

YEAR	JOB	CUSTOMER			APPLICATION	
1961	959	Crucible Steel	Silicon Steel	36" Wide	Timing Belt Brush Drive	Clean or Remove MgO Coating
		USA	Four Brush Unit	0.012"-0.025" Thick	Manual Screwdown	
		Cleaning and MgO Coating Line			No Quick Open	Tampico Brushes
1962	1031	Crucible Steel	Stainless Steel	52" Wide	Roller Chain Brush Drive	Brush Strippers
		USA	Two Brush Unit	0.012"- 0.187" Thick	Manual Screwdown	
		No. 3 Anneal and Pickle Line			No Quick Open	Tampico Brushes
1962	1052	J & L Steel		36" Wide	Timing Belt Brush Drive	"Scotch-Brite" Brushes
		USA	Four Brush Unit		Manual Screwdown	Surface Condition Prior to Plating
		Electroplating Line			Rack & Pinion Equalizer for Quick Open	
1962	1055	J & L Steel		36" Wide	Timing Belt Brush Drive	"Scotch-Brite" Brushes
		USA	Two Brush Unit		Powered Screwdown	Remove Rolling Oil Prior to Plating
		Electroplating Line			Rack & Pinion Equalizer for Quick Open	
1962	1075-1	Sharon Steel	Carbon Steel	36" Wide	Timing Belt Brush Drive	"Scotch-Brite" Brushes
		USA	Four Brush Unit		Powered Screwdown	Surface Condition between Cleaning Section
		Hot Dip Galvanizing Line			Rack & Pinion Equalizer for Quick Open	and Furnace
1962	1075-2	Crucible Steel	Carbon Steel	36" Wide	Timing Belt Brush Drive	Nylon Brushes
		USA	Two Brush Unit		Powered Screwdown	Remove Rolling Oils
		Hot Dip Galvanizing Line			Rack & Pinion Equalizer for Quick Open	
1963	1126	Reverse Brass & Copper		24" Wide	V-Belt Brush Drive	Nylon Brushes
		USA	Six Brush Unit	0.006"-0.032" Thick	Manual Screwdown	
		Color Coating Line (Aluminum)			No Quick Open	
1962	1131	Crucible Steel	Stainless Steel	52" Wide	Roller Chain Brush Drive	Tampico Brushes
		USA	Four Brush Unit	0.012"-0.187" Thick	Manual Screwdown	
		No. 2 Anneal and Pickle Line			Brush Strippers	
1963	1133	Allegheny Ludlum		48" Wide	V-Belt Brush Drive	
		USA	Four Brush Unit	0.012"-0.187" Thick	Manual Screwdown	
		Sheet Scrubber			No Quick Open	
1962	1172	Armco Steel	Stainless Steel	25" Wide	V-Belt Brush Drive	Tampico Brushes
		USA	Five Brush Unit	0.003"-0.080" Thick		
		Anneal & Pickle Line				
1963	1212	Armco Steel	Four Brush Unit	48" Wide	Direct Brush Drive	Tampico (Flow Thru) Brushes
		USA			Manual Screwdown of Backup Rolls	Fixed Brush
		Silicon Steel Scrubber			No Quick Open	
1964	1260	Republic Steel	Carbon Steel	48" Wide	Spindle/Timing Belt Brush Drive	Wire Brushes
		USA	Four Brush Unit		Powered Screwdown	Remove Zinc Coating

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YEAR	JOB	CUSTOMER			APPLICATION	
		Hot Dip Galvanizing Line			Quick Open on Backup Rolls	
1964	1283	Sharon Steel	Carbon Steel	50" Wide	Direct Drive	Tampico Brushes
		USA	Four Brush Unit		Manual Screwdown	
		Pickle Line			Rack & Pinion Equalizer for Quick Open	
1964	1308	Crucible Steel	Stainless Steel	52" Wide	Timing Belt Brush Drive	Brush Strippers
		USA	Two Brush Unit	0.050"-0.140" Thick	Manual Screwdown	Rubber Lined Housing
		No. 9 Line			No Quick Open	
1964	1332	Union Carbide Haynes Stellite	Stainless Steel	60" Wide	Timing Belt Brush Drive	Tampico Brushes
		USA	Two Brush Unit	0.005"-0.250" Thick		
		Sheet Cleaning Line			No Quick Open	
1965	1340	Republic Steel	Carbon Steel	48" Wide	Spindle/Timing Belt Brush Drive	Wire Brushes
