



Projeto e Montagem

Figura 8 - TEMA



Tubular Exchanger Manufacturers Association, Inc.

Home	Members	TEMA Advantage	Standards & Software	Contact
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The Tubular Exchanger Manufacturers Association, Inc. (TEMA) is trade association of leading manufacturers of shell and tube heat exchangers, who have pioneered the research and development of heat exchangers for over sixty years.

The TEMA Standards and software have achieved worldwide acceptance as the authority on shell and tube heat exchanger mechanical design.

TEMA is a progressive organization with an eye towards the future. Members are market-aware and actively involved, meeting several times a year to discuss current trends in design and manufacturing. The internal organization includes various subdivisions committed to solving technical problems and improving equipment performance. This cooperative technical effort creates an extensive network for problem-solving, adding value from design to fabrication.

Whether having a heat exchanger designed, fabricated or repaired, you can count on TEMA members to provide the most current, efficient design and manufacturing solutions. TEMA is a way of thinking--members are not only researching the latest technology, they're creating it.

For over half a century our main goal has been to continually find innovated approaches to heat exchanger applications. As a result, TEMA members have a unique ability to understand and anticipate the technical and practical needs of today's market.

Using TEMA members as a resource today ensures a reliable partners for years to come.



TEMA Name Plate

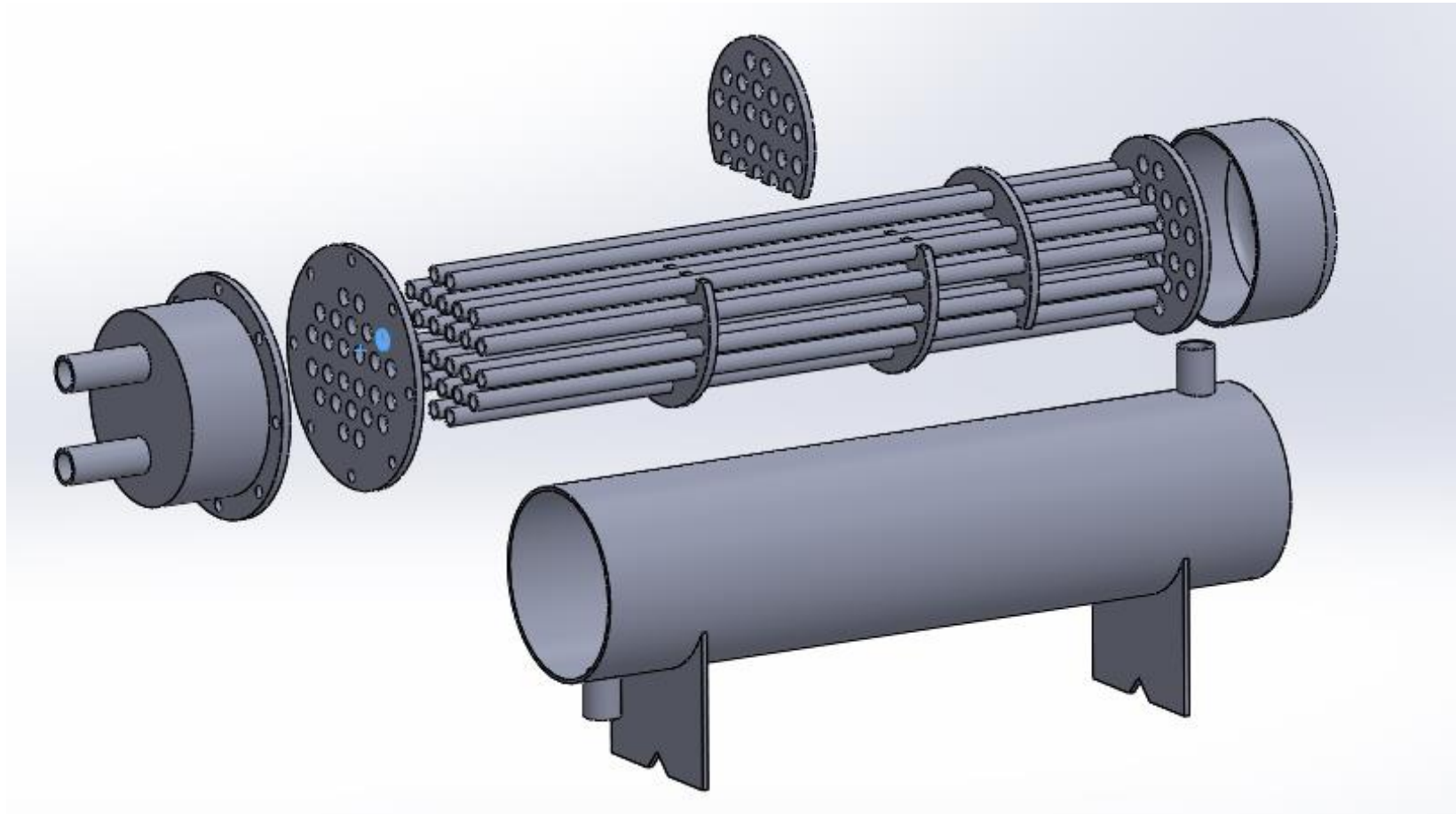
For quality assurance, one need only look for the TEMA Plate attached to the heat exchanger. When you deal with a TEMA manufacturer, you enter into a partnership with an organization dedicated to furnishing a product of the highest technical standards.

