

Due to Bulk Sale of Injection Molding Machines, This is Now an Online Auction.
Updated Asset List Available at www.hilcoind.com/sale/DowSolar



Solar Panel Manufacturing Test & Measurement

*Used in the Production of
Solar Roof Shingles*



November 1 – 8
Midland, Michigan USA

Sale held in partnership with:

 **Hilco**TM
Industrial
www.hilcoind.com

AARON equipment company ^{inc.}
www.aaronequipment.com

 **PERRY VIDEX**
A PERRY EQUIPMENT COMPANY
www.perryvidex.com

Bid online with:

Hilcobid

2012



2012

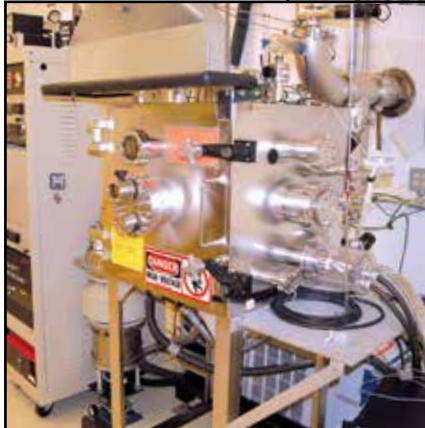


INJECTION MOLDING SUPPORT

- 1 – THORESON MCCOSH MODEL TD-2000 DESSICANT HOPPER DRYER, S/N 212-717-06 (New 2012), Rated @ 2000-CFM, with (2) Insulated Hoppers - (1) 60" & (1) 54", (2) Resin Base Pre Heaters, Allen Bradley Panel ViewPlus 1000 PLC
- 2 – THORESON MCCOSH MODEL SUPER SACK 3,000-LB. BULK BAG UNLOAD SYSTEMS
- 3 – THORESON MCCOSH MODEL MK15 17.5-KW VACUUM PUMPS (New 2012)
- 1 – TUTHILL 25-HP ROTARY LOBE VACUUM PUMP, with Sound Enclosure

LAMINATORS

- 1 – 3S MODULTEC MODEL NG4222XL/CP/EA PHOTOVOLTAIC SOLAR CELL LAMINATOR, S/N 105407 (New 2010), PV Module Size: 4200mm x 2100mm x 20 mm (Max); 890mm x 890 mm (Min), Glass Strength: Clean, Washed Solar Glass 3mm, Module Glass Size: 584.2mm x 254mm, 4-Module Design, with Cooling Press, Extraction Table, Cooling Device, 15-kW Vacuum Pumps, Sterling Temperature Controller, Lamination with Hybrid Heating Plate, Glass/EVA/Solar Cells/Glass Fiber/EVA/Back-Sheet
- 1 – BURKLE TYPE E-LAPV 2344-1 HV 3-STATION LAMINATION LINE, S/N 0129860130 (New 2012), Consisting of: (2) Hot Presses w/ 2300mm x 4400mm Platens, 450mm Stroke, 200mm Max Width, 180°C Max, Thermal Oil Heat, (2) Hot Oil Systems, 96-kW Heating Power, Vacuum Membrane, (1) Cold Press w/ 2300mm x 4400mm Platen, 250mm Stroke, 100mm Max Width, Water Cooling, with PC Control and Allen-Bradley PLC, 9.5-kW Vacuum Pump
- 1 – OEM MODEL VAC-S-1/20/40X60 COMPRESSION LAMINATOR, S/N 3369/1111/036630/HELC, with Heated Platens, Hot Oil Source, Vacuum Pump, Chiller, Envirotherm 2408t Controller
- 1 – NISSHINBO MODEL LAM 1834N SINGLE PLATEN LAMINATOR, S/N CVL15408051 (New 2008), Platen Area: 1.8m x 3.4m, with Vacuum Pump, PLC
- 1 – NISSHINBO MODEL LAM 1222S 3-PLATEN LAMINATOR, S/N CVL07507061 (New 2007)