		USA	Four Brush Unit		Powered Screwdown	Remove Zinc Coating
		Hot Dip Galvanizing Line			Quick Open on Backup Rolls	
1965	1405-1	Ingersoll Steel	Stainless Steel	50" Wide	V-Belt Brush Drive	Tampico Brushes
		USA	Six Brush Unit		Manual Screwdown	
		Grinding Line			No Quick Open	
1965	1405-2	Ingersoll Steel	(Stainless Steel)	50" Wide	V-Belt Brush Drive	
		USA	Four Brush Unit	0.005"-0.125" Thick	Manual Screwdown	
		Anneal & Pickle Line			No Quick Open	
1966	1511	Wheeling Steel	Carbon Steel	48" Wide	Direct Brush Drive thru Spindles	Flow-Thru Brushes
		USA	Four Brush Unit	0.062" Thick	Manual Screwdown	Alkali Cleaning
		Color Coating Line			Rack & Pinion Equalizer for Quick Open	
1966	1547	Armco Steel	Stainless Steel	50" Wide	V-Belt Brush Drive	Synthetic Fiber Brushes
		USA	Six Brush Unit	0.015"-0.090" Thick		
		Bright Anneal Line			No Quick Open	
1966	1548	Armco Steel	Silicon Steel	49" Wide	V-Belt Brush Drive	Tampico Brushes
		USA	Six Brush Unit	0.014"-0.031" Thick		Clean Prior to Decarburizing Furnace
		No. 25 Bright Anneal Line			No Quick Open	
1966	1561	Armco Steel		37" Wide	Direct Brush Drive	Fixed Brush
		USA	Six Brush Unit	0.009"-0.014" Thick	Powered Screwdown on Backup Roll	No Quick Open
		Silicon Steel Anneal & Coating Line			Through Link Type Equalizer Mechanism	
1966	1564	Armco Steel		37" Wide	Direct Brush Drive	Fixed Brush
		USA		0.009"-0.014" Thick	Powered Screwdown on Backup Roll	No Quick Open
		Silicon Steel Anneal & Coating Line	Two Brush Unit		Through Link Type Equalizer Mechanism	
1967	1620	Crucible Steel	Stainless Steel	50" Wide	Roller Chain Brush Drive	Tampico Brushes

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YEAR	JOB	CUSTOMER			APPLICATION	
		USA	Four Brush Unit	0.010"-0.075" Thick	Powered Screwdown	Brush Strippers
		No. 6 Anneal and Pickle Line			No Quick Open	
1969	1753	Allegheny Ludlum	Stainless Steel	18" Wide	V-Belt Brush Drive	Tampico Flow-Thru Brushes
		USA	Two Brush Unit	0.0005"-0.030" Thick	Manual Screwdown	Remove Rolling Oils
		Bright Anneal Line			No Quick Open	
1969	1825	Ball Brothers		28" Wide	Direct Brush Drive thru Spindles &	Wire Brushes
		USA	Two Brush Unit		Pinion Stand	Surface Conditioning & Spray Cooling
		Continuous Casting Line (Zinc)			No Quick Open	
1970	2002	Anaconda	Brass and	44" Wide	V-Belt Brush Drive	Flow-Thru Brushes
		USA	Copper Alloys	0.050"-0.125" Thick	Manual Screwdown	Sulfuric Acid Rinse
		Non-Ferrous Anneal & Pickle Line	Two Brush Unit		Manual Quick Open on Backup Rolls Thr	Linkage
1971	2140	Texas Instruments		13" Wide	V-Belt Brush Drive	
		USA	Two Brush Unit		Manual Screwdown	
		Cleaning Prior to Cladding			No Quick Open	
1974	2190	Metallugimport	Stainless Steel	12" Wide	Roller Chain Brush Drive	Flow Thru Brushes
		Soviet Union	Four Brush Unit	0.002"-0.080" Thick	Manual Screwdown	Alkali Cleaner
		Bright Anneal Line			No Quick Open	
1974	2214	Texas Instruments		28" Wide	V-Belt Brush Drive	
		USA	Four Brush Unit		Manual Screwdown	
		Cleaning Prior to Cladding			No Quick Open	
1973	2266	Texas Instruments		15" Wide	V-Belt Brush Drive	
		USA	Two Brush Unit		Manual Screwdown	Alkali Cleaning
		Cleaning Prior to Cladding			No Quick Open	
1974	2320	Centrozap	Brass and	30" Wide	V-Belt Brush Drive	Flow-Thru Brushes