Fonte: <http://www.tema.org/>



Projeto - SolidWorks

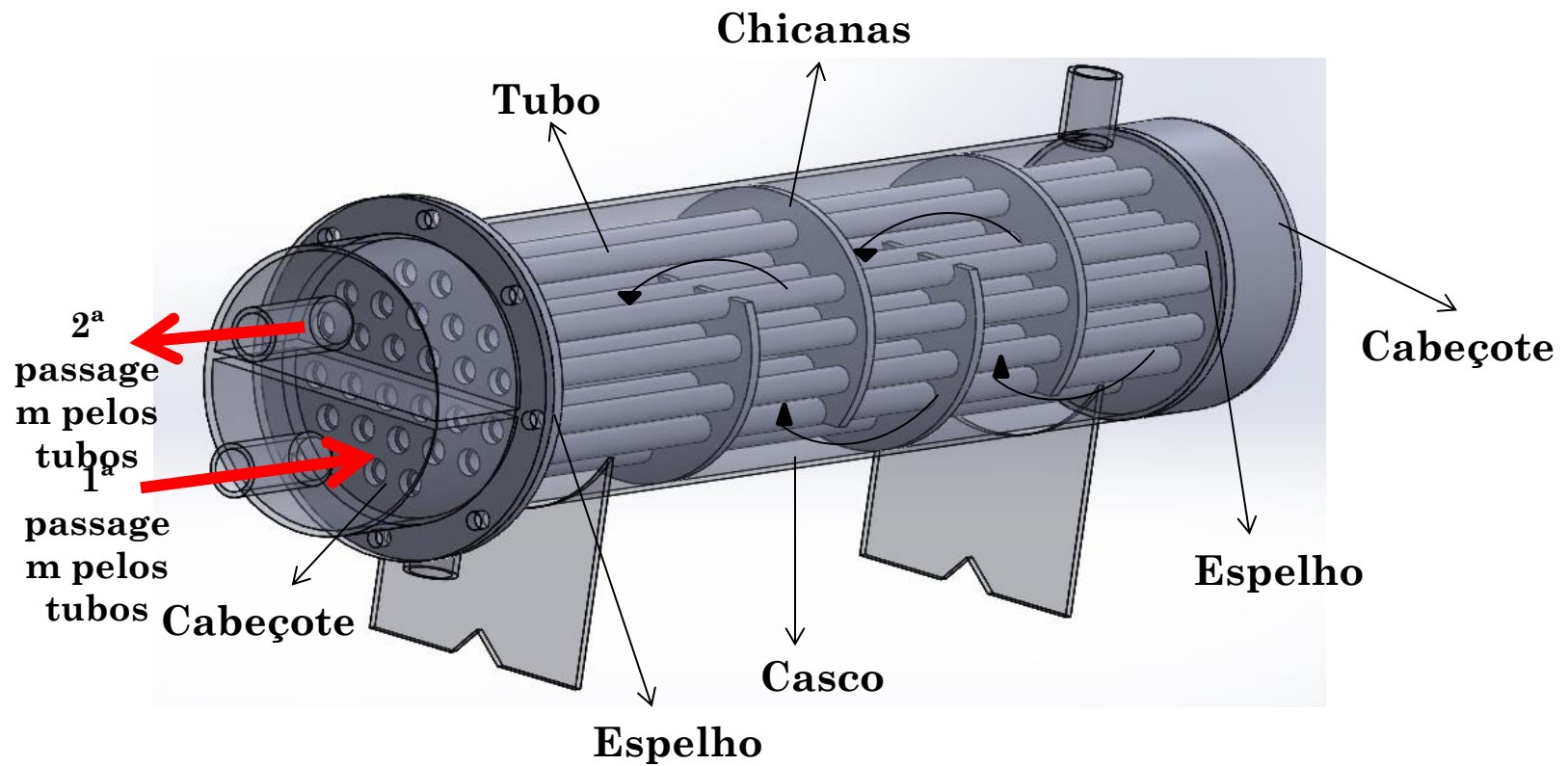
Figura 9 – Vista explodida do trocador de calor tubo carcaça 1-2





