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## **Ball Lock Pins / Lanyards**

*Catalog Pages 48 – 53*

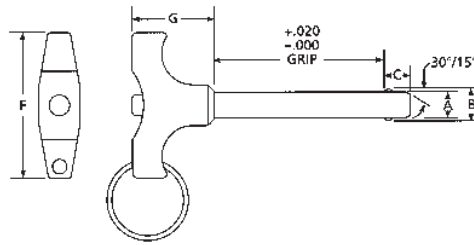


**651-353-6891**  
**[www.idsmachine.com](http://www.idsmachine.com)**

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# Quick Release Ball Lock Pins

## T-handle



► **4130 Steel:** The pins are made from hardened 4130 steel-plated. The handle is machined and tumbled from aluminum alloy. The spindle, spring, and balls are made from stainless steel. Split rings are stainless steel. Push button is brass.

► **304 Stainless Steel:** The pins are made from 304 stainless steel. The handle is machined and tumbled from aluminum alloy. The spindle, spring, and balls are made from stainless steel. Split rings are stainless steel. Push button is brass.

► **High Strength 17-4 Stainless Steel** is available in selected sizes.

### IMPORTANT SPECIFICATIONS

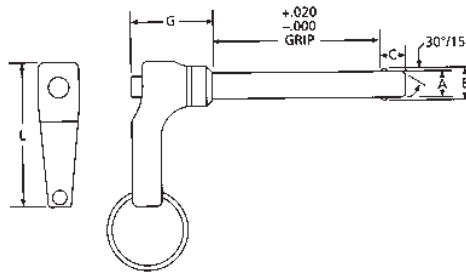
4130 Steel		
Diameter	Pull Out Strength Lbs.	Calculated Double Shear Strength Lbs.
1/4	230	8,200
5/16	510	12,800
3/8	575	18,400
1/2	1,160	32,800
5/8	2,070	51,200

### IMPORTANT SPECIFICATIONS

304 Stainless		
Diameter	Pull Out Strength Lbs.	Calculated Double Shear Strength Lbs.
1/4	180	2,200
5/16	400	3,500
3/8	450	4,500
1/2	900	11,500
5/8	1,500	20,000

4130 Steel PART #	304 S.S. PART #	Nominal Diameter	Max. A	Min.	Grip Length	+/- .005 B	+ .000 -.030 C	F	G Max.	Recommended Hole Size	
TP-2505	TP-2505SS	1/4	.2485	.2470	.50	.289	.290	1.815	1.270	.2540	.2500
TP-2510	TP-2510SS	1/4	.2485	.2470	1.00	.289	.290	1.815	1.270	.2540	.2500
TP-2515	TP-2515SS	1/4	.2485	.2470	1.50	.289	.290	1.815	1.270	.2540	.2500
TP-2520	TP-2520SS	1/4	.2485	.2470	2.00	.289	.290	1.815	1.270	.2540	.2500
TP-2525	TP-2525SS	1/4	.2485	.2470	2.50	.289	.290	1.815	1.270	.2540	.2500
TP-2530	TP-2530SS	1/4	.2485	.2470	3.00	.289	.290	1.815	1.270	.2540	.2500
TP-3110	TP-3110SS	5/16	.3110	.3095	1.00	.375	.330	1.815	1.270	.3165	.3125
TP-3115	TP-3115SS	5/16	.3110	.3095	1.50	.375	.330	1.815	1.270	.3165	.3125
TP-3120	TP-3120SS	5/16	.3110	.3095	2.00	.375	.330	1.815	1.270	.3165	.3125
TP-3125	TP-3125SS	5/16	.3110	.3095	2.50	.375	.330	1.815	1.270	.3165	.3125
TP-3130	TP-3130SS	5/16	.3110	.3095	3.00	.375	.330	1.815	1.270	.3165	.3125
TP-3140	TP-3140SS	5/16	.3110	.3095	4.00	.375	.330	1.815	1.270	.3165	.3125
TP-3710	TP-3710SS	3/8	.3735	.3720	1.00	.440	.365	2.065	1.450	.3790	.3750
TP-3720	TP-3720SS	3/8	.3735	.3720	2.00	.440	.365	2.065	1.450	.3790	.3750
TP-3725	TP-3725SS	3/8	.3735	.3720	2.50	.440	.365	2.065	1.450	.3790	.3750
TP-3730	TP-3730SS	3/8	.3735	.3720	3.00	.440	.365	2.065	1.450	.3790	.3750
TP-3740	TP-3740SS	3/8	.3735	.3720	4.00	.440	.365	2.065	1.450	.3790	.3750
TP-3750	TP-3750SS	3/8	.3735	.3720	5.00	.440	.365	2.065	1.450	.3790	.3750
TP-5010	TP-5010SS	1/2	.4985	.4970	1.00	.594	.460	2.345	1.600	.5050	.5000
TP-5020	TP-5020SS	1/2	.4985	.4970	2.00	.594	.460	2.345	1.600	.5050	.5000
TP-5025	TP-5025SS	1/2	.4985	.4970	2.50	.594	.460	2.345	1.600	.5050	.5000
TP-5030	TP-5030SS	1/2	.4985	.4970	3.00	.594	.460	2.345	1.600	.5050	.5000
TP-5040	TP-5040SS	1/2	.4985	.4970	4.00	.594	.460	2.345	1.600	.5050	.5000
TP-5050	TP-5050SS	1/2	.4985	.4970	5.00	.594	.460	2.345	1.600	.5050	.5000
TP-6220	TP-6220SS	5/8	.6235	.6220	2.00	.750	.580	3.100	1.700	.6300	.6250
TP-6230	TP-6230SS	5/8	.6235	.6220	3.00	.750	.580	3.100	1.700	.6300	.6250
TP-6240	TP-6240SS	5/8	.6235	.6220	4.00	.750	.580	3.100	1.700	.6300	.6250
TP-6250	TP-6250SS	5/8	.6235	.6220	5.00	.750	.580	3.100	1.700	.6300	.6250
TP-6260	TP-6260SS	5/8	.6235	.6220	6.00	.750	.580	3.100	1.700	.6300	.6250

