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A hybrid method for ellipse detection in industrial images

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**Highlights**

- A hybrid method with high reliability to detect ellipses in low SNR industrial images is proposed.
- Using candidate elliptic arcs with high fitting precision as seed arcs to group with other arcs.
- A novel method to extract regions which may contain one ellipse is proposed.
- New selection scores for evaluating hypothetical ellipse are used.
- Experimental results show high reliability of proposed method

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