Projeto - SolidWorks

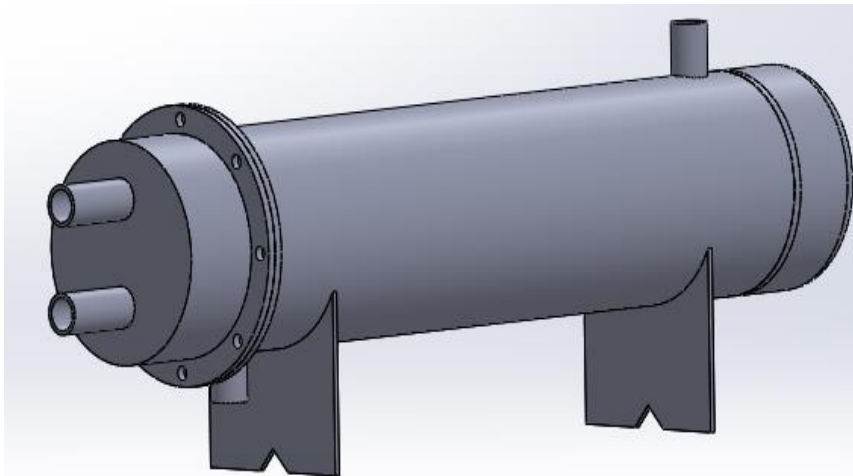
Figura 10 – Trocador de calor tubo carcaça 1-2





