

Processos de Fabrico I bloco processos de ligação

Introdução às juntas soldadas

U. PORTO FEUP FACULDADE DE ENGENHARIA UNIVERSIDADE DO PORTO

Principais tipos de soldadura:

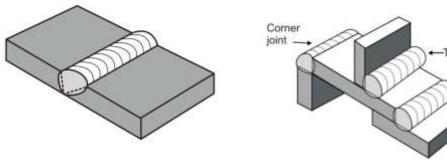


Figure 3.4: Groove weld.

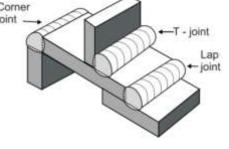


Figure 3.5: Fillet weld.

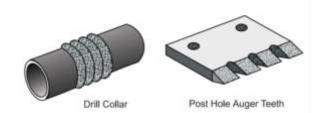


Figure 3.7: Surfacing weld.

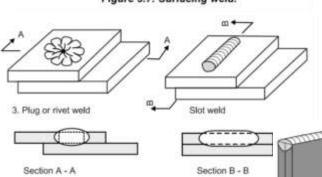
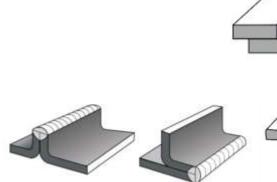


Figure 3.6: Plug weld and slot weld.



Surfacing welds.



Edge Weld on Comer Flanged Joint

Principais tipos de junta:

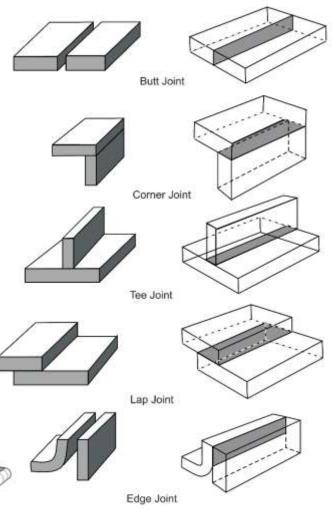


Figure 3.3: Five basic joints.

Edge Weld on

Flanged Butt Joint

Edge Weld

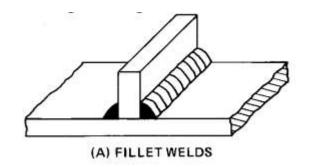
on Edge Joint

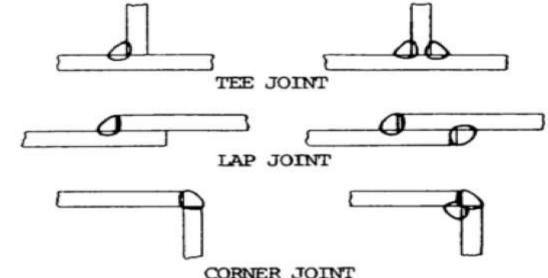
Principais tipos de soldadura:

