



SEACO
Passion. People. Excellence

Shriniwas Engineering Auto Components Pvt. Ltd.

Site Address:- Plot No. A-24, Talegaon Industrial Area (PH-IV), Tal. Maval,
Dist. Pune - 410507.

To,
M/s. Goyal technochem Pvt. Ltd.,
N-90, MIDC, Hingna Road,
Nagpur -440 016.

Date: 10th January, 2023

Dear Sir,

The Goyal Group has been associated with the SEACO for nearly 1 decade, initially as a LCA – *PihKol A* - supplier and then as a supplier of Single Additive for Green Sand – *PihBond-P-009*.

While using Bentonite + LCA in our system, we had severe issues on Metal Penetration (Mold Rough) in a number of castings apart from other issues. To overcome the same, we tried sourcing Bentonite and LCA combinations from nearly all available sources, as well as the Single Additive, AMCOL with Indian Bentonite as per their recommendations. None of the combinations could give satisfactory results.

The Goyal Group were suppliers of their LCA- *PihKol-A* since August-2016. During the discussions for improvement of castings, the Goyal Team suggested the use of their Single Additive to Green Sand – *PihBond*. After a number of discussions both Technical and Commercial, the SEACO Team decided to introduce *PihBond-P-009* in the sand system which was common to both the KW Lines.

The induction of *PihBond-P-009* was initiated (in March -2019) after a number of Technical discussions between the Teams of Goyal and SEACO in both the KW Lines.

Within 20 days of commencement of usage of *PihBond-P-009*, indications of improvement were noticed. Once the enrichment was nearly completed (nearly after 45 working days), the issues of Metal Penetration reduced considerably and was confined only to 1 particular casting. Thereafter, with inputs from the Goyal Team in tandem with our team, fine tuning was done which enabled resolve this issue also.

With Bentonite + LCA combination, Scabbing was also an issue. After usage of *PihBond-P-009*, Scabbing has been nearly eliminated.

With use of *PihBond-P-009*,

- The additive consumption reduced by nearly 34%
- Sand Sticking to Castings has reduced by 32%
- Issues on Sand Sticking to castings and metal penetration were reduced completely, giving a reduction in Shot Blasting Time by nearly 30%, enabling our castings to be dispatched faster, ensure timely dispatched to our buyers.
- Finish of castings improved considerably.
- GCS increased by 16% of Pre-trial even with reduced addition levels
- Sand related rejections reduced by nearly 35% of Pre- *PihBond-P-009*
- There was a reduction of weight of castings by around 1.08%%
- The waste sand disposal reduced considerably on account of reduced Additive
- Mold Breakage reduced considerably: -

*Year's Average	6%	reduced to	2%
*Summer's Average	16%	reduced to	2%

We have experienced a decrease in water demand of around 12%, for maintaining the same Compactability of Prepared Sand.



For some period of time, when our Sand Cooler was inoperative and Temperature of Return Sand being delivered into mixer was around 65 to 70°C, with Bentonite + LCA the mould breakages were very high, affecting productivity as well as the quality of castings. There was increase in Metal Penetration and other rejections. With enrichment of **PihBond-P-009**, not only was the mold breakage / damage issue taken care of but we found the effect of hot sand on castings quality was minimal.

The Goyal Team has given appreciable Technical Service all through our association with the Goyal Technochem. Their Technical Teams are both knowledgeable and capable of analysing issues and offer possible solutions.

During the period that the Goyal Group have been suppliers to us, Goyal Technochem has given us consistent and quality materials, be it **PihKol-A** or **PihBond-P-009** without deviation in specifications. Their deliveries have been on time and as per the schedules given, even during the Covid-19 situation.

With use of **PihBond-P-009**, the improvements in our castings has been tremendous. (more or less in line with the estimates given in the Proposal submitted by them to us). In our experience, **PihBond-P-009** has proved to be the ideal Sand Additive for use in Horizontally Parted High Pressure lines like the KW line, producing sophisticated Automobile Castings like Cylinder Blocks, Housings, etc.

We wish the Goyal Group all the best.

Thanking you,

Yours faithfully,

For Shriniwas Engineering Auto Component Pvt. Ltd.,

Anand J. Marne,
DGM-Materials.

