THE VALUE ENGINEERING ALLIANCE

VISION-INTEGRATED LABORATORY & FACTORY AUTOMATION SOLUTIONS
478 Putnam Avenue, Suite 2 Cambridge, MA 02139-4772 (USA)
Phone/Fax: (617) 492-1252 Email: MarcelVEA@aol.com Website: www.The-V-E-A.com

THE VALUE ENGINEERING ALLIANCE is an independent value engineering organization, established in July of 1987, that specializes in the use of machine vision solutions to lower the overall cost of labor-intensive laboratory analysis and industrial manufacturing operations (assembly, inspection, test, control, identification, etc.) while achieving equivalent or enhanced levels of system/process performance and reliability.

The solutions feature standard products or custom configurations developed by an extensive array of vision vendors, optical engineers, application-specific algorithm & software development experts, machine designers, physicists, OEMs, neural network specialists, lighting gurus, and system integrators.

THE VALUE ENGINEERING ALLIANCE's founder and Director, Marcel R. Singleton, is an M. I. T.-educated electrical engineer who has been very heavily involved in the conceptualization, development, marketing, selling, and implementation of machine vision products and vision-integrated equipment since he began serving as the Key Accounts Specialist for ANALOG DEVICES' Industrial Automation Division's Machine Vision Products Group in 1984. Based in Cambridge, MA (USA), Marcel networks with various individuals and organizations to provide world-class solutions world-wide.

WORLD-CLASS
WORLD-WIDE

The heart of the operation is Marcel's ongoing investigation of various laboratory and industrial arenas, in order to determine those areas that would benefit from implementing or enhancing automation. Potential target applications are reviewed with key individuals representing the entire job spectrum from as many prospective customers as possible. Experience has shown that processing the maximum number of inputs manageable, optimizes the likelihood of zeroing in on true problems or needs. Once a need is exposed as being unquestionably "real" (i.e. a solution is required as opposed to simply desired), possible solutions are examined and reviewed with the aforementioned key company contacts to identify one that is cost justifiable, technologically feasible, and otherwise acceptable. Then Marcel surveys his value engineering network to determine which of his allies are qualified, available, and interested. If multiple sources are ready, willing, and able, an overall capability comparison matrix is developed to isolate the automation ally that offers the greatest probability of achieving ultimate success. When successful implementation requires expertise that is beyond the capabilities of any single partner, Marcel establishes strategic partnerships between companies having the requisite complementary capabilities.

For each approved application, Marcel, his appropriate automation ally/strategic partnership, and the end user(s) of interest, jointly develop and implement a workable plan that is consistent with moving the proposed solution from the realm of theoretical capability, to that of practical reality.

Typical Application Areas

- *Industrial OCR and OCV*
- *Pattern Recognition/Alignment*
- *1D Bar Code & 2D Matrix Decoding*
- *2D & 3D Gauging Of Mfr'ed Parts*
- *Part Presence/Absence Detection*
- *Part Orientation Determination*
- *Sorting Of Items By Size Or Features*
- *IC Mark and Lead Inspection*
- *Printed Circuit Board Inspection*
- *Wafer/Lead Frame/FPD Inspection*
- *BGA, μBGA, and CSP Inspection*
- *Print Quality/Label Inspection*
- *Probe Mark Inspection & Analysis*
- *Color and Texture-Based Inspection*