FLARE V WELD

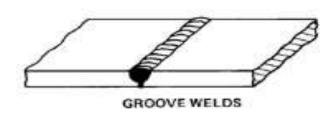


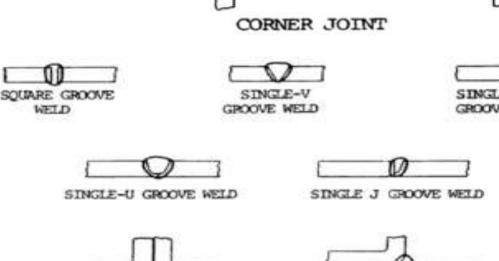
Soldadura de canto





Soldadura de topo a topo

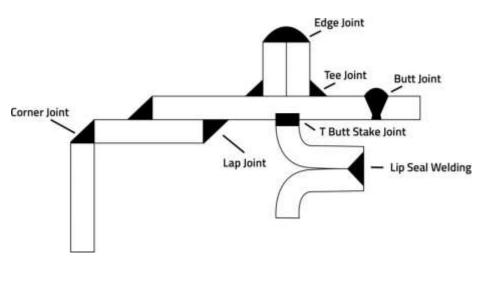


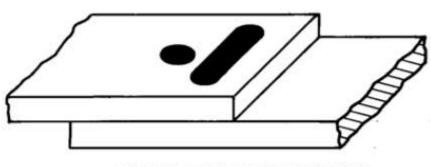


Basic groove welds

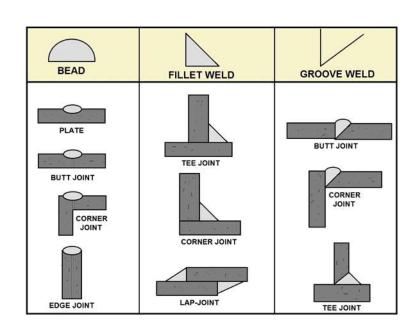
FLARE BEVEL WELD







PLUG AND SLOT WELDS



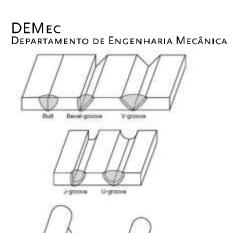


Figure 2: Types of welds that may be made with a basic butt joint

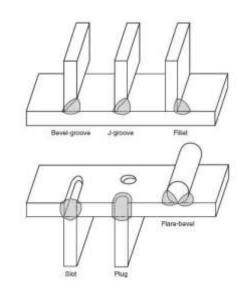


Figure 3: Types of welds that may be made with a basic T-joint.

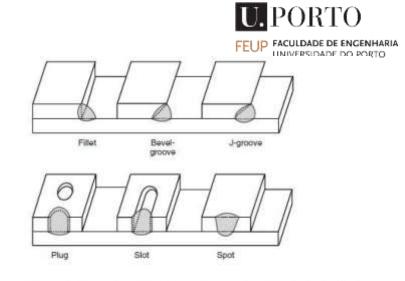
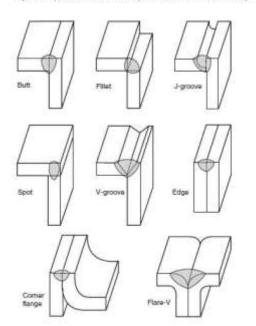
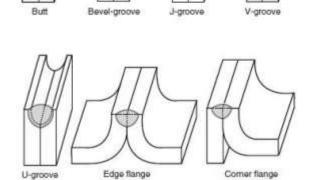


Figure 4 Types of welds that may be made with a basic lap joint.





Butt Bevel V-growe

J-groove U-groove

Bevel and filet Fillet Double filet

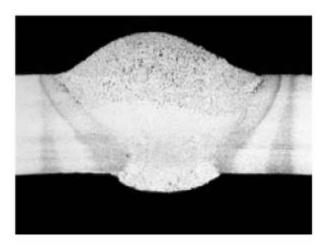
Figure 5: Types of welds that may be made with a basic corner joint.

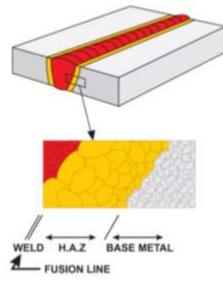
Figure 7: Types of welds that may be made with a basic edge joint. Figure 6: Applications of double welds.