		Poland	Copper Alloys	0.050"-0.157" Thick	Manual Screwdown	Sulfuric Acid Rinse
		Non-Ferrous Anneal & Pickle Line	Two Brush Unit		Manual Quick Open on Backup Rolls Thr	Linkage
1977	2478	S.A. Marvin	Brass and	27" Wide	Direct Brush Drive	Fixed Brush
		Brazil	Copper Alloys	0.032"-0.200" Thick	Manual Screwdown on Backup Rolls	Flow-Thru Brushes
		Non-Ferrous Pickle Line	Two Brush Unit		No Quick Open	
1979	2668-3	Texas Instruments		24" Wide	V-Belt Brush Drive	
		USA	Four Brush Unit		Manual Screwdown	Alkali Cleaning
		Cleaning Prior to Cladding			No Quick Open	
1979	2668-7	Texas Instruments		24" Wide	V-Belt Brush Drive	
		USA	Four Brush Unit		Manual Screwdown	Alkali Cleaning
		Cleaning Prior to Cladding			No Quick Open	

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YEAR	JOB	CUSTOMER			APPLICATION	
1976	2695	Texas Instruments		15" Wide	V-Belt Brush Drive	
		USA	Four Brush Unit		Manual Screwdown	Alkali Cleaning
		Cleaning Prior to Cladding			No Quick Open	
1977	2788	Texas Instruments		15" Wide	V-Belt Brush Drive	
		USA	Four Brush Unit		Manual Screwdown	Alkali Cleaning
		Cleaning Prior to Cladding			No Quick Open	
1979	2964	National de Cobre	Brass and	26" Wide	V-Belt Brush Drive	
		Mexico	Copper Alloys	0.015"-0.100" Thick	Manual Screwdown	
		Non-Ferrous Anneal & Pickle Line	Two Brush Unit		No Quick Open	
1980	3379	Republic Steel	Carbon Steel	48" Wide	Direct Brush Drive thru Spindles	Flow-Thru Brushes
		USA	Two Brush Unit	0.015"-0.036" Thick	Manual Screwdown	Polypropylene Tank
		Electrolytic Galvanizing Line			Pivoting Brush Arms with Quick Open	
1981	3519	Southwestern Pipe	Carbon Steel	10" Wide	Direct Brush Drive	Cantilevered Brushes
		USA	Two Brush Unit	0.015"-0.125" Thick	Manual Screwdown	Alkali Cleaning
		Hot Dip Galvanizing Line				
1982	3581	Anaconda	Brass and	46" Wide	Direct Brush Drive thru Spindles	
		USA	Copper Alloys	0.015"-0.100" Thick	Manual Screwdown	Sulfuric Acid Rinse
		Non-Ferrous Anneal & Pickle Line	Two Brush Unit		Pivoting Brush Arms with Quick Open	
1982	3736	Brush Wellman	Beryllium Copper	18" Wide	Direct Brush Drive thru Spindles	Internal Brush Dressing Boards
		USA	Two Brush Unit	0.002"-0.060" Thick	Manual Screwdown	Surface Conditioning
		Non-Ferrous Pickle Line			Pivoting Brush Arms with Quick Open	
1982	3781	Brush Wellman	Beryllium Copper	18" Wide	V-Belt Brush Drive	
		USA	Two Brush Unit	0.002"-0.060" Thick	Manual Screwdown	Surface Conditioning
		Non-Ferrous Pickle Line			Pivoting Brush Arms with Quick Open	
1984	5017	Brush Wellman		25" Wide	Direct Brush Drive thru Spindles	Dual Backup Rolls
		USA	Two Brush Unit	0.010"-0.100" Thick	Manual Screwdown	Internal Brush Dressing Boards
		Non-Ferrous Bright Anneal Line			Pivoting Brush Arms with Quick Open	Driven Wringer Rolls
						Alkali Cleaning
1987	5079	Allegheny Ludlum	Stainless Steel	36" Wide	V-Belt Brush Drive	Dual Backup Rolls
		USA	Four Brush Unit	0.005"-0.030" Thick	Powered Screwdown	Alkali Cleaning
		Bright Anneal Line			No Quick Open	
1985	5213	S.A. Marvin	Brass and	27" Wide	Direct Brush Drive thru Spindles	Dual Backup Rolls
		Brazil	Copper Alloys	0.032"-0.200" Thick	Manual Screwdown	Sulfuric Acid Rinse
		Non-Ferrous Pickle Line	Two Brush Unit		Pivoting Brush Arms with Quick Open	
