



ITW Patents

ITW's customer back solutions are differentiated by innovative technology designed to meet the needs of today's users with specific focus on productivity, quality, and ease of use behind very strong brands. The list below of ITW products and associated patents may not be all inclusive. Other ITW products not listed may be protected by one or more patents. Additional patents may be pending in the U.S. and elsewhere.

ITW Construction Products Patents

(Published 3/17/2020; Updated 10/31/23)

ITW Brands Fasteners

Backer-On® -Cement Board Screws

9856901				
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E-Z Ancor® - Drywall Anchors

7261505 (Twist-N-Lock™)	7266874	7611316 (Toggle Lock™)	7934895	8057147 (Stud Solver®)
8192123				

Rock-On® - Cement Board Screws

9856901				
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Tapcon® - Concrete Screws

6957557	7076989	7101134	7156600	7458759
8322960	10570943			

GRK Fasteners™

R4™ - Multi-Purpose Screws

8348575				
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RSS™ - Rugged Structural Screws

6789989	8591159	9086088		
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PASLODE® Fasteners

Brite 21° - Framing Nails

7788787	7845889	8033005	8113027	8251686
8333538	8353658	8360703	8650740	

Brite 30° - Framing Nails

7845889	8100618	8113027	8480500	8562268
8740714	8920094	9725670		

GC20 - Corrugated Fasteners

9157228				
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Hot Dipped Galvanized 30° Framing Nails

7273337	7416376	7641432	7845889	8100618
8113027	8353657	8480500	8740714	8920094
10197082				

tetraGRIP™ - Siding Fasteners, Subfloor Fasteners

7819614	8511961			
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PASLODE® Tools & Accessories

All Season Framing Fuel (816008)

7392922	7478740	7571841	7661568	10385285
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Compact 30° Framing Nailer (F325R)

6592014	7918375	8074855	8348118	
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Cordless 16 Ga Finish Nailers (IM250Ali, IM250S-Li)

7392922	8302831			
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Cordless XP Framing Nailer (CF325XP, CFN325XP)

7121441	7392922	8016046		
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Positive Placement® Metal Connector Nailers (F250S-PP, PF150S-PP, F150S-PP)

6808101				
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PowerMaster™ 30° Framing Nailers (F-350P, F350-S)

6592014	8074855			
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quicklode™ Trim Fuel (816007)

7392922	7571841	7661568	8302831	8939339
9802303				

PNA™ Construction Technologies

Armor Edge® Joint Assembly

6775952	8302359 (All Steel)			
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Diamond Dowel® System

8303210 (Pocket Former)				
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Joint Stabilizer (JS5, JS6, JS7)

7334963				
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PD³ Basket® Assembly

7481031	7716890	8381470		
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RACOR® Home Storage Solutions

PHL-1R - Ceiling Storage Lift

7527242				
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Tornado® Extended U-Hook (00510)

D577575				
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Tornado® J-Hook (00515)

D577576				
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Tornado® Ladder Hook (00525)

D577989				
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Tornado® U-Hook (00500)

D581771				
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Tornado® Zinc Extended U-Hook (26208)

7661917	D550545	D558034		
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Tornado® Zinc J-Hooks (26202, 26203)

7972100	D550545	D557595		
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Tornado® Zinc Ladder Hook (26204)

7972100	D550545	D558029		
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Tornado® Zinc U-Hook (26207)

7160074	7510360	D542126		
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ITW Food Equipment Group Patents
(Published 9/6/2019; Updated 10/31/2023)

BAXTER® Baking & Cooking

BVG400G – VersaOven™

10408463				
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DPC1S – Dehumidifying Proofing Cabinet

6894252	9980494			
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OV310 – Mini Rack Oven

8201552				
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OV500 – Rack Oven

6837234 (Gas Models)	7527051	7297904		
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PW – Proofer

6894252	9980494			
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RPW – Retarder/Proofer

6894252	9980494			
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IBEX® Solid State Radio Frequency Oven

IBEX(R) Oven

8207479	8742306	8759729	9132408	9215756
9265097	9301344	9332591	9374852	9414444
9609692	9804104	10057946	10080264	10088436
10244585	10327289	10368402	10405380	10412794
10425999	10433376	10470254	10470255	10598390
10667528	10670542	10687395	10728962	10736185
10750581	10757766	10764971	10772166	10785984
10880959	10904959	10912166	10999901	11009468
11032878	11057968	11102852	D821814	D874866

HOBART® Weighing & Packaging

HT Series – Scale

6884946	7041915	7131774	7886230	9377345
9377346	9417116	9494460	9562806	9752922
9810572	D720769			

NGW – Wrapper

7041915	7886230	8393133	9377345	9377346
9417116	9494460	9562806	9752922	9810572
D720769				

KAIRAK® Refrigeration

KBD – Prep Table

9068773	9541321	10060669		
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KBP – Prep Table

