

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 13458-2:2002/AC

August 2006

Août 2006

August 2006

ICS 23.020.40

English version
Version Française
Deutsche Fassung

Cryogenic vessels - Static vacuum insulated vessels - Part 2: Design,
fabrication, inspection and testing

Réipients cryogéniques - Réipients fixes
isolés sous vide - Partie 2: Conception,
fabrication, inspection et essais

Kryo-Behälter - Ortsfeste vakuum-isolierte
Behälter - Teil 2: Bemessung, Herstellung
und Prüfung

This corrigendum becomes effective on 23 August 2006 for incorporation in the three official language versions of the EN.

Ce corrigendum prendra effet le 23 août 2006 pour incorporation dans les trois versions linguistiques officielles de la EN.

Die Berichtigung tritt am 23. August 2006 zur Einarbeitung in die drei offiziellen Sprachfassungen der EN in Kraft.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

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Ref. No.: EN 13458-2:2002/AC:2006 D/E/F

English version

Replace the following figures:

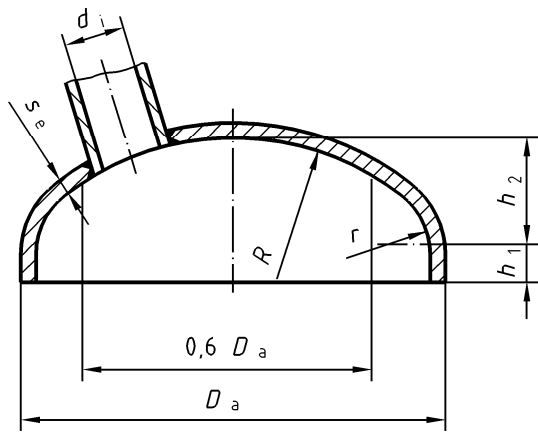


Figure 4b)

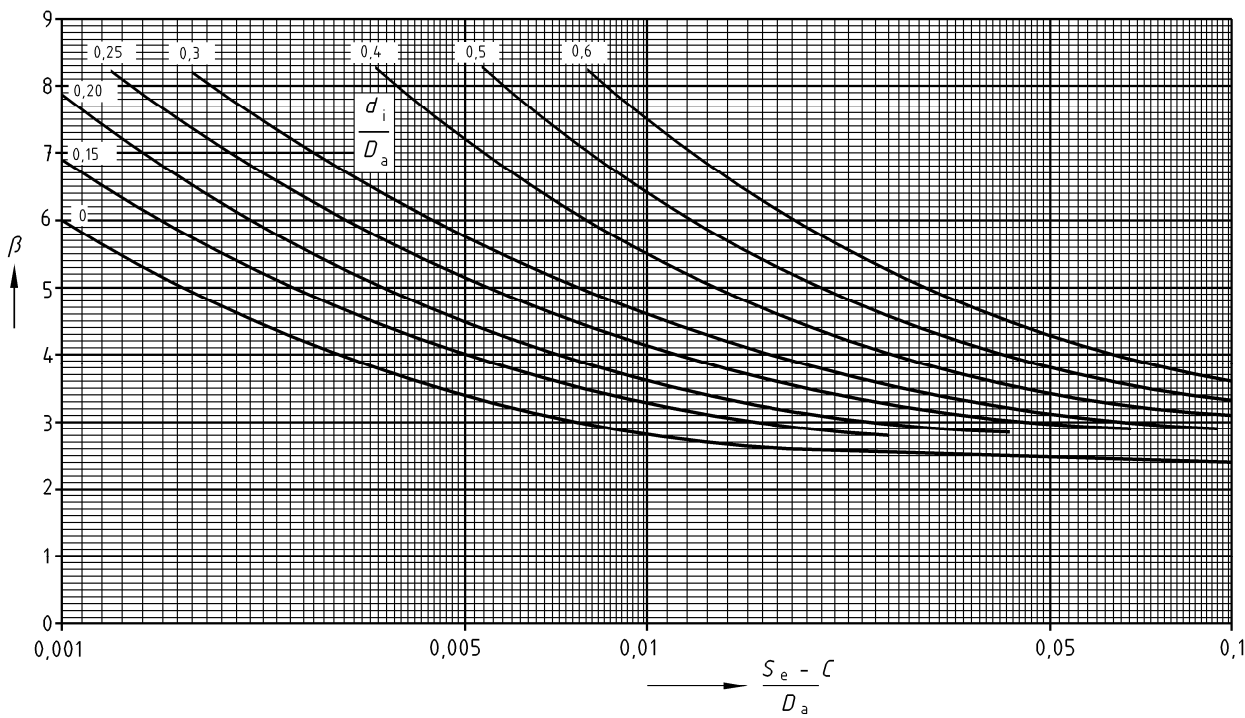
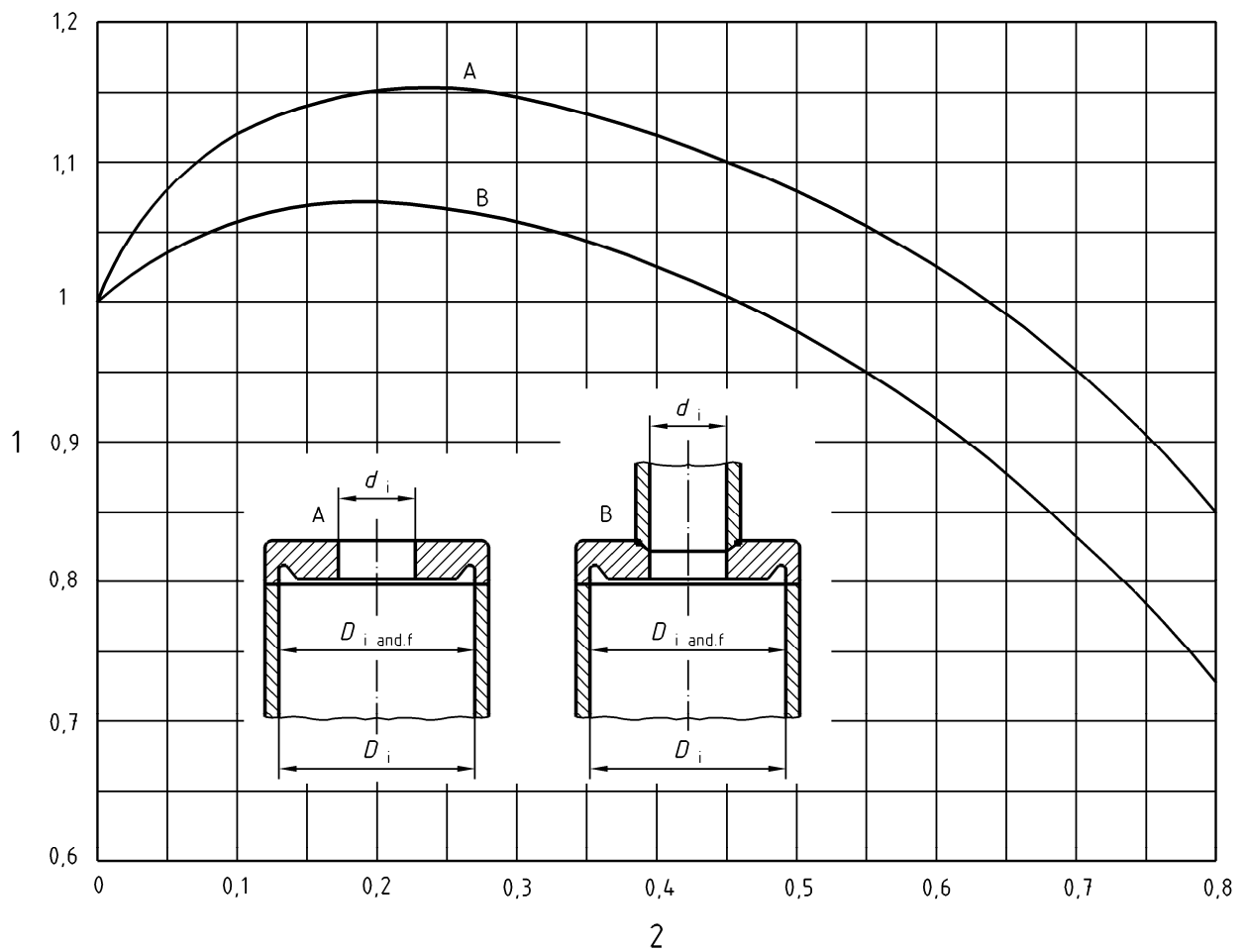


