PARTS CATALOG





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Dear Valued Customer:

At I.J. WHITE, we stand behind every system we sell with highly trained service technicians on call 24 hours a day. In addition to manufacturing the finest systems, I.J. WHITE also offers replacement parts. It is our pleasure to present to you this parts catalog to assist you in maintaining your system for years to come.

Why should you purchase your replacement parts from I.J. White?

Long Term Reliability

In the business of designing and manufacturing systems for the last 75 years, I.J. WHITE has earned it's reputation for quality service and dependability.

The Finest Quality

Each I.J. WHITE replacement part is manufactured with the same excellence and quality engineering that is found in it's Spiral Systems. Each part is pre-tested in our factory prior to shipment. Only genuine I.J. WHITE parts will assure that your system will continue to provide years of trouble-free operation.

Dependable Service

I.J. WHITE'S inventory control system assures availability. Standard replacement parts are stocked and ready for shipment. If a particular item is not listed in this catalog, or a custom fabricated part is needed, please call us.

How To Order - (516) 293-2211 ext. 111

To order by phone, call our Parts Department Monday thru Friday. Be sure to state the catalog part number, size and your purchase order number. Please provide the number of running hours on your system. All stocked and custom fabricated parts in this catalog will be shipped F.O.B. factory. We will ship per your instructions by either UPS, Common Carrier, Federal Express, DHL or Air Freight.

Customer Support - (516) 293-2211 ext. 107

If you have any questions about your existing system, call our Technical Service Department. Our professional staff is here to assist and advise you in maintaining your I.J. WHITE SYSTEM for years to come.

If your existing system can no longer accommodate your growing business...we can help.

Whatever your application, I.J. WHITE can modify, add to or replace your existing system. I.J. WHITE understands your plant's growing needs. Our experienced equipment designers are always on hand to answer your questions and provide you with the most cost effective advice.





Bearings

All bearings used in I.J. WHITE SPIRAL SYSTEMS are manufactured to the highest industry standards. Prior to shipment, each bearing is factory tested, pre-lubricated, sealed against contamination, and equipped with grease fittings.

I.J. WHITE Bearings are available for all temperature applications, including ambient room temperatures of $+35^{\circ}\text{F}\ (+2^{\circ}\text{C})$ to $+140^{\circ}\text{F}\ (+60^{\circ}\text{C})$; and freezer applications from $+32^{\circ}\text{F}\ (0^{\circ}\text{C})$ to $-50^{\circ}\text{F}\ (-46^{\circ}\text{C})$, with our custom plating.

Flanged Cartridge Block Roller Bearings

1 7/16"		10-1076-03
115/16"		10-1156-03
21/2"		10-2012-03
21/2"	Heavy Duty	10-2128-03
215/16"		10-2156-03

37/16"		10-3076-03
315/16"		10-3156-03
415/16"		10-4156-03
415/16"	Spacer Bushing for	
	Bearing (# 10-4156-03)	10-4156-99

Flanged Cartridge Block Ball Bearings

17/16"	11-1076-03
1 15/16"	11-1156-03
215/16"	11-2156-03
3 7/16"	11-3176-03

NOTE: When using Flanged Cartridge Block Ball Bearings or Roller Bearings in high temperatures, please call I.J. White for special part numbers.

Flanged Ball Bearings

1" (2) Bolt Mounting Holes	12-1002-02
1" (2) Bolt Mounting Holes	1 1,70 0
Freezer Duty Plated	12-1002-03

1003-02		1" (3) Bolt Mounting Holes	
1036-02	es	(2) Bolt Mounting H	1 3/16"
		()	

Pillow Block Ball Bearings

3/4"	Room Temperature	13-0034-02
3/4" 1" 1"	Freezer Duty Plated	13-0034-03
1"	Room Temperature	. 13-1000-02
1"	Freezer Duty Plated	13-1000-03
1 3/16"	Room Temperature	13-1036-02
13/16"	Freezer Duty Plated	13-1036-03

1 7/16"	Room Temperature	13-1076-02
1 7/16"	Freezer Duty Plated	13-1076-03
1 15/16"	Room Temperature	13-1156-02
1 15/16"	Freezer Duty Plated	13-1156-03
NOTE:	When using Pillow Block Ball Box	rings in high

NOTE: When using Pillow Block Ball Bearings in high temperatures, please call I.J. White for special part numbers.

Rod End Bearings

5/8"	Transfer Bearing:	1/2" - 20 Mount	14-0058-02
1"	Room Temperature:	3/4"-10 Mount	14-1000-02
1"	Freezer Duty Plated:	3/4"-10 Mount	14-1000-03
1 ³ /16"	Room Temperature:	3/4"-10 Mount	14-1036-02

1 ³ /16"	Freezer Duty Plated:	3/4"-10 Mount	14-1036-03
1 7/16"	Room Temperature:	3/4"- NPT Mount	14-1076-02
1 ⁷ /16"	Freezer Duty Plated:	3/4"- NPT Mount	14-1076-03

Slot Take-up Bearings

1"	Room Temperature	15-1000-02	1"	Freezer Duty Plated	15-1000-03



CLEANING SYSTEMS





Powerwash 2000®

The POWERWASH 2000 is a portable washing system engineered to provide up to 500 PSI at 12 GPM to the Spiral Belt Washing Station. A perfect solution for processing plants without sufficient water pressure to clean the spiral belt.

The system provides a 6 gallon reservoir for sanitizers and has 3 modes of automatic operation including wash, foam, and rinse. Oversized casters and quick release couplings allow the POWERWASH 2000 to be used on more than one spiral belt washing station, as well as for general plant sanitation.

208 Volts	07-8208-01	460 Volts	07-8460-01
230 Volts	07-8230-01	575 Volts	07-8575-01

NOTE: Overseas voltages are also available.

Belt Washing Stations

Maintaining a clean Spiral Belt is critical to obtaining reliable system performance, and reducing belt tension. I.J. WHITE'S Belt Washing Stations are designed to provide focused high pressure belt cleaning followed by high velocity air drying. It can be an all stainless steel modular unit that can be installed on existing spiral systems. If high pressure water is not available, see our Powerwash 2000 above.

Washing Station with Air Pipes

07-1000-00

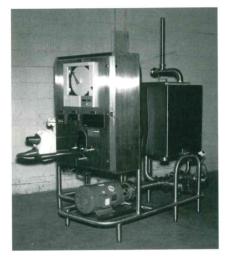
Washing Station with Integral Air Blower

07-9000-99

Dip Tanks

These field proven units are essential for maintaining clean spiral and auxiliary conveyor belts. Ideal for cleaning the glazing or icing accumulation on Donut, Honey Bun or Fruit Pie lines. Dip Tanks can be retrofitted onto existing spiral systems.