1986	5241	Texas Instruments	Stainless Steel	26" Wide	Direct Brush Drive	Fixed Brush

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YEAR	JOB	CUSTOMER			APPLICATION	
		USA	Four Brush Unit	0.008"-0.080" Thick	Manual Screwdown on Backup Roll	Alkali Cleaning
		Bright Anneal Line			No Quick Open	
1986	5297	Thomas Steel	Carbon Steel	42" Wide	Timing Belt Brush Drive	
		USA	Two Brush Unit	0.004"-0.070" Thick	Manual Screwdown	Alkali Cleaning
		Nickel Plating Line			No Quick Open	
1986	5467	Brush Wellman	Beryllium Copper	18" Wide	Timing Belt Brush Drive	Fixed Brush
		USA	Two Brush Unit	0.002"-0.060" Thick	Manual Screwdown on Backup Roll	Dual Backup Rolls
		Non-Ferrous Bright Anneal Line			Rack & Pinion Equalizer for Quick Open	Rinse and Surface Conditioning
		Two Machines			on Backup Rolls	
1991	6260	Federal Iron Works	Carbon Steel	50" Wide	Direct Brush Drive thru Spindles	Driven Wringer Rolls
		Malaysia	Six Brush Unit	0.008"-0.062" Thick	Manual Screwdown	Alkali Cleaning
		Hot Dip Galvanizing Line			Pivoting Brush Arms with Quick Open	
1992	6402	Precision Galvanizing	Carbon Steel	60" Wide	V-Belt Brush Drive	Dual Backup Rolls
		USA	Two Brush Unit	0.012"-0.105" Thick	Manual Screwdown	Alkali Cleaning
		Hot Dip Galvanizing Line			No Quick Open	
1992	6524	Northwest Copper	Beryllium Copper	14" Wide	Direct Brush Drive thru Spindles	Synthetic Fiber Brushes
		PRC	Two Brush Unit	0.002"-0.060" Thick	Manual Screwdown	Sulfuric Acid Rinse
		Non-Ferrous Anneal & Pickle Line			Pivoting Brush Arms with Quick Open	
1993	6589-1	Great Lakes Metals	Brass and	30" Wide	V-Belt Brush Drive	Pivoting Brush Arms
		USA	Copper Alloys	0.004"-0.040" Thick	Hydraulic Powered Screwdown	Automatic Brush Load Control
		Non-Ferrous Anneal & Pickle Line	Vertical Two Brush U	nit	No Quick Open	
1993	6589-2	Great Lakes Metals	Brass and	30" Wide	V-Belt Brush Drive	Pivoting Brush Arms. No Quick Open
		USA	Copper Alloys	0.004"-0.040" Thick	Hydraulic Powered Screwdown	Automatic Brush Load Control
		Non-Ferrous Anneal & Pickle Line	Vertical Four Brush U	nit	No Quick Open	
1994	6748	Poongsan Metals		18" Wide	Pre-clean Section plus Two Brushes	
		South Korea		0.008"-0.060" Thick	Timing Belt Brush Drives	Dual Brush Backup Rolls
		Stainless Steel Bright Anneal Line		50 FPM	Fixed Brushes	(non-driven) with Equalizer and
					Quick Change Brush Doors	Pheumatic Quick Open
1994	6851	IMSA	Carbon Steel &	49" Wide	Directly Opposing Brush	Driven Wringer Rolls
		Mexico	Galvanized Steel	0.008"-0.060" Thick	Backup Rolls (driven) with	Direct Brush Drive with
		High Speed Cleaning Line	Four Brush Units (2)		Pneumatic Quick Open	Automatic Load Control
		Two Machines	2000 FPM		Quick Change Brush Drawers	Offline Tank
1995	6978	IMSA	Carbon Steel &	50" Wide	Directly Opposing Brush	Driven Wringer Rolls
		Mexico	Galvanized Steel	0.008"-0.048" Thick	Backup Rolls (driven) with	Direct Brush Drive with
		Hot Dip Galvanizing Line	One Four-Brush &	600 FPM	Pneumatic Quick Open	Automatic Load Control

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YEAR	JOB	CUSTOMER	APPLICATION			
		Two Machines	One Two-Brush		Quick Change Brush Drawers	Offline Tank