Figure 5



Key 2 : modify to read "ratio d_i/D_i and d_i/f "

Figure 11

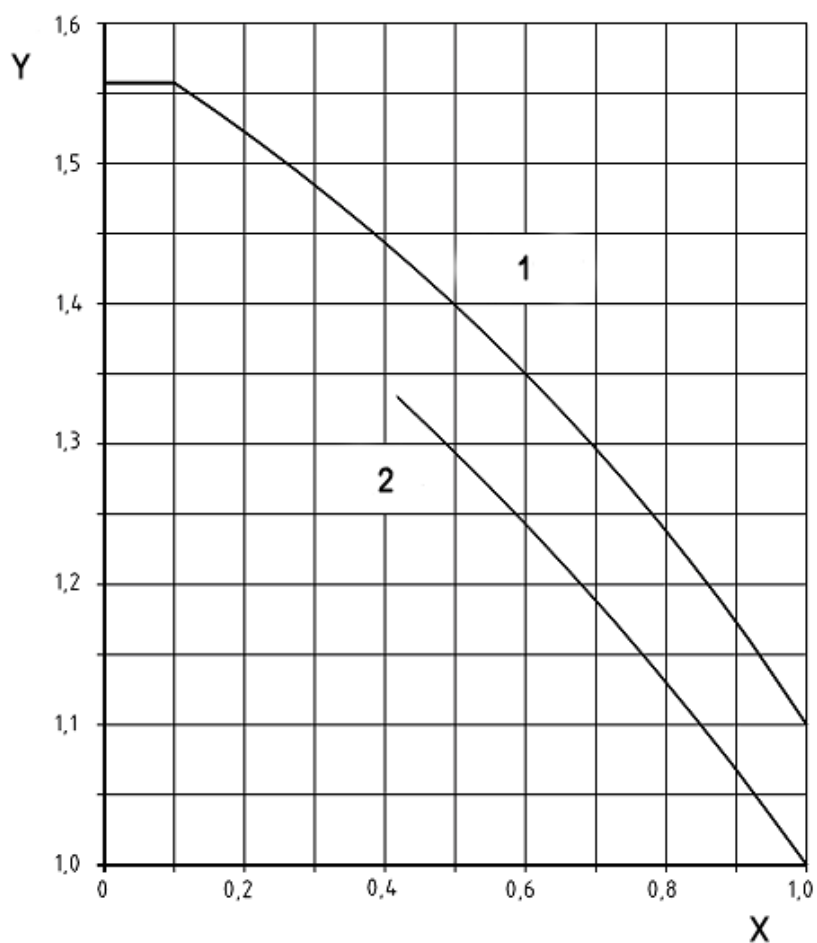
Figure 12c) : modify to read "flat plate welded into the shell from one side only"

Design factor C : for $s \leq 3 s_1$ = 0, 45 ; for $s > 3 s_1$ = 0, 50

Figure 12e) : modify to read "flat plate welded into the shell from both sides"

Design factor C : for $s \leq 3 s_1$ = 0, 35 ; for $s > 3 s_1$ = 0, 40

Replace Figure 13 and modify the key as follows:



Key

- 1 Rectangle
- 2 Ellipse
- Y Design factor C_e
- X Ratio f/e

Rectangular plates

f = short side of the rectangular plate

e = long side of the rectangular plate

$$C_e = \begin{cases} \sum_{i=1}^4 A_i \left(\frac{f}{e} \right)^{i-1} & \left| 0.1 < \left(\frac{f}{e} \right) \leq 1.0 \right| \\ 1.562 & \left| 0 < \left(\frac{f}{e} \right) \leq 0.1 \right| \end{cases}$$

$$A_1 = 1.589\,146\,00$$

$$A_2 = -0.239\,349\,90$$

$$A_3 = -0.335\,179\,80$$

$$A_4 = 0.085\,211\,76$$

Elliptical plates

f = short side of the elliptical plate

e = long side of the elliptical plate

$$C_A = \begin{cases} \sum_{i=1}^6 A_i \left(\frac{d}{D_i} \right)^{i-1} & \left| 0 < \left(\frac{d}{D_i} \right) \leq 0.8 \right| \\ \sum_{i=1}^6 A_i \left(\frac{d}{f} \right)^{i-1} & \left| 0 < \left(\frac{d}{f} \right) \leq 0.8 \right| \end{cases}$$

