



Diffusion Bonding Technology

A solid-state joining technique for making mould insert with conformal cooling channel under a vacuum condition.

Benefits

- Enhance the cooling performance of mould
- Enhance dimensional accuracy and quality of plastic injection parts
- Shorten the overall injection moulding cycle
- Reduce the overall investment in duplicating plastic injection moulds
- Produce a part with conformal cooling channel that could not be manufactured by traditional machining method

Contact us



+852 2788 5533

hkpcenq@hkpc.org

Our Scope of Services

- Technical evaluation on mould design for identifying the application areas of diffusion bonding
- Technical design input for mould insert with conformal cooling channel
- CAE analysis for conformal cooling channel design in mould insert
- Diffusion bonding service for fabrication of mould insert with conformal cooling channel
- Technical support for plastic injection moulding process parameter setting
- Optimisation for the fabricated mould insert with conformal cooling channel
- Join solid blocks of metal or ceramic for fabrication of part for different industrial applications

Our Competency

- State-of-the-art diffusion bonding facility with skillful CAE analysis professionals
- Extensive technical knowledge of identifying and evaluating the application areas of diffusion bonding
- Hands on experience in mold insert design and fabrication with complicated conformal cooling channel
- Substantive support in plastic injection moulding process parameter setting and optimisation