**Quick Release Ball Lock Pins**  
L-handle



**IMPORTANT SPECIFICATIONS**

**4130 Steel**

Diameter	Pull Out Strength Lbs.	Calculated Double Shear Strength Lbs.
1/4	230	8,200
5/16	510	12,800
3/8	575	18,400
1/2	1,160	32,800
5/8	2,070	51,200

**IMPORTANT SPECIFICATIONS**

**304 Stainless**

Diameter	Pull Out Strength Lbs.	Calculated Double Shear Strength Lbs.
1/4	180	2,200
5/16	400	3,500
3/8	450	4,500
1/2	900	11,500
5/8	1,500	20,000

► **4130 Steel:** The pins are made from hardened 4130 steel-plated. The handle is machined and tumbled from aluminum alloy. The spindle, spring, and balls are made from stainless steel. Split rings are stainless steel. Push button is brass.

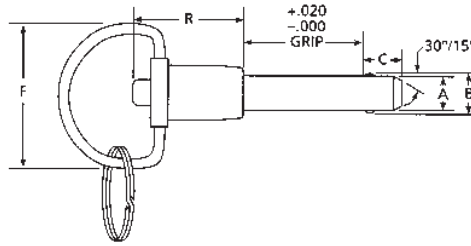
► **304 Stainless Steel:** The pins are made from 304 stainless steel. The handle is machined and tumbled from aluminum alloy. The spindle, spring, and balls are made from stainless steel. Split rings are stainless steel. Push button is brass.

► **High Strength 17-4 Stainless Steel** is available in selected sizes.