$$A_1 = 1.489\,146\,00$$

$$A_2 = -0.239\,349\,90$$

$$A_3 = -0.335\,179\,80$$

$$A_4 = 0.085\,211\,76$$

Figure 13 — Design factor C_e for rectangular or elliptical flat plates

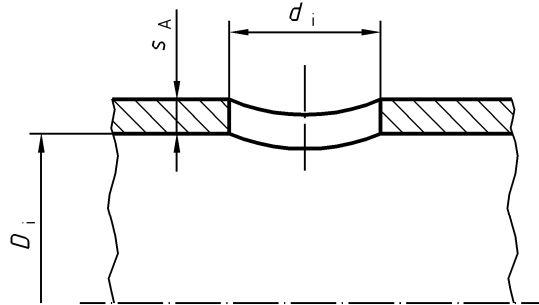


Figure 14

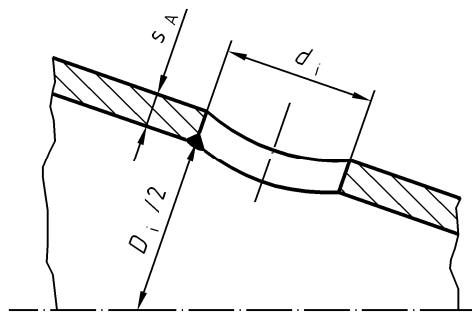


Figure 15

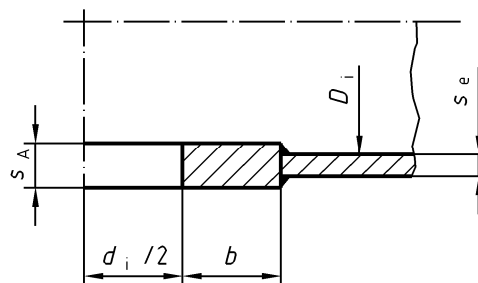


Figure 17

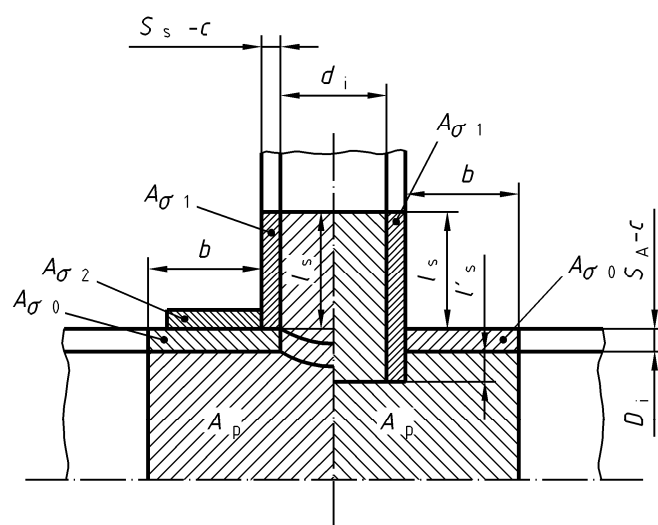


Figure 22

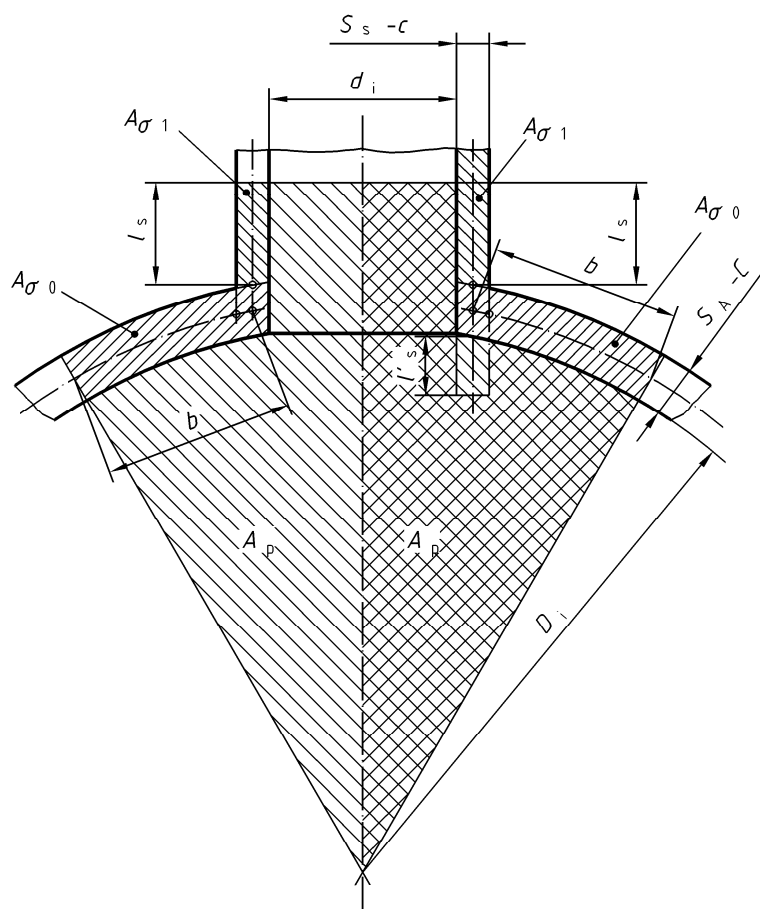


Figure 23

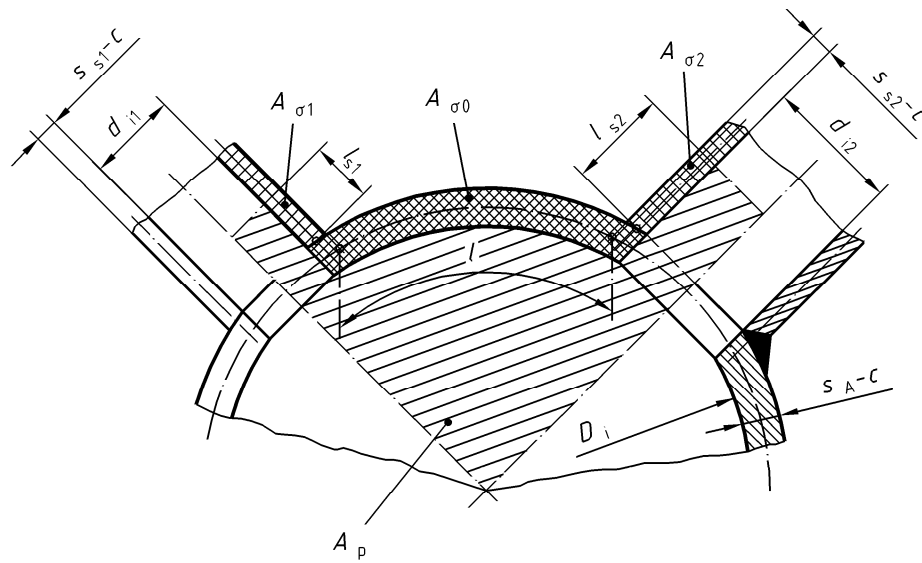


Figure 26

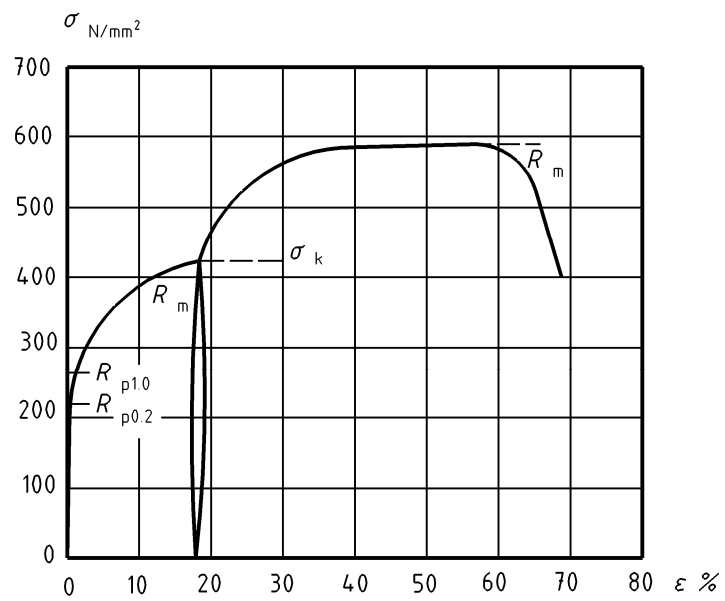


Figure C.2

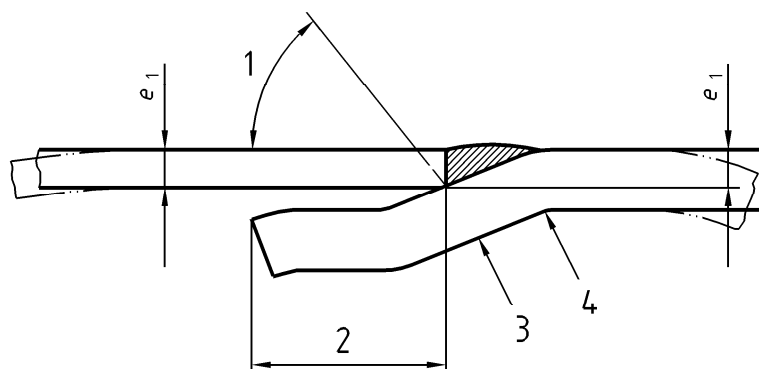


Figure F.1

Version française

Remplacer les figures comme suit:

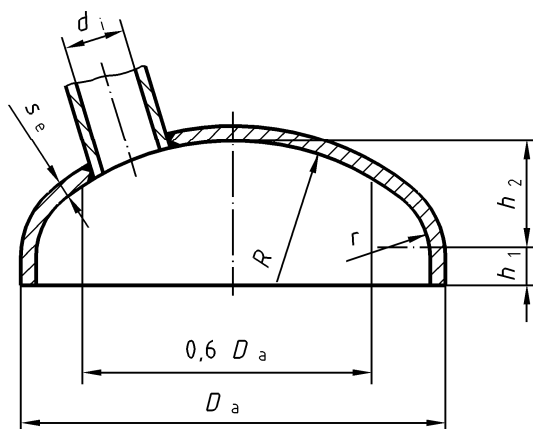


Figure 4b)

