Direct Injection Process (DIP-PU) VS Direct Pouring Process (DPP-PU)

JCB SAFETY FOOTWEAR

Direct Pouring Process (DPP-PU)

Liquid Mix remains in open condition resulting in lower quality

The basic principle involved in this technology is the mixing of two liquid chemicals, Polyol and Isocyanate, using a mixing head and pouring the liquid mixture at low pressure into an Open Type Aluminum Mould, thereby PU remains in open condition for sometime.

OPEN MOULD ON WHICH PU IS POURED LIKE A DOSA BATTER

Low Pressure Mixing

Mixing and Pouring is done at low pressure that result in poor results as compared to Direct Injection Process, in particular bond strength is badly effected.

Use of Pouring Method in making parts

Pouring technology is suitable for making small PU parts and is not best solution for soling of PU soled footwear*.

Direct Injection Process (DIP-PU)

Sole Become integral Part of Upper

In case of Direct Injection Process, Sole becomes integral part of the upper, resulting in better bond strength as compared to other soling methods like Pouring, Stuck On etc.

Better Grain Structure of PU

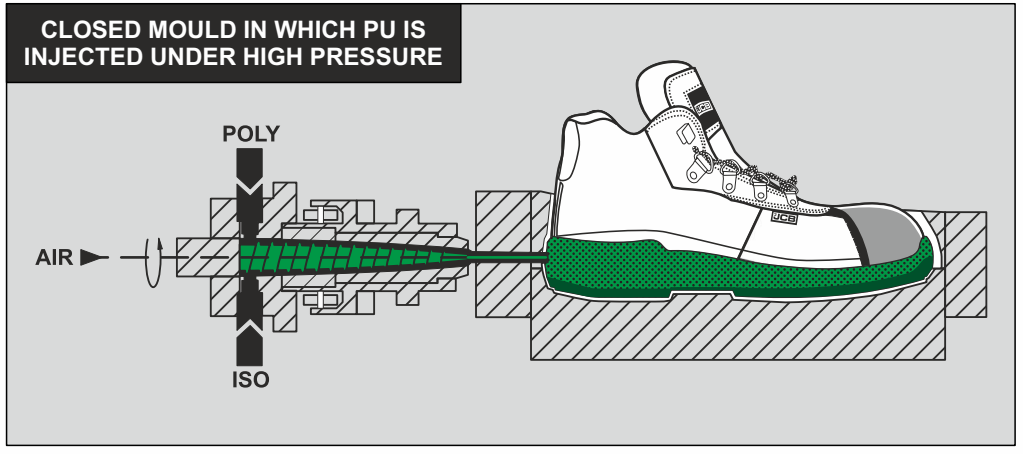
Due to higher mixing speed of over 18000 RPM as compared to 8000 RPM in pouring process*, better grain structure is obtained resulting into better physical and chemical properties.

Consistent Quality

Injection at high pressure into the close mould results in better flow of liquid into the mould that gives better results due to least atmospheric contact and self curing of mixed liquid.

Injection moulding machines used in the production of shoes are highly controlled machines in respect of temperature control, mixing pressure, mixing ratios etc. therefore better and consistent results are obtained.

CLOSED MOULD IN WHICH PU IS INJECTED UNDER HIGH PRESSURE



***Based on Delhi High Court Judgement**