4130 Steel PART #	304 S.S. PART #	Nominal Diameter	Max. A	Min.	Grip Length	+/- .005 B	+ .000 - .030 C	L	G Max.	Recommended Hole Size Max.	Min.
LP-2505	LP-2505SS	1/4	.2485	.2470	.50	.289	.290	1.800	1.270	.2540	.2500
LP-2510	LP-2510SS	1/4	.2485	.2470	1.00	.289	.290	1.800	1.270	.2540	.2500
LP-2515	LP-2515SS	1/4	.2485	.2470	1.50	.289	.290	1.800	1.270	.2540	.2500
LP-2520	LP-2520SS	1/4	.2485	.2470	2.00	.289	.290	1.800	1.270	.2540	.2500
LP-2525	LP-2525SS	1/4	.2485	.2470	2.50	.289	.290	1.800	1.270	.2540	.2500
LP-2530	LP-2530SS	1/4	.2485	.2470	3.00	.289	.290	1.800	1.270	.2540	.2500
LP-3110	LP-3110SS	5/16	.3110	.3095	1.00	.375	.330	1.800	1.270	.3165	.3125
LP-3115	LP-3115SS	5/16	.3110	.3095	1.50	.375	.330	1.800	1.270	.3165	.3125
LP-3120	LP-3120SS	5/16	.3110	.3095	2.00	.375	.330	1.800	1.270	.3165	.3125
LP-3125	LP-3125SS	5/16	.3110	.3095	2.50	.375	.330	1.800	1.270	.3165	.3125
LP-3130	LP-3130SS	5/16	.3110	.3095	3.00	.375	.330	1.800	1.270	.3165	.3125
LP-3140	LP-3140SS	5/16	.3110	.3095	4.00	.375	.330	1.800	1.270	.3165	.3125
LP-3710	LP-3710SS	3/8	.3735	.3720	1.00	.440	.365	2.030	1.450	.3790	.3750
LP-3720	LP-3720SS	3/8	.3735	.3720	2.00	.440	.365	2.030	1.450	.3790	.3750
LP-3725	LP-3725SS	3/8	.3735	.3720	2.50	.440	.365	2.030	1.450	.3790	.3750
LP-3730	LP-3730SS	3/8	.3735	.3720	3.00	.440	.365	2.030	1.450	.3790	.3750
LP-3740	LP-3740SS	3/8	.3735	.3720	4.00	.440	.365	2.030	1.450	.3790	.3750
LP-3750	LP-3750SS	3/8	.3735	.3720	5.00	.440	.365	2.030	1.450	.3790	.3750
LP-5010	LP-5010SS	1/2	.4985	.4970	1.00	.594	.460	2.360	1.600	.5050	.5000
LP-5020	LP-5020SS	1/2	.4985	.4970	2.00	.594	.460	2.360	1.600	.5050	.5000
LP-5025	LP-5025SS	1/2	.4985	.4970	2.50	.594	.460	2.360	1.600	.5050	.5000
LP-5030	LP-5030SS	1/2	.4985	.4970	3.00	.594	.460	2.360	1.600	.5050	.5000
LP-5040	LP-5040SS	1/2	.4985	.4970	4.00	.594	.460	2.360	1.600	.5050	.5000
LP-5050	LP-5050SS	1/2	.4985	.4970	5.00	.594	.460	2.360	1.600	.5050	.5000
LP-6220	LP-6220SS	5/8	.6235	.6220	2.00	.750	.580	3.070	1.700	.6300	.6250
LP-6230	LP-6230SS	5/8	.6235	.6220	3.00	.750	.580	3.070	1.700	.6300	.6250
LP-6240	LP-6240SS	5/8	.6235	.6220	4.00	.750	.580	3.070	1.700	.6300	.6250
LP-6250	LP-6250SS	5/8	.6235	.6220	5.00	.750	.580	3.070	1.700	.6300	.6250
LP-6260	LP-6260SS	5/8	.6235	.6220	6.00	.750	.580	3.070	1.700	.6300	.6250

# Quick Release Ball Lock Pins

ring handle



► **4130 Steel:** The pins are made from hardened 4130 steel-plated. The handle is machined and tumbled from aluminum alloy. The spindle, spring, and balls are made from stainless steel. Split rings are stainless steel. Push button is brass.

► **304 Stainless Steel:** The pins are made from 304 stainless steel. The handle is machined and tumbled from aluminum alloy. The spindle, spring, and balls are made from stainless steel. Split rings are stainless steel. Push button is brass.

► **High Strength 17-4 Stainless Steel** is available in selected sizes.

