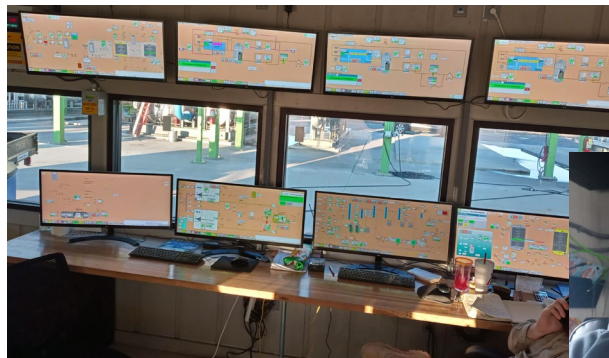
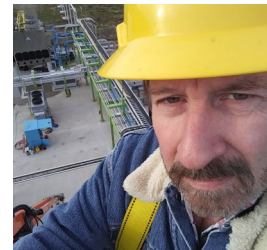


My profile; best described as **“Hands On”**, **Sr Manufacturing/Engineering Leader**, with advanced Mfg’g Skills and Corporate Level Vision, at Macro and Global Scale, encompassing wide ranging technologies and sciences. Hands on at every level, down to Micro Detail of all things in **Plant Operations**, Instruments and Controls, Data Collection, Networks, Network Security, Servers, Technology Integration of Process / Quality / Document Control. **Life Long Love** of Electronics, Circuits, Instrument Design, pairing spec driven engineering, and sophisticated **Test and Measurement Instrumentation** to Electrical Systems “for verifiable” Quality results. My History encompasses; Generating advanced designs, drawings and process instructions, using world class CAD/FEA Software, each as a Senior; GD&T Mechanical, Electronics, Electrical, PLC, P&ID Engineer - for many large corporations to gain competitive edge, and Product



“Maintenance as a Key Critical Issue”
Process Equipment, Instrumentation,
Items, Data Collection, API,

Development Engineering, Process Design and Process **Troubleshooter**, Equipment Designer, Design of Experiment, DFM and Quality Data Collection, tunneling down to key parametric Data for Statistical Analysis and



actionable improvements. Actively promoting, as Primary Driver of; Maintenance, Repair, Spares, Logistics, Accountability; being a longtime proponent of for; Complex Machines, Sensors, Expendables, Wear Networks, and Housekeeping

- **Driving and Implementing CMMS and other Modern applications of MES / ERP, and Work Cell, Work Center Quality strategies** (cellular manufacturing for quality parametric focus). Specializing in Management Level, Real Time “Production Status, Detail Data Collection and Running Historical Metrics”; to understand and drive productivity improvements and action measures. Working with internal and external customer requests over decades; Prototyping for Proof of Concept, Creating Alpha Unit Products, Detail Drawings and Process Design Instructions, to integrate stable Manufactured products; conducting meetings, presentations, discussions for all stakeholders and decision makers. Driving; best Business Practices, Product Development, Shop Logistics, Quality, Historical Data, Technical Personnel training / mentoring - using **decades of Production / Manufacturing / Engineering** and Management experience as my guide, from Trusted Key Business Development positions, both “witnessed and participated in”. **Jumping into the fire to; “Fire Stop” critical Engineering, Manufacturing and Personnel “disruption/emergency/challenge” foci.** My unique Global view of Industrial and Manufacturing Operations, came from “Bottom Up” experience, Starting four Corporations, as “key” team engineer / management guide, in very “hands on” Manufacturing Operations, Product Development, Quality, Marketing, Sales and infrastructure positions; **for many “Word Class Companies” and small lean manufacturing operations.** Meaning; I have performed virtually every Industrial Manufacturing Job and Function in light mfg (electro-mechanical assy, test and debug; **from Microelectronics to large Power Electrical Systems and infrastructure**), Heavy Industry Power, Electrical / Mechanical / Structural – at Engineering Level of Planning, Oversight and Coordination. Provisioning, in “Real Time”, Trades Guidance & Inspection, Vendor Logistics; Technical, Detailed Drawing, reviews, revisions, **Team Feedback, Liaison with all parties throughout major upgrades Installations;** of Large Storage Tanks, Conveyors, Machines and associated Footings, Slabs, Barriers – Noting overlooked Component Fit/Function/Orientation and weather resistance issues throughout. In my active roles, participation and execution of so many varied projects; I have advanced skills in **“Climbing (high towers – 300ft), operating Boom Lifts, Telehandler’s/Forklift’s, etc...** to assist / train / advise