Total Cleaning System® (TCS)

For today's demanding food service applications, TCS has been designed to provide cleaning of Blast Freezing, Proofing and Refrigerated Cooling Systems. TCS utilizes strategically placed spray balls that are applicable to wash, rinse and sanitize your I.J.WHITE SYSTEM. PLC controlled, TCS is available as a single pass or Recirculation Systems. Due to the complexity of these systems, please call I.J. WHITE'S Sales / Engineering Department for more information.

NOTE: All of the above cleaning systems require customer supplied plumbing, drains, air, water and electrical services.

Belt Brushes

I.J. WHITE'S Spiral Brushes are made with a superior quality, stiff 5" diameter bristle. They have been designed to continually remove excess buildup of bread crumbs, flour, and various other dry particles on the belt before returning to the infeed of the system. As an option, the counter rotating belt brushes can be positively driven for improved cleaning.

Complete Assembly w/ Hardware	34-1400-01	Replacement Brush	34-1400-00
Counter Rotating System	34-1490-99	Replacement Bearing (1" Rod End)	14-1000-03

NOTE: A chain guard is not included, but is required. The complete assembly includes a brush on a stainless steel shaft, plated bearings, two (2) drive sprockets, and a roller chain.



ELECTRICAL CONTROL SYSTEMS



PLC's and AC Inverters

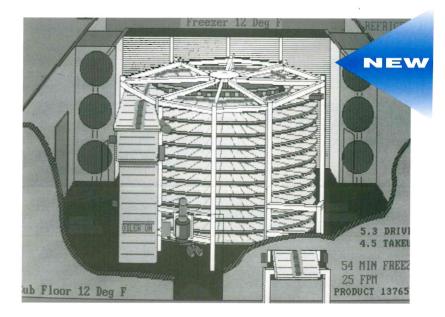
I.J. WHITE's Electrical Control Centers are designed with the latest PLC's and graphic interfaces. AC Inverters are available from the following suppliers: Allen Bradley, Parametrics, General Electric, Sew Eurodrive, Toshiba, Square D., Louis-Allis Magnetek, and T.B. Woods.

I.J. WHITE offers discounted pricing on a full range of the latest AC Inverters and PLC's. Please call our Parts Department for prices, or with any questions you may have.

Belt Tension Control® (BTC)

I.J. WHITE SYSTEMS have built-in Belt Tension Control (BTC) eliminating traditional belt or gear designs. Maintaining proper belt tension can be controlled and fine-tuned from the Electrical Control Center. BTC will operate at 200 Volts thru 480 Volts and 575 Volts.

BTC 200 thru 480 Volts	47B-Q217U-3	
BTC 575 Volts	47B-Q216U-3	



Operating Systems

I.J. WHITE offers a complete operating software package designed to control retention time, air flow and temperature. This package includes preventative maintenance off-site, modem support and real time recording of system operating conditions.

MAIN DRIVE COMPONENTS





Main Drive Gear Reducers

Due to our high volume purchases, I.J. WHITE offers special discount pricing on Main Drive Gear Reducers of *Sew Eurodrive* and *Sumitomo* brands.

Note: See Page 14 for correct oils.

Sumitomo Parts

Sumitomo Ball and Check Valve	34-1700-01
Sumitomo Sight Glass	34-1800-01

Motors: Spiral, Auxiliary Conveyor, and Fans

I.J. WHITE offers a complete line of *Reliance*, *Baldor*, and *U.S. Motors* with special discount pricing for our customers. All motors are available in Chem Duty, TEFC, Corro Duty, as well as for freezer duty for temperatures to –50°F (–46°C). Please call I.J. WHITE for replacement parts and current prices. Please specify the temperature application.



Tension Springs

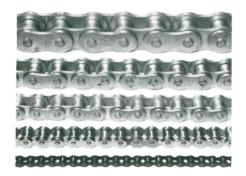
Tension Springs assure proper Main Drive Chain tension and are an integral component in maximizing the operational life of the entire main drive assembly. I.J. WHITE'S tension springs are the highest quality available and will perform in all temperature applications from $-50^{\circ}F$ ($-46^{\circ}C$) to $+300^{\circ}F$ ($+149^{\circ}C$).

NOTE: Blast Freezing and Proofing Tension Springs are available plated to resist rust and corrosion.

			Room Temperature	Blast Freezing / Proofing
1/8"	Wire	1" O.D. 5" Long	37-0018-02	37-0018-03
3/16"	Wire	1 1/2" O.D.8" Long	37-0316-02	37-0316-03
1/4"	Wire	2" O.D.9" Long	37-0014-02	37-0014-03
5/16"	Wire	2 1/4" O.D 10" Long	37-0516-02	37-0516-03
3/8"	Wire	2 1/2" O.D. 12" Long	37-0038-02	37-0038-03
1/2"	Wire	3" O.D. 14" Long	37-0012-02	37-0012-03



MAIN DRIVE COMPONENTS



Drive Chains

I.J. WHITE uses the highest quality hardened steel chain on all drive applications. Each Roller Chain has been riveted on both sides for added strength and long life.

Prior to shipment, all drive chains are pre-lubricated, and pre-stressed to reduce initial break-in wear. Also available is our special zinc plated series for Blast Freezer applications. All chains are in stock and shipped in minimum ten foot lengths.

#35	Plated
#40	Plated
#50	Plated
#60	Plated
#80	Black
#80	Plated
#100	Black
#100	Plated
#120	Black
#120	Plated
#140	Black
#140	Plated
#140-3	Triple Strand, Black
#160	Black
#160	Plated
#160-2	Double Strand, Black
#200	Black
#200	Plated

Drive Chains	Connector Links	Off-set Links
31-0359-03	32-0359-03	33-0359-03
31-0409-03	32-0409-03	33-0409-03
31-0509-03	32-0509-03	33-0509-03
31-0609-03	32-0609-03	33-0609-03
31-0808-02	32-0808-02	33-0808-02
31-0809-03	32-0809-03	33-0809-03
31-1008-02	32-1008-02	33-1008-02
31-1009-03	32-1009-03	33-1009-03
31-1208-02	32-1208-02	33-1208-02
31-1209-03	32-1209-03	33-1209-03
31-1408-02	32-1408-02	33-1408-02
31-1409-03	32-1409-03	33-1409-03
31-1438-02	32-1438-02	33-1438-02
31-1608-02	32-1608-02	33-1608-02
31-1609-03	32-1609-03	33-1609-03
31-1628-02	32-1628-02	33-1628-02
31-2008-02	32-2008-02	33-2008-02
31-2009-03	32-2009-03	33-2009-03



Main Drive Tooth Segments

Main Drive Tooth Segments are custom made by I.J. WHITE and precision engineered to the exact specifications of your system and are not interchangeable, even between similar spirals. Fabricated of high quality steel, each tooth segment is shipped complete with a steel mounting plate.