**IMPORTANT SPECIFICATIONS**

**4130 Steel**

Diameter	Pull Out Strength Lbs.	Calculated Double Shear Strength Lbs.
1/4	230	8,200
5/16	510	12,800
3/8	575	18,400
1/2	1,160	32,800
5/8	2,070	51,200

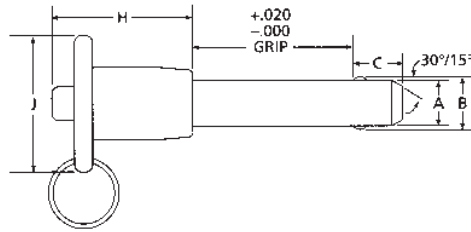
**IMPORTANT SPECIFICATIONS**

**304 Stainless**

Diameter	Pull Out Strength Lbs.	Calculated Double Shear Strength Lbs.
1/4	180	2,200
5/16	400	3,500
3/8	450	4,500
1/2	900	11,500
5/8	1,500	20,000

4130 Steel PART #	304 S.S. PART #	Nominal Diameter	Max. A	Min.	Grip Length	+/- .005 B	+ .000 -.030 C	F	R Max.	Recommended Hole Size Max.	Min.
RP-2505	RP-2505SS	1/4	.2485	.2470	.50	.289	.290	1.060	.780	.2540	.2500
RP-2510	RP-2510SS	1/4	.2485	.2470	1.00	.289	.290	1.060	.780	.2540	.2500
RP-2515	RP-2515SS	1/4	.2485	.2470	1.50	.289	.290	1.060	.780	.2540	.2500
RP-2520	RP-2520SS	1/4	.2485	.2470	2.00	.289	.290	1.060	.780	.2540	.2500
RP-2525	RP-2525SS	1/4	.2485	.2470	2.50	.289	.290	1.060	.780	.2540	.2500
RP-2530	RP-2530SS	1/4	.2485	.2470	3.00	.289	.290	1.060	.780	.2540	.2500
RP-3110	RP-3110SS	5/16	.3110	.3095	1.00	.375	.330	1.060	.830	.3165	.3125
RP-3115	RP-3115SS	5/16	.3110	.3095	1.50	.375	.330	1.060	.830	.3165	.3125
RP-3120	RP-3120SS	5/16	.3110	.3095	2.00	.375	.330	1.060	.830	.3165	.3125
RP-3125	RP-3125SS	5/16	.3110	.3095	2.50	.375	.330	1.060	.830	.3165	.3125
RP-3130	RP-3130SS	5/16	.3110	.3095	3.00	.375	.330	1.060	.830	.3165	.3125
RP-3140	RP-3140SS	5/16	.3110	.3095	4.00	.375	.330	1.060	.830	.3165	.3125
RP-3710	RP-3710SS	3/8	.3735	.3720	1.00	.440	.365	1.060	.940	.3790	.3750
RP-3720	RP-3720SS	3/8	.3735	.3720	2.00	.440	.365	1.060	.940	.3790	.3750
RP-3725	RP-3725SS	3/8	.3735	.3720	2.50	.440	.365	1.060	.940	.3790	.3750
RP-3730	RP-3730SS	3/8	.3735	.3720	3.00	.440	.365	1.060	.940	.3790	.3750
RP-3740	RP-3740SS	3/8	.3735	.3720	4.00	.440	.365	1.060	.940	.3790	.3750
RP-3750	RP-3750SS	3/8	.3735	.3720	5.00	.440	.365	1.060	.940	.3790	.3750
RP-5010	RP-5010SS	1/2	.4985	.4970	1.00	.594	.460	1.160	1.140	.5050	.5000
RP-5020	RP-5020SS	1/2	.4985	.4970	2.00	.594	.460	1.160	1.140	.5050	.5000
RP-5025	RP-5025SS	1/2	.4985	.4970	2.50	.594	.460	1.160	1.140	.5050	.5000
RP-5030	RP-5030SS	1/2	.4985	.4970	3.00	.594	.460	1.160	1.140	.5050	.5000
RP-5040	RP-5040SS	1/2	.4985	.4970	4.00	.594	.460	1.160	1.140	.5050	.5000
RP-5050	RP-5050SS	1/2	.4985	.4970	5.00	.594	.460	1.160	1.140	.5050	.5000
RP-6220	RP-6220SS	5/8	.6235	.6220	2.00	.750	.580	1.240	1.400	.6300	.6250
RP-6230	RP-6230SS	5/8	.6235	.6220	3.00	.750	.580	1.240	1.400	.6300	.6250
RP-6240	RP-6240SS	5/8	.6235	.6220	4.00	.750	.580	1.240	1.400	.6300	.6250
RP-6250	RP-6250SS	5/8	.6235	.6220	5.00	.750	.580	1.240	1.400	.6300	.6250
RP-6260	RP-6260SS	5/8	.6235	.6220	6.00	.750	.580	1.240	1.400	.6300	.6250