SPUTTERING SYSTEMS

- 1 – VON ARDENNE MODEL CS400ES VAPOR DEPOSITION SPUTTERING SYSTEM (New 2008), with (6) Pfeiffer OPS-900 Vacuum Chambers, CTI Cryogenics Compressor and Cryo Pump, (4) Trumpf RF Generators, (3) Advanced Energy Pinnacle Plus RF Generators, (12) Heinzinger/TDK Lambda Power Supplies, (2) Inficon XTM/2 Disposition Monitors, (8) Vacuum Pumps, Media Transfer Robot, Temperature Control
- 1 – INNOTECH MODEL VS-24C VAPOR DEPOSITION SPUTTERING SYSTEM, with Vapor Chamber, Sigma SQC-310 Control, Neslab HX-300 Refrigerated Recirculator, CTI Cryogenics 8200 Compressor, 3-HP Vacuum Pump
- 1 – HIDDEN ANALYTICAL VAPOR DEPOSITION SPUTTERING SYSTEM, with Vapor Chamber, Vacuum Gauge Control, (3) VWR Recirculators, (2) Tri-Vac 3-HP Vacuum Pumps, Kurt Lesker MAPS Power Supply, Temperature Controllers
- 1 – KURT LESKER VAPOR DEPOSITION SPUTTERING SYSTEM, with Vapor Chamber, VWR Recirculators, (2) Mass Flow Controls, Advanced Energy Pinnacle Plus DC Power Supply, Temperature Controllers

SOLAR PANEL WELDING • SOLAR SIMULATORS • HI POT SOLAR TEST CELLS SOLAR LIGHT SOAK CELLS • GLASS WASHERS • CNC ROBOTS

SOLAR PANEL WELDING

- 1 - **PV SOLAR PANEL UPPER BUSS WELDING LINE** (New 2012), with (17) Bosch Anti-Static PV Material Holders, (2) Apollo Seiki Terra 200W Soldering Stations, (4) Miyachi Weld Head Controls and Weld Checkers, (2) Videojet Printers, Schleuniger Pre-Feeder, Scanning Gun, (4) A-B PanelView Plus 1000 PLCs
- 1 - **ATS MODEL 80094 PV SOLAR PANEL STRING WELDING LINE**, S/N 80094-2012.001 (New 2012), with (22) Bosch Anti-Static PV Material Holders, (4) Miyachi Weld Power Supply Fine Spot Inverters, A-B PanelView Plus 1000 PLC, ATS Vartec 1100CP Control
- 1 - **PV SOLAR PANEL HIGH DENSITY WELDING LINE** (New 2016), with (4) Miyachi Weld Head Controls and Weld Checkers, HD Butyl Tape Machine, Videojet Printer, Schleuniger Pre-Feeder, Scanning Gun, (6) A-B PanelView Plus 1000 PLCs
- 1 - **SOLAR PANEL WELDING LINE**, with Miyachi Welder & Control, Inspection Cameras, 2-Axis Fixture, VWR Sputter Gun Control

2012



SOLAR SIMULATORS

- 1 - **SPIRE MODEL SPI-SUN SIMULATOR 4600 SOLAR SIMULATOR**, S/N NA, 5' x 7' Glass Top Table
- 1 - **SPIRE MODEL SPI-SUN SIMULATOR 3500 SOLAR SIMULATOR**, S/N 51369 (New 2008)
- 1 - **ATS MODEL 80166 SOLAR SIMULATOR**, S/N 80166-2016.00, with Kepco Power Supply, Vitrek 964i High Voltage Scanning System, Vitrek 951i Electronic Safety Compliance Analyzer
- 2 - **SPECTRA NOVA TECHNOLOGIES SOLAR SIMULATORS** (New 2008), Both with Newport 92193A-1000 Power Supply, Digital Exposure Control, Gast Vacuum Pump, Shutter Control, Keithley 2440-A5 Source Meter; (1) with TTI Optical Chopper, PV Measurement Control
- 1 - **BERGER MODEL PSS-8 PULSED SOLAR SIMULATOR**, S/N 1313, with PSL-8 Control, 1332 Load & Measuring Device, PT100 Temperature Acquisition Device, Solar Chamber, IR Sensor
- 1 - **NEWPORT MODEL 94083A SOLAR SIMULATOR**, S/N 104 (New 2008), with Poly Science Recirculator, Sun Temp Digital Indicator, 10" x 12" PV Module Frame, Kepco Bipolar Operating Power Supply, Newport Power Supply



