

Accepted Manuscript

Title: Deformation characteristic and geometrical size effect in continuous manufacturing of cylindrical and variable-thickness flanged microparts

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PII: S0924-0136(17)30471-5
DOI: <https://doi.org/10.1016/j.jmatprotec.2017.10.022>
Reference: PROTEC 15442

To appear in: *Journal of Materials Processing Technology*

Received date: 10-8-2017
Revised date: 8-10-2017
Accepted date: 14-10-2017

Please cite this article as: Meng, B., Fu, M.W., Shi, S.Q., Deformation characteristic and geometrical size effect in continuous manufacturing of cylindrical and variable-thickness flanged microparts. *Journal of Materials Processing Technology* <https://doi.org/10.1016/j.jmatprotec.2017.10.022>

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Deformation characteristic and geometrical size effect in continuous manufacturing of cylindrical and variable-thickness flanged microparts

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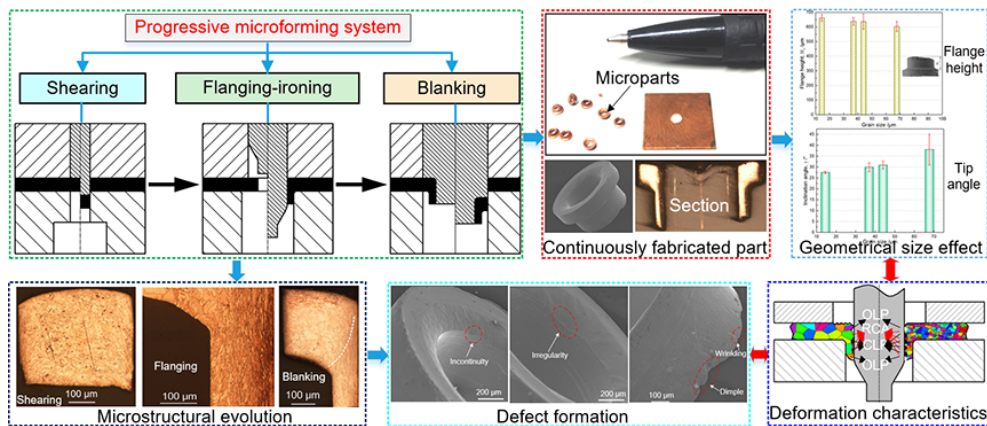
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Graphical abstract



Abstract

The most critical issues in microforming technologies are tailoring the desirable product quality and ensuring the high productivity from application perspective. This is also the case for fabrication of cylindrical micro-pin and flanged micropart with nonuniform thickness. To realize continuous micromanufacturing of the hollow flanged micropart with variable thickness, an efficient progressive microforming method is proposed by using an integrated

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