**Quick Release Ball Lock Pins**  
button handle



**IMPORTANT SPECIFICATIONS**

**4130 Steel**

Diameter	Pull Out Strength Lbs.	Calculated Double Shear Strength Lbs.
1/4	230	8,200
5/16	510	12,800
3/8	575	18,400
1/2	1,160	32,800
5/8	2,070	51,200

**IMPORTANT SPECIFICATIONS**

**304 Stainless**

Diameter	Pull Out Strength Lbs.	Calculated Double Shear Strength Lbs.
1/4	180	2,200
5/16	400	3,500
3/8	450	4,500
1/2	900	11,500
5/8	1,500	20,000

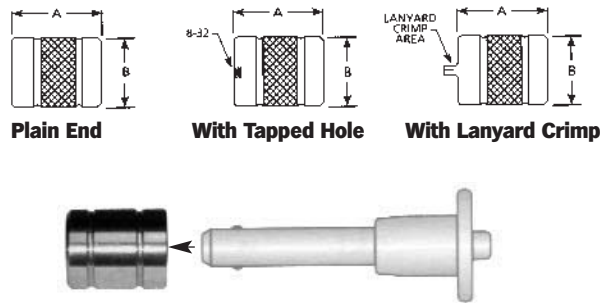
► **4130 Steel:** The pins are made from hardened 4130 steel-plated. The handle is machined and tumbled from aluminum alloy. The spindle, spring, and balls are made from stainless steel. Split rings are stainless steel. Push button is brass.

► **304 Stainless Steel:** The pins are made from 304 stainless steel. The handle is machined and tumbled from aluminum alloy. The spindle, spring, and balls are made from stainless steel. Split rings are stainless steel. Push button is brass.

► **High Strength 17-4 Stainless Steel** is available in selected sizes.

4130 Steel PART #	304 S.S. PART #	Nominal Diameter	Max. A	Min.	Grip Length	+/- .005 B	+ .000 -.030 C	J	H Max.	Recommended Hole Size Max.	Min.
BP-2505	BP-2505SS	1/4	.2485	.2470	.50	.289	.290	.750	.890	.2540	.2500
BP-2510	BP-2510SS	1/4	.2485	.2470	1.00	.289	.290	.750	.890	.2540	.2500
BP-2515	BP-2515SS	1/4	.2485	.2470	1.50	.289	.290	.750	.890	.2540	.2500
BP-2520	BP-2520SS	1/4	.2485	.2470	2.00	.289	.290	.750	.890	.2540	.2500
BP-2525	BP-2525SS	1/4	.2485	.2470	2.50	.289	.290	.750	.890	.2540	.2500
BP-2530	BP-2530SS	1/4	.2485	.2470	3.00	.289	.290	.750	.890	.2540	.2500
BP-3110	BP-3110SS	5/16	.3110	.3095	1.00	.375	.330	.750	.930	.3165	.3125
BP-3115	BP-3115SS	5/16	.3110	.3095	1.50	.375	.330	.750	.930	.3165	.3125
BP-3120	BP-3120SS	5/16	.3110	.3095	2.00	.375	.330	.750	.930	.3165	.3125
BP-3125	BP-3125SS	5/16	.3110	.3095	2.50	.375	.330	.750	.930	.3165	.3125
BP-3130	BP-3130SS	5/16	.3110	.3095	3.00	.375	.330	.750	.930	.3165	.3125
BP-3140	BP-3140SS	5/16	.3110	.3095	4.00	.375	.330	.750	.930	.3165	.3125
BP-3710	BP-3710SS	3/8	.3735	.3720	1.00	.440	.365	.875	1.040	.3790	.3750
BP-3720	BP-3720SS	3/8	.3735	.3720	2.00	.440	.365	.875	1.040	.3790	.3750
BP-3725	BP-3725SS	3/8	.3735	.3720	2.50	.440	.365	.875	1.040	.3790	.3750
BP-3730	BP-3730SS	3/8	.3735	.3720	3.00	.440	.365	.875	1.040	.3790	.3750
BP-3740	BP-3740SS	3/8	.3735	.3720	4.00	.440	.365	.875	1.040	.3790	.3750
BP-3750	BP-3750SS	3/8	.3735	.3720	5.00	.440	.365	.875	1.040	.3790	.3750
BP-5010	BP-5010SS	1/2	.4985	.4970	1.00	.594	.460	1.000	1.190	.5050	.5000
BP-5020	BP-5020SS	1/2	.4985	.4970	2.00	.594	.460	1.000	1.190	.5050	.5000
BP-5025	BP-5025SS	1/2	.4985	.4970	2.50	.594	.460	1.000	1.190	.5050	.5000
BP-5030	BP-5030SS	1/2	.4985	.4970	3.00	.594	.460	1.000	1.190	.5050	.5000
BP-5040	BP-5040SS	1/2	.4985	.4970	4.00	.594	.460	1.000	1.190	.5050	.5000
BP-5050	BP-5050SS	1/2	.4985	.4970	5.00	.594	.460	1.000	1.190	.5050	.5000
BP-6220	BP-6220SS	5/8	.6235	.6220	2.00	.750	.580	1.250	1.500	.6300	.6250
BP-6230	BP-6230SS	5/8	.6235	.6220	3.00	.750	.580	1.250	1.500	.6300	.6250
BP-6240	BP-6240SS	5/8	.6235	.6220	4.00	.750	.580	1.250	1.500	.6300	.6250
BP-6250	BP-6250SS	5/8	.6235	.6220	5.00	.750	.580	1.250	1.500	.6300	.6250
BP-6250	BP-6260SS	5/8	.6235	.6220	6.00	.750	.580	1.250	1.500	.6300	.6250