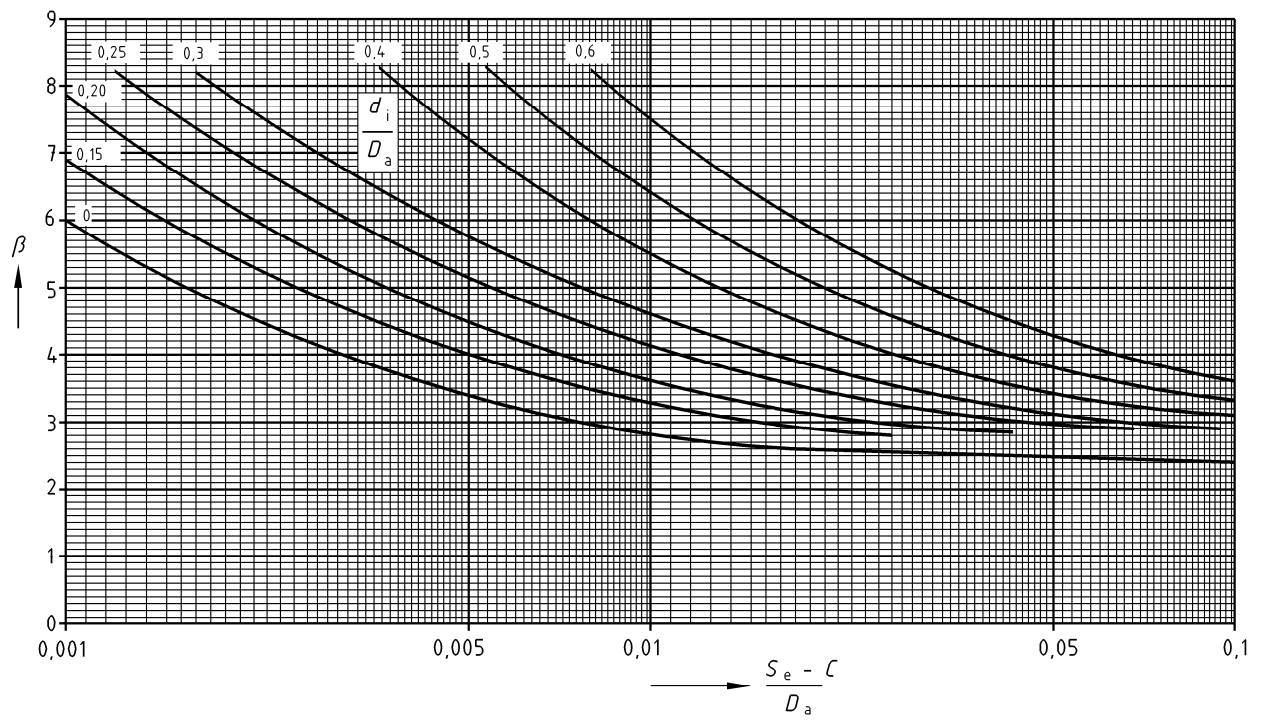
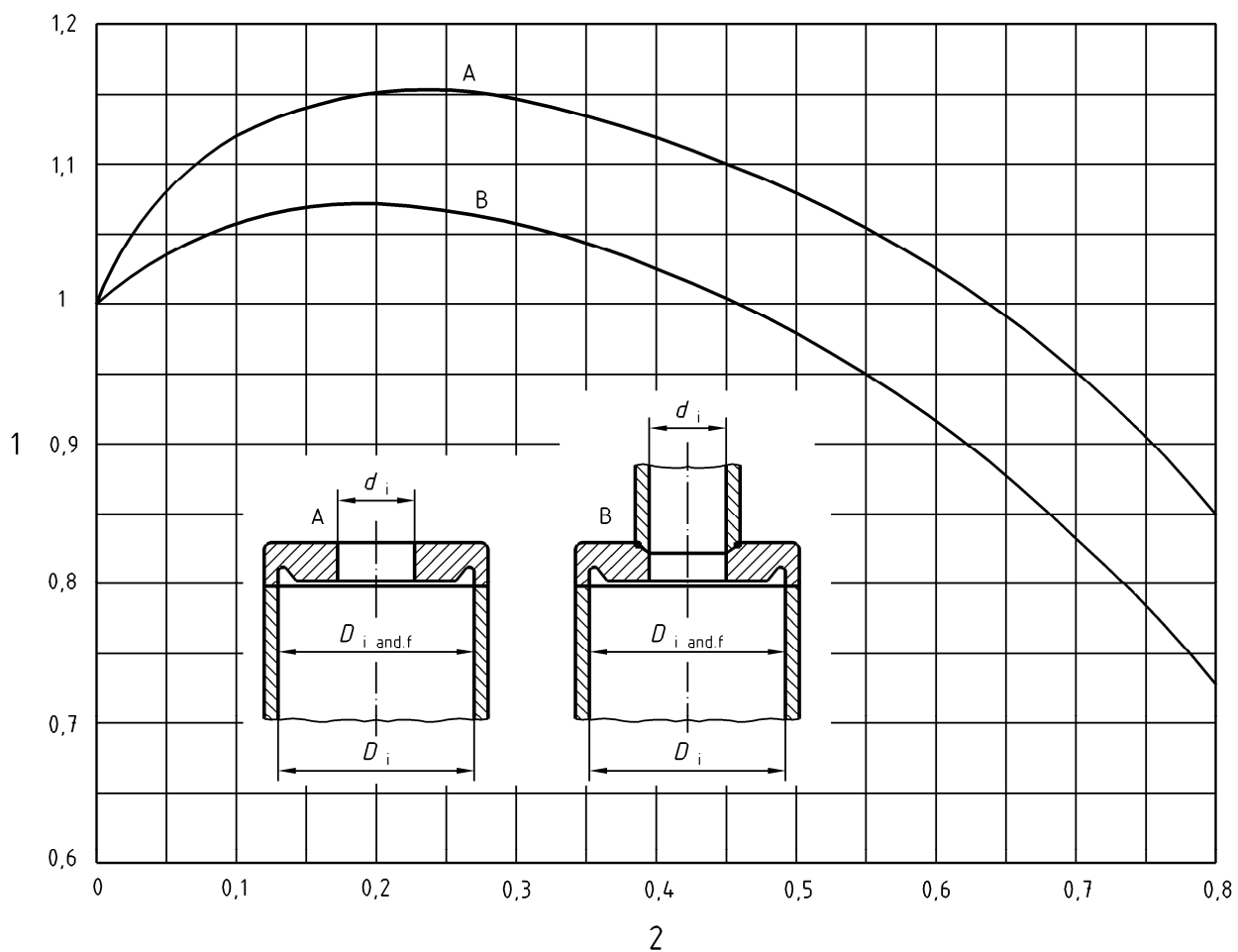


Figure 5



Légende 2 : modifier comme suit "ratio d_i/D_i and d_i/f "

Figure 11

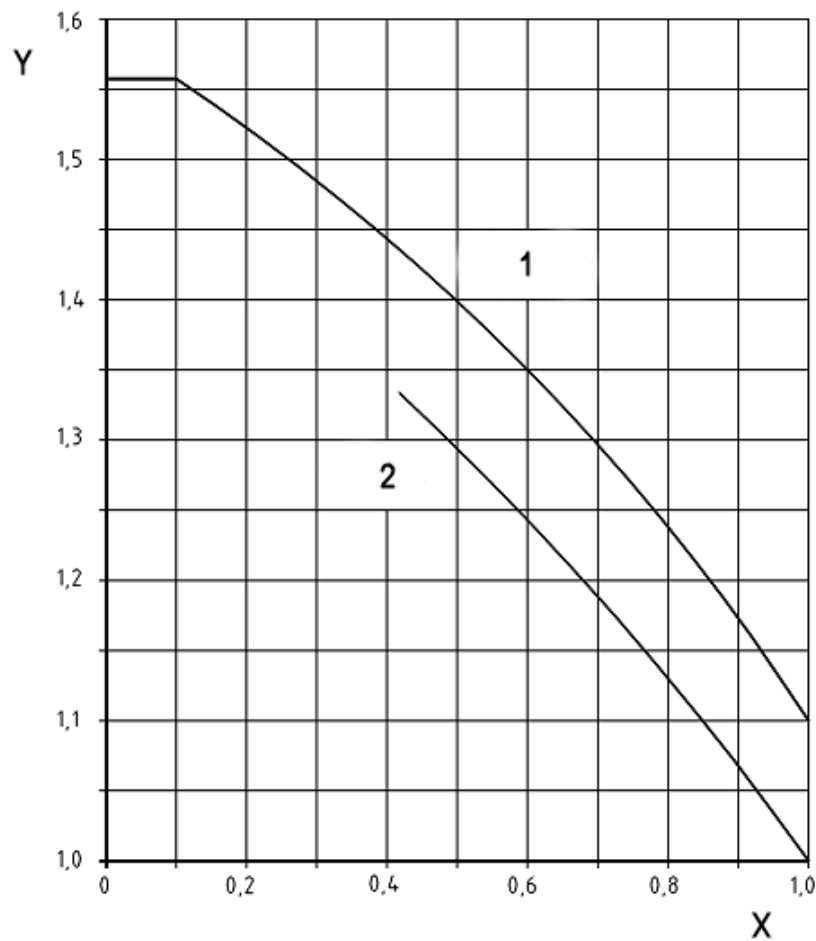
Figure 12c) : modifier comme suit "tôle plate soudée à l'intérieur de l'enveloppe, uniquement d'un côté"