NOTE: Tooth segments should be replaced as a complete set only.

#60	36-0060-99
#80	36-0080-99
#100	36-0100-99
#120	36-0120-99
#140	36-0140-99

#140-3 Triple	36-0143-99
#160	36-0160-99
#160-2 Double	36-0162-99
#200	36-0200-99



SPROCKETS





Polyethylene Sprockets

These sprockets eliminate metal to metal contact and reduce noise levels. UHMW Polyethylene Sprockets are ideal for all spiral belt, turn and straight conveyor drive applications. They are precision made, accurately machined and finished. Each sprocket is complete with a standard key way and set screw.

NOTE: Please call I.J. WHITE for custom bore diameters, specifications, or more information.

Polyethylene Sprockets with Set Screw

18 Tooth	1" Pitch with 1" Bore	23-1000-01
18 Tooth	1" Pitch with 1 7/16" Bore	23-1076-01
18 Tooth	1" Pitch with 1 15/16" Bore	23-1156-01

25 Tooth	3/4" Pitch with 1" Bore	23-1000-16
25 Tooth	3/4" Pitch with 17/16" Bore	23-1076-16
25 Tooth	3/4" Pitch with 115/16" Bore	23-1156-16



Cast Iron Sprockets

Cast Iron Sprockets are used with 1" Pitch Grid Belts, 1/2" x 1" and 1" x 1" Flex Belts. They are designed for all load drive applications and offer outstanding performance in all temperatures. Each sprocket includes a 3/8" set screw.

NOTE: They are also available in stainless steel.

Cast Iron Sprockets with Set Screw

18 Tooth 1" Pitch, with 1" Bore	25-1801-01
18 Tooth 1" Pitch, with 1" Bore - Stainless	25-1801-91
18 Tooth 1" Pitch, with 1 3/16" Bore	25-1803-01
18 Tooth 1" Pitch, with 1 3/16" Bore - Stainless	25-1803-91

18 Tooth 1" Pitch, with 1 7/16" Bore	25-1807-01
18 Tooth 1" Pitch, with 1 7/16" Bore - Stainless	25-1807-91
18 Tooth 1" Pitch, with 15/16" Bore	25-1815-01
18 Tooth 1" Pitch, with 15/16" Bore - Stainless	25-1815-91

Steel Sprockets

Steel Belt Sprockets are used with 3/4" Pitch Belts when space is limited. The 3 1/2" diameter allows more flexibility in locating a drive. Steel Sprockets are available in hardened steel with hub, hardened steel with taper lock, and 303 stainless steel with hub.

NOTE: Please call our Parts Department for specifications. Sprockets with different bore or taper lock bushing diameters are also available.

Steel Belt Sprockets with B-Hub and Set Screw

12 Tooth ³ / ₄ " Pitch, with 1" Bore - Hardened Steel	24-1201-01
12 Tooth ³ / ₄ " Pitch,	~1
with 1" Bore - Stainless Steel	24-1201-91
12 Tooth 3/4" Pitch,	
with 1 3/16" Bore - Hardened Steel	24-1203-01

24-1203-91
24-1207-01
24-1207-91





Idler & Tension Sprockets

I.J. WHITE's Idler and Tension Sprockets are specifically designed for operation on your Spiral System and are engineered to give optimum performance with our Main Drive Roller Chain. Precision made, accurately machined, and finished, they are manufactured to ANSI specifications to ensure consistency and reliability.

NOTE: Please specify your temperature.

80A20H	Sprocket	35-A0820H1
80A20H	Sprocket with bearings	35-A0820H3
100A18H	Sprocket	35-A1018H1
100A18H	Sprocket with bearings	35-A1018H3
100C20H	Sprocket	35-C1020H1
100C20H	Sprocket with bearings	35-C1020H3
120C18H	Sprocket	35-C1218H1
120C18H	Sprocket with bearings	35-C1218H3
140C18H	Sprocket	35-C1418H1
140C18H	Sprocket with bearings	35-C1418H3
140A18H	Triple Sprocket	35-A14T18H1
140A18H	Triple Sprocket with bearings	35-A14T18H3

140C20H	Triple Sprocket	35-C14T20H1
140C20H	Triple Sprocket w/ bearings	35-C14T20H3
160C16H	Sprocket	35-C1616H1
160C16H	Sprocket with bearings	35-C1616H3
160A18H	Double Sprocket	35-A16D18H1
160A18H	Double Sprocket w/ bearings	35-A16D18H3
160C20H	Double Sprocket	35-C16D20H1
160C20H	Double Sprocket w/ bearings	35-C16D20H3
200C14H	Sprocket	35-C2014H1
200C14H	Sprocket with bearings	35-C2014H3
200C15H	Sprocket	35-C2015H1
200C15H	Sprocket with bearings	35-C2015H3

Collars

I.J. WHITE offers the finest Set Screw Collars available in corrosion free zinc plated or stainless steel. They are manufactured from quality bar stock, and meet our high standards of strength and accuracy. Assuring perfect balance and uniformity, they will prevent pulleys and sprockets from wandering on infeed or discharge shafts.

NOTE: I.J. WHITE Collars come in a variety of bore sizes and are shipped complete with set screws.

Plated Steel

1/2" Bore	with single set screw	16-0012-01
5/8" Bore	with single set screw	16-0058-01
3/4" Bore	with single set screw	16-0034-01
1" Bore	with single set screw	16-1000-01
1" Bore	with double set screw	16-1102-01
13/16" Bore	with double set screw	16-1316-01
17/16" Bore	with double set screw	16-1716-01

Stainless Steel

1/2" Bore	with single set screw	16-0012-91
5/8" Bore	with single set screw	16-0058-91
3/4" Bore	with single set screw	16-0034-91
1" Bore	with single set screw	16-1000-91
11/16" Bore	with single set screw	16-1116-91
13/16" Bore	with double set screw	16-1316-91
17/16" Bore	with double set screw	16-1716-91



Torque Limiters

All I.J. WHITE SYSTEMS incorporate safety features for added employee protection as well as protective devices for the spiral system itself.

