



**INTERNATIONAL STANDARD ISO 17475:2005**  
**TECHNICAL CORRIGENDUM 1**

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

**Corrosion of metals and alloys — Electrochemical test  
methods — Guidelines for conducting potentiostatic and  
potentiodynamic polarization measurements**

**TECHNICAL CORRIGENDUM 1**

*Corrosion des métaux et alliages — Méthodes d'essais électrochimiques — Lignes directrices pour la  
réalisation de mesures de polarisations potentiostatique et potentiodynamique*

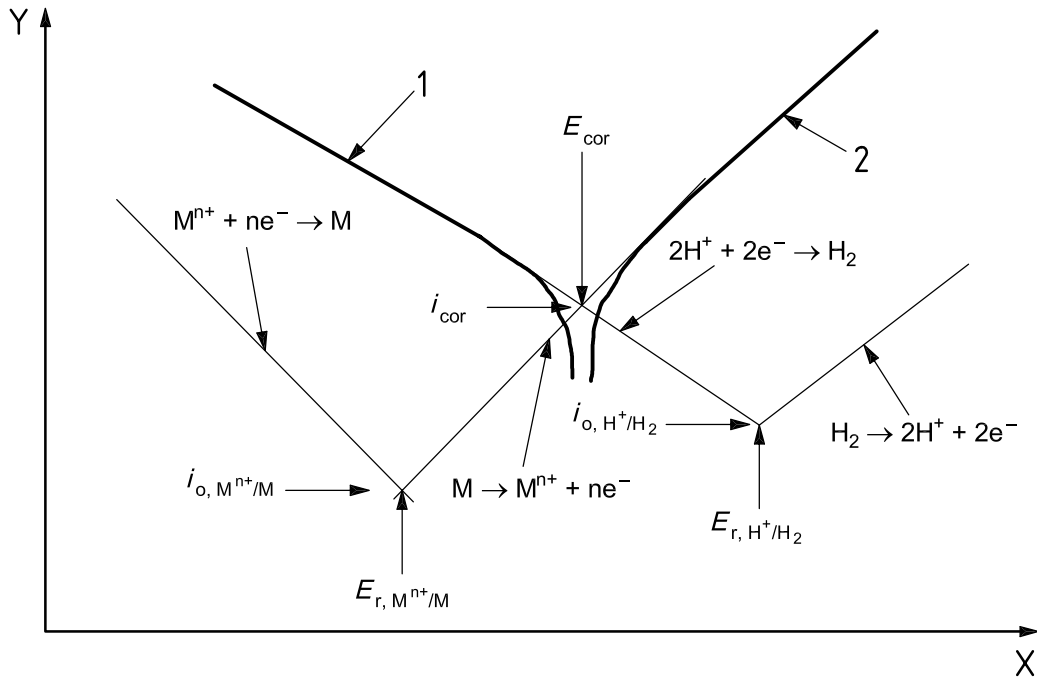
*RECTIFICATIF TECHNIQUE 1*

Technical Corrigendum 1 to ISO 17475:2005 was prepared by Technical Committee ISO/TC 156, *Corrosion of Metals and alloys*.

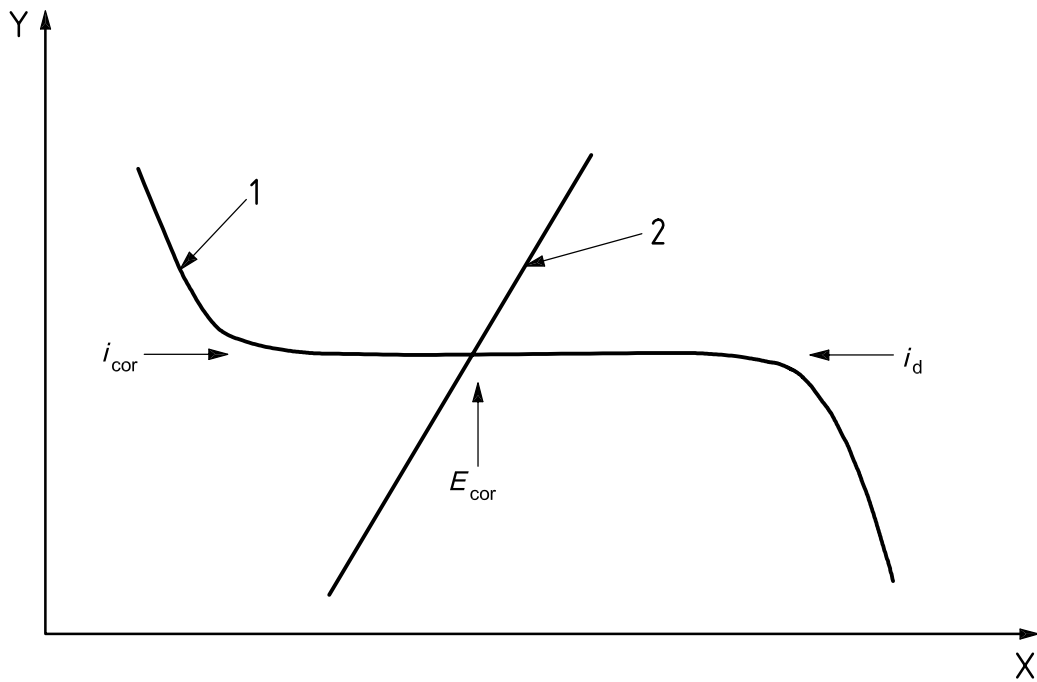
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*Page 2*

Replace Figure 1 with the following figure.



a) Corrosion rate is under diffusion control



b) Example by diffusion of oxygen in water

**Key**

- X potential
- Y log current density
- 1 cathodic
- 2 anodic
- $E_{cor}$  corrosion potential
- $i_{cor}$  corrosion current density
- $E_r$  reversible electrode potential
- $i_o$  exchange current density
- $i_d$  limiting diffusion current density, which corresponds to the maximum diffusion rate of oxygen in the solution

**Figure 1 — Schematic anodic and cathodic polarization curves for metals corroding in a system where the cathodic reaction is reduction of protons**