Personnel on installations and repairs of every type of equipment and facilities, all weather conditions. Reviewing and providing Mfg support, high level Engineering knowledge, proactively! I have a wealth of current and historical knowledge in these arts. I help transition **industrial projects “from startup to full production”**, with all the “Team / Functional / Technical / Documentation - Anomalies” that go along with any significant Project. More recently my **focus on CMMS (Maintenance Management), transitioning/integrating ERP/MES (Resource/Mfg)**, with my “human” Data / Visualization goals. I “champion” management level resource Data collection strategies, covering entire factory mfg/engineering functions, from Network Distribution/Mapping, **HMI/DCS Control Systems**, Mentoring & Training, Lead by Example (I can perform any Task I oversee), active in Processes from 1,800F (SS Oxidation) to -430F (Hydrogen Liquification), and that’s extreme! I stand “Toe to Toe” with PHD’s regularly, to support process issues and solutions, and get **“Down and Dirty” with Fabrication, Materials, Equipment Integration, Trades, and Facilities personnel**. My **Lean Mfg experience** started when I worked for General Dynamics in the 80’s, as a Sr Mfg Engineer receiving Training in Taguchi Quality Methods, long before the other industries refinements of current QA systems. Applying **Cellular mfg and Statistical Process Tools** to the most rigorous, tight tolerance microelectronics manufacturing applications, achieving tremendous quality in critical military applications. I Love interesting and hard challeng goals. My website www.engineeranything.com you can see additional links and reference to my history and background.

No Limits, Only Multiple Paths - Nick Barrett (865)250-6718

TEAM BUILDER

MENTOR

(Hands On) **ENGINEERING MANAGER**

NICK BARRETT
(865)250-6718

www.nickbarrett.com & www.engineeranything.com

420 W. ROCKWOOD ST
ROCKWOOD, TN 37854

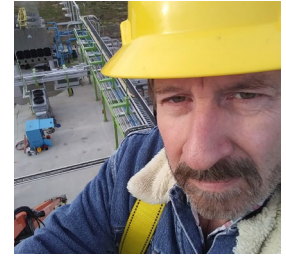


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RELEVANT EXPERIENCE:

CAD Design Engineering (Mechanical, Structural, Electrical, Electronics, Control, Animation)

Electronics Engineer (Wiring, Circuits, PLC, Panels, PCB, Discrete, Power, Control, Test)

Test Engineer - Technician (Instrumentation, Metrology, EMI/EMC, Power DC/RF/MW)

Industrial Engineer (Plant Layout, MMI, Flow Design, Ergonomics, Machine & Process)

Manufacturing Engineer (Process, Equipment, PLC, Control, Automation Process)

Maintenance Engineer (Ops, Planning, Logistics, PM, CMMS, Bldgs, Equip, Process)

Management (ERP, MES, Acct'g, Labor Union/NonUnion, Hire/Fire, Propose/Present/Sell)

Broadcast - RF - Infrastructure (FCC, Licensing Towers, RF, Microwave / Linking)

Technology-IT-Networking (Network, Security, Integration, Infrastructure, DCS, API)

Science - Biomedical (Product Development, Quality, Compliance, Validation, Process design)



ENGINEERING & OFFICE SOFTWARE EXPERIENCE:

Office Applications (Sage, QuickBooks, MS Office Suite, Project, Visio, Adobe Suite, Dreamweaver, SAP, PLM, Web Development, Networking, IT, Server, PC everything) **CAD Software** (SolidWorks, Solid Edge, ProE, Creo, Inventor / ACAD, FEA Design Space),

(**PLC/HMI** Allen-Bradley, Mitsubishi, Keyence, Siemens, etc...), (**SCADA** - Intellution, Genesis, Wonderware, etc...)

(**PCB / EDA** - PADS, Altium, ORCAD, WinBoard, WinDraft, Elect.Workbench-EDA, Spice)

EMPLOYMENT HISTORY

HEUBACH CORP.

Chief Engineer Oct 14 2021 - Current

Multi Corporations Operations Development - Facility, Mechanical, Electrical, Electronics, Control, Network, ERP/MES/CMMS/API, etc... Electrical / Electronics Engineering - Training Machine/Facilities Maintenance Personnel in Support of Equipment Installations, Wiring, Plumbing, Operation, Test/Repair, Tooling, etc... Test Engineer, Instrumentation, Automation, Circuits, PLC, Panels, PCB, Discrete, Power, Control, Networks, PC's Industrial Engineer - Plant Layout, MMI, Flow Design, Ergonomics, Machine & Process Manufacturing Engineer - Process, Equipment, PLC, Control, Automation Process, Floor/Facilities Planning Maintenance Engineer - Ops, Planning, Logistics, PM, Min/Max Stock, Buildings / Facilities, Equip, Process Engineering Staff/Contractors, Coordinate & Oversee all Facilities Functions, Planning. Corp/Office/Engineering Document Standards, Server, Data Configuration, Backups, Rev Control. Science - Biomedical, establish manufacturing/production operations, Recover/Remake lost CAD Engineering Documentation, stabilize Quality systems, determine Product Classification, FDA ISO 13485 validation, certification, GMP, methods, process, products.

PLUG POWER / UNITED HYDROGEN, INC. (Charleston, TN)

Sr Plant Engineer July 2019 - Aug 2021

JOB FUNCTIONS: Critical Systems hand off in Contractor Hard Stop transition Engineering, On Site Principal Engineer, Hands On; all engineering functions, electrical, mechanical, sensor, process, network/network security, DCS oversight, control systems edits, change and documentation, at a Liquid Hydrogen Mfg Plant. Cryogenic processing of Hydrogen Gas to Liquid State, HMI, PLC, Historian Data w/Allen Bradley/Rockwell high level software. Driving Maintenance, Repair, Data trending, as Change agent, promoting transitions to MES, CMMS, integrating Real Time Production Portals, ERP, Corp expansion active participant.

