



INDustrial TECHNOLOGIES 2018
Innovative Industries for Smart Growth



INDTECH2018

Innovative industries for smart growth

29-31 October, 2018
Vienna, Austria

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PILLAR 2

Session 2.3

Early upstream collaboration selecting materials, processes and the design approach to get the best product

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INGWERK GmbH

30 October 2018

INGWERK



 Federal Ministry
Republic of Austria
Transport, Innovation
and Technology

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 767162.



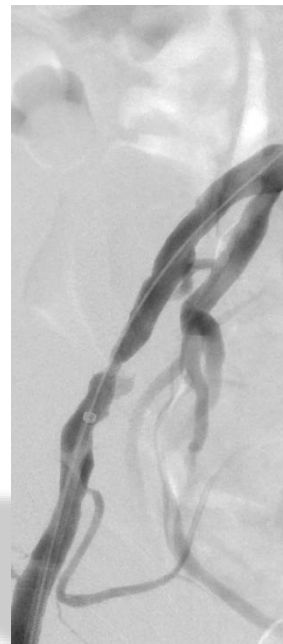
Role of design

“Form follows function”

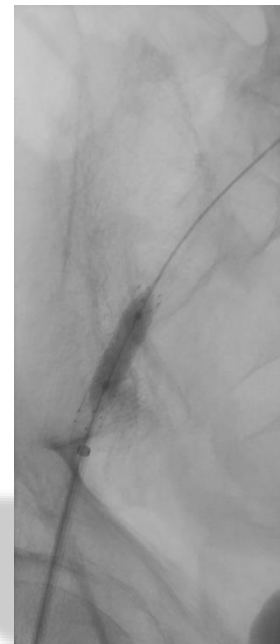
-Louis Sullivan, 1896



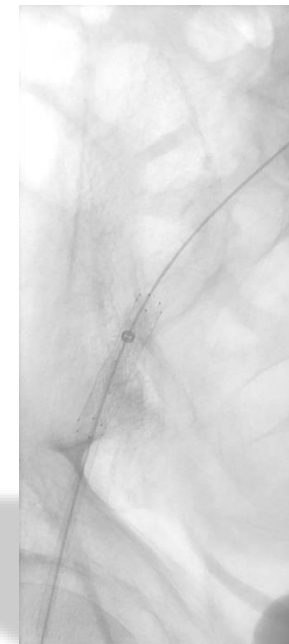
Source: NeuroNews, January 2017



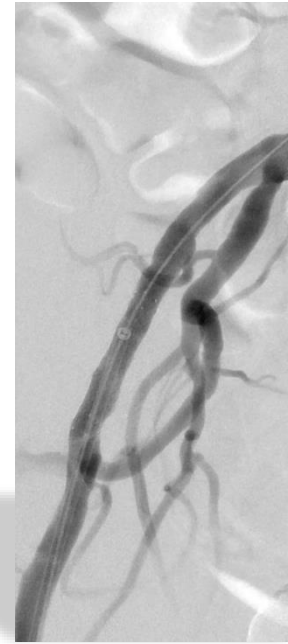