Coefficient de calcul C : for $s \leq 3 s_1 = 0,45$; for $s > 3 s_1 = 0,50$

Figure 12e) : modifier comme suit "tôle plate soudée à l'intérieur de l'enveloppe, des deux côtés"

Coefficient de calcul C : for $s \leq 3 s_1 = 0,35$; for $s > 3 s_1 = 0,40$

Remplacer la Figure 13 et modifier la légende comme suit:



Légende

- 1 Rectangle
- 2 Ellipse
- Y Coefficient de calcul C_e
- X Rapport f/e

Tôles rectangulaires

f = côté court de la tôle rectangulaire

e = côté long de la tôle rectangulaire

$$C_e = \begin{cases} \sum_{i=1}^4 A_i \left(\frac{f}{e} \right)^{i-1} & \left| 0,1 < \left(\frac{f}{e} \right) \leq 1,0 \right. \\ 1,562 & \left| 0 < \left(\frac{f}{e} \right) \leq 0,1 \right. \end{cases}$$

$$A_1 = 1,589\,146\,00$$

$$A_2 = -0,239\,349\,90$$

$$A_3 = -0,335\,179\,80$$

$$A_4 = 0,085\,211\,76$$

Tôles ellipsoïdales

f = côté court de la tôle ellipsoïdale

e = côté long de la tôle ellipsoïdale

$$C_A = \begin{cases} \sum_{i=1}^6 A_i \left(\frac{d}{D_i} \right)^{i-1} & \left| 0 < \left(\frac{d}{D_i} \right) \leq 0,8 \right. \\ \sum_{i=1}^6 A_i \left(\frac{d}{f} \right)^{i-1} & \left| 0 < \left(\frac{d}{f} \right) \leq 0,8 \right. \end{cases}$$

$$A_1 = 1,489\,146\,00$$

$$A_2 = -0,239\,349\,90$$

$$A_3 = -0,335\,179\,80$$

$$A_4 = 0,085\,211\,76$$

Figure 13 — Coefficient de calcul C_e relatif à des fonds plats rectangulaires ou ellipsoïdaux