LUMAZON PRODUCT DEVELOPMENT, INC. (Rockwood, TN)

Product Development Engineer 2000 - 2019

TYPICAL JOB FUNCTIONS: Contract Engineer Generalist, acting as a Project Engineer to diverse Industries and Manufacturing Companies. Using advanced Sr Level Electro-Mechanical, Electrical, Electronics, Control and Industrial Engineering experience to design new equipment and processes, make changes to existing manufacturing and product offerings. Contribute as a Product Development Engineer on new products. Contribute by making presentation and proposals within corporate teams, via initial specs and drawings, animations within a CAD environment, then complete Drawing Package with Mfg Instructions, BOM's, Sources,. Following to completion, driving project schedules and resources. HANDS ON ENGINEERING on multiple simultaneous projects.

SAMPLE LIST OF COMPANIES SERVED at LPD, Corp.

Siemens Automation Div. (Johnson City), Siemens Molecular Imaging (Knoxville), ORTEC/Amatek (Oak Ridge), Fisher Scientific (Rockwood), Advanced Catalyst Systems (Maryville), Keisler Engineering (Rockford), Uster Technologies (Knoxville), Thomas Kinkade Co. (Morgan Hill), HERMCO Engineering (San Marcos), NOVA Controls (Wattsonville), United Cutlery (Sevierville)...

EXTENDED HISTORY

BC TECH

GUIDANT ADVANCED CARDIOVASCULAR SYSTEMS

BOSCH AUTOMATION PRODUCTS

PERPETUAL MACHINE

TAMARACK SCIENTIFIC

AUTONOMOUS ROBOTICS

CERTITECH LABORATORIES

GENERAL DYNAMICS

HYLINE ELECTRONICS

CENTURY III ELECTRONICS

AMERICAN ELECTRONICS

CUSTOM POWER CALIFORNIA.

GENERAL AUTOMATION



Director of Engineering	1999-1999
Sr Equipment Engineer	1996-1999
Sr Product Design Engineer	1995-1996
R&D Engineer / Supervisor	1994-1995
Sr Project Engineer	1992-1993
Chief Engineer	1989-1992
Chief Engineer	1988-1989
Sr Mfg Engineer / Supervisor	1984-1988
Ops Mgr / Chief Engineer	1979-1984
Mfg & Test Eng'g Supervisor	1983-1983
Lab Supervisor / Engineer	1977-1979
QC & Sr Engineering Tech	1972-1977
Elect. Assy & Test Technician	1970-1972

EDUCATION / LICENSE / SPECIALIZED TRAINING

EDUCATION: Savanna High, Anaheim CA, 1970

Riverside City College CA, 1977 (digital math & microprocessor)

American International University "Pasadena" CA, BSEE 1981 (non DETC or ABET)

Realty Institute 1992 – Broker Graduate

LICENSE: Electrical Contractors License-CA, 1993 (#670026)

FCC/General Radiotelephone Operators License 1979 (#PG-11-10082/lifetime)

General Class 1968 (WA6GOQ), Extra Class 1997(AD6CI), RE License-1991

DELEGATE: National Conference of Standards Labs – Hyline Electronics Corp.

SECURITY CLEARANCE: Confidential - General Dynamics

TRAINING: ROBOTICS Intelledex, Cognex, Hughes LASER: ESI, Quantrad, Universal

HIGH VACUUM: Sputter, Evaporative, Magnetron, E-Beam, Cryo & Turbo Vacuum Systems

INSTRUMENTATION: LabView, Allan-Bradly, Fluke, HP, ATE, Tektronix/Agilent, etc...

RADIATION SAFETY: General Dynamics, Guidant, Perpetual Machine, Siemens

QUALITY SYSTEMS: (SPC) statistical process control, (TQM) Taguchi Quality Methods, (CELLULAR) Manufacturing, (FDA/GMP)

FAILURE DIAGNOSIS: HiRel Labs, FMA (Failure Modes Analysis), FMEA, Statistical Analysis, etc...

MANAGEMENT / LAW: Century III Electronics, General Dynamics, (AAP) affirmative action, union / non-union law

SOFTWARE: CAD DESIGN – SolidWorks, Inventor, ProE/Creo, SolidEdge, AutoCAD, FEA Cosmos, DesignSpace, LabVIEW

PLC/MMI - Allen-Bradley, Mitsubishi, Keyence, Siemens, etc... SCADA – Intellution, Genesis, Wonderware, etc...

PCB - Elect. Workbench-EDA Spice, WinBoard, Altium, Pads, Orcad

BUSINESS – ERP/MES/CMMS, SAP, PLM, MS Office, Visio, etc... GRAPHICS - Corel Draw, Adobe Software Suite(Web/Graphics/Video)



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My website www.engineeranything.com you can see additional links and reference to my history and background.

