Maintaining powder transfer pumps

Problem. Although traditional transfer pumps require minimum attention, regular maintenance will increase the service life of your transfer pump and ensure more efficient material handling. To get the longest service life out of your powder transfer pump, we recommend the following maintenance tips to avoid problems such as clogged pumps and higher outputs.

Solution. Check wear parts and replace as needed (o-rings and pump inserts). Visually inspect the pump body for wear or impacted powder. If these maintenance tips are followed, problems should be minimal. However, if you do experience problems, the following troubleshooting tips will be helpful in determining the cause and solution.

Powder pump doesn't convey. Check the compressed air source to see if it has failed or is set too low. Ensure that powder is moving in the transfer pump. (Remove pump from suction point if needed.) Check the pump compressed air line; clean and ensure sealed transitions. Ensure powder delivery hoses are free of obstructions and are correctly connected.

Powder pump conveys "irregular" or "too little powder." Ensure that the supply air is set correctly. Inspect the powder hoses for impacted powder or other obstructions: Clean or replace hoses as needed. Check the seating or the presence of the o-rings. (Bad o-rings can cause leakage.) Ensure that oil or water isn't entering the powder pump; this causes blockages in the powder hose and transfer pump.

Dust generation too strong at the powder hose exit. Incoming air pressure at the pump is too high: Reduce the air pressure gradually. (If the air is too low, it can cause clogging in the powder hose or may not transfer material fast enough.) **PC**

Thanks to ITW Gema, Indianapolis; 317/298-5161 [www.itwgema.com].