9068773	9541321	10060669	10323875	
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KRD – Prep Table

9068773	9541321	10060669		
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KS – Prep Table

7228698	7587904	10323875		
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KU – Undercounter

7228698	7587904	10323875		
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TRAULSEN® Refrigeration

G-Series – Reach In

7228698	9797650 (Glass Door)	10323875		
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R&A Series – Reach In

7228698	9797650 (Glass Door)	10323875		
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RET – Even Thaw

7119306 (2 Section)	7228698	10323875		
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TB – Prep Table

9068773	9541321	10060669	10323875	
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TE – Equipment Stand

7228698	7587904	10323875		
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TS – Prep Table

7228698	7587904	10323875		
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TU – Undercounter

7228698	7587904	10323875		
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VULCAN® Cooking Equipment**Boil Out ByPass™ Feature on Fryers (ER, GR, VEG Series)**

7698994	8163098			
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Dishwasher-Safe Removable Doors on Ovens (VC5 Series)

9618211				
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Low Water Energy on Steamers (EA, ET Series)

10208964				
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Module Design on Ranges (Endurance™, EV, V Series)

8424512	8578585				
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PowerFry3™ & PowerFry5™ Fryers (TR, VK Series)

7698994	8163098	9021941	9380912	D632131
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PowerSteam™ Feature on Steamers (EA, ET, GA Series)

7418960	8111072			
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SonicSafe™ Feature on Steamers (EA, EO, ET Series)

10357126				
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VMCS Series - Clamshell Griddle Accessory

10271685				
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ITW Test & Measurement and Electronics Patents

(Published 3/7/2019; Updated 8/2/2024)

AVERY WEIGH-TRONIX®

BridgeMont® Truck Scales

7004040				
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Center of Gravity

6552278				
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Counting Scale

D830212	D813067	9400207	9423289	9534732
9709436				

EasiPost™

7004040				
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Eyecon®

7599516	8682047	8861816		
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Galaxy™

D672262	9080911			
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High Resolution Weighing

D830212	D813067	9400207	9423289	9534732
9709436				

Integral Fork Lift Scale

9073738				
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Load Cells

9562802				
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Pill Counting

7599516	8682047	8861816		
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Quartzell®

D830212	D813067	9400207	9423289	9534732
9709436				

Smart Junction Box

6552278				
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Streamline™

9234809				
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WeighBar®

7004040				
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Weigh Legs

6693244				
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ZM2xx Products

D672262				
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ZM/ZQ3xx Products

D672262				
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BROOKS INSTRUMENT®**B950**

D584179	D590734			
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Coriolis Flow Controller

7991510				
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Coriolis – Low Flow

8100382				
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CMX – Pressure Sensor Control Product

6701790	6734659	7131334		
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CMX II – Pressure Control Products

6910381	7010983	7720628	7490518	
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Flow Metrology Tool

7412986	7424895			
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GF 40/80

8100382				
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GF 100 Series

7748268				
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GF 125 EtherCAT

7222029	7412336			
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GF 125 with Self Diagnostics

9410834	9739655	10048105		
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GF 135

8504318	9507351	9739655	9810377	
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GF 225

9760096				
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GF High Flow Products

9464729				
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GF Series Thermal Mass Flow Controller (MFC)

6845659	6962164	7043374	7073392	7082824
7114511	7231931	7272512	7273063	7380564
7434477	7636640	7720617	7905139	8010303
8068999	8751180			

GP200 – Pressure Based Mass Flow Controller (MFC)

7222029	7412336	9562796	10114387	
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IFC 125 PTI Thermal Mass Flow Controller (MFC)

6845659	7082824			
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Liquid Flow Controller (LFC) Ultrasonic

7991510				
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SLA 7840

8100382				
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Solid Sense® II - Positive Pressure Measurement Tool

7131334				
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Thermal Mass Flow Controller (MFC)

7243035	7363182			
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VAI / VAP Product

6321604	6883388	6901813		
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Vapor Delivery Module (VDM300)

7680399	7991510			
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BUEHLER®

AbrasiMatic® 300 Sectioning Product

D604344				
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AbrasiMet® XL Pro Sectioning Product

11511381	11549571			
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AutoMet® Grinder Polisher

8465347	8574028	9180571	11491611	
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IsoMet® High Speed Sectioning System

10532415	D841062	D841658		
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SimpliMet® XPS1 Compression Mounting Product

9645058				
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SimpliVac Mounting Product

11714032	11340144			
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SimpliMet® 4000 Compression Mounting Product

9645058	10928280			
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Wilson® Series Product

9496099	7004017	11435270		
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ELECTRONIC ASSEMBLY EQUIPMENT™