The Torque Limiter is a protective device that limits torque transmitted from the take-up drive motor when the demand exceeds a preset value as a result of shock loads, overloads, or machine jams. The torque limiter will automatically re-engage when the overload torque has passed, thereby eliminating machine damage and costly downtime.

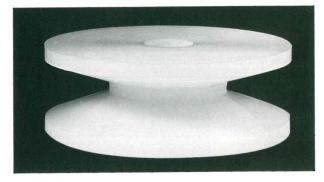
NOTE: Please specify take-up chain size.

Torque Limiters: for Take-Up Drive

1" Bore	41-1000-01	1 ⁷ /16" Bore	41-1716-01
1 ³ /16" Bore	41-1316-01	1 ^{15/} 16" Bore	41-1516-01

PULLEYS





Take-Up Pulleys

I.J. WHITE's Take-Up Pulleys are an integral part of every Spiral System. Made from a durable, high strength, and high density polyethylene compound, they are designed to allow the take-up weight shaft to move freely up and down.

The V-groove pulley pictured here, enables the entire weight assembly to track properly during movement.

6" Steel Flanged	1 3/16" Bore	21-6036-01
6" Polyethylene Flanged	1 3/16" Bore	21-613F-01
6" Steel Center	1 3/16" Bore	21-603C-01

6" Polyethylene Center	1 3/16" Bore	21-613C-01
6" Polyurethane Center	1 ³ / ₁₆ " Bore	21-6136-01
Polyethylene w/ V-groove	1 ³ / ₁₆ " Bore	21-1316-01

Edge Guard Pulleys

Edge Guard Guard Pulleys

6" Polyethylene Flanged	1" Bore	44-610F-99
6" Polyethylene Flanged	1 7/16" Bore	44-617F-99

O" Take Un Delvethylana Flancad	13/40" Poro	44-613F-99
6" Take Up Polyethylene Flanged	19/16 DOIE	44-0136-99



Side Guide Rollers and Assemblies

I.J. WHITE'S Side Guide Rollers are made of the same strong polyurethane compound as our other pulleys. Reinforced with high density polyethylene bushings, the need for a bearing-mounted shaft is avoided without sacrificing durability. They are available in two sizes with all the necessary mounting brackets and hardware. When properly installed, excellent lateral support is provided for conveyor belts in straight sections and spiral towers.

4" Side Guide Rollers and Assemblies

4" Roller with Bushing	22-4777-01	
Aluminum Mounting Bracket, 4" Pulley		
with Bushing	22-4077-99	
Complete Assembly:		
Two 4" Rollers with Bushings and T-Bracket	22-4747-99	
4" Side Guide Roller Bushing	22-4777-99	

6" Side Guide Rollers and Assemblies

6" Roller with Bushing	22-6888-01
Mounting Bracket for 6" Roller Assembly	22-7077-99
with Bushing	
Complete Assembly:	×
Two 6" Rollers with Bushings and T-Bracket	22-6868-99
Stainless Steel Sleeve	22-6008-01
6" Side Guide Roller Bushing	22-6888-99

Conveyor Side Guide Shoes

After years of development and testing, we have found both Nylon and High Density Polyethylene best for turn or straight conveyor Guide Shoes. Depending on the application, belt speed, and product weight, it is very important to use the correct material for guide shoe replacement. Call our Engineering Department for special sizes or assistance before ordering.

12" x 2" x ^{1/2} "	Nylon	30-0202-01
12" x 2" x 1/2"	High Density Polyethylene	30-1292-01
12" x 3" x 1/2"	Nylon	30-0203-01
12" x 3" x ¹ / ₂ "	High Density Polyethylene	30-1293-01
12" x 5" x ¹ / ₂ "	Nylon	30-0205-01

High Density Polyethylene	30-1295-01
Nylon Coil - Cut to length	30-8112-01
Nylon Coil - Cut to length	30-8200-01
Nylon Coil - Cut to length	30-8300-01
	Nylon Coil - Cut to length Nylon Coil - Cut to length





Polyethylene Pulleys

Polyethylene Pulleys combine the best qualities of the polyethylene with the durability of steel. They have been designed for use in tension locations, such as infeed and discharge shafts, but will function well in many other applications.

The Polyethylene material provides an excellent, low friction wear surface which is gentle against steel belting. In many cases, I.J. WHITE Polyethylene Pulleys have out lasted Steel Pulleys.

Flange Pulleys: Nominal Body Diameters

4" Flanged Polyethylene	1" Bore	44-410F-01
4" Flanged Polyethylene	1 ³ / ₁₆ " Bore	44-413F-01
4" Flanged Polyethylene	1 7/16" Bore	44-417F-01
6" Flanged Polyethylene	1" Bore	44-610F-01
6" Flanged Polyethylene	1 ³ /16" Bore	44-613F-01
6" Flanged Polyethylene	1 ⁷ /16" Bore	44-617F-01

Center Pulleys: Nominal Body Diameters

4" Center Polyethylene	1 " Bore	44-410C-01
4" Center Polyethylene	1 ³ / ₁₆ " Bore	44-413C-01
4" Center Polyethylene	1 7/16" Bore	44-417C-01
6" Center Polyethylene	1" Bore	44-610C-01
6" Center Polyethylene	1 3/16" Bore	44-613C-01
6" Center Polyethylene	1 ⁷ /16" Bore	44-617C-01



Polyurethane Pulleys

Developed exclusively for I.J. WHITE, these strong and durable Polyurethane Pulleys have proven to be very successful in spiral belt protection. USDA approved; they eliminate costly wear and damage to the spiral belt and reduce noise levels.

Flange Pulleys: Nominal Body Diameters

3" Flange	1" Bore	18-3100-01
4" Flange	1" Bore	18-4100-01
4" Flange	1 ³ / ₁₆ " Bore	18-4136-01
4" Flange	1 ⁷ /16" Bore	18-4176-01
6" Flange	1" Bore	18-6100-01
6" Flange	1 ³ /16" Bore	18-6136-01
6" Flange	1 ⁷ /16" Bore	18-6176-01

Center Pulleys: Nominal Body Diameters

3" H.D. Center	1 ⁷ /16" Bore	19-3176-01
4" Center	1" Bore	19-4100-01
4" H.D. Center	1 7/16" Bore	19-4176-01
6" H.D. Center	1" Bore	19-6100-01
6" H.D. Center	1 ³ /16" Bore	19-6136-01
6" H.D. Center	1 ⁷ /16" Bore	19-6176-01



Steel Pulleys

I.J. WHITE'S Steel Pulleys are designed to smoothly convey all styles of Spiral Belts. They are ideal for high load spiral belt applications such as infeeds, discharges, and slack take-up assemblies.