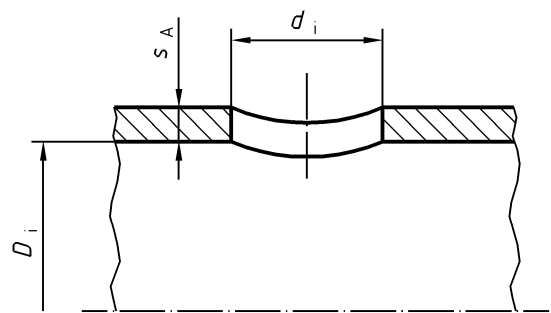


Figure 14

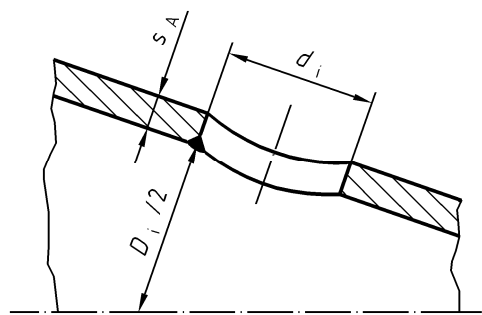


Figure 15

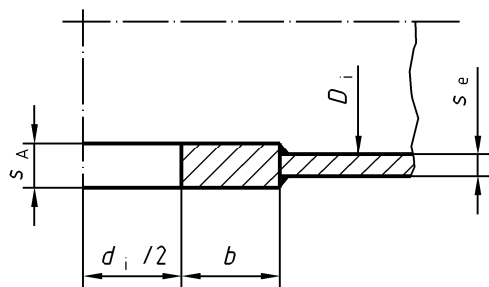


Figure 17

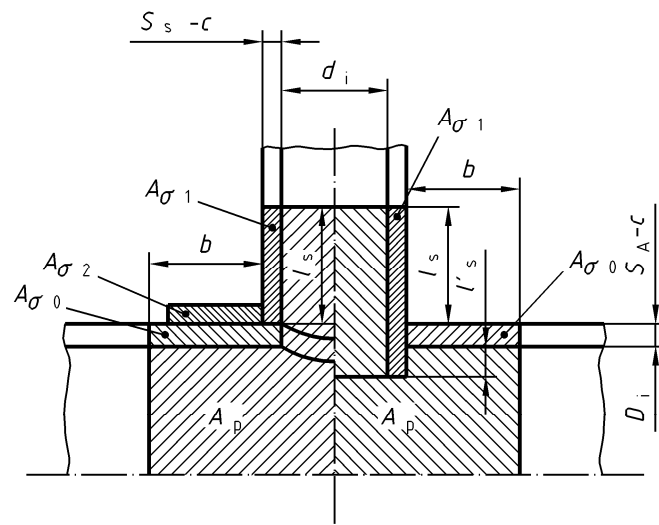


Figure 22

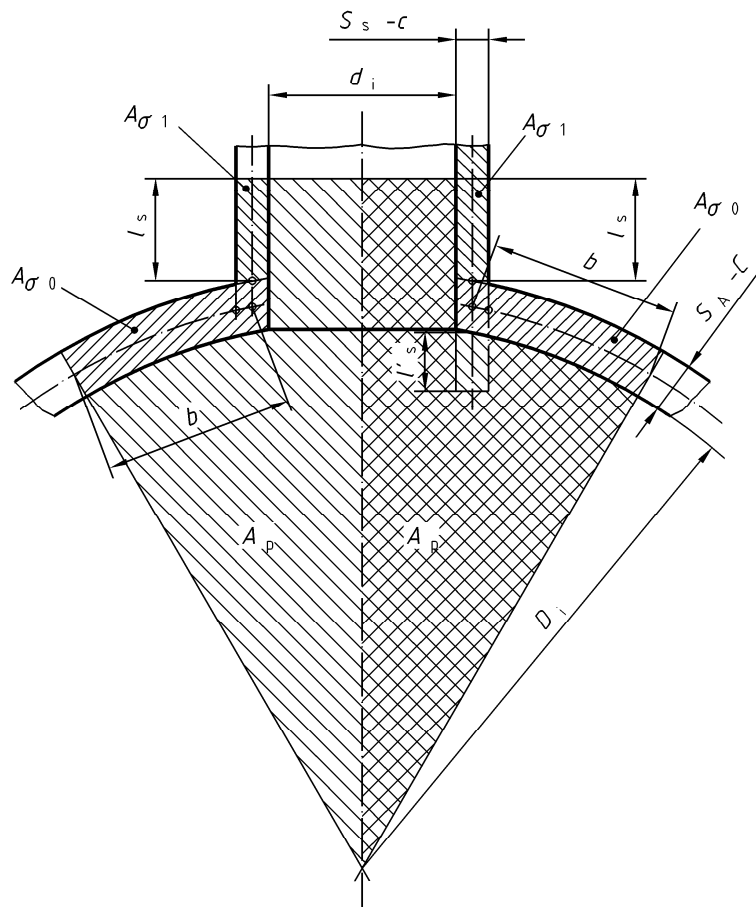


Figure 23

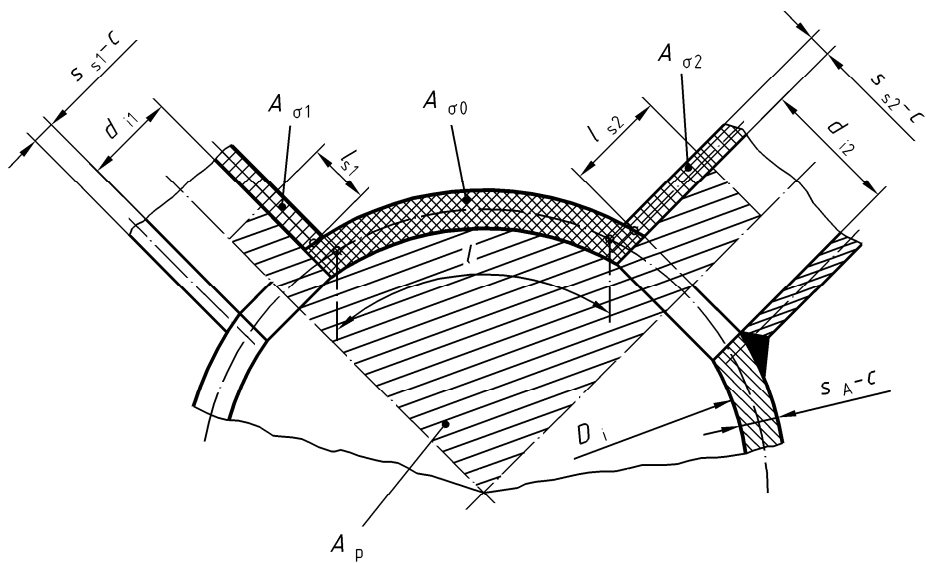


Figure 26

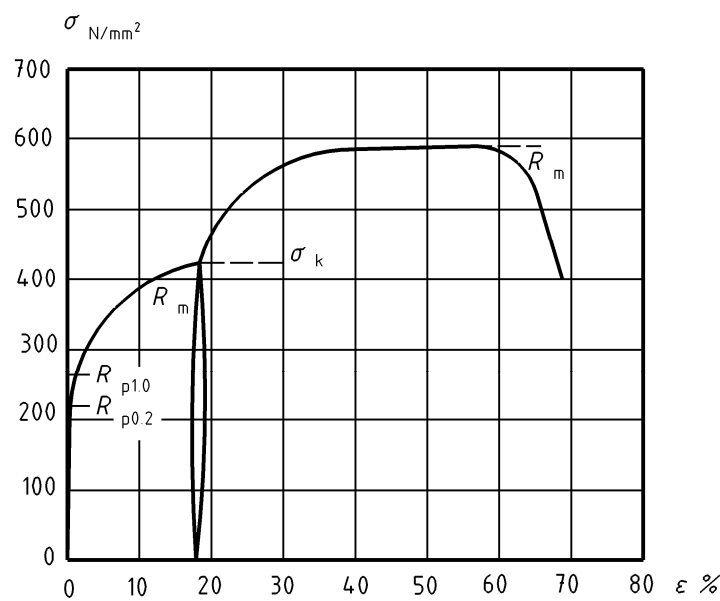


Figure C.2

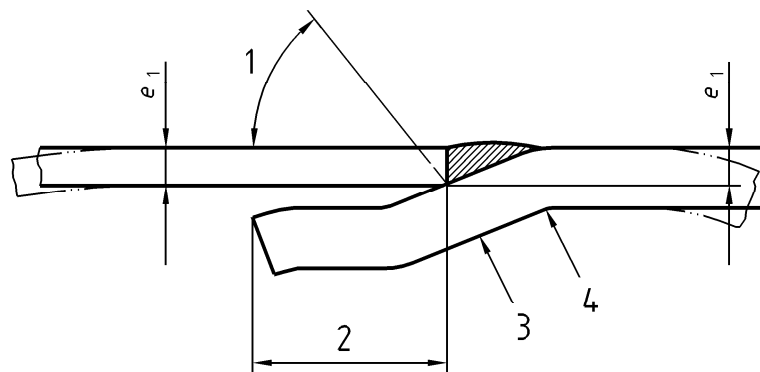


Figure F.1

Deutsche Fassung

Die folgenden Bilder sind wie folgt zu ersetzen:

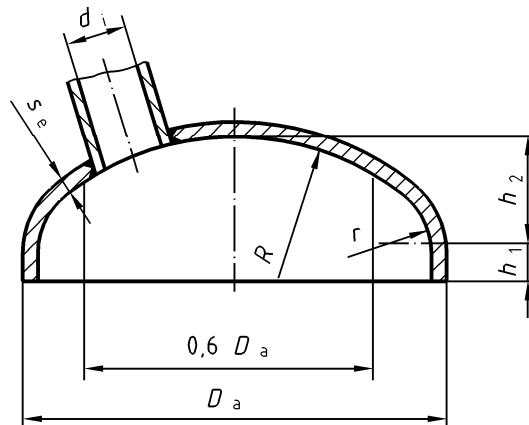


Bild 4b)

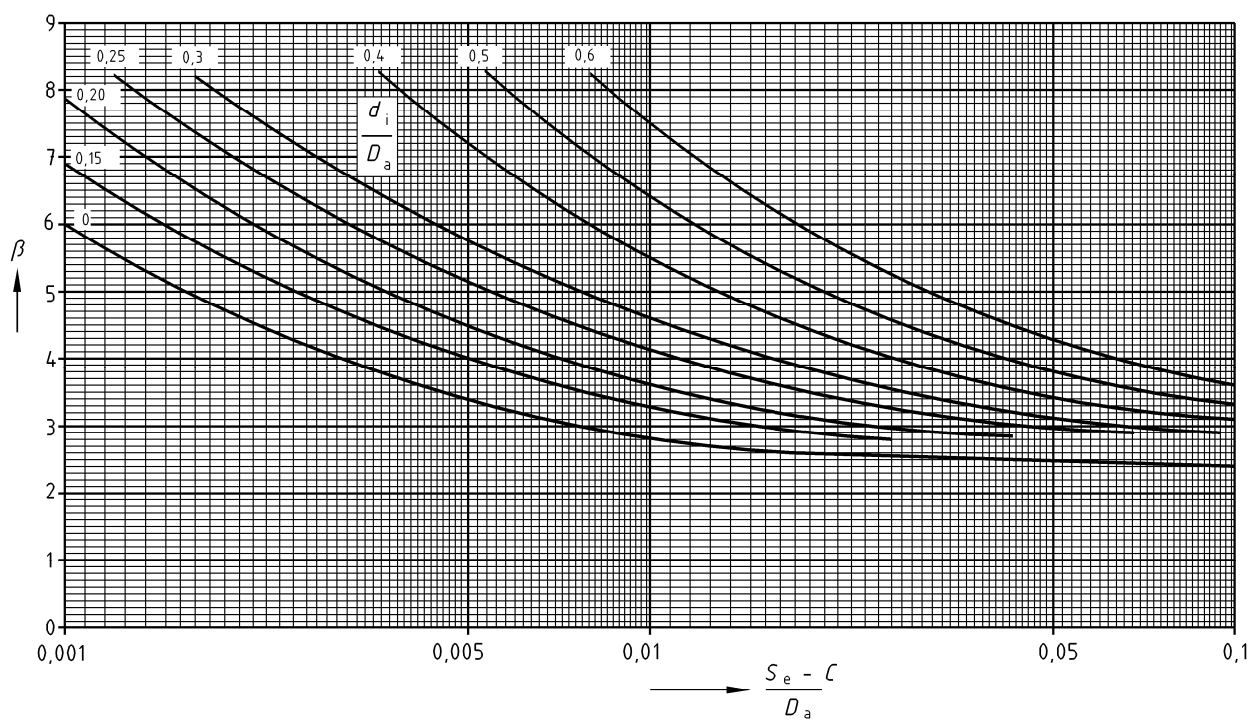
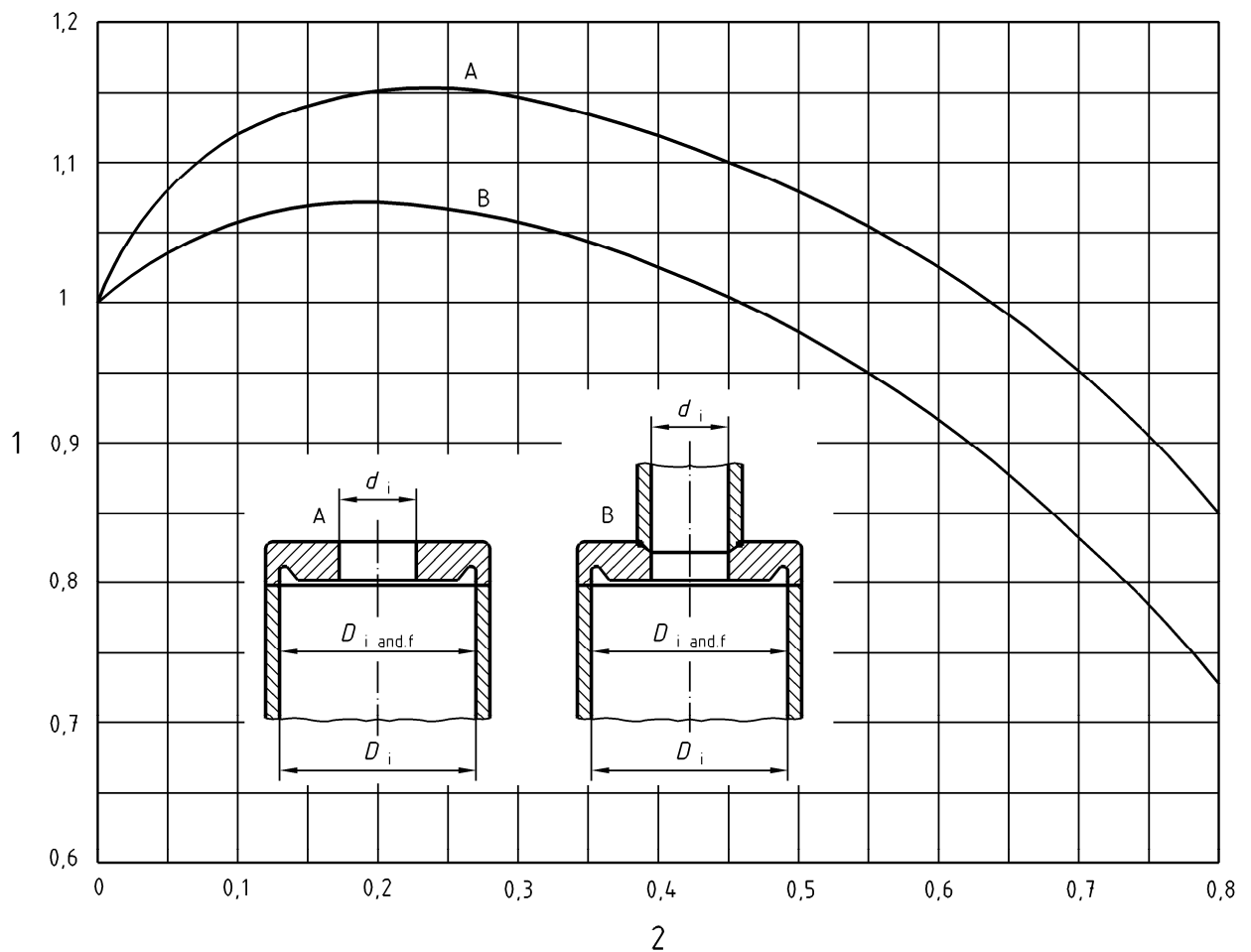