1995	7147	Hamilton Precision Metals USA Stainless Steel Bright Anneal Line		18" Wide 0.002"-0.070" Thick 50 FPM	Timing Belt Brush Drives Dual Brush Backup Rolls (non-driven) with Equalizer and Pneumatic Quick Open	Pre-clean Section plus Two Brushes Fixed Brushes Quick Change Brush Doors
1996	7156	US Steel Fairfield, AL USA Hot Dip Galvanizing Line	Carbon Steel	49" Wide 0.009"- 0.040" Thick 600 FPM	Directly Opposing Brush Backup Rolls (Driven) with Pneumatic Quick Open Quick Change Brush Drawers Offline Tank	Driven Wringer Rolls Direct Brush Drive withAutomatic Load Control
1996	8016	US Steel Irvin PA USA Hot Dip Galvanizing Line	Carbon Steel Four Brushes (All Flow-Thru)	49" Wide 0.009"-0.040" Thick 330 FPM	Directly Opposing Brush Backup Rolls (Driven) with Pneumatic Quick Open on Backup Rolls Quick Change Brush Drawers	Driven Wringer Rolls Direct Brush Drive with Automatic Load Control Offline Tank
1996	3986	Warren Consolidated Industries Warren, OH USA Silicon Steel Anneal Line Two Machines	Four Brushes	48" Wide 0.014"-0.037" Thick 350 FPM	Single Offset Brush Backup Rolls (Non-Driven) Non-Driven Wringer Rolls	Direct Brush Drive Offline Tank
1997	8081	Armco Steel Middletown, OH USA Stainless Steel Anneal & Pickle Line Two Machines	Two Brush	12", Wide 0.080"-0.120" Thick 100 FPM	Dual offset Brush Backup Rolls (Non Driven) Direct Brush Drives Pilot Line	
1997	7997	Winner Steel Services Sharon, PA USA Hot Dip Galvanizing Line	Four Brush	60" Wide 0.008" – 0.065" Thick 675 FPM	Directly Opposing Brush Backup Rolls (Driven) Direct Brush Drives	Manual Brush Adjust Gas Heating Online Reservoir
1998	10255	GalvPro Jeffersonville, IN USA Hot Dip Galvanizing Line	Two Brush	60" Wide 0.008" – 0.040" Thick 500 FPM	Directly Opposing Brush Backup Rolls (Driven) Direct Brush Drives	Gas Heating Offline Reservoir
2000	10403	Dofasco Canada Annealing Line	Four Brushes	48" Wide .00670020 Thick 1500 FPM	Directly Opposing Brush Backup Rolls (Driven) with Pneumatic Quick Open Quick Change Brush Drawers Offline Tank (By Others)	Driven Wringer Rolls Direct Brush Drive with Automatic Load Control
2006	11835	Allegeny Ludlum USA Annealing Line	Two Brushes	28" Wide 0.012"-0.065" Thick	Directly Opposing Brush Backup Rolls (driven) with Adjustable Stops and Pneumatic Quick Open	Online (Poly & Propylene) Tank Quinch Open on Brushes Timing Belt Drive

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YEAR	JOB	CUSTOMER	APPLICATION				
2011	11626	US Steel		50" Wide	Directly opposing brushes		
		USA	Two Brushes	0.009"-0.040" Thick	Dry brushing		
		Galvanizing Line		600 FPM	Zinc Removal after pot stop		
2014	12711	SDI		60" Wide	Directly Opposing Brush	Gas Heating	
		USA	Two Brushes	0.008"-0.040" Thick	Backup Rolls (Driven)	Offline Reservoir	
		Hot Dip Galvanizing Line	Timing Belt Drive	650 FPM	Direct Brush Drives		
2015	13327	US Steel - Greatlakes		73" Wide	Directly Opposing Brush		
		USA	Four Brushes	0.018-0.080 Thick	Backup Rolls (Driven)		
		Galvanizing Line		600 FPM	Direct Brush Valves		
2016	13485	National Galvanizing		48" Wide	Directly Opposing Brush		
			Four Brushes	0.030"-0.250" Thick	Backup Roll (Driven)		
		Galvanizing Line		150 FPM	Direct Brush Drives		
					Gas Heating		

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