2012

HI POT SOLAR TEST CELLS

- 2 - **ROBOTIC HI POT SOLAR TEST CELLS** (New 2012), (1) with Fanuc R2000iB-125L CNC Robot, Vitrek 956i Electrical Safety Compliance Analyzer, (5) Poly Tanks, Allen Bradley PanelView Plus 1000 PLC; (1) with Fanuc R2000iB-125L CNC Robot, (3) Poly Tanks, Controls
- 2 - **JR AUTOMATION MANUAL HI POT SOLAR TEST CELLS** (New 2015), Each with Vitrek 956i Electrical Safety Compliance Analyzer, Vitrek 964i High Voltage Scanning System, Omega Conductivity/Resistivity Meter, Allen Bradley PanelView Plus 1000 PLC



2015

SOLAR LIGHT SOAK CELLS

- 3 - **ATLAS SOLAR LIGHT SOAK CELLS**, (1) 8-Lights and (2) 6-Lights, with Atlas Testing Solutions Control Cabinet, Siemens Simatic HMI PLC, Screen Curtains

GLASS WASHERS

- 1 - **BILCO MODEL 330-8 30" GLASS WASHER**, S/N 07053A
- 2 - **BILCO MODEL 460-8 60" 8-ROLL GLASS WASHERS**, with Recirculating Wash & Rinse Zones, Dry Zone, Touch Screen, Conveyor
- 1 - **LAMINATOR FRAME CLEANER** (New 2012), with Allen Bradley Panel View Plus 1000 PLC, Conveyors

CNC ROBOTS

- 2 - **FANUC MODEL R-2000iB-125L CNC ROBOTS**, (New 2012), R-30iA Control, Teach Pendant
- 4 - **FANUC MODEL R-1000iA-80F CNC ROBOTS**, (New 2012), R-30iA Control, Teach Pendant
- 1 - **FANUC MODEL M-710i-C50 CNC ROBOT**, (New 2008), R-30iA Control, Teach Pendant



2012

ENVIRONMENTAL CHAMBERS

- 8 - THERMOTRON MODEL SE2000-15-15 ENVIRONMENTAL TEST CHAMBERS, S/Ns 47009 & 47010 (New 2016); 42068 , 42071, 42072, 42069 & 42070 (New 2011); 40840 (New 2010), Chamber Size: 48" x 48" x 52", Volume: 69-Cu.Ft., Temp Range: -94°F to 356°F, Humidity Range: 10% to 98%, Air Flow: 1000-CFM
 - 1 - THERMOTRON MODEL SE2000-10-10 ENVIRONMENTAL TEST CHAMBER, S/N 40147 (New 2009), Chamber Size: 48" x 48" x 52", Volume: 1965-L, Temp Range: -94°F to 356°F, Humidity Range: 10% to 98%, Air Flow: 1000-CFM
 - 3 - THERMOTRON MODEL SE1000-6-6 ENVIRONMENTAL TEST CHAMBERS, S/Ns 39006 & 39007 (New 2008); 38543 (New 2007), Chamber Size: 40" x 39" x 38", Volume: 986-L, Temp Range: -94°F to 356°F, Humidity Range: 10% to 98%
 - 1 - ESPEC MODEL EWSX282-30CW ENVIRONMENTAL TEST CHAMBER, S/N 3210995 (New 2010), Chamber Size: 72" x 72" x 94", Volume: 282-Cu.Ft., Temp Range: -94°F to 302°F, Humidity Range: 10% to 95%, Air Flow: 4000-CFM
 - 2 - ESPEC MODEL ENL112-CCA ENVIRONMENTAL TEST CHAMBERS, S/Ns 1610994A & NA, Chamber Size: 48" x 48" x 84", Volume: 112-Cu.Ft., Temp Range: -59°F to 302°F
 - 2 - ESPEC MODEL ESC-4CA ENVIRONMENTAL TEST CHAMBERS, S/Ns 0111459B & NA, Chamber Size: 39" x 35" x 39", Volume: 112-Cu.Ft., Temp Range: -94°F to 356°F, Air Flow: 800-CFM
 - 1 - ENVIRONMENTAL SPECIALTIES MODEL ES2000-CDMD-TW DRY CHAMBER, S/N 08078162955, Chamber Size: 115" x 28", Temp Range: 2° - 70°C, 3-Door, PLC Control
 - 1 - TERRA UNIVERSAL ENVIRONMENTAL TEST CHAMBER, 21" x 22" x 11", 10-Door
 - 4 - MCDRY MODEL DXV-1002 DRY CHAMBERS
- AUTOCLAVES**
- 2 - TUTTNAUER MODEL 6666120-1VEP AUTOCLAVES, S/Ns 1010031 & 1010030 (New 2010), 26"x26"x48" Chamber, with Jacket 3.1 Bar @ 145°C