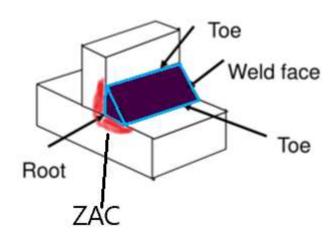


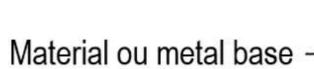


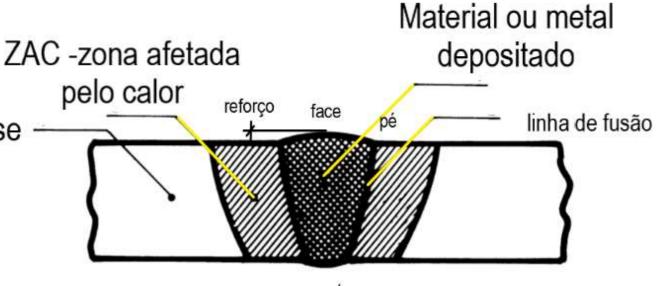








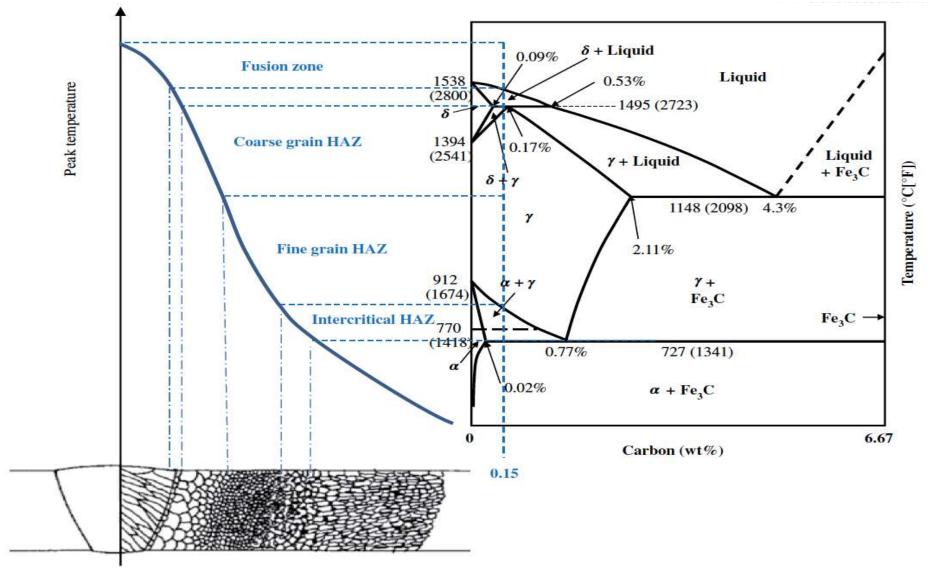




raíz

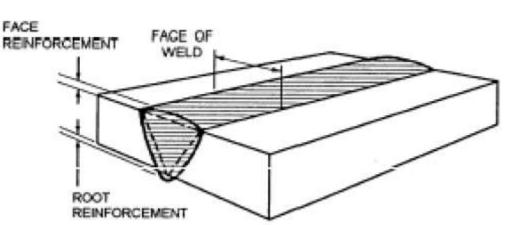






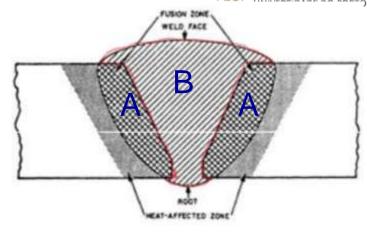
Relationship between Fe-Fe₃C phase diagram and the microstructure in the HAZ of plain-carbon steels.



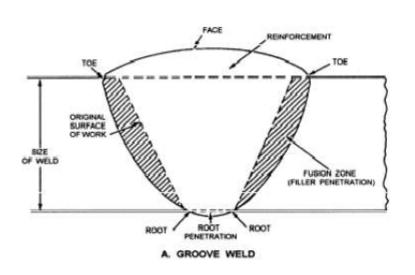


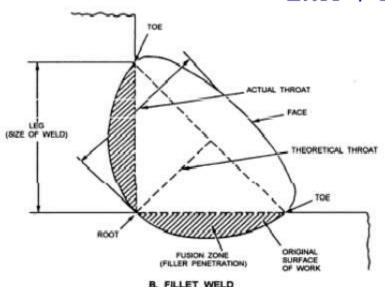
Metal base (MB): 0,15%C; 0,25%Si; 0,5%Mn Metal adição: 0,1%C; 0,4%Si; 0,7%Mn %D=30%

Qual a composição do metal depositado (MD)? (desprezando as perdas)

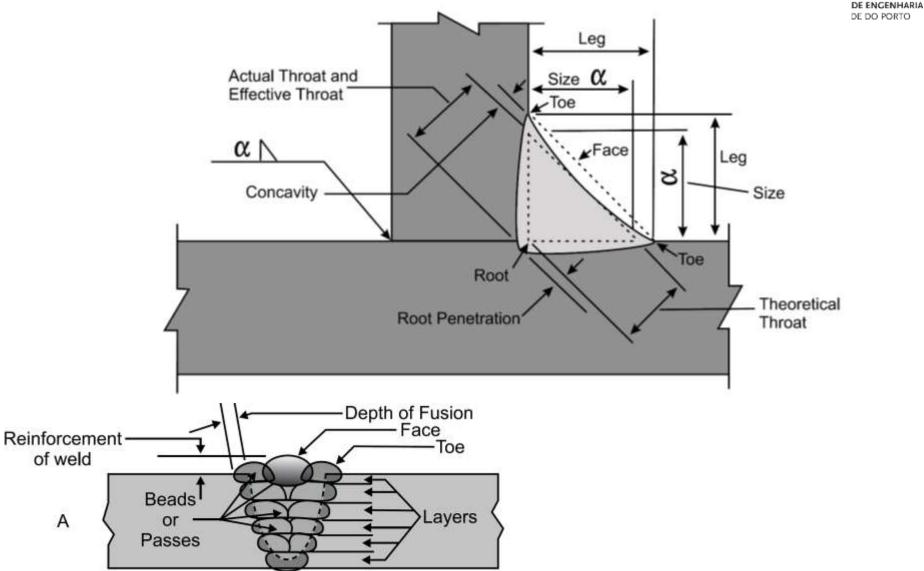


$$\%Diluição = \frac{2xA}{2xA + B}x100$$









Root and root weld