# Article information:

LIQUID PENETRANT TEST | McGraw-Hill Education - Access Engineering
<https://www-accessengineeringlibrary-com.ezproxy.itcr.ac.cr/content/book/9780070707030/chapter/chapter4>

# Article summary:

1. The liquid penetrant test is based on the principles of cohesion and adhesion, capillarity, and contact angle.

2. Contaminants, dirt, and grease can significantly affect the spreading of a penetrant liquid on metallic surfaces.

3. Liquid penetrant systems are divided into visible liquid penetrant and fluorescent penetrant systems, which are further classified as water-washable, post-emulsifiable, and solvent removable.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article provides a comprehensive overview of the principles behind the liquid penetrant test (LPT). It explains the concepts of cohesion and adhesion, capillarity, contact angle, capillary rise, surface contamination effects, LPT principle, and different types of LPT systems in detail. The article also includes figures to illustrate these concepts clearly.

The article is generally reliable in terms of its content accuracy; however there are some potential biases that should be noted. For example, it does not mention any potential risks associated with using LPT or any possible counterarguments to its use. Additionally, it does not provide any evidence for the claims made in the article or explore any unexplored counterarguments to its use. Furthermore, it does not present both sides equally when discussing the advantages and disadvantages of using LPT systems; instead it focuses mainly on the advantages without providing an equal amount of information about potential drawbacks or risks associated with using them.

In conclusion, while this article provides a comprehensive overview of LPT principles and systems with accurate information presented in an easy-to-understand manner; readers should be aware that there may be some potential biases present in terms of missing points of consideration or evidence for claims made as well as one-sided reporting when discussing advantages/disadvantages associated with using LPT systems.

# Topics for further research:

* Risks associated with liquid penetrant test
* Advantages and disadvantages of liquid penetrant test
* Evidence for claims made in liquid penetrant test
* Counterarguments to using liquid penetrant test
* Unexplored applications of liquid penetrant test
* Safety considerations for liquid penetrant test

# Report location:

<https://www.fullpicture.app/item/f4c150b3d056174ee38e52f269e3dfd1>