Bild 5



Die **Legende 2** ist wie folgt zu modifizieren: "ratio d_i/D_i und d_i/f "

Bild 11

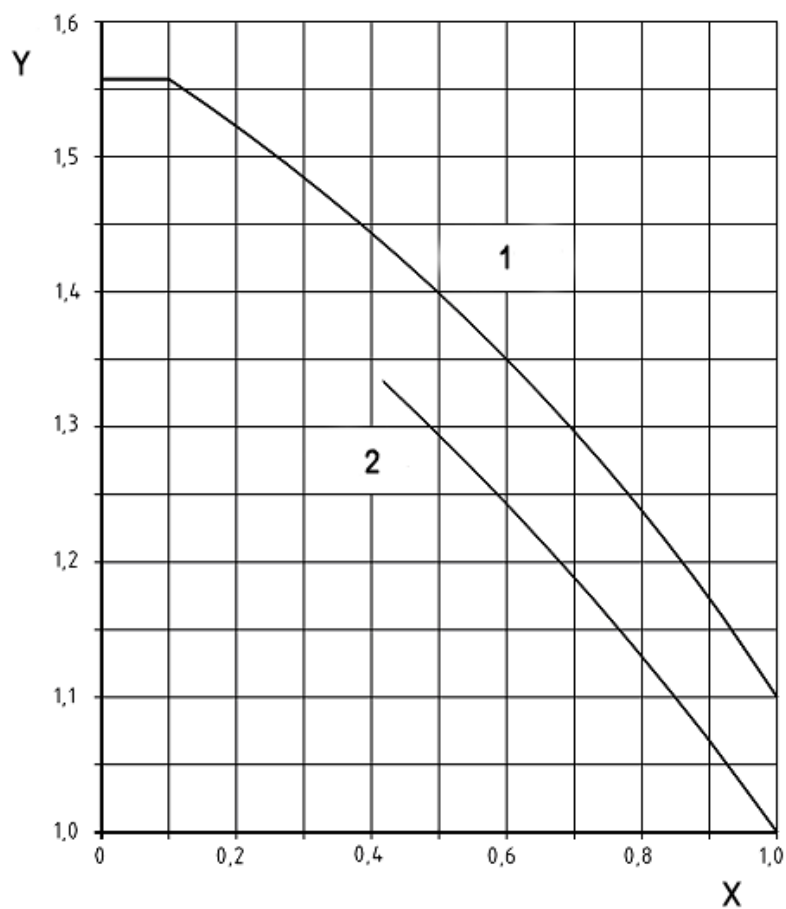
Das **Bild 12c)** ist wie folgt zu modifizieren: "flat Ebene Platte, nur von einer Seite in den Mantel eingeschweißt"

Bemessungsfaktor C : für $s \leq 3 s_1$ = 0,45 ; für $s > 3 s_1$ = 0,50

Das **Bild 12e)** ist wie folgt zu modifizieren: "Ebene Platte, von beiden Seiten in den Mantel eingeschweißt"

Bemessungsfaktor C : für $s \leq 3 s_1$ = 0,35 ; für $s > 3 s_1$ = 0,40

Das Bild 13 ist zu ersetzen und die Legende ist wie folgt zu modifizieren:



Legende

1 Rechteck

2 Ellipse

Y Berechnungsbeiwert C_E

X Verhältnis f/e

Rechteckige Platten

f = schmale Seite der rechteckigen Platte

e = breite Seite der rechteckigen Platte

$$C_e = \begin{cases} \sum_{i=1}^4 A_i \left(\frac{f}{e}\right)^{i-1} & \left| 0,1 < \left(\frac{f}{e}\right) \leq 1,0 \right. \\ 1,562 & \left| 0 < \left(\frac{f}{e}\right) \leq 0,1 \right. \end{cases}$$

$$A_1 = 1,58914600$$

$$A_2 = -0,23934990$$

$$A_3 = -0,33517980$$

$$A_4 = 0,08521176$$

Elliptische Platten

f = schmale Seite der rechteckigen Platte

e = breite Seite der rechteckigen Platte

$$C_e = \begin{cases} \sum_{i=1}^4 A_i \left(\frac{f}{e}\right)^{i-1} & \left| 0,43 < \left(\frac{f}{e}\right) \leq 1,0 \right. \end{cases}$$