Steel Pulleys are engineered to perform in the harshest environments from -50°F (-46°C) to +450°F (+232°C). Each steel pulley is precision machined and zinc plated, and comes complete with a ³/₈" set screw.

NOTE: Full Width Solid End Pulley's are also available. When ordering, please specify belt width.

Flange Pulleys: Nominal Body Diameters

4" Flanged	1" Bore	20-4100-01
4" Flanged	1 7/16" Bore	20-4176-01
6" Flanged	1" Bore	20-6100-01
6" Flanged	1 7/16" Bore	20-6176-01

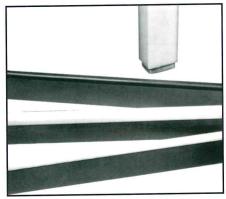
Center Pulleys: Nominal Body Diameters

4" Center	1" Bore	20-5100-01
4" Center	1 7/16" Bore	20-5176-01
6" Center	1" Bore	20-6700-01
6" Center	1 7/16" Bore	20-6760-01



WEAR STRIPS





Spiral Wear Strips

I.J. WHITE Wear Strips are exclusive, custom extruded profiles which meet the demanding requirements of low-tension spiral systems and increase belt life.

The UHMW (Ultra High Molecular Weight), high density polyethylene wear strip is the most non-abrasive, wear resistant, non-metallic material available in the industry. Having an extremely low coefficient of friction enables the spiral belt to glide smoothly and quietly over the track system.

Easily installed and available for all temperature applications, the I.J. White custom profile is an integral part in each of our quality-built systems.

NOTE: For wear strips on transfer devices, see page 15.

Track Wear Strips: Blast Freezers and Coolers

1/8" Low Friction	26-1018-01	1/4" Low Friction	26-1014-01
	26-1036-01	3/8" Low Friction	26-1038-01
3/16" Low Friction	20-1000 01	70 LOW THOUGH	

Proofing System Wear Strips: Proofing Systems

Specially engineered wear strips for the proofing environment must have the proper friction co-efficient and be able to withstand the heat and humidity without excessive elongation.

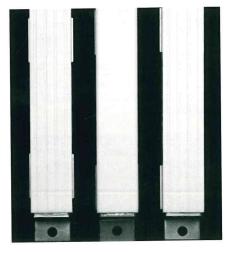
29-6018-04	3/16" Wear Strip	29-6036-04
		29-6038-04
29-6014-04	3/8" Wear Strip	29-0030-04
	29-6018-04 29-6014-04	

High Temperature Wear Strip

This High Temperature Wear Strip has been developed to give the same low friction results as our other wear strip, and is excellent for dryers, and oven applications. *NOTE:* Please call I.J. White for custom cut lengths.

1/8" Track Wear Strip to +250°F (+121°C) - Nylon	29-4018-04
1/8" Track Wear Strip to +400°F (+204°C)	29-5018-04
1/4" Track Wear Strip to +400°F (+204°C)	29-5014-04

1"x1" Upright Wear Strip to +400°F (+204°C)	29-5101-04
2" Upright T-Wear Strip to +400°F (+ 204°C)	29-5002-04



Vertical Cage Bar Wear Strip

These Wear Strips are available in two profiles - smooth and grooved.

The Smooth profile has been a standard on I.J. WHITE SPIRALS for over 20 years. It continues to provide the excellent forward traction needed to drive spiral belts, while keeping friction to a minimum as the belt ascends or descends the spiral cage. The Grooved wear strip provides additional traction to the belt. Each groove acts as its own leading edge. This profile should be reviewed by engineering for proper applications.

Both styles are available in custom lengths or in standard 20' lengths. Also available are Cage Bar Wear Strip Clips to securely fasten the wear strip to the cage. Made of corrosion-resistant aluminum or stainless steel, each clip comes complete with fastening hardware and is easy to install.

1" x 1"	Upright Wear Strip Smooth	27-1010-01
1" x 1"	Upright Wear Strip Grooved	27-2010-01
1" x 1"	Upright Clip - Aluminum	28-1019-99
1" x 1"	Upright Clip - Stainless Steel	28-1019-91

2" x 1 ¹ / ₂ "	Smooth Upright Wear Strip	27-3120-01
2" x 1 ¹ / ₂ "	Upright Wear Strip Grooved	27-4120-01
2" x 1 ¹ / ₂ "	Upright Clip - Aluminum	28-2129-99
2" x 1 ¹ / ₂ "	Upright Clip - Stainless Steel	28-2129-91





Safety Sensors

These solid state Inductive Sensors respond to abnormal conveyor belt movement. Operable in the most extreme environment, the sensors will protect the system as well as your product. Also available are I.J. WHITE Standard Limit Switches for take-up and belt applications.

Room Temp. Prox	imity Sensor: Take Up	42-0002-02
Freezer Duty Prox	imity Sensor: Take Up	42-0002-03
Room Temp. Belt	and Main Drive Chain	42-0003-02
	and Main Drive Chain	42-0003-03
Mounting Bracket for	or Take-Up Sensor	42-9110-99
Mounting Bracket for	or Belt Sensor	42-9220-99
Mounting Bracket for	or Take-Up Limit Switch	42-9330-99

Mounting Bracket for Belt Limit Switch	42-9440-99
Mounting Channel: Take-Up	42-9550-99
Adjustable Mounting Arm for Motor Base Sensor	42-9660-99
NEW Protector Case Water Jacket	42-0001-01



Personnel Safety

Due to the isolated environment of Blast Freezing, Proofing, Steaming, Refrigerated Cooling, and Drying Systems, I.J. White has developed a number of safety systems to protect plant personnel which might make the difference in the event of an unforeseen emergency.

Man-in-System

I.J. WHITE engineers developed the Man-in-System to notify plant personnel that an employee who entered the system has not emerged after a predetermined safe time. When an enclosure door is opened, an automatic timer is activated. After a preset time period, if the alert button on the Electronic Control Center is not cleared, a warning alarm is triggered.

Man-In-System 04-8000-01

IMPORTANT SAFETY TIP: When changing or inspecting any parts, the Electrical Control Panel and all Motors must be locked out.

Personnel Alert System®

An emergency life line is available to install around the perimeter of your system. If an emergency occurs, pulling the life line will sound an alarm and stop the system.