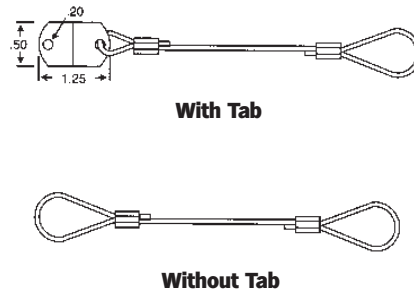
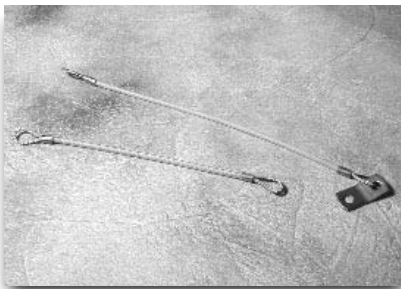
## Receiver Caps for Lock Pins



- Caps are made from 303 stainless steel
- Cap with tapped hole has 8-32 thread
- The receiver caps fit over the end of the lock pin. They allow the pins to be used in applications where the receiving hole is not within tolerance or is out of round

Plain End PART #	With Tapped Hole PART #	With Lanyard Crimp PART #	Fits Pin Dia.	+/- .010 A	+/- .010 B
RC-50	RC-10	RC-105	1/4	.580	.375
RC-55	RC-15	RC-110	5/16	.650	.469
RC-60	RC-20	RC-115	3/8	.730	.562
RC-65	RC-25	RC-120	1/2	1.000	.750
RC-70	RC-30	RC-125	5/8	1.300	1.000

## Lanyards



- Made from 1/16" stainless cable with plastic coating to 1/8" diameter
- Tab is made from stainless steel
- Keeps lock pins from getting lost and insures they are handy when needed

With Tab PART #	Without tab PART #	Length
LY-5	LY-35	6"
LY-10	LY-40	8"
LY-15	LY-45	10"
LY-20	LY-50	12"
LY-30	LY-60	18"

## Ball & Spring Plunger Wrenches

- ▶ Used in installing or removing plungers. Spring damage can result when using a screwdriver on the nose end of plunger.
- ▶ Wrenches work on all inch and metric sizes



PART #	For Plungers with Thread Sizes
WR-10	#6
WR-11	#8 and M4
WR-12	#10 and M5
WR-13	1/4 and M6
WR-14	5/16 and M8
WR-15	3/8 and M10
WR-16	1/2 and M12
WR-17	5/8
WR-18	3/4
WR-19	1"



**Morton Machine Works** manufactures quality tooling components to ISO 9001 certified standards at two production facilities in central Pennsylvania.





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