



in remote areas is not necessary anymore.

**Elimination of adhesion problems.** The new coating has excellent wetting characteristics. It has an adhesion to the substrate's surface and is actually pushed to the substrate by air pressure and has a cohesive fracture, meaning when it is peeled off, the material will break apart and the remaining film is left on the pipe. The material shows cold flow as it is a pressure-sensitive adhesive.

It flows into the pores of the pipe and there exists a very intimate match between the substrate and the coating. This results in an extremely good and immediate adhesion. Due to the wetting characteristics, adhesion will take place rather quickly and will remain for decades.

**Elimination of osmosis problems.** Due to its impermeable character for moisture the phenomenon of osmosis does not occur. In addition, the coating has self-healing characteristics. Minor pinholes will be dealt with by the wetting and viscous properties of the coat wrap and damages will heal automatically.

**Elimination of MIC problems.** With the new coating, MIC does not occur. The material is impermeable for water and consists of an organic polymeric composition with inorganic filler material. It is proposed here that if no nitrogen nutrients are available in the coating substance, it is impossible for micro-organisms to grow on this material under anaerobic conditions.

**Elimination of surface preparation problems.** A surface preparation of ST-2 removal of sand, loose parts and grease is sufficient. Sandblasting is better. However, it is not absolutely necessary. Due to the coating's cold flow characteristics and the low surface tension, the material shows a perfect adhesion to all materials, even to PE and PP.

Elimination of water permeability problems.



The material is made of amorphous a-polar polyolefins with no reactive groups and free radicals. It has an extremely low permeability for water and is impermeable for moisture under ambient conditions. Due to the amorphous structure, the coating will wet the surface of the substrate up to a physical molecular level.

**Self healing.** Tests and practice have proven that the material overcomes typical coating rehabilitation problems due to its 1) impermeable character to moisture and gases, 2) easy application, 3) failure-free application to any surface and 4) immediate adhesion to any material.

One of the main characteristics of the mate-

rial, however, is its self-healing effect. Due to its amorphous behavior and the continuous pressure of the outer wrap or the soil, minor damages will automatically be repaired. It is indeed a smart coating. **PEGJ**

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## Attention To Surface Preparation Yields Big Value Additions

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**S**hot and grit-blasting have traditionally been underestimated as to their importance by those who learn by trial and error. The lesson, in those situations, is learned belatedly when the task rises up and bites the unaware. That's because, when it is not done properly, shot and grit-blasting can immediately turn what should have been something crisp and efficiently executed into a costly, professionally embarrassing procedure.

Done wrong, poor surface treatment shortens the life-span of coating, wastes good quality abrasives and — moreover — the blasted profile may not pass the quality control tests. All this is why Wheelabrator Allevard works hand-in-hand with customers to show them

that shot and grit-blasting, done right, can be turned into a real value creation step for surface performance enhancement.

### Premium Steel Abrasives

The chain of value proposition starts with the high-quality abrasives developed to the specific needs of the customer. Wheelabrator Allevard believes that every customer is unique and each customer's applications require much more than a standard product offer which cannot answer the challenges of different industries such as pipeline construction.

The company's Premium Steel Abrasive range is the outcome of its expertise and continuous innovation on behalf of the pipe construction challenge. The Premium Steel Abrasive

range includes: 1) Profilium, 2) ProWheelium, 3) HPG (High Performance Grit), 4) Stainium, and 5) Stelux.

**Profilium:** Specifically designed for air blasting surface preparation, Profilium provides improved and accelerated surface cleanliness while ensuring improved coating adhesion and optimum paint consumption through better surface profile quality. Through its higher productivity, Profilium enables a significant reduction in the overall blasting process costs.

**ProWheelium:** A premium product for wheel blasting, ProWheelium is specially developed for surface preparation before coating, painting, enameling and metalizing where sharp surface profiles are required. It is a high performance alternative to hard steel grit used in wheel blas-