Personnel Alert System	04-5000-01
Control Panel Components	04-5001-01
Mounting Bracket	04-5003-01
Cable, Material, Hardware	04-5004-01
Blast Freezer / Proofing Sensor	04-5002-03

NEW	Room Temp. Sensor	
	w/ manual reset (right hand)	04-5002-02R
NEW	Room Temp. Sensor	
	w/ manual reset (left hand)	04-5002-02L
	w manda reset (left hand)	04-3002-02L



MAIN DRIVE OILERS & LUBRICANTS





Chain Oilers

All I.J. WHITE Spiral Systems are equipped with a Main Drive Chain Oiler with adjustable drip control, and a break -resistant acrylic reservoir window to observe oil feed in the mounting shank. The reservoir has self-closing filler caps and is available with oil brushes and fittings. The following two styles are available:

Automatic Drop Feed Oiler provides automatic oiling of the main drive chain. The unit includes a solenoid, an electrical timer, a single pole circuit breaker and an electrical wiring diagram for easy installation.

Manual Drop Feed Oiler also provides oiling of the Main Drive Chain. It is operated by use of a toggle switch for easy application of oil by your maintenance department.

Automatic Drop Feed Oiler with Solenoid	34-1000-03
Manual Drop Feed Oiler with Toggle Shut-Off	34-1100-03
Oiler Replacement Solenoid	34-2000-03
Oiler Replacement Valve Body (Automatic)	34-2100-03

Oiler Replacement Valve Body (Manual)	34-2200-01
Oiler Brush	34-1200-01
Fittings	34-1300-01

Lubricants

I.J. WHITE stocks a full line of oils and greases necessary for a wide range of temperature applications. Proper lubrication is essential to ensure long, trouble-free operation. We suggest stocking a sufficient supply of the proper lubricants for your system.

Greases

High Ten	nperature	38-1000-04
Room Te	mp. for Pillow Block Bearings	38-2000-02
Room Te	mp. for Main Shaft & Motor Base	38-2009-02
Blast Fre	ezer	38-3000-03
NEW	Multi-Temperature (Synthetic)	38-5000-03

Oils

Olis	
Sumitomo	
High Temperature	39-1400-04
Room Temperature	39-1500-02
Freezer Temperature	39-1600-03
Eurodrive	
Room Temperature	39-1800-03
Freezer Temperature	39-1801-03
Other	
High Temperature for Take-Up	39-1100-04
Room Temperature	39-1700-02
Refrigerated Temperature for Take-Up	39-1200-02
Refrigerated Cooler	39-1900-03
Freezer for Take-Up	39-1300-03
	Sumitomo High Temperature Room Temperature Freezer Temperature Eurodrive Room Temperature Freezer Temperature Other High Temperature for Take-Up Room Temperature Refrigerated Temperature for Take-Up Refrigerated Cooler



Automatic Spiral Belt Lubricating System

This system is specifically designed to reduce belt tension. The system applies a minimal amount of lubricant exactly where the belt comes in contact with the track wear strip. When used with the programmable ammeter the system becomes self regulating.

I.J. WHITE'S Spiral Belt Lubricators consists of a reservoir, a drip control valve (manual or electric), a brush wheel applicator, piping, fittings, mounting bracket, and hardware.

Belt Lubricant	39-1000-01
Single Belt Lubricating System (Single)	34-1500-01
Double Belt Lubricating System (Double)	34-1500-02
Replacement Reservoir	34-1501-01

Replacement Brush Wheel	34-1502-01
Replacement Solenoid	34-1502-01
Replacement Valve Body (Electrical)	34-2100-03
Replacement Valve Body (Manual)	34-2200-01





Transfers

The need for a reliable transfer for Spiral Systems has led to I.J. WHITE's development of two transfer styles which have been field proven for auxiliary conveyors as well as for the infeed and discharge of spiral systems. Each of the following three products described below have their own unique transferring characteristics.

NOTE: To assure proper transfer of your product, please discuss your product applications with our Parts Department.

Knife Edge Transfers

Knife Edge Transfers are positively driven, and assist in maintaining product orientation. These transfers are specifically engineered for delicate or small products such as cookies, raw dough, cupcakes, croissant, and pizza. They are also ideal for hamburger patties, chicken, and fish fillets. Knife Edge Transfers can be slave driven, or supplied with a single or variable speed drive.

NOTE: Knife Edge Belting available. Please specify width.

Knife Edge Transfer Unit	05-4000-01
Knife Edge Sprocket 1" Bore	23C-6024-01
Knife Edge Filler 1" Bore	23C-6124-01
UHMW Center Bearings	15-4100-02

Nose Bar Wear Strip	26-1100-01
Two-bolt Flanged Bearing 1" Bore	12-1002-02
Replacement Top Plate (specify length and width)	05-4001-01



Roller Transfers

Roller Transfers are available with one, two or three rollers and are best suited for more rigid products or products in pans, carriers, foils, or trays. The rollers are available in different diameters, as well as hex, or round shaft. Roller Transfers are typically slave driven from the spiral pulley shaft.

NOTE: Replacement Rollers specify type, diameter and length.

Single	Roller Transfer Device - Round	05-1000-01
Single	Roller Transfer Device - Hex	05-1000-02
Double	Roller Transfer Device - Round	05-2000-01
Double	Roller Transfer Device - Hex	05-2000-02
Triple	Roller Transfer Device - Round	05-3000-01
Triple	Roller Transfer Device - Hex	05-3000-02

Rod End Bearings	14-1258-02		
Mounting Bracket	05-0000-99		
Transfer Bracket	. 05-9000-01		
NEW End Roller Assembly with Filler	05-8000-99		

Transfer Plate

These durable Transfer Plates are ideally suited for releasing product from the spiral belt.

Complete Unit	05-5000-01
Replacement Nylon Plate (Specify L x W)	05-5001-01
Replacement UHMW Plate (Specify L x W)	05-5001-02

Replacement Brackets	05-9000-01
Threaded Rod Support Assembly	05-3001-01
Transfer Bracket	05-9000-01



CONVEYOR SYSTEMS





Straights and Turns

As with all I.J. WHITE SPIRAL SYSTEMS our auxiliary conveyors, whether straight, curved, or even a hinge bridge, adhere to the same high quality standards.

I.J. WHITE straight and turn conveyors are available in standard belt widths including 8" to 60". Each conveyor is custom made according to the original order.

NOTE: See page 3 for list of Bearings <u>and</u> page 8 for list of Belt Drive Sprockets.