Stenosis



Stent with balloon



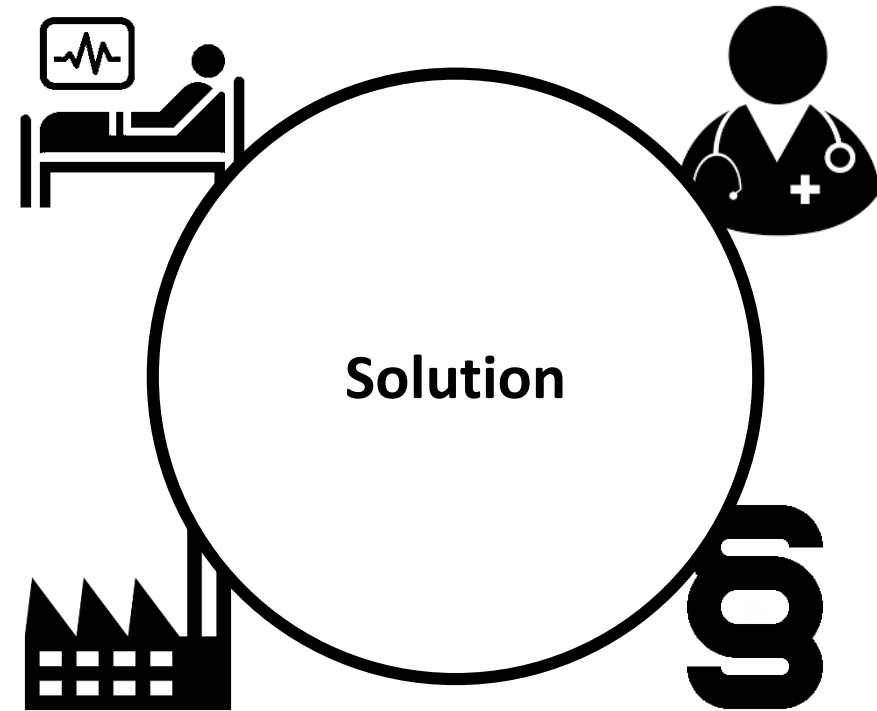
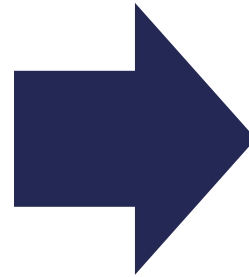
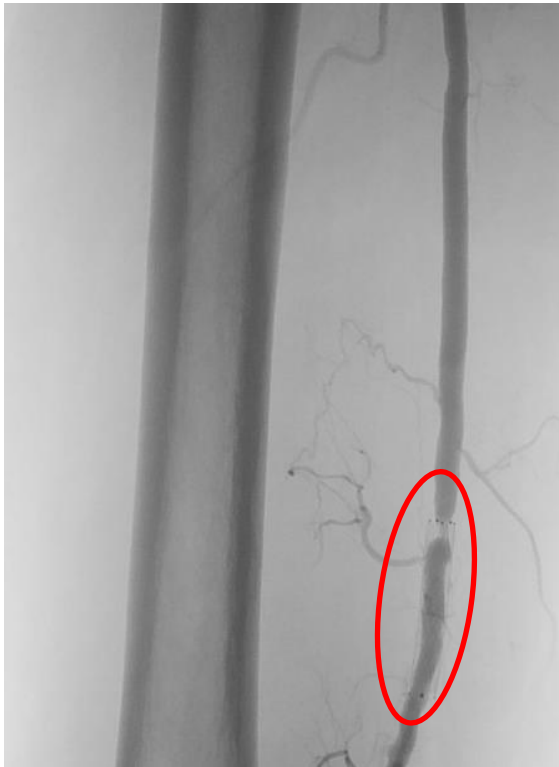
Dilated stent



Dilated artery

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In stent stenosis



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Feed stock material



Source: Endovascular Today, April 2015

- Final shape is produced by laser cutting
- Feed stock material are tubes
 - Outer diameter: 1.5 – 4.5 mm
 - Wall thickness: 0.3 – 0.5 mm

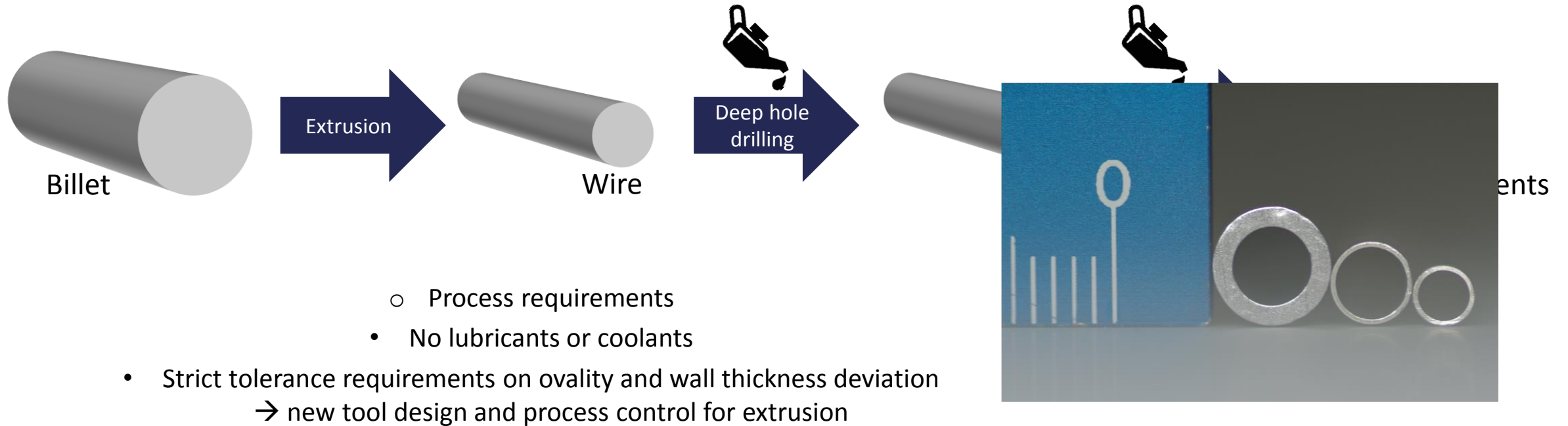
Conventional production route



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New production route for Magnesium stents





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Thank you for your attention

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