$$A_1 = 1,48914600$$

$$A_2 = -0,23934990$$

$$A_3 = -0,33517980$$

$$A_4 = 0,08521176$$

Bild 13 — Berechnungsbeiwert C_e rechteckiger oder elliptischer Platten

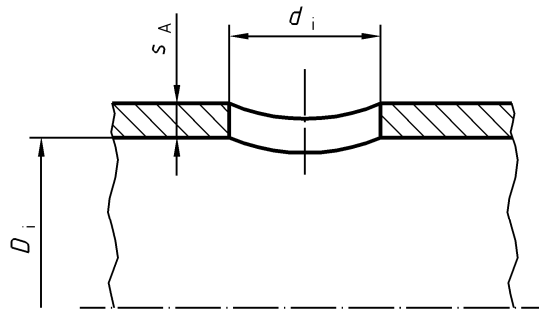


Figure 14

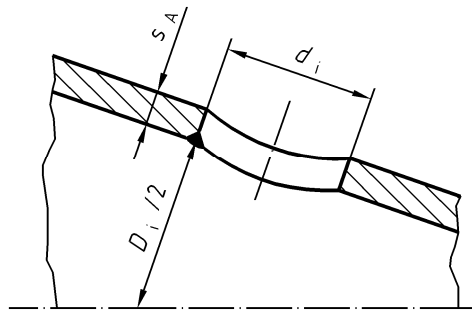


Figure 15

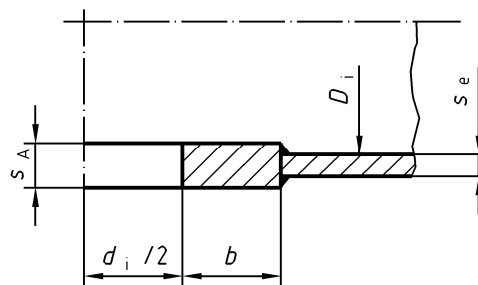


Figure 17

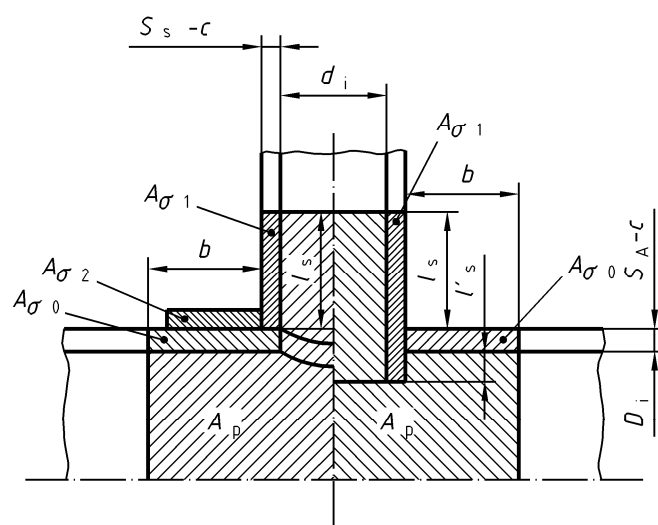


Figure 22

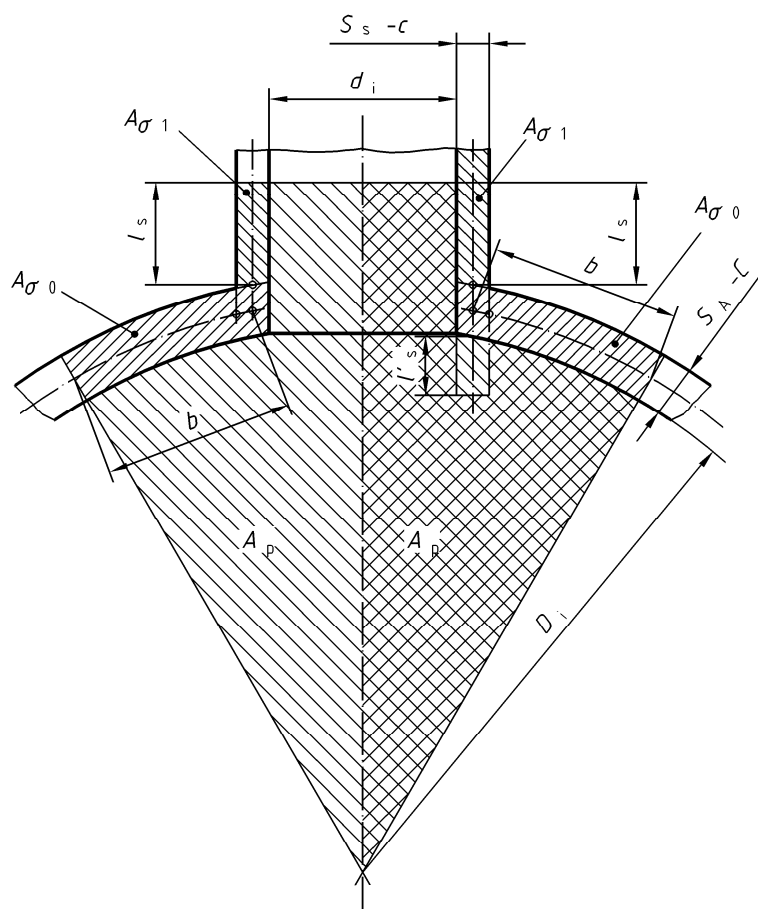


Figure 23

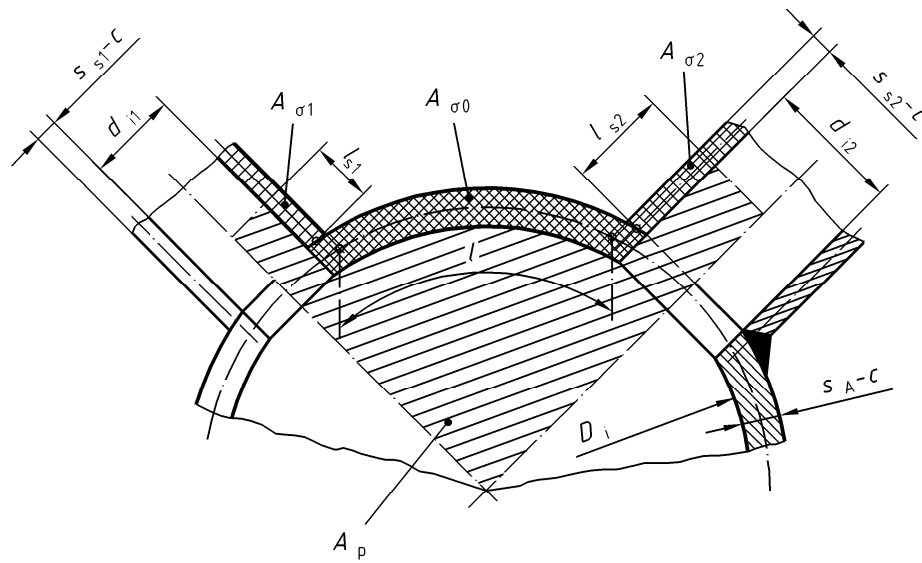


Figure 26

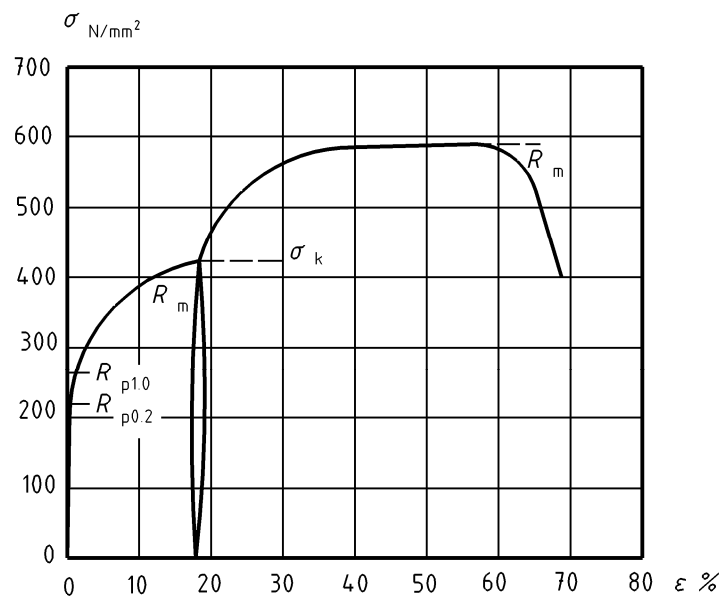


Figure C.2

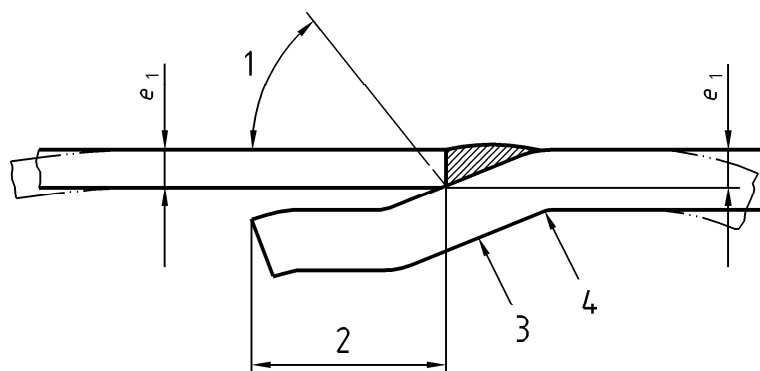


Figure F.1