Side Plates

Aluminum Side Plates

Standard 10' Aluminum Straight Section Side Pla	ite
(Specify Left or Right)	03-1001-02
Standard 10' Aluminum Side Plate Tail Section	
with Reinforced Bearing Mount	03-1043-02
Standard 10' Aluminum Side Plate Drive End	
with Heavily Reinforced Bearing Mount	03-1044-02
Aluminum Side Plate Joints	03-1002-02

Stainless Steel Side Plates

Standard 10' Stainless Straight Section Side Plate	
(Specify Left or Right)	03-1001-01
Standard 10' Stainless Side Plate Tail Section	
with Reinforced Bearing Mount	03-1043-01
Standard 10' Stainless Side Plate Drive End	
with Heavily Reinforced Bearing Mount	03-1044-01
Stainless Side Plate Joints	03-1002-01

Turn Conveyor Components

I.J. WHITE has developed many upgrade components for improving the performance of your Constant Radius Flex Grid Turns such as our Poly-Tapered Pulleys.

Poly-Tapered Pulleys have been designed to give added support to the belt without increasing belt wear. Tapered Pulleys and Flex Grid Sprockets are available with custom bores and diameters to match your existing equipment. Please call I.J. WHITE for more information.

Poly Tapered Pulleys 4" Long with Steel Sleeve Bushing

2 5/8" Major Dia.	2 3/8" Minor Dia.	1" Bore	17-1258-01	3 3/4" Major Dla.	3 1/4" Minor Dia.	1" Bore	17-4375-01
	2 5/8" Minor Dia.	1" Bore	17-2300-01	4" Major Dia.	3 3/4" Minor Dia.	1" Bore	17-5400-01
3 1/4" Major Dia.	3" Minor Dia.	1" Bore	17-3325-01				

Flex Grid Outside Steel Sprockets: Constant Radius Turns

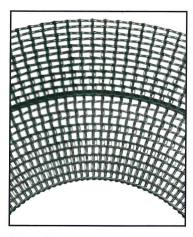
12"	5 Ga. Belt1"	Bore	35-5012-01	24"	7 Ga. Belt	1" Bore	35-7024-01
12"	7 Ga. Belt	1" Bore	35-7012-01	30"	5 Ga. Belt	1" Bore	35-5030-01
15"	5 Ga. Belt	1" Bore	35-5015-01	30"	7 Ga. Belt	1" Bore	35-7030-01
15"	7 Ga. Belt	1" Bore	35-7015-01	36"	5 Ga. Belt	1" Bore	35-5036-01
18"	5 Ga. Belt	1" Bore	35-5018-01	36"	7 Ga. Belt	1" Bore	35-7036-01
18"	7 Ga. Belt	1" Bore	35-7018-01	42"	5 Ga. Belt	1" Bore	35-5042-01
24"	5 Ga. Belt	1" Bore	35-5024-01	42"	7 Ga. Belt	1" Bore	35-7042-01

Flex Grid Inside Steel Sprockets for Above

All 5 Gauge Belts	1" Bore	35-5000-01	All 7 Gauge Belts	1" Bore	35-7000-01
All 5 dauge Dello	1 5010				

NOTE: Stainless Steel Flex Grid Sprockets are also available. When ordering, please substitute (-91) for (-01) in any of the above part numbers.







Conveyor Belts

I.J. WHITE offers a complete line of belting from leading manufacturers in many different styles and materials. When purchasing belt through I.J. WHITE, you have the benefit and support of our engineering and technical service staff. They review each particular application, so that your new belt is installed and operated the way it was designed to. I.J. WHITE's pricing policy is extremely competitive due to large volume buying power, making I.J. WHITE the logical choice for all your belting needs.

Belt Styles

Flex 1/2" x 1" and 1" x 1" • Grid 3/4" and 1" pitch • Reduced Radius • Small Radius • Plastic • Neoprene • Cleated

Connector Rods

Replacement stainless steel (Type 304) connector rods are available in the following styles:

- Flatwire Belt: 11 gauge clinched construction with a hook formed on one end for a Flat Wire Belt or welded on one end.
- Flex or Grid Belt: Standard 6 gauge welded on one end with the other end threaded with stainless steel nut included.

Stainless Steel Connector Rods

8"	Clinched End	40-0800-01
8"	Threaded End	40-0809-01
10"	Clinched End	40-1000-01
10"	Threaded End	40-1009-01
	Clinched End	40-1200-01
12"	Threaded End	40-1209-01
14"	Clinched End	40-1400-01
14"	Threaded End	40-1409-01
16"	Clinched End	40-1600-01
16"	Threaded End	40-1609-01
18"	Clinched End	40-1800-01
18"	Threaded End	40-1809-01
20"	Clinched End	40-2000-01
20"	Threaded End	40-2009-01
22"	Clinched End	40-2200-01
22"	Threaded End	40-2209-01

24" Clinched End	40-2400-01
24" Threaded End	40-2409-01
26" Clinched End	40-2600-01
26" Threaded End	40-2609-01
28" Clinched End	40-2800-01
28" Threaded End	40-2809-01
30" Clinched End	40-3000-01
30" Threaded End	40-3009-01
32" Clinched End	40-3200-01
32" Threaded End	40-3209-01
34" Clinched End	40-3400-01
34" Threaded End	40-3409-01
36" Clinched End	40-3600-01
36" Threaded End	40-3609-01
38" Clinched	40-3800-01
38" Threaded End	40-3809-01

40-4000-01
40-4009-01
40-4200-01
40-4209-01
40-4400-01
40-4409-01
40-4800-01
40-4809-01
40-5000-01
40-5009-01
40-5200-01
40-5209-01
40-5400-01
40-5409-01
40-6000-01
40-6009-01



Guard Edge Plates

I.J. WHITE's T-304 Stainless Steel Guard Edge Plates can be attached at every belt pitch, or spaced at wider intervals to ensure product orientation.