Camalot® Prodigy™ Dispenser Product

7980197	9411779	9636699	10966323	10926287	9993838
7833572	9779494	9374905	11395410	10016780	11554436
8230805	9475078	9775250	9662675	10071393	11246249
7923056	10010900	9936585	9815081	10933483	11389819
8616042	9144818	10244634			

Electrovert® Wave Soldering Products

9161459	9370838	10029326	10780516	11389888
9198300	9427819			

MPM® Stencil Printer Products

7458318	8253355	9060437	11072033	11084114
7549371	8230785	8939073	11167365	11173562
7827909	7987781	9126280	7878116	7121199

MPM® EDISON™ Stencil Printer Product

7322288	7013802	9370925	9370923	10723117
7171898	7469635	9370924	9868278	10703089
9919511				

MPM® EDISON™ II ACT Stencil Printer Product

11247286	11590595	11351804	11554580	
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MPM® Momentum® Stencil Printer Products

7861650	8230784	8739699	8746139	8776684
8230783	7806048	8474377	8733244	

Vitronics Soltec™ Centurion™ Reflow Soldering Oven Product

11697168	11679444	11607742	10576567	
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Vitronics Soltec™ ZEVA® Selective Soldering Machine Product

9550246	10086460			
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INSTRON®**Advanced Video Extensometer (AVE)**

7047819	7610815			
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AutoX™

9551560				
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Biomedical Text Fixtures

9746402				
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Durasynch™ Grips

9744676				
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Electropuls® - All E1000, E3000 & E10000 Systems

8151650	8602177			
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ElectroPuls® Biax

8393225				
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KPX, KN, HDX Machines

7913574				
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KPX, KN, HDX Series High Force Static Hydraulic Testing Machine

7540201				
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Manual Wedge Grips

7500401				
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Optical Strain Gauge (OSG) Extensometer

9243895				
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Wave Matrix® Software Option

10107731				
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2712-04X series Pneumatic Grips

8448522	9377385			
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2712-04X Series Pneumatic Grips

8757004				
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5944XY Test System

9797699	9797820			
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MTS® Systems Corporation**1200C Grip**

9696218				
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329 Road Simulator

9328747				
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855 Wheel Test Machine

7254995				
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MTS Acumen®

D691501	D763109	D728401	D796360	8955397
9121791	9270155	9455608	9696229	9797943
9904258				

ADAS Testing Systems

9880556				
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Bionix® Knee Wear Simulator

7383738				
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Bionix® Spine Wear Simulator

7617744	7654150	7762147	7779708	7824184
7913573	8156824			

Custom Blast Simulator

7726124				
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E22 Charpy Impact Test System

10345168				
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MTS Echo®

9501375	9652347	10255156		
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Elastomer Test System

7404334	10180379			
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Elastomer, Acumen®, and Other Accelerator Components

7331209				
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Flat Belt Roadwheel

7908916				
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GRV Displacement Transducer

9795397				
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High Frequency MAST

6758623	7802939	8113733		
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Intelligent Vehicles

9310808				
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Material Testing Grip

7739919				
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Mechanical Hardware-In-The-Loop / Model Motion

9477793	10061278	10339265		
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RPC® Pro

8135556				
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Rolling Road

7348502	7788984	7918143	8186207	8607626
8788116	8955397	9778122		

Service Oil Condition Monitoring Kit

8322233				
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ITW Welding Patents
(Published 3/7/2019; Updated 10/26/2023)

Millermatic®

8552339	7465901	8546728	9802265	7977604	7208699
7755000	8278601	8604389	10183352	8536488	8642924
9545684	6794976	7046111	6633485	9592565	6977358
7105776	7301124	7339135	7355141	7411147	7423238
7429712	D611074	7700893	7777447	7800018	7985940
8575517	8629373	8658942	8748777	8796585	8890031
9000329	9050680	9333585	9399263	9604303	9610646
9931706	10144086	10252367	10369650	10596651	10603736
10737348	10773333	9636768	7138601	7262387	6855914
7049545	7329834	7767933	9308597	9586283	10112252
9289844					

Invision™

8395085					
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Alumapower™

8395085					
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Spectrum® / AirForce®

7807937	9931708	8710396	10328516	8552339	7465901
7046111	7411149	8558138	6633485	6814659	6781085
7781699	8263896	8373084	D683774	8772668	8901451
8901450	9040868	9132502			

Handler®

8546728	9802265	7977604	7208699	7755000	8278601
8604389	10183352				

Ironman™

7977604	7208699	7755000	8278601	8536488	8642924
9545684					

Dimension™

8455794	8546726	8884188	9144856	9492880	9737950
8653413	9862052	10112251	7351932	7307239	9818529
10150173	10406623	10486257	10500669	10556289	

Deltaweld®

10270719	D882517	D882516	D909298	7351932	
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Dynasty®

7265318	9862052	10112251	6801443	9700965	10213861
6770846	7377825	7682208	6750427	10369651	10456851
9093912	10207351	9180544			