**To 2016
19-Available**

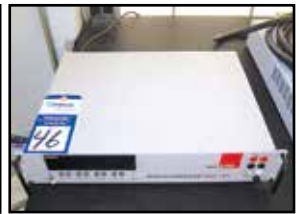


2010

TEST & MEASUREMENT

- 1 - ROMER MODEL RA-7325SI 7-AXIS PORTABLE ARM INSPECTION MACHINE, S/N NA, 8' Reach, with Scanning Option, Rolling Tripod Stand
- 1 - INSTRON MODEL 3365 1,125-LB. TENSILE TESTER, S/N P6001 (New 2002)
- 1 - SEMITOOL MODEL PSC-101 RINSER SPIN DRYER, S/N 14599
- 1 - ESMA MODEL E782 4-ZONE ULTRASONIC CLEANER, S/N 782-72
- 1 - METTLER TOLEDO MODEL HB43 HALOGEN MOISTURE ANALYZER, S/N 1126062646
- 1 - STELLERNET MODEL CXR-SR-50 SPECTROMETER, S/N 12070212
- 2 - KRUSS FORCE TENSIO METERS, (1) Model K20 and (1) Model K10ST
- 1 - SPECTRAL SYSTEMS EVOLUTION SR-1900 SPECTRO RADIOMETER, S/N 165-82E9; with Case

LARGE QUANTITY OF TEST, MEASUREMENT AND INSPECTION EQUIPMENT Including: Tensile Testers, Digital Force Gages, Digital Height Gages, Digital Calipers, Digital Micrometers, Digital Dial Indicators, Digital Depth Gage, Surface Roughness Tester, Digital Microscopes, pH Meters, Fluke Insulation Testers, Multimeters, Power Analyzers, Lab Scales & Balances, Voltage Testers/Probes/Regulators, Current Amplifiers & Probes, Milliohm Controllers, Sonic Cutter, VLF & DC HV Test System, UPS's, DC Power Supplies, Power Isolation Unit, (21) Agilent 34972A & 34970A LXI Data Acquisition Switch Units, Agilent 3499A Control Switch System, Agilent Model 4339B High Resistance Meter Ionization Gauge Control, Pulse Generators, Energy Maximizer, Wave Length Analyzer, Data Logger, Function Generator, Infrared Chamber Scope, Hidden Analytical Ion EQP/EQS Analyzer, Source Meter, Module Tester, Camera Inspection Systems, Dessicator, Lab Benches, Tables, and Cabinets, Granite Surface Plate, Portable A/C Units, Light Booth, Lab Freezers, Lab Ovens, and More