Stainless Steel Sidebar Edge Plates with 1" nominal pitch design

E1-0000-12

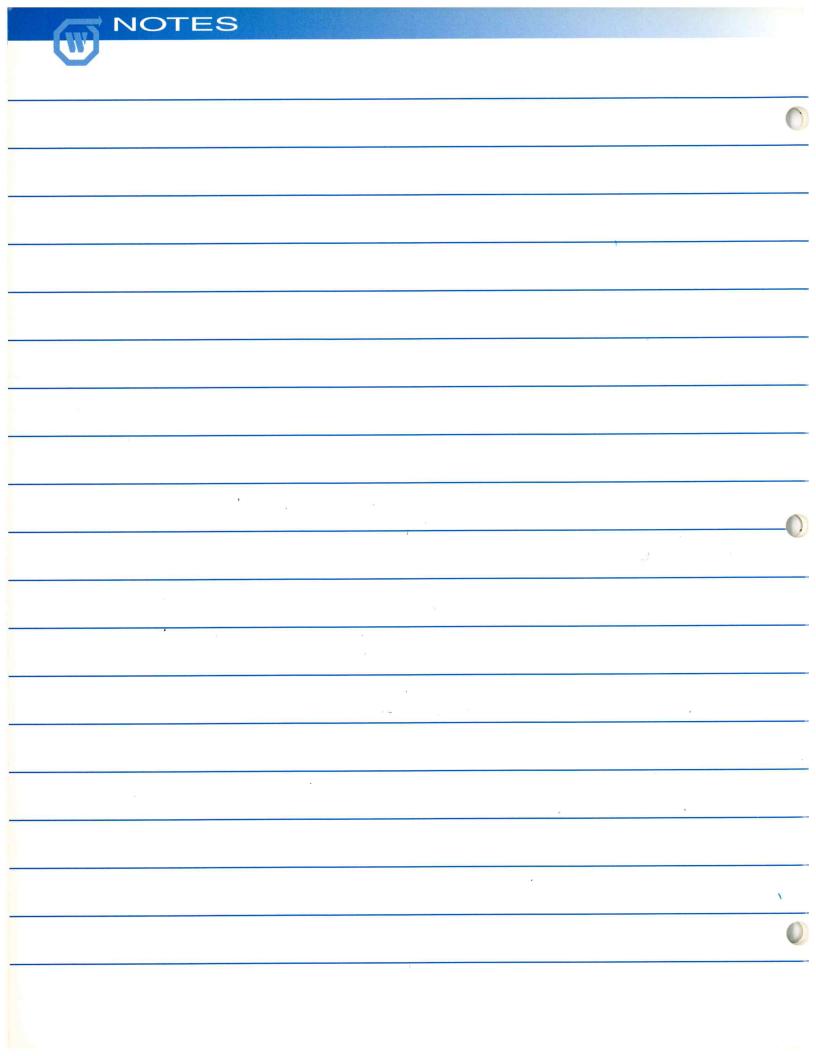
Flight Clips

I.J. WHITE's 302 Stainless Steel Clips have been designed for 1" x 1", and ½" x 1" Standard Weight and Heavy Duty Flat Wire Belts to attach flights or cleats to the belt surface. They are an inexpensive solution to stop your product from sliding on incline or decline conveyor sections. Each flight clip is furnished with the necessary mounting hardware and is easy to install.

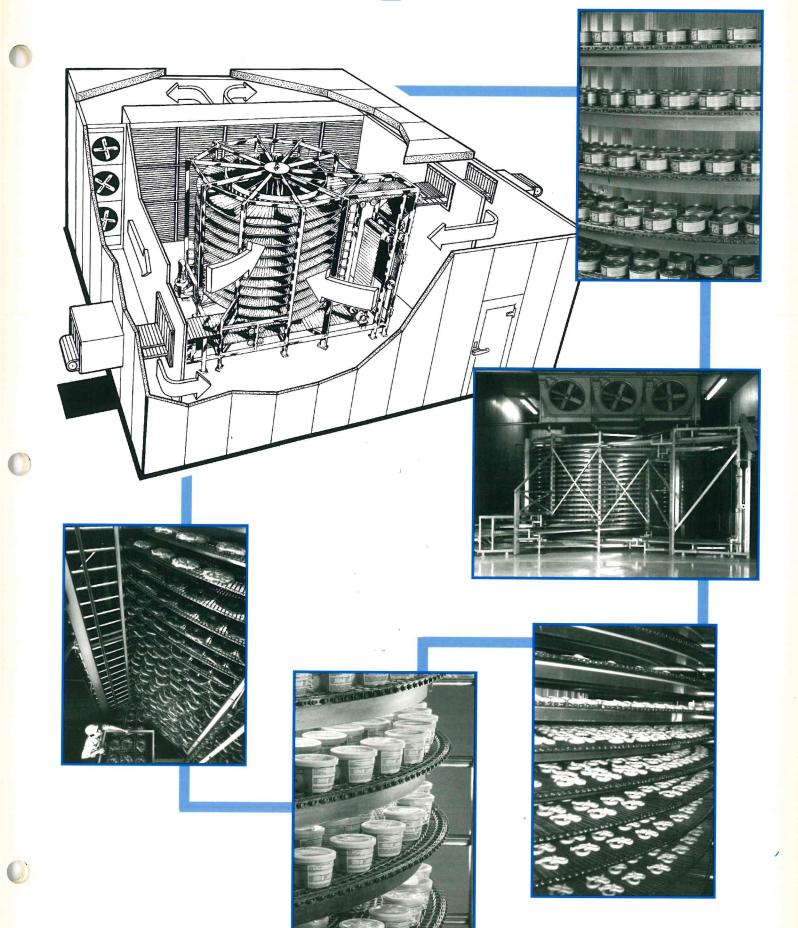
Stainless Steel Flight Clips

28-0100-91







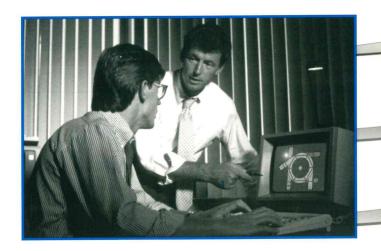


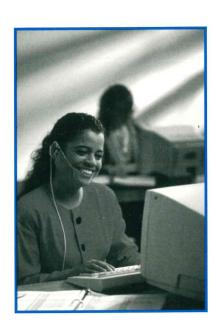
WORLDWIDE SERVICE NETWORK

Our Technical Service Engineers realize the high cost of downtime and the value of fast, on-site service. We minimize downtime by providing your plant managers and engineers with:

- Global On-Site Service
- 24-Hour, 7 Days a Week Engineering Assistance
- Modem: Direct-Link Support
- Overnight Replacement Parts

Reinforced by a worldwide network of training and service personnel with replacement parts stocked both here and abroad, we are always available for on-site support.





COMPREHENSIVE PRODUCT SUPPORT

I.J. WHITE has over 75 years of product and service experience. Fast, thorough support is provided for every I.J. WHITE SYSTEM, including same-day service and parts, and comprehensive warranty packages.

TOTAL SYSTEM TRAINING

I.J. WHITE recognizes the importance of proper system training in today's multi-shift plants. Our Training Department is available to provide all operating personnel with:

- Operations / Maintenance Manuals
- Preventative Maintenance Programs
- Multi-Shift Personnel Training

As a further commitment to guarantee your satisfaction, only I.J. WHITE offers the following invitation: Before we ship, come to our plant and approve your custom-designed system manufactured and assembled to your satisfaction.



Putting Innovation into Motion since 1919.

I.J. WHITE CORPORATION

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