Projeto e Montagem

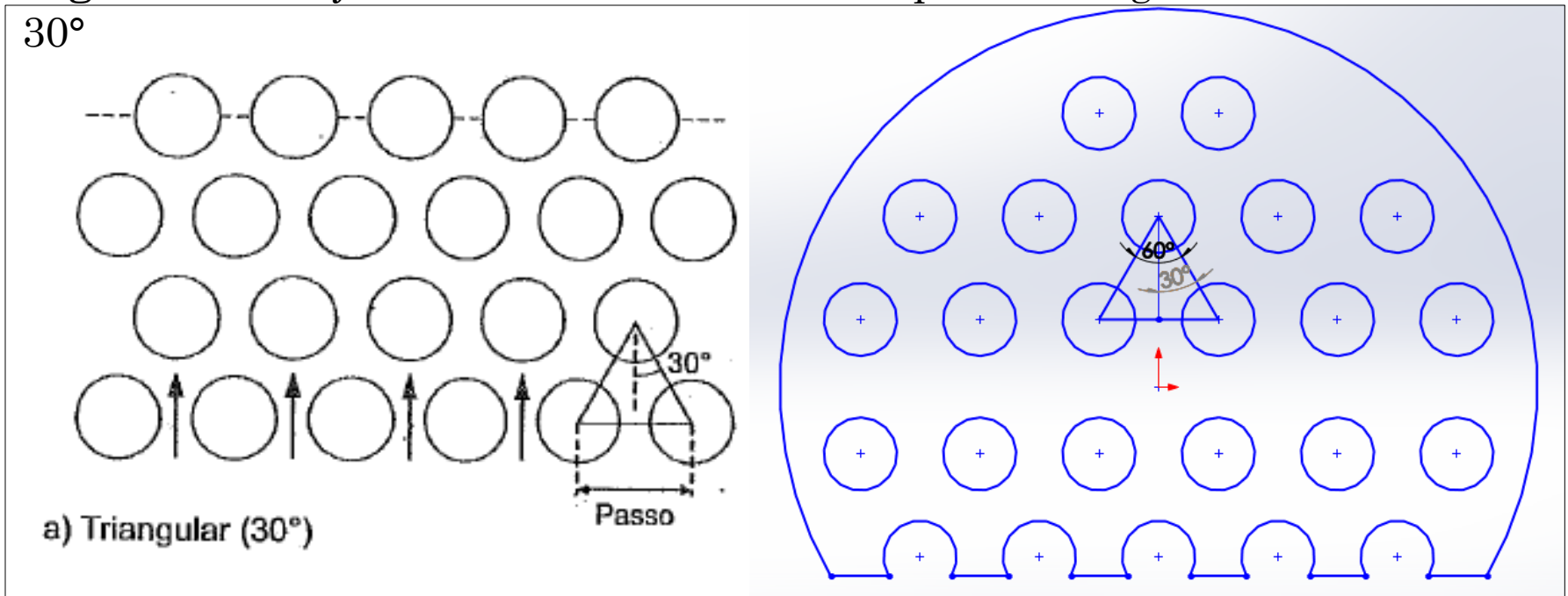
Figura 11– Tocador projetado e montado





Disposição dos Tubos

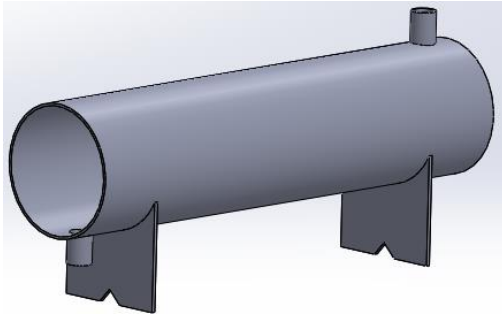
Figura 12– Projeto do trocador de calor com passo triangular de 30°