**Partial Listing Only
Please Visit
hilcoind.com/sale/DowSolar
for Complete Lot Catalog**



PLANT & PRODUCTION SUPPORT

- 1 – TENNANT MODEL 7200 ELECTRIC RIDER-TYPE FLOOR SCRUBBER
 - 1 – OMI 30/10-TON DOUBLE GIRDER BRIDGE CRANE, S/N 14042, 30' Span and 35' Under Hook (Approx.), (1) 30-Ton and (1) 10-Ton Hoist, Radio Control
 - 1 – MOTREC MODEL TA-364 120,000-LB. ELECTRIC DIE LIFT TRUCK, S/N 1082658 (New 2012), 48-Volt, Power Steering
 - 1 – 60,000-LB. DIE LIFT CART, WITH 6' X 8' ROTATING TABLE
 - 1 – YALE MODEL ERP040 2,500-LB. ELECTRIC FORKLIFT TRUCK, 189" Lift, Side Shift
 - 1 – KNIGHT 500-LB. GANTRY CRANE, 12' Span, 15' Runway
 - 2 – GRACOMODEL THERM-O-FLOW 200 BULK HOT MELT SYSTEMS, for 55-Gallon Drums, Each System Arranged with (2) Therm-O-Flow Units and (1) Easy Key Control
 - 1 – MOKON AIR COOLED CHILLER, S/N 7008706
 - 2 – TURMOIL MODEL OC-100R WATER COOLED REFRIGERATED AIR DRYERS, S/Ns 12977-09 & 12978-09
 - 1 – BUSCH MODEL COBRA NC400BLZ3 11-KW VACUUM PUMP, S/N C1205000326
 - 1 – MOLEX MODEL TM-3000 2-TON TERMINAL CRIMPING PRESS, S/N 1671 (New 2012)
 - 1 – WILTON MODEL 3575 7" X 12" HORIZONTAL BAND SAW
 - 1 – JET MODEL HBS-814GH 8" X 14" HORIZONTAL BAND SAW, S/N 11111451
 - 1 – ECONOLINE ABRASIVE BLAST CABINET, w/ Dust Collector
 - 1 – DAKE MODEL DA 10-TON H-FRAME SHOP PRESS
 - 1 – CLAUSING MODEL 1792 ¾-HP DRILL PRESS, S/N NA, 521279
 - 1 – JET MODEL J-A5816 15" DRILL PRESS, S/N 12010768
 - 1 – JET MODEL J-4202A 6"/12" COMBINATION BELT/DISC SANDER, S/N 12020196
 - 2 – BALDOR 2-HP PEDESTAL DOUBLE END GRINDERS
 - 1 – REX MODEL 6390 PIPE THREADER, S/N 811436
 - 1 – NUGIER MODEL H20-6 20-TON H-FRAME SHOP PRESS
- MISCELLANEOUS PLANT & PRODUCTION SUPPORT EQUIPMENT**
Including, But Not Limited to: Double End Grinders, Hand & Power Tools, Torque Wrenches, Pipe Threaders, Pipe Bender, Pallet Racking, Gravity Flow Pallet Racking, Spare Parts, Mobile Photo Booth, (75) 30" x 48" Rolling Utility Carts, Die Carts, (11) Electric Scissor Lift Carts & Tables, Storage Cabinets, Work Tables & Benches, Rexroth Work Stations, Pipe Stands, Welding Accessories, Printronix Label Printers, and Much More.

2012



ONLINE BIDDING

NOVEMBER 1-8

FOR CLOSING TIMES CHECK

HILCOIND.COM/SALE/DOWSOLAR

PREVIEW

OCTOBER 31 • 9AM TO 4PM ET

All visitors will check in at the guard gate at 940 F Street and be escorted to one of (4) buildings to view the machinery. Please reference the lot description for the building location of each.