Maxstar®

7265318	8552339	7465901	6770846	7377825	7682208
6750427	10369651	10456851	9093912	6648698	6861586
6794976	7046111	6814659	8558138	6633485	

Diversion™ / Hobart EZ Tig™ 165

6801443	8552339	7465901			
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Syncrowave®

7265318	9093912	10207351	9180544	7301122	7381925
7381924					

CST™

7820943	8179100				
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Fusion™

10751825	10384290				
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Champion®

7288740	7411153	9925613	10661374		
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Bobcat™

6674046	6753503	6933465	7044999	10384290	9993890
9474185	6954131	7315231	10766090	10900485	7288740
7411153	8342150	10371039	10601353	10815862	8188708
8759714	8969762	9796037	10576573	9109549	9587593
9803572	9863374	9943924	10525545	10596652	

Trailblazer®

10202968	7858903	10384290	9993890	10710188	7265318
7642486	9718141	9724778	10369652	10688583	8502115
8859937	9381593	7288740	7411153	8188708	8759714
8969762	9796037	10576573	9109549	9587593	9803572
9863374	9943924	10525545	10596652	9474185	9266183
9604302	10144082	8115328	8125094	8338971	7199331
7211764	7265319	9888592	7858904	8604385	8653415
8921735	8922034	9000328	9162309	9380717	9407185
9457417	9676053	9821398			

Big Blue®

10202968	6883540	7261522	9539662	10144083	10894295
7858903	6674046	6753503	6933465	7044999	10384290
9993890	10710188	7820943	7265318	7642486	9718141
9724778	10369652	10688583	8502115	8859937	9381593

Enpak®

10202968	6674046	6753503	6933465	7044999	10384290
8342150	10371039	10601353	10815862	8188708	8759714
8969762	9796037	10576573	7870915	7908911	8261717
8459958	8464526	8627797	8833066	8845300	8893679
9206780	9835181	10001148	9266183	9604302	10144082
8115328	8125094	8338971			

SuitCase® Feeder

9902008	9399561	9616516	7041937	9254984	9505076
10076803	10076809	10807181			

Continuum®

6995338	8592723	8704131	9403231	9987701	9399561
6909067	6933466	7129443	8598492	8927903	9314865
9718142	9808882	6974931	10112251	8669490	9506958
10464155	10857610	8604386	D727986	D731968	9102347
D751033	9511444	9517525	9517522	9623506	9833858
10046411	10118241	10155278	10183355	10189106	10207352
10315269	10442027	10632559	10898964	8455794	8546726
8884188	9144856	9492880	9737950	9102000	9844828
9616516	8653413	9862052			

XMT™

8395085	9902008	7820943	7265318	7138601	7262387
8330077	8357007	8431864	8624161	8779329	9024234
9061367	9142909	9902012	10603735	10773331	

Pipeworx™

6909067	6933466	7129443	8598492	8927903	9314865
9718142	9808882	7078652	7820943	6750427	6794976
7411155	7952051	9314867	9463523	9764407	9782851
9878393	9156103	9662735	10105781	10155277	10259067
10384289	10406621	10507542	10751828		

Multimatic®

9862052	10112251	8552339	7465901	10207351	8546728
9802265	7977604	8604389	10183352	6794976	7046111
6633485	9636768	6855914	7049545	7329834	7767933
9308597	9586283	10112252	9566657	10343230	10751826
10773328					

Subarc™ Systems

9862053				
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ProHeat™ Induction Heating systems

6727483	6956189	7015439	7696458	7786415	8038931
8115147	9589705	9733130	9913320	10104795	10406624
10458855	10533897	10539604	10593491	10609770	10645763
10672533	10863591	10912156			

Filtair™ Fume extraction systems

9468958	9498805	9505042	9505041	9604266	9821351
10603698					

Wire Feeders

8395085	9399561	9102000	9844828	9616516	6809286
7208698	7285746	7374074	7390989	7389900	7465902
7531768	7615723	8269143	10293425	10384294	8237087
7238918					

PPE and Accessories

D769535	D769542	D769543	D770689	D776360	D776359
D777987	D779128	D781502	D781502	D782120	D803486
D804107	D804107	9999546	10034510	10098403	10299530
10512798	10681953	10702003	9731152		

ITW Specialty Products Patents
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HI-CONE®

Carriers

7445114	7510074	7775020	7775348	7793778
7964125	7975841	8418844	8545375	8789691
9079700	9315309	9434521	9499320	9669977
9957093	10301092	10611539	10683151	11319129
11352180	11434058	11623804	11643261	11834241
11845599	11897679	12031018	12077357	12103750
12122579	12172815			

Carrier Production and Application

7637077	8387341	9533782	9630729	10166690
10913560	11591121	11713145	11772834	12024321
12187475	12195215			