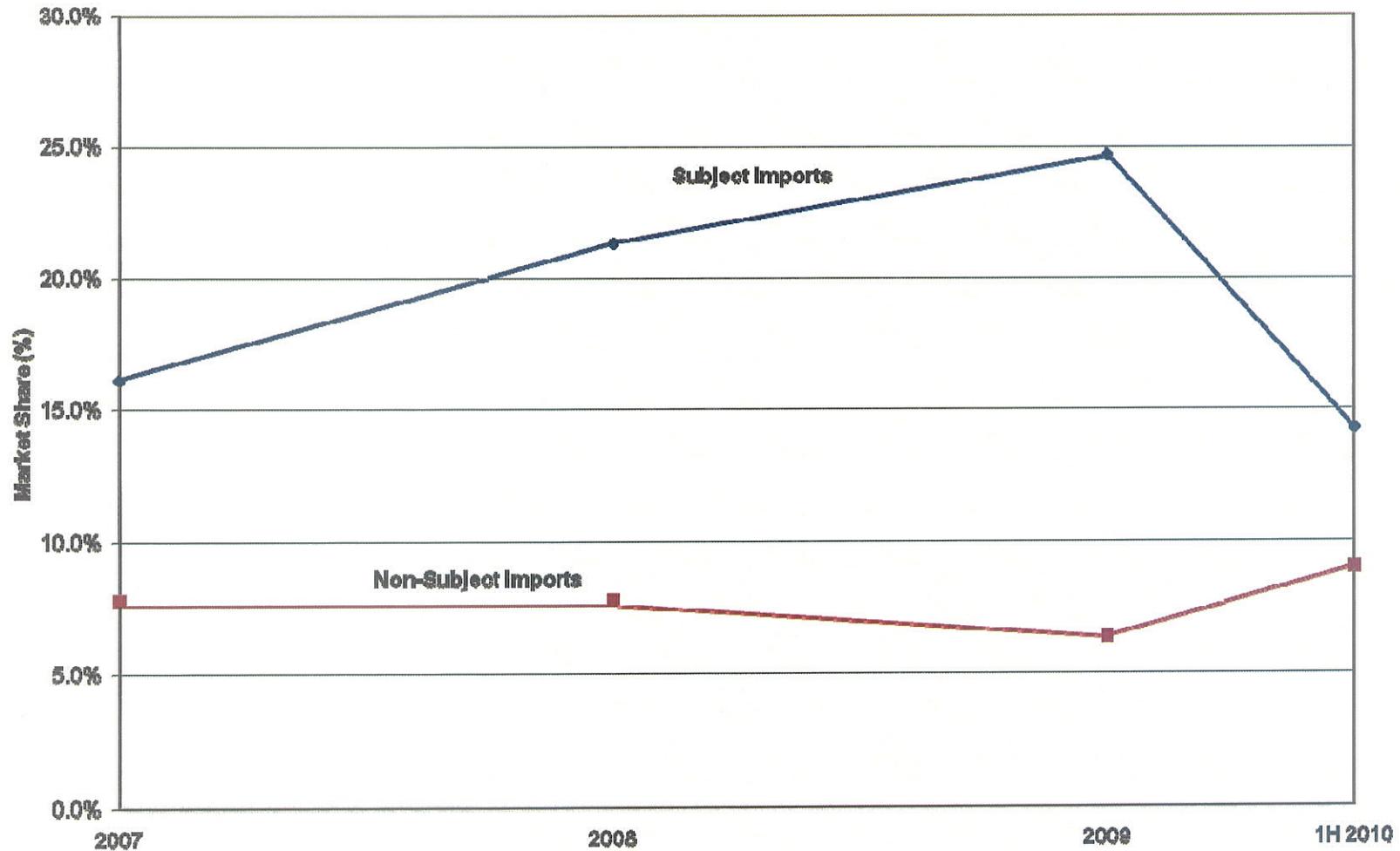
U.S. Producer Market Shares During the POI



Source: ITC Prehearing Report at Table IV-8.

Petitioners' Exhibit 12

Import Market Shares During the POI



Source: ITC Prehearing Report at Table IV-8.

Petitioners' Exhibit 13

GOLDEN DRAGON THREATENS CONTINUED INJURY TO U.S. PRODUCERS



Li Changjie
Chairman of Golden Dragon Group

“It still remains to be seen which side will win in this battle. Even if we lose at the final ruling, *we will continue to export to the American market and seize a larger market shares.*”

Source: *Golden Dragon Copper Smarting from U.S. Antidumping Charges,* BUSINESS CHINA (June 22, 2010).