TO SCHEDULE AN EARLIER INSPECTION, PLEASE CONTACT TIM PFISTER AT +1 847-313-4747

EMAIL TPFISTER@HILCOGLOBAL.COM

ASSET LOCATION

940 F STREET, MIDLAND, MI 49640

(GATE 6, BUILDING 1870)

ONLINE AUCTION

FURTHER INFORMATION

- A 16% BUYER'S PREMIUM WILL BE CHARGED ON ALL ASSETS WHEN PAYMENT IS MADE BY MEANS OF CASH, CASHIER'S CHECK, COMPANY CHECK (WITH BANK LETTER OF GUARANTEE) OR WIRE TRANSFER WITHIN 48 HOURS OF SALE CLOSE. AN 18% BUYER'S PREMIUM WILL BE CHARGED ON ALL ASSETS WHEN PAYMENT IS MADE BY CREDIT CARD (ACCEPTED FOR INVOICES OF \$2000 OR LESS), OR WHEN PAYMENT IS RECEIVED AFTER 48 HOURS OF SALE CLOSE. AUCTION WILL BE CONDUCTED IN ENGLISH, ACCEPTING U.S. CURRENCY ONLY.
- REMOVAL DEADLINE IS DECEMBER 15, WITH HOURS OF REMOVAL BETWEEN 8:00 AM - 4:00 PM ET MONDAY THROUGH FRIDAY. BUYERS WITH ITEMS LEFT ON SITE AFTER DEADLINE ARE SUBJECT TO FINES OF \$500 PER DAY.

MACHINERY & EQUIPMENT

TIM PFISTER +1 847-313-4747 • TPFISTER@HILCOGLOBAL.COM

PAYMENT INFORMATION

LESIA JOSEPH +1 616-328-6892 • LJOSEPH@HILCOGLOBAL.COM

HILCO ACCOUNTS RECEIVABLE AT AR-GR@HILCOGLOBAL.COM

CUSTOMER SERVICE

+1 877-37-HILCO • +1 616-732-1800 • INFO@HILCOIND.COM

Information contained herein deemed to be accurate at time of printing and subject to change. For updated information, please visit our website at www.hilcoind.com for any changes to date, sale process, terms and conditions and list of available assets.

Bid Online at

Hilcobid



31555 W. Fourteen Mile Road, Suite 301
 Farmington Hills, MI 48334
 Ph: 248-254-9999
 Fx: 248-254-9995
 www.hilcoind.com

Forwarding Service Requested

Hilco Industrial ONLINE AUCTION



Solar Panel Manufacturing Test & Measurement

Used in the Production of Solar Roof Shingles



**November 1-8
 Midland, Michigan USA**

Terms of Sale

A 16% buyer's premium will be charged on all assets when payment is made by means of cash, cashier's check, company check (with bank letter of guarantee) or wire transfer within 48 hours of sale close. An 18% buyer's premium will be charged on all assets when payment is made by credit card (accepted for invoices of \$2000 or less), or when payment is received after 48 hours of sale close. Everything will be sold to the highest bidder for cash, in accordance with the Auctioneer's customary "Terms of Sale", copies of which will be posted online. All items will be sold "as is, where-is" without any warranties, expressed or implied. Although obtained from sources deemed reliable, the Auctioneer makes no warranty or guarantee to the accuracy of the information herein contained. Bidders are encouraged to thoroughly inspect the items on which they intend to bid prior to sale. Absolutely no items will be removed until the day after the conclusion of the sale and payment is made in full. Subject to additions, deletions and prior sale. For updated information, please visit our website at www.hilcoind.com for any changes to date, sale process, terms and conditions and list of available assets.

Payment: INVOICES WILL BE EMAILED WITHIN 24 HOURS AFTER THE AUCTION CLOSES. Payment is to be made to Hilco Industrial, LLC. Payment Options: VISA, Mastercard Discover accepted - if invoice total is \$2,000 or less; Wire Transfer; Certified Check; or Company Check (with Bank letter of guarantee - see sample letter below). All sales are subject to sales tax. Purchasers claiming exemptions from taxes must provide proof satisfactory to the Auctioneer of their entitlement to claim such exemptions. Please see complete terms and conditions on our website, www.hilcoind.com.

Sample Bank Letter

(Bank Name) unconditionally guarantees payment to Hilco Industrial from (Company Name). This guarantee will be valid for purchases made at the Auction of Dow Chemical on November 1-8, 2016.



Follow us on:

