

# PROCESS DEVELOPMENT ENGINEERS

## PURPOSE OF POSITION

Primarily responsible for developing new and improved processes for customers using the company's superabrasive products and equipment for grinding lapping and polishing advanced materials and emerging applications such as compound semiconductor substrates, technical ceramics, optics, and hard-disk read-write heads. Works in coordination with Engis affiliate companies.

## CONTACTS

Reports to Business Group Manager – Hyprez Products. Has inside contacts with department managers, R&D team, Hyprez Cell Team, product managers, and overseas affiliates. Has outside contacts with customers, vendors, and research institutes.

## ESSENTIAL QUALIFICATIONS

Requires a bachelor's degree in **Material Science and/or Mechanical Engineering** with 3+ years of experience working with fine grinding, lapping, polishing, or planarization process is desirable.

Must be a hands-on Engineer with strong skills in DOE setup, data analysis, reporting, and technical presentations; able to provide direction and work closely with other team members and provide training and familiarity and understanding of semiconductor wafer, advanced materials, and/or optical manufacturing processes is desirable.

The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

## ESSENTIAL QUALIFICATIONS

- Defines application-based technical requirements for lapping/polishing consumables and machines in support of product development
- Performs set-up and operation of fine grinding, lapping, and polishing machines to develop commercially competitive diamond finishing solutions on compound semiconductor and other electronic & optics materials.
- Explores and develops new process technologies and fixturing concepts to advance Engis technologically.
- Competently plans and conducts complex engineering experiments to test, prove, or modify theoretical propositions on the basis of research findings and experiences of others research in related areas.
- Demonstrates initiative and innovation in the evaluation of findings to develop new concepts, products, equipment, or processes; or applications independently or jointly.
- Collaborates with R&D group, provides quantitative & qualitative research findings to assist other R&D staff to develop companion products. Prepares clear and concise technical reports for R&D review, or for sales or technical services activities.
- Maintains a high level of professionalism in communicating with customers and other outside contacts as well as inter-company personnel to provide support and resolve problems.
- Thoroughly investigates and evaluates facts related to surface finishing and material removal as a function of diamond type, size, machine kinematics, lapping plates, & slurry chemistries.
- Establishes metrological solutions & procedures for various materials based on their final requirements.
- Assists in authoring/presenting abstracts based on research findings for technical publications and conferences as required.
- Assists in supporting applications engineering for customer installations & training as required.
- Leads key application projects in developing advanced surface finishing processes for automotive, aerospace, medical, optical, compound semiconductor industries.



# PROCESS DEVELOPMENT ENGINEERS

- Assists the sales department on estimation of consumables, labor, lead time related to contract grinding, lapping, and polishing services.
- Processes and runs customer's parts to provide contract grinding, lapping, and polishing services.
- Specifies metrology tools and instruments as well as optimizes metrology techniques.
- Builds relationships with surface finishing consumables suppliers and partners and evaluates their products.
- Acts as a subject matter expert on issue resolution related to process development and improvement to support customers and to provide leadership, technical guidance, and consulting to global engineering and sales teams, both domestically and overseas

## ESSENTIAL QUALIFICATIONS

- Experienced using metrology tools and optical microscopy as well as the operation of various laboratory equipment.
- Ability to travel to tradeshow, technical exhibitions & conferences, customers, and overseas affiliate sites as required; up to 20% domestic and foreign travel may be required.
- Ability to read, analyze and interpret an extensive variety of technical instructions and concepts in mathematical or diagrammatic form.
- Ability to write reports, business correspondence, and procedure manuals. Ability to communicate effectively, orally, and in written form, with engineering staff, manufacturing operations, management personnel, and peers.
- Ability to apply principles of scientific thinking to understand theories, collect data, establish facts and draw valid conclusions. Ability to deal with a variety of abstract and concrete variables in situations where only limited standardization exists.
- Primarily laboratory hands-on with moderate physical work - while performing the duties of this job, the employee is regularly required to sit and talk or hear; is frequently required to stand; walk and reach with hands and arms above shoulder heights, below the waist, or lifting as required throughout the workday. Occasionally lift and/or move, exerting up to 50 pounds of force; may occasionally be exposed to wet, humid conditions and corrosive chemicals as well as occasionally exposed to fumes or airborne particles.
- Primary environment: ambient room temperatures, lighting, and traditional laboratory equipment as found in a typical laboratory environment.
- The performance of this position may occasionally require exposure to the manufacturing areas where certain areas require the use of personal protective equipment such as safety glasses with side shields. Additionally, on occasion, may be exposed to wet, humid conditions and corrosive chemicals as well as occasionally exposed to fumes or airborne particles. In addition to regulatory OSHA safety training required for this position, the employee will receive introductory and, on an annual basis, EPA(RCRA) prescribed hazardous waste handling training.

**PLEASE CONTACT OUR HUMAN RESOURCES TO SUBMIT YOUR RESUME AT  
CAREERS@ENGIS.COM**