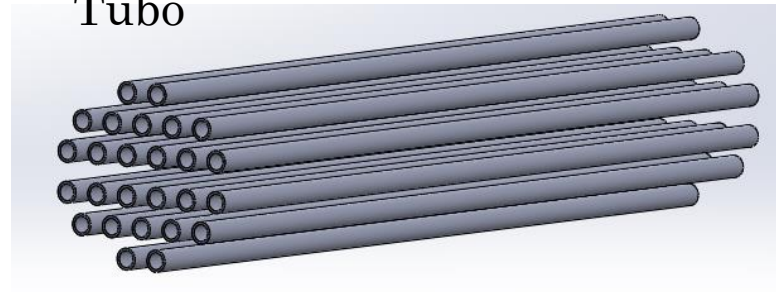
Casco e Tubos

Figura 13 -Casco



- Tubos aço inox 4 in / 2 mm de espessura
- $L = 400$ mm

**Figura 14 -
Tubo**



- Tubos aço inox 3/8 in / 1,2 mm de espessura
- $L = 400$ mm

Figura 15 – Casco e tubos produzidos





Espelho

Figura 17– Espelhos projetados

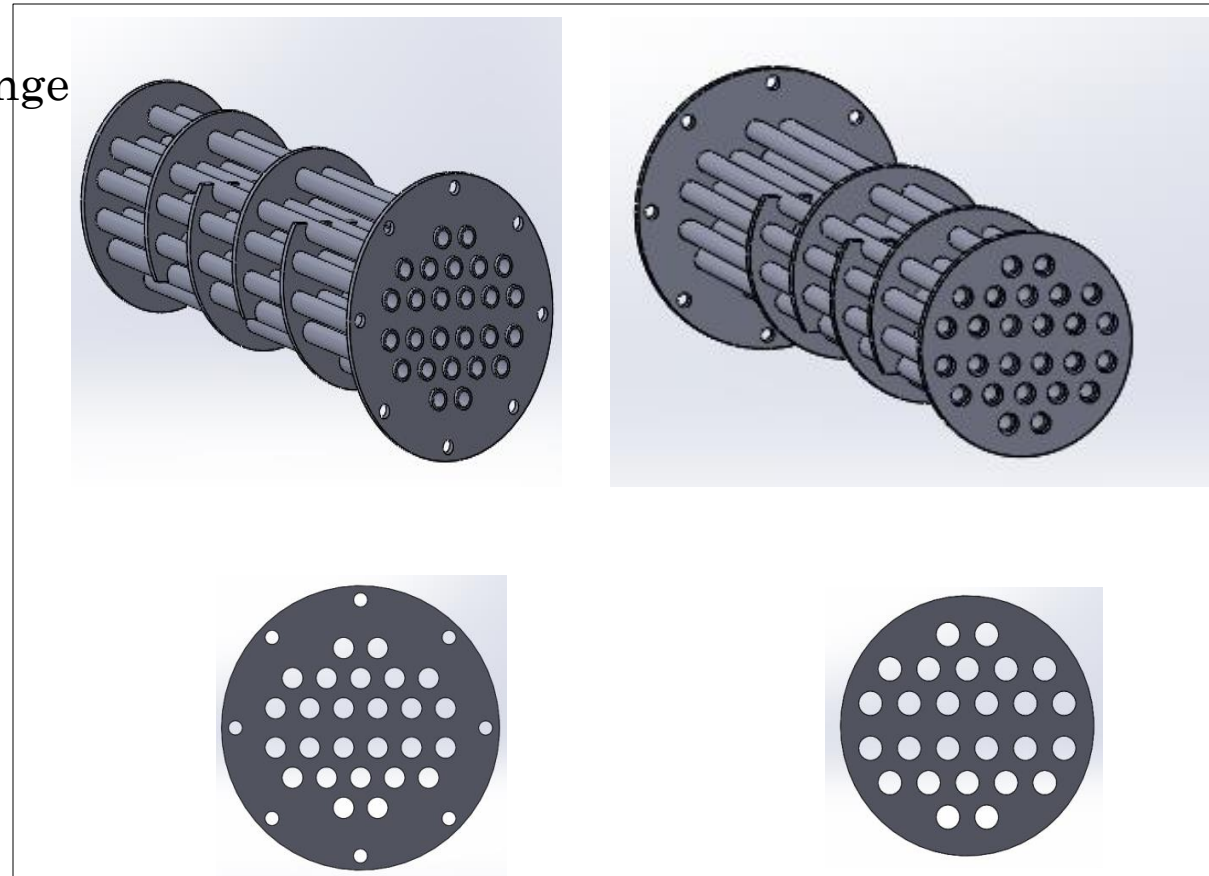
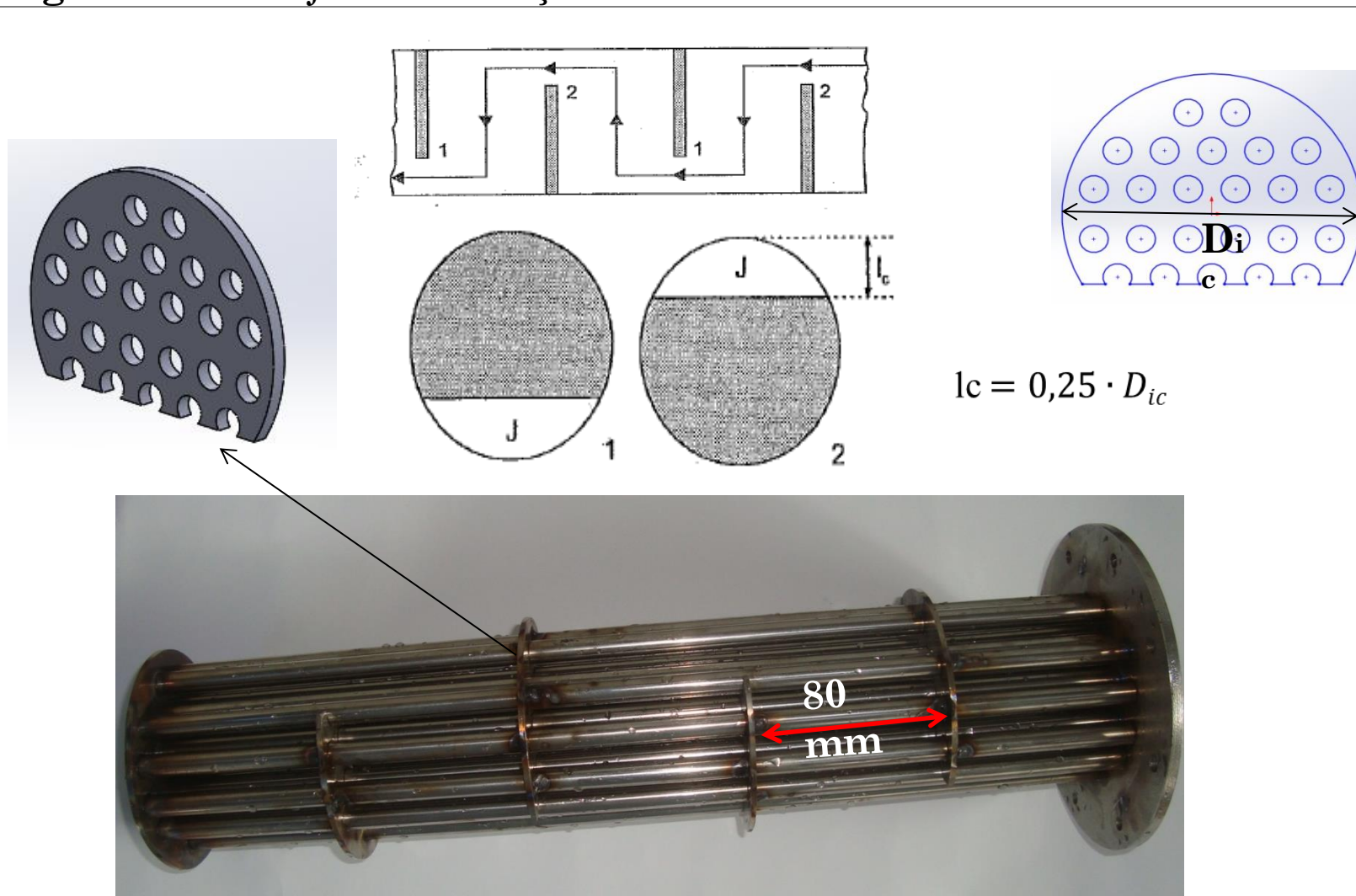


Figura 16 – Espelho com flange



Chicanas

Figura 18 – Projeto e confecção de chicanas





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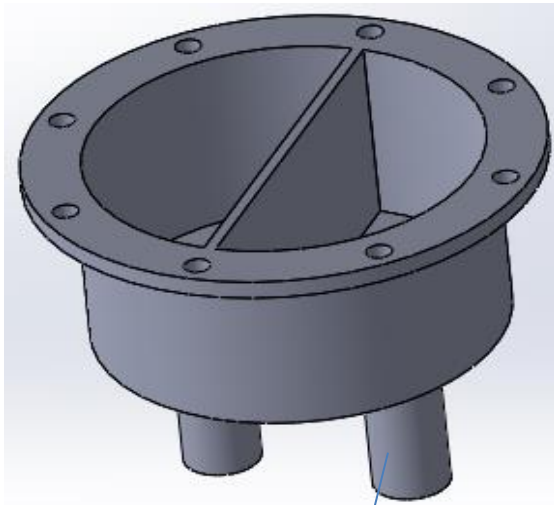
Figura 19 – Montagem dos tubos, espelhos , chicanas e a carcaça





Cabeçote

Figura 20 – Cabeçote de alimentação e descarga



Tubo aço inox $\frac{3}{4}$ in



Tubo aço inox 4 in



Cabeçote

Figura 21 – Cabeçote para recirculação

